

# RADIO FIX AND HOLDING DATA RECORD

NAME: ATELL STATE: NC COUNTRY: US ICAO REGION CODE: K7  
 LATITUDE/LONGITUDE: 351959.43N/0804643.06W TYPE: WP, RADAR, INT, DME

AIRSPACE DOCKET: FIX TYPE OF ACTION: CANCEL

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	MRA	MAA
1	CHARLOTTE	I-APU	LOC/DME		055.48	048.48	11.46	11.44	4000	5200
2	CHARLOTTE	CLT	VOR/DME	L	049.77	044.77	12.07	12.07	4000	6000
3	BARRETT'S MOUNTAIN	BZM	VOR/DME	L	150.71	144.71	39.25	39.25	4000	6000

HOLDING: HOLDING TYPE OF ACTION: CANCEL

## PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	HOLDING ALTITUDES DME	MIN	MAX	TEMPLATES MIN	MAX
1	NE	CLT	VOR/DME	049.77	229.77	R	1	4000	6000	6	7	
2	NW	BZM	VOR/DME	150.71	150.71	L		4	4000	6000	6	7
3	NE	WP	WP	055.57	235.57	R		4	4000	6000	5	6

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (37-000115)	351602.00N/0804404.00W	2000	2C
1	310	TOWER (37-000900)	353157.00N/0804746.00W	2349	3C
2	200	TOWER (37-000115)	351602.00N/0804404.00W	2000	2C
2	310	TOWER (37-000900)	353157.00N/0804746.00W	2349	3C
3	200	TOWER (37-001038)	351634.64N/0804758.51W	1343	5D
3	310	TOWER (37-000900)	353157.00N/0804746.00W	2349	3C

## REASON FOR NONSTANDARD HOLDING:

PAT 2 TO KEEP HOLD PATTERN TURNS AWAY FROM AIRPORT AREA.

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

## PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	ILS OR LOC RWY 5	KCLT	CHARLOTTE	NC (US)
2	ILS OR LOC RWY 5 (ALT MA)	KCLT	CHARLOTTE	NC (US)
3	RNAV (GPS) Y RWY 23	KCLT	CHARLOTTE	NC (US)
3	RNAV (RNP) Z RWY 23	KCLT	CHARLOTTE	NC (US)

## REMARKS:

I-APU DME COORDINATES: 351221.29N-0805710.05W.  
 PRECIPITOUS TERRAIN EVALUATION COMPLETED.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 23	1		KCLT	CHARLOTTE	NC (US)
IAP	ILS OR LOC RWY 5	2, 3	1	KCLT	CHARLOTTE	NC (US)
IAP	ILS OR LOC RWY 5 (ALT MA)	3	2	KCLT	CHARLOTTE	NC (US)
IAP	RNAV (GPS) Y RWY 23			KCLT	CHARLOTTE	NC (US)
IAP	RNAV (GPS) Y RWY 5		3	KCLT	CHARLOTTE	NC (US)
IAP	RNAV (RNP) Z RWY 23			KCLT	CHARLOTTE	NC (US)
IAP	RNAV (RNP) Z RWY 5		3	KCLT	CHARLOTTE	NC (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 11 DATE OF REVISION: 02/11/2010

## REASON FOR REVISION:

CHANGED COORDINATES, FIX MOVED 14.38 FT.  
 ADDED DIST FROM FAC FOR FAC 1, FAC 2, AND FAC 3.  
 CHANGED FAC 2 AND FAC 3 MRA FROM 17,500 TO 6000.  
 ADDED DME DIST TO FAC 2.  
 DELETED FAC 4 (REFERENCE KCLT THLD).  
 TO REFRAIN FROM CONFUSION, DELETED ALL 3 HOLD PATTERNS (1-I-APU, 2-WP, 3-CLT VOR/DME).  
 ADDED NEW HOLD PATTERNS: 1, CLT VOR/DME, 4000-6000; 2, BZM VOR/DME (ALT MA HOLD), 4000 TO 6000; 3, WP HOLDING, 4000-6000.  
 INCLUDED CIH EVALUATIONS AND APPLICABLE TEMPLATES, OBSTACLE INFORMATION, AND TURNS FOR ALL 3 PATTERNS.  
 UPDATED FIX USE.  
 ADDED REMARK: PRECIPITOUS TERRAIN EVALUATION COMPLETED.

