

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 9	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> FLORENCE	<u>STATE</u> SC		
<u>AIRPORT ELEVATION</u> 147	<u>TDZE</u> 147	<u>SUPERSEDED</u> RNAV (GPS) RWY 9	<u>ORIGINAL/AMENDMENT</u> ORIG-D	<u>DATED</u> 01/27/2022	<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

FROM	FIX TYPE	TO	FIX TYPE	ALTITUDE
1. 002/30 CW 182/30	NOPT	CADZU	IF/IAF	3000
2. 182/30 CW 272/30		OXBIP	IAF	3000
3. 272/30 CW 002/30		GOBAC	IAF	3000

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
GOBAC	IAF	CADZU	NOPT	TF	FB	1.00	002.43	9.00	3000
OXBIP	IAF	CADZU	NOPT	TF	FB	1.00	182.41	9.00	3000
CADZU	IF/IAF	IMOVE		TF	FB	1.00	092.42	5.94	2200
IMOVE	FAF	GOCEL/3.06 NM TO RW09		TF	FB	0.30	092.47	3.20	
GOCEL/3.06 NM RW09		RW09	MAP	TF	FO	0.30	092.47	3.06	
RW09	MAP	600 MSL		CA			092.47		600
600 MSL		CADZU		DF	FO	1.00			3000



MISSED APPROACH**MAP:**

LPV: DA
LNAV/VNAV: DA
LNAV: RW09

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 600 THEN CLIMBING LEFT TURN TO 3000 DIRECT CADZU AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000.

ALTERNATE MISSED APPROACH INSTRUCTIONS:**PROFILE:**

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2. HOLD W CADZU, RT, 092.42 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.					
3. FAC:	092.47	FAF: IMOVE	DIST FAF TO MAP: 6.26		DIST FAF TO THLD: 6.26
4. MIN ALT: CADZU 3000, IMOVE 2200, GOCEL/3.06 NM TO RW09 1180					
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	200 HAT: 0.44	GS ANT:
6. MIN GP INCPT: 2200	GP ALT AT PFAF :	IMOVE 2200	OM:	MM:	IM:
7. GP ANGLE: 3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 58.7		
8. MSA FROM:					

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

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

ADDITIONAL FLIGHT DATA:

