

RADIO FIX AND HOLDING DATA RECORD

NAME: FAYETTEVILLE VOR/DME

STATE: NC

COUNTRY: US

ICAO REGION CODE: K7

LATITUDE/LONGITUDE: 345907.98N/0785230.23W

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	FAC FEET	MRA	MAA
1	FAYETTEVILLE	FAY	VOR/DME	L							17500

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	265	TOWER (37-001791)	344751.00N/0790241.00W	1249	2D

HOLDING RESTRICTIONS:

UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 2500.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

PRIOR COORDINATION REQUIRED WITH CONTROLLING AGENCY FOR HOLDING OVER R-5311 A-B-C AND FT BRAGG NORTH A,B OR SOUTH A,B MOA.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	PANTHER			KVUJ	ALBEMARLE	NC (US)
DP	PANTHER			KCLT	CHARLOTTE	NC (US)
DP	PANTHER			KJQF	CONCORD	NC (US)
DP	MOUNTY			KFAY	FAYETTEVILLE	NC (US)
DP	PANTHER			KAKH	GASTONIA	NC (US)
DP	TRIAD			KGSO	GREENSBORO	NC (US)
DP	PANTHER			KIPJ	LINCOLNTON	NC (US)
DP	PANTHER			KEQY	MONROE	NC (US)
DP	FAYETTEVILLE			KRDU	RALEIGH/DURHAM	NC (US)
DP	HOOKZ (RNAV)			KRDU	RALEIGH/DURHAM	NC (US)
DP	RALEIGH			KRDU	RALEIGH/DURHAM	NC (US)
DP	TAR HEEL			KRDU	RALEIGH/DURHAM	NC (US)
DP	PANTHER			KRUQ	SALISBURY	NC (US)
DP	TRIAD			KINT	WINSTON-SALEM	NC (US)
DP	WINSTON			KINT	WINSTON-SALEM	NC (US)
DP	PANTHER			KLKR	LANCASTER	SC (US)
DP	PANTHER			KUZA	ROCK HILL	SC (US)
EN ROUTE	V136					(US)
EN ROUTE	V157					(US)
EN ROUTE	V296					(US)
EN ROUTE	V54					(US)
EN ROUTE	V56					(US)
IAP	LOC RWY 6			KCTZ	CLINTON	NC (US)
IAP	VOR/DME-A			KCTZ	CLINTON	NC (US)
IAP	VOR/DME RWY 15			KEYF	ELIZABETHTOWN	NC (US)
IAP	LOC/DME RWY 5			KHRJ	ERWIN	NC (US)
IAP	NDB RWY 23			KHRJ	ERWIN	NC (US)
IAP	ILS OR LOC/DME RWY 4			KFAY	FAYETTEVILLE	NC (US)
IAP	LOC BC RWY 22			KFAY	FAYETTEVILLE	NC (US)
IAP	VOR RWY 22			KFAY	FAYETTEVILLE	NC (US)
IAP	VOR RWY 28			KFAY	FAYETTEVILLE	NC (US)
IAP	VOR RWY 4			KFAY	FAYETTEVILLE	NC (US)
IAP	NDB RWY 27			KFBG	FORT BRAGG	NC (US)
IAP	RNAV (GPS) RWY 27			KFBG	FORT BRAGG	NC (US)
IAP	ILS OR LOC RWY 5			KLBT	LUMBERTON	NC (US)
IAP	RNAV (GPS) RWY 13			KLBT	LUMBERTON	NC (US)
IAP	ILS OR LOC RWY 5			KMEB	MAXTON	NC (US)
IAP	VOR/DME OR GPS-A			K5W4	RAEFORD	NC (US)
IAP	NDB RWY 7			KBBP	BENNETTSVILLE	SC (US)

REQUIRED CHARTING: DP, MILITARY IAP, IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 12

DATE OF REVISION: 11/10/2016

REASON FOR REVISION:

REMOVED KCLT HUSTN (RNAV) STAR AND CHESTERFIELD STAR FROM FIX USE.

DELETED KOAJ ILS OR LOC RWY 5 FROM FIX USE.