INITIATED BY: DATE: ORGANIZATION: NAME:

QUALITY  
45  
CHECKED

**DEVELOPED BY:**      **DATE:** 07/18/2009      **OFFICE:** AVN-110      **NAME:** DEBBIE NELSON

**APPROVED BY:**      **DATE:** 12/13/2022      **OFFICE:** AJV-A433      **NAME:** DAVID TEFFETELLER

**SIGNATURE:**      *Digitally signed by*  
                         **DAVID TEFFETELLER**

**DISTRIBUTION:**      **NFDC**      Dec 16, 2022  
                         **FPO: EST**  
                         **ARTCC: ZTL**  
                         **ATC FACILITY: CLT TRACON**  
                         **OTHER:**

QUALITY  
45  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: BARRETTS MOUNTAIN VOR/DME STATE: NC COUNTRY: US ICAO REGION CODE: K7  
 LATITUDE/LONGITUDE: 355207.87N/0811425.90W TYPE:

AIRSPACE DOCKET: FIX TYPE OF ACTION: NO CHANGE

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	FEET	MRA	MAA
1	BARRETTS MOUNTAIN	BZM	VOR/DME	H							17500

HOLDING: HOLDING TYPE OF ACTION: NO CHANGE

## PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG TIME	LENGTH DME	HOLDING ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	NE	BZM	VOR/DME	064.00	244.00	R	1-1 1/2		4000	17500	4	16
2	N	BZM	VOR/DME	003.00	183.00	L	1-1 1/2		4000	17500	4	16
3	N		WP	003.00	183.00	L		4	4000	17500	5	17

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	355300.60N/0811532.60W	2113	6C
2	200	AAO	360154.00N/0811257.00W	2602	4E
3	200	AAO	360200.00N/0811245.00W	2609	4E
3	310	AAO	360234.30N/0810925.90W	2880	6C

## REASON FOR NONSTANDARD HOLDING:

PAT 2 ATC REQUEST  
 PAT 3 ATC REQUEST

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

## PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
3	RNAV (GPS) RWY 1	KHKY	HICKORY	NC (US)

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
 MAG VAR W06/1990

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	KERMIT			KVUJ	ALBEMARLE	NC (US)
DP	ASHEVILLE			KAVL	ASHEVILLE	NC (US)
DP	KERMIT			KCLT	CHARLOTTE	NC (US)
DP	KERMIT			KJQF	CONCORD	NC (US)
DP	KERMIT			KAKH	GASTONIA	NC (US)
DP	TRIAD			KGSO	GREENSBORO	NC (US)
DP	HICKORY			KHKY	HICKORY	NC (US)
DP	KERMIT			KIPJ	LINCOLNTON	NC (US)
DP	KERMIT			KEQY	MONROE	NC (US)
DP	KERMIT			KRUQ	SALISBURY	NC (US)
DP	TRIAD			KINT	WINSTON-SALEM	NC (US)
DP	KERMIT			KLKR	LANCASTER	SC (US)
DP	KERMIT			KUZA	ROCK HILL	SC (US)
DP	KINGS			KTRI	BRISTOL/JOHNSON/KINGSPORT	TN (US)
EN ROUTE	V133					(US)
EN ROUTE	V20					(US)
EN ROUTE	V259					(US)
IAP	ILS OR LOC RWY 18R			KCLT	CHARLOTTE	NC (US)
IAP	ILS OR LOC RWY 36C			KCLT	CHARLOTTE	NC (US)
IAP	ILS OR LOC RWY 36L			KCLT	CHARLOTTE	NC (US)
IAP	ILS RWY 18R (CAT II-III)			KCLT	CHARLOTTE	NC (US)
IAP	ILS RWY 18R (SA CAT I)			KCLT	CHARLOTTE	NC (US)
IAP	ILS RWY 36C (CAT II- III)			KCLT	CHARLOTTE	NC (US)
IAP	ILS RWY 36L (CAT II-III)			KCLT	CHARLOTTE	NC (US)
IAP	ILS RWY 36L (SA CAT I)			KCLT	CHARLOTTE	NC (US)
IAP	ILS OR LOC RWY 20			KJQF	CONCORD	NC (US)
IAP	ILS OR LOC RWY 24		2	KHKY	HICKORY	NC (US)
IAP	RNAV (GPS) RWY 1		3	KHKY	HICKORY	NC (US)
IAP	RNAV (GPS) RWY 6		3	KHKY	HICKORY	NC (US)
IAP	VOR/DME RWY 24		1	KHKY	HICKORY	NC (US)
IAP	LOC RWY 28			KGEV	JEFFERSON	NC (US)
IAP	ILS OR LOC RWY 6			KEXX	LEXINGTON	NC (US)
IAP	ILS Z OR LOC Z RWY 23			KIPJ	LINCOLNTON	NC (US)
IAP	RNAV (GPS) RWY 9			8A7	MOCKSVILLE	NC (US)
IAP	LOC RWY 3			KMRN	MORGANTON	NC (US)
IAP	RNAV (GPS) RWY 3			KMRN	MORGANTON	NC (US)
IAP	ILS Y OR LOC Y RWY 1			KUKF	NORTH WILKESBORO	NC (US)

