

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</u> CHARLOTTE/DOUGLAS INTL	<u>AIRPORT ID</u> KCLT	<u>PROCEDURE NAME</u> RNAV (GPS) Y RWY 18L	<u>ORIGINAL/AMENDMENT</u> 5	<u>CITY</u> CHARLOTTE	<u>STATE</u> NC
<u>AIRPORT ELEVATION</u> 748	<u>TDZE</u> 748	<u>SUPERSEDED</u> RNAV (GPS) Y RWY 18L	<u>ORIGINAL/AMENDMENT</u> 4A	<u>DATED</u> 05/24/2018	<u>MAG VAR</u> 7W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 15 AUGUST 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 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>
CAVVI	IAF	SNAKK		TF	FB	1.00	182.96	3.15	5000
SNAKK	IF	GILGE		TF	FB	1.00	182.96	3.15	4000
GILGE		QUWED		TF	FB	1.00	182.96	3.15	3000
QUWED		EGUUL		TF	FB	1.00	182.96	1.88	2400
EGUUL	FAF	ZIMOG/2.60 NM TO RW18L		TF	FB	0.30	182.97	2.42	
ZIMOG/2.60 NM TO RW18L		RW18L	MAP	TF	FO	0.30	182.97	2.60	
RW18L	MAP	1300 MSL		CA			182.97		1300
1300 MSL		LOCAS		DF	FO	1.00			4000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW18L

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 4000 DIRECT LOCAS AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT CAVVI

3. FAC:

182.97

FAF:

EGUUL

DIST FAF TO MAP:

5.02

DIST FAF TO THLD:

5.02

4. MIN ALT: CAVVI 6000, SNAKK 5000, GILGE 4000, QUWED 3000, EGUUL 2400, ZIMOG/2.60 NM TO RW18L 1620*

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

257 HAT:

0.64

GS ANT:

6. MIN GP INCPT:

2400

GP ALT AT FAF :

EGUUL 2400

OM:

MM:

IM:

7. GP ANGLE:

3.00

34:1:

IS NOT CLEAR

20:1:

IS CLEAR

TCH:

55.7

8. MSA FROM: RW18L 3800

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA AT NIGHT.
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.
CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.
CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS.
CHART NOTE: RWY 18L HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -11°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.12 NM TO RW18L*
*LNAV ONLY
WAAS CHANNEL #77500
REFERENCE PATH ID: W18A
CHART FAS OBST: 930 TOWER 351418N/0805532W.
HOLD W, RT, 093.32 INBOUND
LTP HAE: 196.8 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



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	1002	4000	254	1002	4000	254	1002	4000	254	1002	4000	254			
LNAV/VNAV DA	1216	1 3/8	468	1216	1 3/8	468	1216	1 3/8	468	1216	1 3/8	468			
LNAV MDA	1180	5500	432	1180	5500	432	1180	1 1/4	432	1180	1 1/4	432			
CIRCLING	1380	1	632	1380	1	632	1500	2 1/4	752	1500	2 1/2	752			

CHANGES - REASONS

1. REMOVED TERMINAL ROUTE FROM QUWED (FAF) - ZIMOG ADDED ROUTE QUWED TO EGUUL (FAF) - ATC REQUEST NEW FAF, QUWED IF SDF
2. ADDED TERMINAL ROUTE EGUUL-ZIMOG/2.6 NM TO RW18L - NEW FAF/SDF LOCATION.
3. UPDATED TERMINAL ROUTE FROM ZIMOG/2.5 NM TO RW18L TO ZIMOG/2.6 NM TO RW18L AND COURSE/DIST FROM 182.96/2.50 TO 182.97/2.60
4. UPDATD FAC FROM 182.96 TO 182.97 - MATCH AIRNAV DATA.
5. UPDATED FAF FROM QUWED TO EGUUL - ATC REQUEST
6. UPDATED DIST FAF TO MAP/THLD FROM 6.90/6.90 TO 5.02/5.02 - NEW FAF LOCATION.
7. UPDATED MIN ALT AT ZIMOG FROM 1580 TO 1620 - OPTIMUM ALT.
8. ADDED MIN ALT EGUUL 2400 - NEW FAF ALT
9. ADDED 20:1 IS CLEAR - DOCUMENTING REQUIRMENTS IAW 8260.19H.
10. ADDED PBN REQUIREMENTS NOTE: RNP APCH - CHARTING REQUIREMENTS.
11. UPDATED CHART NOTE FROM FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -10C (14F) OR ABOVE 54C (130F) TO CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -11C OR ABOVE 54C. - NEW NOTE FORMAT AND RECALCULATED VALUES BASED ON CURRENT 5 YR AVERAGE
12. UPDATED DISTANCE TO THLD FROM 250 HAT: 0.61 NM TO 257 HAT 0.64 NM - NE W HAT FROM MA PENETRATION
13. UPDATED CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT TO CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}) - NEW NOTE FORMAT.
14. RAISED LPV DA/HAT FROM 998/250 TO 1005/257 - MA OBSTACLE PENETRATION.
15. LOWERED LNAV/VNAV DA/HAT 1305/557 TO 1220/472, VIS ALL CATS FROM 1 7/8 TO 1 3/8 - OBS EVALUATION.
16. REMOVED CHART NOTE: DME/DME RNP-0.3 NA. - NO LONGER REQUIRED.
17. REMOVED CHART PLANVIEW NOTE: RADAR REQUIRED - NOT REQUIRED.
18. UPDATED FAS DATA CRC REMAINDER - SYSTEM GENERATED
19. UPDATED LTP/FPT LAT/LON - ROUNDING
20. UPDATED FPAP LAT/LONG - ROUNDING
21. UPDATED ALTERNATE MINIMIMS NON PREC FROM STANDARD TO STANDARD, CAT C 800-2 1/4, CAT D 800-2 1/2.
22. UPDATED CHART NOTE FROM RWY 18L HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED TO RWY 18L HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED. - RWY HAS RVR.
23. LOWERED MSA FROM 3900 TO 3800 - OBSTACLE EVALUATION.

COORDINATED WITH:

A4A☒ALPA☒AOPA☒APA☒HAI☐NBAA☒OTHER: ZTL, CLT TRACON, AIRPORT MANAGER

FLIGHT CHECKED BY

MARC J HINCK

Digitally signed by

CASIMIR L TABAKA

Jun 13, 2019

OFFICE

FICO

DATE

6/12/19

DEVELOPED BY

HEIDI SNIDER

Digitally signed by

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Apr 22, 2019

Digitally signed by

CASIMIR L TABAKA

Jun 13, 2019

OFFICE

AJV-A422

DATE

02/26/2019

APPROVED BY

JULIE MORGAN

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	KCLT
RUNWAY	RW18L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W18A
LTP/FTP LATITUDE	351329.0470N
LTP/FTP LONGITUDE	0805610.1650W
LTP/FTP ELLIPSOIDAL HEIGHT	+01968
FPAP LATITUDE	351200.0270N
FPAP LONGITUDE	0805602.5280W
THRESHOLD CROSSING HEIGHT (TCH)	00055.7
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0104
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	8CD81682

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+02274
FPAP ORTHOMETRIC HEIGHT	+02274