DELETED KSOP ILS Z OR LOC/DME Z RWY 5 FROM FIX USE.

HOLDING PATTERN CONTROLLING OBSTACLE MSL ELEVATION LOWERED FROM 1250 TO 1249.

REMOVED STAR FROM REQUIRED CHARTING.

DEVELOPED BY: **DATE:** 05/24/2016 **OFFICE:** AJV-5413 **NAME:** MIKE MELSSEN
APPROVED BY: **DATE:** 09/26/2016 **OFFICE:** AJV-5410 **NAME:** MARLON ROBINSON
SIGNATURE:

DISTRIBUTION: **NFDC**
 FPO: EST
 ARTCC: ZDC
 ATC FACILITY: FAY APP CON, FBG ATCT
 OTHER: USAASA

RADIO FIX AND HOLDING DATA RECORD

NAME: FLAT ROCK VORTAC STATE: VA COUNTRY: US ICAO REGION CODE: K6
 LATITUDE/LONGITUDE: 373142.63N/0774941.59W TYPE:

AIRSPACE DOCKET: FIX TYPE OF ACTION: MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	MRA FEET	MAA
1	FLAT ROCK	FAK	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 TIME	LENGTH DME	HOLDING ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	SW	FAK	VORTAC	218.00	038.00	L	1 1/2		21000	37000	18	26

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	TOWER (51-000705)	373023.00N/0774202.00W	1539	3D

REASON FOR NONSTANDARD HOLDING:

PAT 1 AIR TRAFFIC REQUEST

HOLDING RESTRICTIONS:

UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3000.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	HICKORY (OBSTACLE)			KHKY	HICKORY	NC (US)
DP	OXFRD (RNAV)			KRDU	RALEIGH/DURHAM	NC (US)
DP	RALEIGH			KRDU	RALEIGH/DURHAM	NC (US)
DP	HENRY			KPHF	NEWPORT NEWS	VA (US)
DP	KISRR			KORF	NORFOLK	VA (US)
DP	READE			KRIC	RICHMOND	VA (US)
EN ROUTE	J109					(US)
EN ROUTE	J24					(US)
EN ROUTE	J51		1			(US)
EN ROUTE	V155					(US)
EN ROUTE	V16					(US)
EN ROUTE	V223					(US)
EN ROUTE	V260					(US)
EN ROUTE	V290					(US)
EN ROUTE	V3					(US)
IAP	RNAV (GPS) RWY 15			KW81	CREWE	VA (US)
IAP	NDB RWY 3			KFVX	FARMVILLE	VA (US)
IAP	RNAV (GPS) RWY 21			KFVX	FARMVILLE	VA (US)
IAP	LOC/NDB RWY 5			KPTB	PETERSBURG	VA (US)
IAP	VOR RWY 23			KPTB	PETERSBURG	VA (US)
IAP	RNAV (GPS) RWY 15			KFCI	RICHMOND	VA (US)
IAP	ILS OR LOC RWY 02			KRIC	RICHMOND	VA (US)
IAP	ILS OR LOC RWY 16			KRIC	RICHMOND	VA (US)
IAP	ILS OR LOC RWY 34			KRIC	RICHMOND	VA (US)
IAP	ILS RWY 34 (CAT II)			KRIC	RICHMOND	VA (US)
IAP	ILS RWY 34 (CAT III)			KRIC	RICHMOND	VA (US)
IAP	ILS RWY 34 (SA CAT I)			KRIC	RICHMOND	VA (US)
IAP	RNAV (GPS) RWY 7			KRIC	RICHMOND	VA (US)
IAP	RNAV (GPS) Z RWY 16			KRIC	RICHMOND	VA (US)
IAP	RNAV (GPS) Z RWY 2			KRIC	RICHMOND	VA (US)
IAP	RNAV (GPS) Z RWY 20			KRIC	RICHMOND	VA (US)
IAP	RNAV (GPS) Z RWY 34			KRIC	RICHMOND	VA (US)
IAP	VOR RWY 02			KRIC	RICHMOND	VA (US)
IAP	VOR RWY 34			KRIC	RICHMOND	VA (US)
IAP	LOC RWY 16			KOFP	RICHMOND/ASHLAND	VA (US)
IAP	VOR RWY 16			KOFP	RICHMOND/ASHLAND	VA (US)
STAR	IRONS			KDCA	WASHINGTON	DC (US)
STAR	BARIN (RNAV)			KIAD	WASHINGTON	DC (US)
STAR	COATT			KIAD	WASHINGTON	DC (US)
STAR	RIPKN			KBWI	BALTIMORE	MD (US)
STAR	RIPKN			KMTN	BALTIMORE	MD (US)
STAR	IRONS			KW00	BOWIE	MD (US)
STAR	IRONS			KADW	CAMP SPRINGS	MD (US)
STAR	IRONS			KW32	CLINTON	MD (US)
STAR	IRONS			KCGS	COLLEGE PARK	MD (US)
STAR	IRONS			KVKX	FRIENDLY	MD (US)
STAR	IRONS			K2W5	INDIAN HEAD	MD (US)
STAR	RIPKN			KDMW	WESTMINSTER	MD (US)