QUALITY  
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CHECKED

IAP	ILS Z OR LOC Z RWY 01	KUKF	NORTH WILKESBORO	NC (US)
IAP	ILS OR LOC RWY 20	KRUQ	SALISBURY	NC (US)
IAP	NDB RWY 20	KRUQ	SALISBURY	NC (US)
IAP	ILS Y OR LOC Y RWY 28	KSVH	STATESVILLE	NC (US)
IAP	ILS Z OR LOC Z RWY 28	KSVH	STATESVILLE	NC (US)
IAP	RNAV (GPS) RWY 10	KSVH	STATESVILLE	NC (US)
IAP	ILS OR LOC RWY 33	KINT	WINSTON-SALEM	NC (US)
STAR	BTSEY	KCLT	CHARLOTTE	NC (US)
STAR	LIINN	KCLT	CHARLOTTE	NC (US)
STAR	LIINN	KAKH	GASTONIA	NC (US)
STAR	LIINN	KIPJ	LINCOLNTON	NC (US)
STAR	LIINN	KEQY	MONROE	NC (US)
STAR	LIINN	KEHO	SHELBY	NC (US)
STAR	LIINN	KAFP	WADESBORO	NC (US)
STAR	LIINN	N52	WAXHAW	NC (US)
STAR	LIINN	KDCM	CHESTER	SC (US)
STAR	LIINN	KLKR	LANCASTER	SC (US)
STAR	LIINN	KUZA	ROCK HILL	SC (US)

**REQUIRED CHARTING:** DP, STAR, IAP, EN ROUTE LOW, EN ROUTE HIGH, CONTROLLER LOW, CONTROLLER HIGH

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 20

**DATE OF REVISION:** 06/15/2023

**REASON FOR REVISION:**

REMOVED KCLT ILS OR LOC RWY 23/ILS OR LOC RWY 5 ADDED KUKF ILS Z OR LOC Z RWY 01 TO FIX USE

**INITIATED BY:**

**DATE:**

**ORGANIZATION:**

**NAME:**

**OFFICE OF PRIMARY RESPONSIBILITY:**

AJV-A433

**NAME:** DAVID TEFFETELLER

**APPROVED BY:**

**DATE:** 12/13/2022

**OFFICE:** AJV-A433

**NAME:** DAVID TEFFETELLER

**SIGNATURE:** *Digitally signed by*

**DAVID TEFFETELLER**

Dec 16, 2022

QUALITY  
45  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: CHARLOTTE VOR/DME STATE: NC COUNTRY: US ICAO REGION CODE: K7

LATITUDE/LONGITUDE: 351125.04N/0805706.31W TYPE:

AIRSPACE DOCKET: FIX TYPE OF ACTION: NO CHANGE

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	FEET	MRA	MAA
1	CHARLOTTE	CLT	VOR/DME	L							17500

HOLDING: HOLDING TYPE OF ACTION: NO CHANGE

## PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG TIME	LENGTH DME	HOLDING ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	S		WP	191.00	011.00	R		10	4000	6000	15	15

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	BUILDING (37-001250)	351339.00N/0805032.00W	1633	5D

