FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (RNP) 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.

AIRPORT ID	PROCEDURE NAME	ORIGINAL/AMENDMENT	CITY	STATE
CLT	RNAV (RNP) Z RWY 19L	ORIG	CHARLOTTE	NC

AIRPORT ELEVATION	TDZE	SUPERSEDED	ORIGINAL/AMENDMENT	DATED	MAG VAR	EPOCH YEAR
748	742		NONE		7W	2000

FACILITY	COORDINATES OF FACILITIES	ACTUAL EFFECTIVE DATE	REQUIRED EFFECTIVE DATE	CANCEL/SUSPEND
RNAV			ROUTINE	

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
JEDKO	IAF	LERDY		TF	FB	1.00	182.95	3.50	7000
LERDY		FERSA		TF	FB	1.00	182.95	3.15	6000
FERSA		TOMME		TF	FB	1.00	182.95	3.14	5000
TOMME	IF	HAGUL		TF	FB	1.00	182.95	3.15	4000
HAGUL		OZEJI		TF	FB	1.00	182.96	3.14	3000
OZEJI		CYLOW	PFAF	TF	FB	1.00	182.96	1.89	2400
CYLOW	PFAF	RW19L	MAP	TF	FO	0.30	182.96	5.03	
RW19L	MAP	1067 MSL		CA			182.96		
1067 MSL		DENNE		DF	FO	1.00			3000

MISSED APPROACH

MAP:
RNP: DA

MISSED APPROACH INSTRUCTIONS:
CLIMB TO 3000 DIRECT DENNE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. **PT** **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF** (IAF)
2. PROFILE STARTS AT JEDKO
3. **FAC:** 182.96 **PFAF:** CYLOW **DIST FAF TO MAP:** **DIST FAF TO THLD:**
4. **MIN ALT:** JEDKO 8000, LERDY 7000, FERSA 6000, TOMME 5000, HAGUL 4000, OZEJI 3000, CYLOW 2400
5. **DIST TO THLD FROM PFAF:** 5.03 **MM:** **IM:** **150 HAT:** **325 HAT:** 0.85 **GS ANT:**
6. **MIN GP INCPT:** 2400 **GP ALT AT PFAF:** CYLOW 2400 **OM:** **MM:** **IM:**
7. **GP ANGLE:** 3.00 **34:1:** IS CLEAR **20:1:** IS CLEAR **TCH:** 55.3
8. **MSA FROM:** RW19L 3800

QUALITY 39 CHECKED

AIRPORT ID	PROCEDURE NAME	ORIGINAL/AMENDMENT	CITY	STATE
CLT	RNAV (RNP) Z RWY 19L	ORIG	CHARLOTTE	NC

PBN REQUIREMENTS NOTE:

RNP AR APCH - GPS.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -7°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.

ADDITIONAL FLIGHT DATA:

HOLD S, RT, 002.97 INBOUND.

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

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
AUTHORIZATION REQUIRED															
RNP 0.11 DA	1067	2600	325	1067	2600	325	1067	2600	325	1067	2600	325			
RNP 0.30 DA	1177	4000	435	1177	4000	435	1177	4000	435	1177	4000	435			

CHANGES - REASONS

COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZTL, CLT TRACON, CLT ATCT, CLT AMGR

FLIGHT CHECKED BY ADAM K STALVEY	*Digitally signed by* ***CASEY D HILL*** Apr 24, 2026	**OFFICE** AJF	**DATE** 04/22/2026
DEVELOPED BY TIMOTHY JOHNSON	*Digitally signed by* ***CASEY D HILL*** Apr 24, 2026	**OFFICE** AJV-A431	**DATE** 12/17/2025
APPROVED BY CASEY HILL	*Digitally signed by* ***CASEY D HILL*** Apr 24, 2026	**OFFICE** AJV-A431	**DATE** **TITLE** MANAGER

QUALITY 39 CHECKED

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

AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
CLT	RNAV (RNP) Z RWY 19L	ORIG	CHARLOTTE	NC	748	RNAV

PART A: OBSTRUCTION DATA SEGMENTS

INITIAL

FROM	TO
JEDKO	LERDY

RNP	DISTANCE	PAT	MAP	HAT	HMAS
1.00	3.50				

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	353718.00N/0810030.00W	1129	215	8	4B	1000				AC8 AT4863	7000
TERRAIN	353336.00N/0810057.00W	918 (900)								AS1500	2400