STAR	JAIKE (RNAV)	KCDW	CALDWELL	NJ (US)
STAR	JAIKE (RNAV)	KLDJ	LINDEN	NJ (US)
STAR	JAIKE (RNAV)	K47N	MANVILLE	NJ (US)
STAR	JAIKE (RNAV)	KMMU	MORRISTOWN	NJ (US)
STAR	DYLIN	KEWR	NEWARK	NJ (US)
STAR	PHLBO (RNAV)	KEWR	NEWARK	NJ (US)
STAR	JAIKE (RNAV)	KSMQ	SOMERVILLE	NJ (US)
STAR	JAIKE (RNAV)	KTEB	TETERBORO	NJ (US)
STAR	PAATS (RNAV)	KTTN	TRENTON	NJ (US)
STAR	PAATS (RNAV)	KMQS	COATESVILLE	PA (US)
STAR	PAATS (RNAV)	KPHL	PHILADELPHIA	PA (US)
STAR	PAATS (RNAV)	KPNE	PHILADELPHIA	PA (US)
STAR	IRONS	KDAA	FORT BELVOIR	VA (US)
STAR	COATT	KJYO	LEESBURG	VA (US)
STAR	COATT	KHEF	MANASSAS	VA (US)
STAR	TERKS	KCPK	NORFOLK	VA (US)
STAR	TERKS	KNGU	NORFOLK	VA (US)
STAR	TERKS	KORF	NORFOLK	VA (US)
STAR	TERKS	KPVG	NORFOLK	VA (US)
STAR	TERKS	KSFQ	SUFFOLK	VA (US)
STAR	TERKS	KNTU	VIRGINIA BEACH	VA (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 15

DATE OF REVISION: 01/08/2015

REASON FOR REVISION:
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 07/14/2014

OFFICE: AJV-352

NAME: MICHAEL DOJCAK

APPROVED BY: **DATE:** 01/08/2015

OFFICE: AJV-352

NAME: SUE CRUMB

SIGNATURE:

DISTRIBUTION: **NFDC**
 FPO: EST
 ARTCC: ZDC
 ATC FACILITY:
 OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: FRANKLIN VORTAC **STATE:** VA **COUNTRY:** US **ICAO REGION CODE:** K6
LATITUDE/LONGITUDE: 364251.25N/0770044.56W **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	MRA FEET	MAA
1	FRANKLIN	FKN	VORTAC	L						17500

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

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	W	FKN	VORTAC	290.00	110.00	R	1		1600	6000	4	5
2	W		WP	290.00	110.00	R		4	2000	5000	4	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (51-000975)	364116.00N/0770058.48W	524	5D
2	200	TOWER (51-000975)	364116.00N/0770058.48W	524	5D