## REMARKS:

ASSIGNED FACILITY MAGVAR: W05/1985.  
PRECIPITOUS TERRAIN EVALUATION COMPLETE.  
PAT 1 USED FOR LOST COMM PROCEDURES WITH BANKR/PARQR STARS.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	KERMIT			KVUJ	ALBEMARLE	NC (US)
DP	KNIGHTS			KVUJ	ALBEMARLE	NC (US)
DP	CHARLOTTE			KCLT	CHARLOTTE	NC (US)
DP	KERMIT			KCLT	CHARLOTTE	NC (US)
DP	KNIGHTS			KCLT	CHARLOTTE	NC (US)
DP	KERMIT			KJQF	CONCORD	NC (US)
DP	KNIGHTS			KJQF	CONCORD	NC (US)
DP	TAKE-OFF MINIMUMS			KJQF	CONCORD	NC (US)
DP	KERMIT			KAKH	GASTONIA	NC (US)
DP	KNIGHTS			KAKH	GASTONIA	NC (US)
DP	HICKORY			KHKY	HICKORY	NC (US)
DP	KERMIT			KIPJ	LINCOLNTON	NC (US)
DP	KNIGHTS			KIPJ	LINCOLNTON	NC (US)
DP	KERMIT			KEQY	MONROE	NC (US)
DP	KNIGHTS			KEQY	MONROE	NC (US)
DP	KERMIT			KRUQ	SALISBURY	NC (US)
DP	KNIGHTS			KRUQ	SALISBURY	NC (US)
DP	KERMIT			KLKR	LANCASTER	SC (US)
DP	KNIGHTS			KLKR	LANCASTER	SC (US)
DP	KERMIT			KUZA	ROCK HILL	SC (US)
DP	KNIGHTS			KUZA	ROCK HILL	SC (US)
EN ROUTE	V37					(US)
EN ROUTE	V409					(US)
IAP	ILS OR LOC RWY 18C			KCLT	CHARLOTTE	NC (US)
IAP	ILS OR LOC RWY 18L			KCLT	CHARLOTTE	NC (US)
IAP	ILS OR LOC RWY 18R			KCLT	CHARLOTTE	NC (US)
IAP	ILS OR LOC RWY 36C			KCLT	CHARLOTTE	NC (US)
IAP	ILS OR LOC RWY 36L			KCLT	CHARLOTTE	NC (US)
IAP	ILS OR LOC RWY 36R			KCLT	CHARLOTTE	NC (US)
IAP	ILS RWY 18R (CAT II & III)			KCLT	CHARLOTTE	NC (US)
IAP	ILS RWY 18R (SA CAT I)			KCLT	CHARLOTTE	NC (US)
IAP	ILS RWY 36C (CAT II & III)			KCLT	CHARLOTTE	NC (US)
IAP	ILS RWY 36L (CAT II & III)			KCLT	CHARLOTTE	NC (US)
IAP	ILS RWY 36L (SA CAT I)			KCLT	CHARLOTTE	NC (US)
IAP	ILS RWY 36R (CAT II & III)			KCLT	CHARLOTTE	NC (US)
IAP	ILS RWY 36R (SA CAT I)			KCLT	CHARLOTTE	NC (US)
IAP	ILS OR LOC RWY 20			KJQF	CONCORD	NC (US)
IAP	NDB RWY 3			KAKH	GASTONIA	NC (US)
IAP	ILS Z OR LOC Z RWY 23 (ALT MA)			KIPJ	LINCOLNTON	NC (US)
IAP	ILS OR LOC RWY 5			KEQY	MONROE	NC (US)
IAP	ILS Y OR LOC Y RWY 28			KSVH	STATESVILLE	NC (US)
IAP	ILS Z OR LOC Z RWY 28			KSVH	STATESVILLE	NC (US)
IAP	RNAV (GPS) RWY 22			N52	WAXHAW	NC (US)
IAP	RNAV (GPS) RWY 4			N52	WAXHAW	NC (US)
IAP	ILS Y OR LOC Y RWY 2			KUZA	ROCK HILL	SC (US)
IAP	ILS Z OR LOC Z RWY 2			KUZA	ROCK HILL	SC (US)
STAR	BANKR		1	KCLT	CHARLOTTE	NC (US)
STAR	BTSEY			KCLT	CHARLOTTE	NC (US)
STAR	LIINN			KCLT	CHARLOTTE	NC (US)
STAR	MAJIC			KCLT	CHARLOTTE	NC (US)
STAR	PARQR		1	KCLT	CHARLOTTE	NC (US)
STAR	RASLN			KCLT	CHARLOTTE	NC (US)
STAR	UNARM			KCLT	CHARLOTTE	NC (US)