COMPUTATIONS

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

SEGMENT REMARKS:

INITIAL: STEPDOWN

FROM	TO
LERDY	FERSA

RNP	DISTANCE	PAT	MAP	HAT	HMAS
1.00	3.15				

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	353336.00N/0810054.00W	1119	215	8	4B	1000				AC8 AT3873	6000
TERRAIN	353257.00N/0810115.00W	908 (900)								AS1500	2400

COMPUTATIONS

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

SEGMENT REMARKS:

AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
CLT	RNAV (RNP) Z RWY 19L	ORIG	CHARLOTTE	NC	748	RNAV

INITIAL: STEPDOWN

FROM	TO
FERSA	TOMME

RNP	DISTANCE	PAT	MAP	HAT	HMAS
1.00	3.14				

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TOWER (37-002166)	352848.90N/0805946.10W	1101	50	20	2C	1000				AC20 AT2879	5000
TERRAIN	352918.00N/0805948.00W	866 (900)								AS1500	2400

COMPUTATIONS

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

SEGMENT REMARKS:

INTERMEDIATE

FROM	TO
TOMME	HAGUL

RNP	DISTANCE	PAT	MAP	HAT	HMAS
1.00	3.15				

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TOWER (37-002795)	352640.73N/0805909.57W	1004	250	50	4D	500				AC50 AT2446	4000
TERRAIN	352412.00N/0810033.00W	833 (800)								AS1500	2300

COMPUTATIONS

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

SEGMENT REMARKS:

INTERMEDIATE: STEPDOWN

FROM	TO
HAGUL	OZEJI

RNP	DISTANCE	PAT	MAP	HAT	HMAS
1.00	3.14				

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TOWER (37-002032)	352205.94N/0805939.00W	1060	20	3	1A	500				AC3 AT1437	3000
TERRAIN	352136.00N/0805945.00W	813 (800)								AS1500	2300

COMPUTATIONS

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

SEGMENT REMARKS:

INTERMEDIATE: STEPDOWN

FROM	TO
OZEJI	CYLOW

RNP	DISTANCE	PAT	MAP	HAT	HMAS
1.00	1.89				

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	352121.00N/0805939.00W	978	215	8	4B	500				AC8 AT914	2400
TERRAIN	352015.00N/0805842.00W	770 (800)								AS1500	2300

COMPUTATIONS

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

SEGMENT REMARKS:

AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
CLT	RNAV (RNP) Z RWY 19L	ORIG	CHARLOTTE	NC	748	RNAV

FINAL

FROM	TO
CYLOW	RW19L

RNP	DISTANCE	PAT	MAP	HAT	HMAS
0.11	5.03		DA	325	

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TREE (37-171524)	351406.64N/0805701.24W	832	20	3	1A		20.79:1			AC3	1067

COMPUTATIONS

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

SEGMENT REMARKS:

FINAL

FROM	TO
CYLOW	RW19L

RNP	DISTANCE	PAT	MAP	HAT	HMAS
0.30	5.03		DA	435	

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TOWER (37-003012)	351421.00N/0805643.00W	900	20	3	1A		20.76:1			AC3	1177

COMPUTATIONS

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

SEGMENT REMARKS:

AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
CLT	RNAV (RNP) Z RWY 19L	ORIG	CHARLOTTE	NC	748	RNAV

MISSED APPROACH: LEVEL SURFACE

FROM	TO
DA	DENNE

RNP	DISTANCE	PAT	MAP	HAT	HMAS
0.11-1.00					906

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC				3000
CONTROL_TOWER (37-117734)	351214.28N/0805635.76W	1068	20	3	1A	1000					2100
TERRAIN	351448.00N/0805636.00W	787 (800)								AS1500	2300

COMPUTATIONS

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

SEGMENT REMARKS:

MISSED APPROACH: LEVEL SURFACE

FROM	TO
DA	DENNE

RNP	DISTANCE	PAT	MAP	HAT	HMAS
0.30-1.00					1016

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC				3000
CONTROL_TOWER (37-117734)	351214.28N/0805635.76W	1068	20	3	1A	1000					2100
TERRAIN	351448.00N/0805636.00W	787 (800)								AS1500	2300