CHART FAS OBST: 321 TOWER (45-020741) 341126N/0794535W.
335 AAO 341048N/0794802W.
CHART VDP AT 1.18 NM TO RW09.
WAAS CHANNEL # 70710
REFERENCE PATH ID: W09A
LTP HAE: 12.4 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	347	1/2	200	347	1/2	200	347	1/2	200	347	1/2	200			
LNAV/VNAV DA	603	7/8	456	603	7/8	456	603	7/8	456	603	7/8	456			
LNAV MDA	580	1/2	433	580	1/2	433	580	3/4	433	580	3/4	433			
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 441/294 TO 347/200. - ALL SURFACES CLEAR.
2. DECREASED LNAV/VNAV DA/HAT FROM 623/476 TO 603/456. VISIBILITY ALL CATS FROM 1 1/4 TO 7/8. - NEW LNAV/VNAV CONTROLLING OBSTACLE.
3. DECREASED LNAV MDA/HAT FROM 660/513 TO 580/433; VISIBILITY CAT C FROM 1 TO 3/4, CAT D FROM 1 1/4 TO 3/4. - NEW LNAV STEPDOWN CONTROLLING OBSTACLE.
4. REMOVED FEEDERS FROM WARNR, FLORENCE VORTAC, AND PEGIE; INITIAL FROM CHART. - FPT/ATC REQUEST; FLORENCE VORTAC DECOMMISSIONING.
5. ALL COURSES UPDATED 4 DEGREES. - KFLO MAGVAR UPDATED FROM W5/1980 TO W9/2025
6. REMOVED MSA. ADDED TAA WITH LEFT BASE INITIAL FROM OXBIP, RIGHT BASE FROM GOBAC. - PER ATC/FPT REQUEST.
7. UPDATED INTERMEDIATE DISTANCE FROM 6.04 TO 5.94. - FAF MOVED TO ACCOMMODATE 3.00 GPA.
8. UPDATED FINAL DISTANCE IMOVE TO GOCEL FROM 3.06 TO 3.20, AND GOCEL TO RW09 FROM 3.10 TO 3.06. - FAF AND STEPDOWN MOVED TO ACCOMMODATE 3.00 GPA.
9. MA CA LEG ALTITUDE INCREASED FROM 441 MSL TO 600 MSL. - IAW 8260.58A 3-5-2B
10. UPDATED MISSED APPROACH FROM "CLIMB TO 2000 DIRECT ESVAAC AND HOLD" TO "CLIMB TO 600 THEN CLIMBING LEFT TURN TO 3000 DIRECT CADZU AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000." - PER FPT REQUEST; CLIMB-IN-HOLD REQUIRED.
11. LINE 2: ADDED MAX ALTITUDE 6000. - UPDATED FORMS.
12. LINE 3: UPDATED DIST FAF TO MAP/THLD FROM 6.16 TO 6.26. - FAF MOVED TO ACCOMMODATE 3.00 GPA.
13. LINE 4: REMOVED *, AND *LNAV ONLY FROM ADDITIONAL FLIGHT DATA - NO LONGER REQUIRED.
14. LINE 5: ADDED DISTANCE TO THLD FROM 200 HAT: 0.44; AND "DISTANCE TO THLD FROM 294 HATH: 0.74 NM" REMOVED FROM ADDITIONAL FLIGHT DATA. - FORMS UPDATED.
15. REMOVED CHART NOTE: DME/DME RNP-0.3 NA; ADDED PBN REQUIREMENTS NOTE: RNP APCH - GPS. - IAW 8260.58B TABLE 1-2-1.
16. UPDATED CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW FROM "-15C (5F) OR ABOVE 49C (120F)" 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; FAHRENHEIT REMOVED IAW 8260.19I.
17. 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.
18. MOVED CHART NOTE: ALTERNATE ALTIMETER NOTE TO 8260-9 PART C - REMARKS. - IAW 8260.19H 8-6-9 F.
19. REMOVED CHART NOTE: FOR INOPERATIVE MALSR WHEN USING DARLINGTON ALTIMETER SETTING, INCREASE LPV ALL CATS VISIBILITY TO 1 1/4 SM. - NO LONGER REQUIRED.
20. REMOVED ADDITIONAL FLIGHT DATA: CHART: ASR - NO LONGER REQUIRED; NEED DETERMINED BY CHARTING.
21. UPDATED ADDITIONAL FLIGHT DATA: CHART FAS OBST: FROM "411 TWR 341142N/0794615W, 321 ANT 341126N/0794535W" TO "321 TOWER (45-020741) 341126N/0794535W." - NEW LNAV STEPDOWN CONTROLLING OBSTACLE, LNAV/VNAV NOT REQUIRED TO BE CHARTED.
22. ADDED ADDITIONAL FLIGHT DATA: 335 AAO 341048N/0794802W. - LNAV 7:1 OBSTACLE.
23. UPDATED ADDITIONAL FLIGHT DATA: FROM CHART VDP AT 1.43 NM TO RW09 TO 1.18 NM TO RW09. - UPDATED EVALUATION.
24. FAS DATA: UPDATED FPAP LATITUDE/LONGITUDE FROM 341117.2700N/0794215.4700W TO 341117.2710N/0794215.4715W. - NEW FPAP LOCATION.
25. FAS DATA: UPDATED VERTICAL ALERT LIMIT (VAL) FROM 50.0 TO 35.0. - LPV HAT DECREASED TO 200.
26. FAS DATA: UPDATED CRC REMAINDER FROM D39C6086 TO B9F16C73. - NEW FPAP LATITUDE/LONGITUDE AND VAL.



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

01/30/2023

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	RW09
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W09A
LTP/FTP LATITUDE	341107.2485N
LTP/FTP LONGITUDE	0794402.1965W
LTP/FTP ELLIPSOIDAL HEIGHT	+00124
FPAP LATITUDE	341117.2710N
FPAP LONGITUDE	0794215.4715W
THRESHOLD CROSSING HEIGHT (TCH)	00058.7
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)	35.0
CRC REMAINDER	B9F16C73

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00447
FPAP ORTHOMETRIC HEIGHT	+00447

