

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
ILS STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.29**

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> FLO	<u>PROCEDURE NAME</u> ILS OR LOC RWY 9	<u>ORIGINAL/AMENDMENT</u> 14	<u>CITY</u> FLORENCE	<u>STATE</u> SC
<u>AIRPORT ELEVATION</u> 147	<u>TDZE</u> 147	<u>SUPERSEDED</u> ILS OR LOC RWY 9	<u>ORIGINAL/AMENDMENT</u> 13	<u>DATED</u> 08/10/2023
<u>FACILITY</u> I-FLO	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>MAG VAR</u> 9W
				<u>EPOCH YEAR</u> 2025
				<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>
CTF VOR/DME	IAF	CADZU INT/I-FLO 13.68 DME	NOPT				156.12	32.76	2200
CADZU INT/I-FLO 13.68 DME	IF/IAF	IMOVE/I-FLO 7.74 DME					092.54 (I-FLO)	5.94	2200
IMOVE/I-FLO 7.74 DME	FAF	6.26 NM AFTER IMOVE/I-FLO 7.74 DME OR AT I-FLO 1.48 DME	MAP				092.54 (I-FLO)	6.26	
6.26 NM AFTER IMOVE/I-FLO 7.74 DME OR AT I-FLO 1.48 DME	MAP	347 MSL		CA			092.47		
347 MSL		ESVAC		DF	FO	1.00			2000

MISSED APPROACH

MAP:

ILS: DA
LOC: 6.26 NM AFTER IMOVE/I-FLO 7.74 DME OR AT I-FLO 1.48 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 DIRECT ESVAC AND HOLD

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT**
- SIDE OF COURSE**
- OUTBOUND**
- FT WITHIN**
- MILES OF (IAF)**
- HOLD W CADZU INT/I-FLO 13.68 DME, RT, 092.54 INBOUND, 2200 FT. IN LIEU OF PT (IAF), MAX 4600.**
- FAC: 092.54 FAF: IMOVE/I-FLO 7.74 DME DIST FAF TO MAP: 6.26 DIST FAF TO THLD: 6.26**
- MIN ALT: IMOVE/I-FLO 7.74 DME 2200**
- DIST TO THLD FROM OM: MM: IM: 150 HAT: GS ANT: 1202**
- MIN GS INCPT: 2200 GS ALT AT PFAF: IMOVE/I-FLO 7.74 DME 2200 OM: MM: IM:**
- GS ANGLE: 3.00 34:1 20:1 TCH: 58.7**
- MSA FROM: ARP KFLO 3200**



PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED.

NOTES:

CHART NOTE: CIRCLING RWY 1, 19 NA AT NIGHT.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CTF VOR/DME ON V259 NORTHWEST BOUND.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 09 CATS C AND D VISIBILITIES TO 2 SM.

ADDITIONAL FLIGHT DATA:

HOLD E, LT, 272.68 INBOUND.
CHART FAS OBST: 574 TOWER (45-000151) 340939N/0795012W.
CHART VDP AT 3.53 DME.
DISTANCE VDP TO THLD 2.05 NM.

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE., NA WHEN CONTROL TOWER CLOSED.; LOC: STANDARD - CAT C 800-2 1/4, CAT D 800-2 1/2, NA WHEN LOCAL WEATHER NOT AVAILABLE., NA WHEN CONTROL TOWER CLOSED.

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
S-ILS 09	347	1/2	200	347	1/2	200	347	1/2	200	347	1/2	200			
S-LOC 09	860	1/2	713	860	1/2	713	860	1 5/8	713	860	1 5/8	713			
CIRCLING	860	1	713	860	1	713	900	2 1/4	753	900	2 1/2	753			

CHANGES - REASONS

1. MISSED APPROACH CHANGED FROM CLIMB TO 600 THEN CLIMBING LEFT TURN TO 2200 ON HEADING 270 AND ON SMS NDB BRG- 069 TO CADZU INT/ I-FLO 13.7 DME AND HOLD TO CLIMB TO 2000 DIRECT ESVAC AND HOLD - ATC REQUEST FOR SMS NDB DECOMMISSIONING.
2. REQUIRED EQUIPMENT/PBN NOTES: ADDED RNP APCH - GPS - RNAV MISSED APPROACH REQUIRES GPS GUIDANCE
3. REQUIRED EQUIPMENT NOTES: REMOVED ADF REQUIRED NOTE - SMS NDB NO LONGER INCLUDED IN FIX MAKEUP FOR CADZU, SCHEDULED FOR DECOMMISSIONING
4. MISSED APPROACH: CHANGED LOC MAP FROM I-FLO 1.48 DME TO 6.26 NM FROM IMOVE/I-FLO LOC/DME 7.74 DME OR AT I-FLO /1.48 DME. - IAW 8260.19J 8-6-6C
5. LINE 3: ADDED DIST FAF TO MAP 6.26
6. CHART PLANVIEW NOTE: ADDED PROCEDURE NA FOR ARRIVALS AT CTF VOR/DME ON V259 NORTHWEST BOUND - TURN TO JOIN GREATER THAN 120DEG.
7. CHART NOTE: ADDED FOR INOPERATIVE ALS, INCREASE S-LOC 09 CATS C AND D VISIBILITIES TO 2 SM. - IAW 8260.19J 8-6-12
8. ADDITIONAL FLIGHT DATA: ADDED HOLD E, LT, 272.68 INBOUND - IAW 8260.19J 8-6-11



