

**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> KFLO	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 27	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> FLORENCE	<u>STATE</u> SC		
<u>AIRPORT ELEVATION</u> 147	<u>TDZE</u> 139	<u>SUPERSEDED</u> RNAV (GPS) RWY 27	<u>ORIGINAL/AMENDMENT</u> ORIG-E	<u>DATED</u> 09/08/2022	<u>MAG VAR</u> 9W	<u>EPOCH YEAR</u> 2025
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 10 AUGUST 2023	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 183/30 CW 003/30	NOPT	183/10 CW 003/10		3200
2. 183/10 CW 003/10		ESVAC	IF/IAF	2000
3. 003/30 CW 093/30		WOSVA	IAF	2000
4. 093/30 CW 183/30		OYULY	IAF	2000

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>
WOSVA	IAF	ESVAC	NOPT	TF	FB	1.00	002.69	9.00	2000
OYULY	IAF	ESVAC	NOPT	TF	FB	1.00	182.67	9.00	2000
ESVAC	IF/IAF	MENGY		TF	FB	1.00	272.68	6.00	1600
MENGY	FAF	RW27	MAP	TF	FO	0.30	272.61	4.50	
RW27	MAP	600 MSL		CA			272.61		600
600 MSL		ESVAC		DF	FO	1.00			2000



MISSED APPROACH**MAP:**

LPV: DA
LNAV/VNAV: DA
LNAV: RW27

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 600 THEN CLIMBING LEFT TURN TO 2000 DIRECT ESVAC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:**PROFILE:**

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2. HOLD E ESVAC, LT, 272.68 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 6000.					
3. FAC:	272.61	FAF: MENGY	DIST FAF TO MAP: 4.50		DIST FAF TO THLD: 4.50
4. MIN ALT:	ESVAC 2000, MENGY 1600				
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	250 HAT: 0.69	GS ANT:
6. MIN GP INCPT:	1600	GP ALT AT PFAF :	MENGY 1600	OM:	MM:
7. GP ANGLE:	3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 46.2	IM:
8. MSA FROM:					

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: CIRCLING RWY 1, 19 NA AT NIGHT.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -7°C OR ABOVE 54°C.

ADDITIONAL FLIGHT DATA:

CHART FAS OBST: 294 TANK (45-002230) 341135N/0794232W.
300 AAO 341301N/0793720W.
CHART VDP AT 1.23 NM TO RW27.
WAAS CHANNEL # 61310
REFERENCE PATH ID: W27A
LTP HAE: 4.8 M



MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 800-2 1/4, CAT D 800-2 1/2, 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	389	1	250	389	1	250	389	1	250	389	1	250			
LNAV/VNAV DA	465	1	326	465	1	326	465	1	326	465	1	326			
LNAV MDA	560	1	421	560	1	421	560	1 1/4	421	560	1 1/4	421			
CIRCLING	640	1	493	660	1	513	900	2 1/4	753	900	2 1/2	753			