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

AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
CLT	RNAV (RNP) Z RWY 19L	ORIG	CHARLOTTE	NC	748	RNAV

MSA

CENTER	RADIUS
RW19L	25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TOWER (37-001173)	352049.00N/0811014.00W	311	12.9	2754	500	125	5E	1000			3800

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

CLT APP CON, CLT TOWER

WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	WMSCR	ADJUSTMENTS
ASOS	CLT	24	CLT		Y	0

BACK-UP WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	WMSCR	ADJUSTMENTS

WX REMARKS:

BACKUP ALTIMETER SOURCE NOT REQUIRED DUE TO REDUNDANT SOURCES AT KCLT.

PRIMARY NAVAID	MONITOR POINT	HRS OPERATION	CAT

APPROACH AND RUNWAY LIGHTING SYSTEM	RUNWAY MARKINGS	RUNWAY VISUAL RANGE
RW01L - ALSF-2, TDZ, HIRL, C/LINE, PAPI-4L	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW01R - ALSF-2, HIRL, C/LINE, TDZ, PAPI-4L	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW18L - C/LINE, HIRL, REIL, PAPI-4L	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW19L - MALSR, C/LINE, HIRL, PAPI-4R	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW19R - ALSF-2, C/LINE, TDZ, HIRL, PAPI-4R	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW36R - ALSF-2, TDZ, C/LINE, HIRL, PAPI-4R	PIR-G	APPROACH, MIDPOINT, ROLL OUT

GLIDESLOPE ANGLE	ELEV RWY THRESHOLD	TCH	ELEV GS ANTENNA	DISTANCE FROM RWY	VGSI ANGLE	TCH
3.00	742.0	55.3			3.00	69.3

FINAL APPROACH COURSE AIMING

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

QUALITY 39 CHECKED

CRITICAL TEMPERATURES

AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
CLT	RNAV (RNP) Z RWY 19L	ORIG	CHARLOTTE	NC	748	RNAV

CRITICAL LOW	CRITICAL HIGH	ACT	APT ISA
-7C	+54C	-7C	+13.52C

CRITICAL TEMPERATURE REMARKS:

AVERAGE COLD TEMPERATURE DERIVED FROM 5-YEAR HISTORY (2020-2024).
CRITICAL LOW TEMPERATURE BASED ON ACT.
DESCENT RATE (FPM): STANDARD TEMP 965 HIGH TEMP 1273.

"VISUAL PORTION OF FINAL" PENETRATIONS

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

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

PENETRATIONS REMARKS:

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.
VDP PUBLISHED: NA RNP PROCEDURE.
VEGETATION HEIGHT: 100 FT.
RNP DESIGN NOT TIED TO STARS DUE TO COMPLEXITY OF AIRSPACE AND ATC OPERATIONS. ATC REQUESTED NO FEEDERS. ESTABLISHED/DESIGN SIMILAR TO ILS/RNAV PROCEDURES.

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**	3.15
WIDTH OF	FINAL	**SEGMENT AT 1000FT POINT**	1.20
TRUE COURSE OF	FINAL	**SEGMENT CONTAINING 1000FT POINT**	175.96
HIGH TERRAIN IN	FINAL	**SEGMENT CONTAINING 1000FT POINT**	800
DISTANCE FROM	THLD	**TO 1500FT POINT**	4.72
WIDTH OF	FINAL	**SEGMENT AT 1500FT POINT**	1.20
TRUE COURSE OF	FINAL	**SEGMENT CONTAINING 1500FT POINT**	175.96
HIGH TERRAIN IN	FINAL	**SEGMENT CONTAINING 1500FT POINT**	800

THRESHOLD COORDINATES (IF STR-IN)	351338.63N/0805711.41W
ARP COORDINATES	351247.76N/0805709.06W
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 36R DISTANCE 1.17 NM
FAF COORDINATES	351840.31N/0805737.40W
FIX NAME COORDINATES	

REMARKS

QUALITY 39 CHECKED

PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
TIMOTHY JOHNSON	AJV-A431	12/17/2025	AERONAUTICAL INFORMATION SPECIALIST