QUALITY  
45  
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STAR	LIINN	KAKH	GASTONIA	NC (US)
STAR	MAJIC	KAKH	GASTONIA	NC (US)
STAR	RASLN	KAKH	GASTONIA	NC (US)
STAR	LIINN	KIPJ	LINCOLNTON	NC (US)
STAR	MAJIC	KIPJ	LINCOLNTON	NC (US)
STAR	RASLN	KIPJ	LINCOLNTON	NC (US)
STAR	LIINN	KEQY	MONROE	NC (US)
STAR	MAJIC	KEQY	MONROE	NC (US)
STAR	RASLN	KEQY	MONROE	NC (US)
STAR	LIINN	KEHO	SHELBY	NC (US)
STAR	MAJIC	KEHO	SHELBY	NC (US)
STAR	RASLN	KEHO	SHELBY	NC (US)
STAR	LIINN	KAFP	WADESBORO	NC (US)
STAR	MAJIC	KAFP	WADESBORO	NC (US)
STAR	RASLN	KAFP	WADESBORO	NC (US)
STAR	LIINN	N52	WAXHAW	NC (US)
STAR	MAJIC	N52	WAXHAW	NC (US)
STAR	RASLN	N52	WAXHAW	NC (US)
STAR	LIINN	KDCM	CHESTER	SC (US)
STAR	MAJIC	KDCM	CHESTER	SC (US)
STAR	RASLN	KDCM	CHESTER	SC (US)
STAR	LIINN	KLKR	LANCASTER	SC (US)
STAR	MAJIC	KLKR	LANCASTER	SC (US)
STAR	RASLN	KLKR	LANCASTER	SC (US)
STAR	LIINN	KUZA	ROCK HILL	SC (US)
STAR	MAJIC	KUZA	ROCK HILL	SC (US)
STAR	RASLN	KUZA	ROCK HILL	SC (US)

**REQUIRED CHARTING:** DP, STAR, IAP, EN ROUTE LOW, CONTROLLER LOW

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 27

**DATE OF REVISION:** 06/15/2023

**REASON FOR REVISION:**

REMOVED KCLT ILS OR LOC RWY 23/ILS OR LOC RWY 5; KAVL ASHVILLE DP AND FAY MOUNTY DP FROM FIX USE  
ADDED KCLT UNARM STAR AND KIPJ ILS Z OR LOC Z RWY 23 (ALT MA) TO FIX USE.

**INITIATED BY:**

**DATE:**

**ORGANIZATION:**

**NAME:**

**OFFICE OF PRIMARY RESPONSIBILITY:**

AJV-A433

**NAME:** DAVID TEFFETELLER

**APPROVED BY:**

**DATE:** 12/12/2022

**OFFICE:** AJV-A433

**NAME:** DAVID TEFFETELLER

**SIGNATURE:**

*Digitally signed by*

**DAVID TEFFETELLER**

Dec 16, 2022

QUALITY  
45  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: DOVSE

STATE: NC

COUNTRY: US

ICAO REGION CODE: K7

LATITUDE/LONGITUDE: 351437.10N/0805407.91W

TYPE: WP, DME

AIRSPACE DOCKET:

FIX TYPE OF ACTION: CANCEL

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	FAC FEET	MRA	MAA
1	CHARLOTTE	I-APU	LOC/DME		055.48	048.48	3.36	3.34		1300	5200

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## REMARKS:

I-APU DME COORDINATES: 351221.29N-0805710.05W.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 23	1		KCLT	CHARLOTTE	NC (US)
IAP	RNAV (GPS) Y RWY 23			KCLT	CHARLOTTE	NC (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 02/11/2010

## REASON FOR REVISION:

ADDED DISTANCE TO FAC TO FAC 1.  
DELETED FAC 2 (REFERENCE TO KCLT THLD).  
UPDATED FIX USE.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 07/18/2009