COORDINATED WITH:

A4A

☒

ALPA

☒

AOPA

☒

APA

☒

HAI

☐

NBAA

☒

OTHER: ZLX, FLO APP CON, FLO ATCT, APR MGR

FLIGHT CHECKED BY

Digitally signed by
ERIC N SUSKI
Mar 17, 2025

OFFICE

AJF

DATE

03/14/2025

ERIC L GEYER

DEVELOPED BY

JOHN BORDY (NICHOLAS HEIDERSTADT)

Digitally signed by
ERIC N SUSKI
Mar 17, 2025

OFFICE

AJV-A33

DATE

09/06/2024

APPROVED BY

JOHN BORDY

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ERIC N SUSKI
Mar 17, 2025

OFFICE

AJV-A33

DATE

04/17/2025

TITLE

MANAGER



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD**

<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILITY</u>
FLO	ILS OR LOC RWY 9	14	FLORENCE	SC	147	I-FLO

PART A: OBSTRUCTION DATA SEGMENTS

INITIAL

FROM CTF VOR/DME **TO** CADZU INT/I-FLO 13.68 DME

<u>RNP</u>	<u>DISTANCE</u> 32.76	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>			<u>HMAS</u>		
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TOWER (45-001320)	342929.00N/0801435.00W	897	50	20	2C	1000				AT303	2200
TERRAIN	343900.00N/0801633.00W	597 (600)								AS1500	2100

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE

FROM CADZU INT/I-FLO 13.68 DME (IF/IAF) **TO** IMOVE/I-FLO 7.74 DME

<u>RNP</u>	<u>DISTANCE</u> 5.94	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>			<u>HMAS</u>		
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TOWER (45-000438)	340753.00N/0795604.00W	467	500	125	5E	500				AC125 AT1108	2200
TERRAIN	341218.00N/0795812.00W	183 (200)								AS1500	1700

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL: ILS

FROM

IMOVE/I-FLO 7.74 DME

TO

RW09

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>
	6.26		DA	200	

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
							ASC				347

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LOC

FROM

IMOVE/I-FLO 7.74 DME

TO

6.26 NM AFTER IMOVE/I-FLO 7.74 DME OR AT I-FLO 1.48 DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>
	6.26		6.26 NM AFTER IMOVE/I-FLO 7.74 DME OR AT I-FLO 1.48 DME	713	

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TOWER (45-000151)	340939.00N/0795012.00W	574	500	125	5E	250				XL14 SA-106 AC125	860

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

HOLD-IN-LIEU OF PT

FROM
CADZU INT/I-FLO 13.68 DME

TO
P-6

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u> P-6	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u>				
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TOWER (45-001473)	341035.00N/0800821.00W	624	250	50	4D	1000				AT576	2200
TERRAIN	431136.00N/0800827.00W	203 (200)								AS1500	1700

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSSED APPROACH: ILS

FROM
DA

TO
ESVAC

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u> 177				
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
							ASC				2000
TOWER (45-000674)	341116.00N/0793116.00W	575	500	125	5E	1000					1600
TERRAIN	341106.00N/0794406.00W	144 (100)								AS1500	1600

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSSED APPROACH: LOC

FROM

6.26 NM AFTER IMOVE/I-FLO 7.74 DME OR AT I-FLO 1.48 DME

TO

ESVAC

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u>				
1.00										596	
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
							ASC				2000
TOWER (45-000674)	341116.00N/0793116.00W	575	500	125	5E	1000					1600
TERRAIN	341106.00N/0794406.00W	144 (100)								AS1500	1600

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

CIRCLING

☐ ALL CATS

☒ CAT A

☒ CAT B

☒ CAT C

☒ CAT D

☐ CAT E

☐ NOT AUTHORIZED

OBSTRUCTION	COORDINATES	RADIUS	HAA	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
CATEGORY A											
CRANE (45-020730)	341150.86N/0794520.01W	1.30	713	325	20	3	1A	300		SI	860
CATEGORY B											
BUILDING (45-027642)	341149.17N/0794525.30W	1.81	713	350	20	3	1A	300		SI	860
CATEGORY C											
TOWER (45-000042)	341349.00N/0794450.00W	2.84	753	546	50	50	2D	300		AC50	900
CATEGORY D											
TOWER (45-000042)	341349.00N/0794450.00W	3.71	753	546	50	50	2D	300		AC50	900