CHANGES - REASONS

1. DECREASED LPV DA/HAT FROM 474/335 TO 389/250; VISIBILITY FROM 1 1/4 SM TO 1 SM. - NEW CONTROLLING OBSTACLE.
2. DECREASED LNAV/VNAV DA/HAT FROM 595/456 TO 465/326; VISIBILITY FROM 1 3/4 SM TO 1 SM. - NO MISSED APPROACH PENETRATION.
3. REMOVED FEEDER FROM FLORENCE VORTAC; INITIALS FROM CLETA AND CARLI. - FPT/ATC REQUEST; FLORENCE VORTAC DECOMMISSIONING.
4. ALL COURSES UPDATED 4 DEGREES. - KFLO MAGVAR UPDATED FROM W5/1980 TO W9/2025
5. REMOVED MSA. ADDED TAA WITH LEFT BASE INITIAL FROM WOSVA, RIGHT BASE FROM OYULY. - PER ATC/FPT REQUEST.
6. UPDATED INTERMEDIATE DISTANCE FROM 6.06 TO 6.00. - FAF MOVED TO ACCOMMODATE 3.00 GPA/46.2 GPA.
7. UPDATED FINAL DISTANCE MENGY TO RW27 FROM 4.44 TO 4.50. - FAF MOVED TO ACCOMMODATE 3.00 GPA/46.2 GPA.
8. MA CA LEG ALTITUDE INCREASED FROM 441 MSL TO 600 MSL. - IAW 8260.58A 3-5-2B.
9. UPDATED MISSED APPROACH FROM "CLIMB TO 2000 DIRECT IMOVE AND HOLD." TO "CLIMB TO 600 THEN CLIMBING LEFT TURN TO 2000 DIRECT ESVAC AND HOLD." - PER FPT REQUEST.
10. LINE 3: UPDATED DIST FAF TO MAP/THLD FROM 4.44 TO 4.50. - FAF MOVED TO ACCOMMODATE 3.00 GPA/46.2 TCH.
11. LINE 5: UPDATED DISTANCE TO THLD FROM 335 HAT: 0.96 TO 250 HAT: 0.69. - FORMS UPDATED.
12. LINE 7: TCH UPDATED FROM 46.0 TO 46.2. - NEW LPV CONTROLLING OBSTACLE.
13. UPDATED PBN REQUIREMENTS NOTE: FROM "RNP APCH" TO "RNP APCH - GPS." - IAW 8260.58B TABLE 1-2-1.
14. UPDATED CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW FROM "-15C OR ABOVE 48C" TO "-7F TO 54C." - UPDATED WEATHER STUDY (2018-2022) USED FOR SLOPE CALCULATIONS AND TO DETERMINE UPPER/LOWER TEMPERATURE LIMITS FOR UNCOMPENSATED BARO-VNAV SYSTEMS.
15. MOVED CHART NOTE: BARO-VNAV AND VDP NA WHEN USING DARLINGTON ALTIMETER SETTING TO 8260-9 PART-C REMARKS. - IAW 8260.19I 8-6-9 E(3)8.
16. MOVED CHART NOTE: ALTERNATE ALTIMETER NOTE TO 8260-9 PART C - REMARKS. - IAW 8260.19H 8-6-9 F.
17. UPDATED ADDITIONAL FLIGHT DATA: CHART FAS OBST: FROM "294 TANK 341135N/0794232W, 294 ANT 341135N/0794232W." TO "294 TANK (45-002230) 341135N/0794232W." - OBSTACLE ID ADDED IAW 8260.19I 8-6-10C; LNAV/VNAV NOT REQUIRED TO BE CHARTED.
18. ADDED ADDITIONAL FLIGHT DATA: 300 AAO 341301N/0793720W. - LNAV 7:1 OBSTACLE.
19. ADDED ADDITIONAL FLIGHT DATA: CHART VDP AT 1.23 NM TO RW27. - NO 20:1 PENETRATIONS PRESENT.
20. FAS DATA: UPDATED FPAP LATITUDE/LONGITUDE FROM 341104.4500N 0794432.0200W TO 341104.4430N 0794432.0205W. - NEW FPAP LOCATION.
21. FAS DATA: UPDATED CRC REMAINDER FROM 3AE39900 TO 4DC5CC63. - NEW FPAP LATITUDE/LONGITUDE.



AIRPORT ID
KFLO

PROCEDURE NAME
RNAV (GPS) RWY 27

ORIGINAL/AMENDMENT
1

CITY
FLORENCE

STATE
SC

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZLX, FLO APP CON, FLO ATCT, APT MGR

FLIGHT CHECKED BY

JAMES L REINEBOLD

Digitally signed by

CASIMIR L TABAKA

Jun 28, 2023

OFFICE

FPO

DATE

06/02/2023

DEVELOPED BY

CASIMIR L. TABAKA (BARBARA GORMAN)

Digitally signed by

CASIMIR L TABAKA

Apr 07, 2023

OFFICE

AJV-A432

DATE

02/02/2023

APPROVED BY

CASIMIR TABAKA

Digitally signed by

CASIMIR L TABAKA

Apr 07, 2023

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	KFLO
RUNWAY	RW27
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W27A
LTP/FTP LATITUDE	341114.4725N
LTP/FTP LONGITUDE	0794245.2970W
LTP/FTP ELLIPSOIDAL HEIGHT	+00048
FPAP LATITUDE	341104.4430N
FPAP LONGITUDE	0794432.0205W
THRESHOLD CROSSING HEIGHT (TCH)	00046.2
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	4DC5CC63

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00370
FPAP ORTHOMETRIC HEIGHT	+00370