OFFICE: AVN-110

NAME: DEBBIE NELSON

APPROVED BY:

DATE: 12/13/2022

OFFICE: AJV-A433

NAME: DAVID TEFFETELLER

SIGNATURE: *Digitally signed by*

**DAVID TEFFETELLER**

DISTRIBUTION:

NFDC

FPO: EST

ARTCC: ZTL

ATC FACILITY: CLT TRACON

OTHER:

Dec 16, 2022

QUALITY  
45  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: JEPHS

STATE: NC

COUNTRY: US

ICAO REGION CODE: K7

LATITUDE/LONGITUDE: 352455.89N/0803952.48W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE  
STAR

USE TITLE  
CHSLY (RNAV)

FAC

PAT

AIRPORT IDENT  
KCLT

CITY  
CHARLOTTE

STATE  
NC (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4

DATE OF REVISION: 06/15/2023

REASON FOR REVISION:

REMOVED RADAR AND DME FROM FIX TYPE

REMOVED FAC1 (APU LOC/DME) AND ALL ASSOCIATED REMARKS

REMOVED KCLT ILS OR LOW RWY 23, RNAV (GPS) Y RWY 23, AND RNAV (RNP) Z RWY 23 FROM FIX USE

REMOVED IAP FROM REQUIRED CHARTING

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A433

NAME: DAVID TEFFETELLER

APPROVED BY:

DATE: 12/13/2022

OFFICE: AJV-A433

NAME: DAVID TEFFETELLER

SIGNATURE:

*Digitally signed by*

**DAVID TEFFETELLER**

Dec 16, 2022

QUALITY  
45  
CHECKED



# RADIO FIX AND HOLDING DATA RECORD

NAME: KECKS STATE: NC COUNTRY: US ICAO REGION CODE: K7  
 LATITUDE/LONGITUDE: 350457.56N/0810723.73W TYPE: WP, RADAR, INT, DME

AIRSPACE DOCKET: FIX TYPE OF ACTION: CANCEL

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	MRA	MAA
1	CHARLOTTE	I-CLT	LOC		235.47	228.47		12.71	4000	5200
2	CHARLOTTE	CLT	VOR/DME	L	237.67	232.67	10.62	10.62	4000	6000
3	BARRETT'S MOUNTAIN	BZM	VOR/DME	L	179.01	173.01	47.45	47.45	4000	6000

## EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
BZM	VOR/DME	R-179	48	4000	6000

HOLDING: HOLDING TYPE OF ACTION: CANCEL

## PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	DME	HOLDING ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	SW	CLT	VOR/DME	237.67	057.67	R	1		4000	6000	6	7
2	N	BZM	VOR/DME	179.01	179.01	R		4	4000	6000	6	7
3	SW	WP	WP	235.37	055.37	R		4	4000	6000	5	6

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	350418.20N/0810613.40W	1170	6A
1	310	TOWER (45-000698)	350747.42N/0811628.36W	1540	1B
2	200	AAO	351226.40N/0811012.40W	1290	6A
2	310	TOWER (37-001173)	352049.00N/0811014.00W	2755	5E
3	200	AAO	350418.20N/0810613.40W	1170	6A
3	310	TOWER (45-001586)	350351.84N/0811827.39W	1252	2C

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

## PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	ILS OR LOC RWY 23	KCLT	CHARLOTTE	NC (US)
2	ILS OR LOC RWY 23 (ALT MA)	KCLT	CHARLOTTE	NC (US)
3	RNAV (RNP) Z RWY 23	KCLT	CHARLOTTE	NC (US)
3	RNAV (GPS) Y RWY 23	KCLT	CHARLOTTE	NC (US)

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 23	2, 3	1	KCLT	CHARLOTTE	NC (US)
IAP	ILS OR LOC RWY 23 (ALT MA)	3	2	KCLT	CHARLOTTE	NC (US)
IAP	ILS OR LOC RWY 5	1, 3		KCLT	CHARLOTTE	NC (US)
IAP	RNAV (GPS) Y RWY 23		3	KCLT	CHARLOTTE	NC (US)
IAP	RNAV (GPS) Y RWY 5			KCLT	CHARLOTTE	NC (US)
IAP	RNAV (RNP) Z RWY 23		3	KCLT	CHARLOTTE	NC (US)
IAP	RNAV (RNP) Z RWY 5			KCLT	CHARLOTTE	NC (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3