CIRCLING REMARKS:

MSA

CENTER

ARP KFLO

RADIUS

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TOWER (45-000481)	342205.00N/0791920.00W	070	22.8	2114	500	50	5D	1000			3200

MSA REMARKS:



NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

FLO APP CON, FLO FSS, ZJX ARTCC, FLO TOWER

<u>WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>WMSCR</u>	<u>ADJUSTMENTS</u>
ASOS	FLO	24	FLO	0	Y	0
<u>BACK-UP WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>WMSCR</u>	<u>ADJUSTMENTS</u>
AWOS-3PT	UDG	24	UDG	17.74	Y	48

WX REMARKS:

RASS PRESSURE PATTERNS THE SAME
KFLO 147, KUDG 192
RA = 47.2.

<u>PRIMARY NAVAID</u>	<u>MONITOR POINT</u>	<u>HRS OPERATION</u>	<u>CAT</u>
I-FLO	FLO ATCT	TWR OPEN	1
		TWR CLOSED	3

<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>	<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW01 - MIRL, REIL (PCL), PAPI-4L (PCL)	NPI-F	
RW19 - MIRL, REIL (PCL), PAPI-4L (PCL)	NPI-G	
RW27 - HIRL (PCL), REIL (PCL), PAPI-4L	NPI-G	
RW09 - MALSR (PCL), HIRL (PCL), PAPI-4L	PIR-G	

<u>GLIDESLOPE ANGLE</u>	<u>ELEV RWY THRESHOLD</u>	<u>TCH</u>	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u>	<u>TCH</u>
3.00	146.5	58.7	137.5	1202	3.00	58.0

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	X	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	X	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>
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CRITICAL TEMPERATURE REMARKS:

"VISUAL PORTION OF FINAL" PENETRATIONS

FINAL TYPE	CIRCLING RWY 01
20:1	
172 TREE (45-021488) 341021.5300N/0794333.0400W (7.43)	191 TREE (45-034587) 341017.0800N/0794331.3400W (4.13)
156 TREE (45-021487) 341023.9600N/0794333.4400W (3.66)	



<u>AIRPORT ID</u> FLO	<u>PROCEDURE NAME</u> ILS OR LOC RWY 9	<u>AMDT NO.</u> 14	<u>CITY</u> FLORENCE	<u>STATE</u> SC	<u>AIRPORT ELEVATION</u> 147	<u>FACILITY</u> I-FLO
FINAL TYPE	CIRCLING RWY 01					
34:1						
N/A						
FINAL TYPE	CIRCLING RWY 19					
20:1						
244 TREE (45-051053) 341154.3000N/0794320.9400W (2.87)			234 TREE (45-027611) 341152.5200N/0794322.5200W (2.03)			
223 TREE (45-025810) 341150.6900N/0794322.4400W (0.27)						
FINAL TYPE	CIRCLING RWY 19					
34:1						
N/A						
<u>PENETRATIONS REMARKS:</u>						

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

<u>PENETRATIONS REMARKS:</u>

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FPT NOTIFIED OF PENETRATIONS.

100FT VEGETATION USED PER FPT.

CONTINGENCY NOTE:
WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE UDG ALTIMETER SETTING AND INCREASE S-ILS 09 DA TO 395 FEET; INCREASE ALL MDAS 60 FEET AND INCREASE S-LOC 09 AND CIRCLING VISIBILITY CATS B, C, AND D 1/4 SM. FOR INOPERATIVE ALS WHEN USING UDG ALTIMETER SETTING, INCREASE S-LOC 09 CATS C AND D VISIBILITIES TO 2 1/2 SM.

VDP NA WHEN USING UDG ALTIMETER SETTING.
ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



PART D: AIRSPACE

DOCKET #

ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE

DISTANCE FROM	THLD	TO 1000FT POINT	3.12
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	0.90
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	083.54
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	200
DISTANCE FROM	THLD	TO 1500FT POINT	5.26
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	1.35
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	083.54
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	200

THRESHOLD COORDINATES (IF STR-IN)	341107.25N/0794402.20W
ARP COORDINATES	341107.31N/0794325.98W
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 27 DISTANCE 0.57 NM
FAF COORDINATES	341024.69N/0795132.31W
FIX NAME COORDINATES	

REMARKS

PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
JOHN BORDY (NICHOLAS HEIDERSTADT)	AJV-A33	09/06/2024	AERONAUTICAL INFORMATION SPECIALIST