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	MOUNTY			KFAY	FAYETTEVILLE	NC (US)
DP	RALEIGH			KRDU	RALEIGH/DURHAM	NC (US)
EN ROUTE	J207					(US)
EN ROUTE	J79					(US)
EN ROUTE	V189					(US)
EN ROUTE	V260					(US)
EN ROUTE	V266					(US)
EN ROUTE	V66					(US)
IAP	RNAV (GPS) RWY 2			KIXA	ROANOKE RAPIDS	NC (US)
IAP	RNAV (GPS) RWY 20			KIXA	ROANOKE RAPIDS	NC (US)
IAP	LOC RWY 34			KEMV	EMPORIA	VA (US)
IAP	RNAV (GPS) RWY 34			KEMV	EMPORIA	VA (US)
IAP	COPTER RNAV (GPS) RWY 14			KFAF	FORT EUSTIS	VA (US)
IAP	RNAV (GPS) RWY 14			KFAF	FORT EUSTIS	VA (US)
IAP	ILS OR LOC RWY 7			KPHF	NEWPORT NEWS	VA (US)
IAP	RNAV (GPS) RWY 7			KPHF	NEWPORT NEWS	VA (US)
IAP	ILS OR LOC RWY 23		1	KORF	NORFOLK	VA (US)
IAP	RNAV (GPS) RWY 10			KPVG	NORFOLK	VA (US)
IAP	LOC RWY 5			KPTB	PETERSBURG	VA (US)
IAP	VOR RWY 23			KPTB	PETERSBURG	VA (US)
IAP	RNAV (GPS) RWY 25			KSFQ	SUFFOLK	VA (US)
IAP	RNAV (GPS) RWY 4			KSFQ	SUFFOLK	VA (US)
IAP	RNAV (GPS) RWY 20		2	KAKQ	WAKEFIELD	VA (US)
STAR	NASCR			KVUJ	ALBEMARLE	NC (US)
STAR	CHSLY (RNAV)			KCLT	CHARLOTTE	NC (US)
STAR	NASCR			KJQF	CONCORD	NC (US)
STAR	ARGAL			KRDU	RALEIGH/DURHAM	NC (US)
STAR	KAROO (RNAV)			KRDU	RALEIGH/DURHAM	NC (US)
STAR	NASCR			KRUQ	SALISBURY	NC (US)
STAR	DRONE			KLFI	HAMPTON	VA (US)
STAR	DRONE			KPHF	NEWPORT NEWS	VA (US)
STAR	DRONE			KCPK	NORFOLK	VA (US)
STAR	DRONE			KNGU	NORFOLK	VA (US)
STAR	DRONE			KORF	NORFOLK	VA (US)
STAR	DRONE			KPVG	NORFOLK	VA (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 19

DATE OF REVISION: 11/10/2016

REASON FOR REVISION:

REMOVED KCLT IVANE (RNAV) STAR FROM FIX USE.
 UPDATED PATTERN 1 AND 2 CONTROLLING OBSTRUCTION ELEVATION FROM 528 TO 524.
 ADDED KFAF RNAV (GPS) RWY 14 AND COPTER RNAV (GPS) RWY 14 TO FIX USE.
 ADDED KSFQ RNAV (GPS) RWY 4, RNAV (GPS) RWY 7 AND RNAV (GPS) RWY 25 TO FIX USE.
 ADDED KPTB LOC RWY 5 TO FIX USE.

DEVELOPED BY: **DATE:** 05/26/2016 **OFFICE:** AJV-5413 **NAME:** MIKE MELSSEN
APPROVED BY: **DATE:** 09/26/2016 **OFFICE:** AJV-5410 **NAME:** MARLON ROBINSON
SIGNATURE:

