

# RADIO FIX AND HOLDING DATA RECORD

NAME: COLLIERS VORTAC      STATE: SC      COUNTRY: US      ICAO REGION CODE: K7  
 LATITUDE/LONGITUDE: 334226.47N/0820943.43W      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	COLLIERS	IRQ	VORTAC	H							45000

HOLDING:      HOLDING TYPE OF ACTION: NO CHANGE

**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	N	IRQ	VORTAC	341.00	161.00	R	1-1 1/2	2100 17500	4 16
2	NE	IRQ	VORTAC	063.00	243.00	R	1	2400 10000	4 9

**CONTROLLING OBSTRUCTIONS:**

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (45-000142)	333939.70N/0821046.96W	845	2C
2	200	TOWER (45-000142)	333939.70N/0821046.96W	845	2C

**HOLDING RESTRICTIONS:**

HOLDING LIMITED TO ESTABLISHED PATTERNS.

**REMARKS:**

PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
 ASSIGNED FACILITY MAGVAR: 4W (1990).

**FIX USE:**

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	GAIRY (RNAV)			KATL	ATLANTA	GA (US)
DP	KNIGHTS			KVUJ	ALBEMARLE	NC (US)
DP	ASHEVILLE			KAVL	ASHEVILLE	NC (US)
DP	KNIGHTS			KCLT	CHARLOTTE	NC (US)
DP	KNIGHTS			KJQF	CONCORD	NC (US)
DP	KNIGHTS			KAKH	GASTONIA	NC (US)
DP	HICKORY			KHKY	HICKORY	NC (US)
DP	KNIGHTS			KIPJ	LINCOLNTON	NC (US)
DP	KNIGHTS			KEQY	MONROE	NC (US)
DP	KNIGHTS			KRUQ	SALISBURY	NC (US)
DP	PLFMD (RNAV)			KCHS	CHARLESTON	SC (US)
DP	EXECUTIVE (RNAV)			KJZI	CHARLESTON	SC (US)
DP	KNIGHTS			KLKR	LANCASTER	SC (US)
DP	KNIGHTS			KUZA	ROCK HILL	SC (US)
EN ROUTE	J4					(US)
EN ROUTE	J52					(US)
EN ROUTE	J53					(US)
EN ROUTE	J81					(US)
EN ROUTE	J85					(US)
EN ROUTE	J99					(US)
EN ROUTE	T209					(US)
EN ROUTE	V155					(US)
EN ROUTE	V18					(US)
EN ROUTE	V185					(US)
EN ROUTE	V417					(US)
EN ROUTE	V56					(US)
IAP	ILS OR LOC RWY 17			KAGS	AUGUSTA	GA (US)
IAP	ILS OR LOC RWY 35	1		KAGS	AUGUSTA	GA (US)
IAP	RNAV (GPS) Z RWY 8			KAGS	AUGUSTA	GA (US)
IAP	NDB RWY 11			KDNL	AUGUSTA	GA (US)
IAP	VOR/DME-B	1		KDNL	AUGUSTA	GA (US)
IAP	ILS OR LOC/NDB RWY 10	2		KHQU	THOMSON	GA (US)
IAP	VOR/DME-A	2		KHQU	THOMSON	GA (US)
IAP	ILS OR LOC/DME RWY 7			KAIK	AIKEN	SC (US)
IAP	NDB RWY 25			KAIK	AIKEN	SC (US)
IAP	VOR/DME-A			KAIK	AIKEN	SC (US)
STAR	SINCA			KATL	ATLANTA	GA (US)
STAR	STUGE			KAGS	AUGUSTA	GA (US)
STAR	STWRT			KAGS	AUGUSTA	GA (US)
STAR	STWRT			KDNL	AUGUSTA	GA (US)
STAR	CHPTR			KVUJ	ALBEMARLE	NC (US)
STAR	UNARM			KVUJ	ALBEMARLE	NC (US)
STAR	CHPTR			KCLT	CHARLOTTE	NC (US)
STAR	UNARM			KCLT	CHARLOTTE	NC (US)
STAR	CHPTR			KJQF	CONCORD	NC (US)
STAR	UNARM			KJQF	CONCORD	NC (US)
STAR	CHPTR			KAKH	GASTONIA	NC (US)
STAR	UNARM			KAKH	GASTONIA	NC (US)
STAR	CHPTR			KIPJ	LINCOLNTON	NC (US)

STAR	UNARM	KIPJ	LINCOLNTON	NC (US)
STAR	CHPTR	KEQY	MONROE	NC (US)
STAR	UNARM	KEQY	MONROE	NC (US)
STAR	MALNR (RNAV)	KRDU	RALEIGH/DURHAM	NC (US)
STAR	CHPTR	KRUQ	SALISBURY	NC (US)
STAR	UNARM	KRUQ	SALISBURY	NC (US)
STAR	CHPTR	KEHO	SHELBY	NC (US)
STAR	UNARM	KEHO	SHELBY	NC (US)
STAR	CHPTR	KAFP	WADESBORO	NC (US)
STAR	UNARM	KAFP	WADESBORO	NC (US)
STAR	CHPTR	KN52	WAXHAW	NC (US)
STAR	UNARM	KN52	WAXHAW	NC (US)
STAR	OSPRI (RNAV)	KCHS	CHARLESTON	SC (US)
STAR	TRTLS (RNAV)	KCHS	CHARLESTON	SC (US)
STAR	OSPRI (RNAV)	KJZI	CHARLESTON	SC (US)
STAR	CHPTR	KDCM	CHESTER	SC (US)
STAR	UNARM	KDCM	CHESTER	SC (US)
STAR	CHPTR	KLKR	LANCASTER	SC (US)
STAR	UNARM	KLKR	LANCASTER	SC (US)
STAR	CHPTR	KUZA	ROCK HILL	SC (US)
STAR	UNARM	KUZA	ROCK HILL	SC (US)

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 14

**DATE OF REVISION:** 12/07/2017

**REASON FOR REVISION:**

1. INCREASED PAT 1 MIN HOLDING ALTITUDE FROM 2000 TO 2100 (MATCH LOWEST PUBLISHED ALTITUDE ON PROCEDURES USING THIS PATTERN).
2. INCREASED PAT 2 MIN HOLDING ALTITUDE FROM 2000 TO 2400 (MATCH LOWEST PUBLISHED ALTITUDE ON PROCEDURES USING THIS PATTERN).
3. DELETED JAGUAR DP AT KMCO FROM FIX USE.
4. DELETED MUNSN DP AT KATL FROM FIX USE.
5. ADDED KNIGHTS DP AT KVUJ, KCLT, KJQF, KAKH, KLKR, KIPJ, KEQY, KUZA, AND KRUQ IN FIX USE.

**DEVELOPED BY:**                      **DATE:** 06/13/2017                      **OFFICE:** AJV-5422                      **NAME:** PETER GUIMOND

**APPROVED BY:**                      **DATE:**                      **OFFICE:** AJV-5420                      **NAME:** JULIE MORGAN

**SIGNATURE:**

**DISTRIBUTION:**    **NFDC**  
**FPO: EST**  
**ARTCC: ZTL**  
**ATC FACILITY: AGS APP CON**  
**OTHER:**