DATE OF REVISION: 02/11/2010

## REASON FOR REVISION:

CHANGED COORDINATES, FIX MOVED 68.12 FT.  
 ADDED DIST FROM FAC TO FAC 1, CHANGED MRA FROM 2500 TO 4000 AND MAA FROM 6500 TO 5200.  
 DELETED FAC 2 (FML VOR WAS DECOMMISSIONED) AND FAC'S 4/5 (REFERENCED TO KCLT THLD). (FAC 3, CLT VOR/DME, NOW BECOMES FAC 2)  
 CHANGED FAC 2 RADIAL/COURSE FROM 237.68/232.68 TO 237.67/232.67, DME DISTANCE FROM 10.61 TO 10.62 AND ADDED NM FROM FAC.  
 ADDED FAC 3, BZM VOR/DME AND APPLICABLE ASSOCIATED INFORMATION.  
 ADDED ESV INFORMATION FOR BZM RADIAL.  
 CHANGED HOLD PAT 1 FROM CLT LOC TO CLT VOR/DME AND UPDATED COURSE, MIN/MAX ALTITUDES, TEMPLATES AND CONTROL OBSTRUCTION.  
 UPDATED HOLD PAT 2 MIN/MAX ALT FROM 2500-14000 TO 4000-6000 AND TEMPLATES/CONTROL OBSTRUCTIONS.  
 ADDED HOLD PAT 3 (ALT MA HOLD).  
 ADDED REMARK: PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
 UPDATED FIX USE.

QUALITY  
45  
CHECKED

**INITIATED BY:**

DATE:

**ORGANIZATION:**

NAME:

**DEVELOPED BY:**

**DATE:** 07/18/2009

**OFFICE: AVN-110**

**NAME:** DEBBIE NELSON

**APPROVED BY:**

**DATE:** 12/13/2022

**OFFICE:** AJV-A433

**NAME:** DAVID TEFFETELLER

**SIGNATURE:** *Digitally signed by*

**DAVID TEFFETELLER**

**DISTRIBUTION:**

**NFDC**

Dec 16, 2022

FPO: EST  
ARTCO: 37

ARTCC: ZTL

ATC FACILITY: CLT TRACON  
OTHER:

**OTHER:**

QUALITY  
45  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: LECAR

STATE: NC

COUNTRY: US

ICAO REGION CODE: K7

LATITUDE/LONGITUDE: 351650.32N/0805104.25W

TYPE: WP, RADAR, DME

AIRSPACE DOCKET:

FIX TYPE OF ACTION: CANCEL

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	FEET	MRA	MAA
1	CHARLOTTE	I-APU	LOC/DME		055.48	048.48	6.71	6.69	40623	2500	5200

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## REMARKS:

I-APU DME COORDINATES: 351221.29N-0805710.05W.  
RNP FORMULA USED TO ESTABLISH PFAF: 31877.77 FT/5.25 NM.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 23	1		KCLT	CHARLOTTE	NC (US)
IAP	RNAV (GPS) Y RWY 23			KCLT	CHARLOTTE	NC (US)
IAP	RNAV (RNP) Z RWY 23			KCLT	CHARLOTTE	NC (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 10

DATE OF REVISION: 02/11/2010

## REASON FOR REVISION:

ADDED DIST FROM FAC IN NM AND FEET TO FAC 1.  
DELETED FAC 2 (REFERENCE TO KCLT THLD).  
ADDED FEET/NM OF PFAF TO RNP PFAF REMARK.  
UPDATED FIX USE.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 07/18/2009

OFFICE: AVN-110

NAME: DEBBIE NELSON

APPROVED BY:

DATE: 12/13/2022

OFFICE: AJV-A433

NAME: DAVID TEFFETELLER

SIGNATURE: *Digitally signed by*

**DAVID TEFFETELLER**

DISTRIBUTION:

NFDC  
FPO: EST  
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ATC FACILITY: CLT TRACON  
OTHER:  
Dec 16, 2022

QUALITY  
45  
CHECKED