DISTRIBUTION: **NFDC**
 FPO: EST
 ARTCC: ZDC
 ATC FACILITY: ORF APP CON
 OTHER: RDU APP CON

RADIO FIX AND HOLDING DATA RECORD

NAME: GREENSBORO VORTAC **STATE:** NC **COUNTRY:** US **ICAO REGION CODE:** K7

LATITUDE/LONGITUDE: 360244.49N/0795834.95W **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	GREENSBORO	GSO	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	SW	GSO	VORTAC	221.00	041.00	R	1-1 1/2	3100 17500	4 17
2	W	GSO	VORTAC	283.00	103.00	R	1-1 1/2	3000 17500	4 17
3	E	GSO	VORTAC	108.00	288.00	R	1-1 1/2	3100 17500	4 17
4	W	WP	WP	287.00	107.00	R	4	3000 6000	5 6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (37-001004)	360553.00N/0800107.00W	1341	5D
1	310	TOWER (37-001292)	355642.65N/0795144.38W	2046	1A
2	200	TOWER (37-002786)	360636.33N/0800436.41W	1441	5D
3	200	TOWER (37-000975)	355811.00N/0794929.00W	1851	2C
3	310	TOWER (37-001292)	355642.65N/0795144.38W	2046	1A
4	200	TOWER (37-002786)	360636.33N/0800436.41W	1441	5D

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	VOR/DME RWY 23L	KGSO	GREENSBORO	NC (US)
3	ILS OR LOC RWY 23L	KGSO	GREENSBORO	NC (US)
3	ILS RWY 23L (CAT II)	KGSO	GREENSBORO	NC (US)

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	JDUBB (RNAV)			KDCA	WASHINGTON	DC (US)
DP	GABBE (RNAV)			KHEF	WASHINGTON	DC (US)
DP	JDUBB (RNAV)			KIAD	WASHINGTON	DC (US)
DP	CHATT (RNAV)			KAGS	AUGUSTA	GA (US)
DP	CHATT (RNAV)			KDNL	AUGUSTA	GA (US)
DP	CHATT (RNAV)			KHQU	THOMSON	GA (US)
DP	FIXET (RNAV)			KBWI	BALTIMORE	MD (US)
DP	TERPZ (RNAV)			KBWI	BALTIMORE	MD (US)
DP	TERPZ (RNAV)			KMTN	BALTIMORE	MD (US)
DP	JEFSN (RNAV)			KADW	CAMP SPRINGS	MD (US)
DP	TERPZ (RNAV)			KESN	EASTON	MD (US)
DP	TERPZ (RNAV)			KFDK	FREDERICK	MD (US)
DP	TERPZ (RNAV)			KGAI	GAITHERSBURG	MD (US)
DP	TERPZ (RNAV)			KDMW	WESTMINSTER	MD (US)
DP	HORNET			KVUJ	ALBEMARLE	NC (US)
DP	BLUE DEVIL			KIGX	CHAPEL HILL	NC (US)
DP	CHARLOTTE			KCLT	CHARLOTTE	NC (US)
DP	HORNET			KCLT	CHARLOTTE	NC (US)
DP	HORNET			KJQF	CONCORD	NC (US)
DP	MOUNTY			KFAY	FAYETTEVILLE	NC (US)
DP	HORNET			KAKH	GASTONIA	NC (US)
DP	QUAKER			KGSO	GREENSBORO	NC (US)
DP	TRIAD			KGSO	GREENSBORO	NC (US)
DP	HICKORY			KHKY	HICKORY	NC (US)
DP	HORNET			KIPJ	LINCOLNTON	NC (US)
DP	HORNET			KEQY	MONROE	NC (US)
DP	BLUE DEVIL			KRDU	RALEIGH/DURHAM	NC (US)
DP	PACKK			KRDU	RALEIGH/DURHAM	NC (US)
DP	RALEIGH			KRDU	RALEIGH/DURHAM	NC (US)
DP	BLUE DEVIL			KTDF	ROXBORO	NC (US)
DP	HORNET			KRUQ	SALISBURY	NC (US)
DP	QUAKER			KINT	WINSTON-SALEM	NC (US)
DP	TRIAD			KINT	WINSTON-SALEM	NC (US)
DP	WINSTON			KINT	WINSTON-SALEM	NC (US)
DP	CHATT (RNAV)			KAIK	AIKEN	SC (US)
DP	HORNET			KLKR	LANCASTER	SC (US)
DP	HORNET			KUZA	ROCK HILL	SC (US)

DP	JDUBB (RNAV)	KDAA	FORT BELVOIR	VA (US)
DP	JDUBB (RNAV)	KJYO	LEESBURG	VA (US)
DP	READE	KRIC	RICHMOND	VA (US)
DP	JDUBB (RNAV)	KOKV	WINCHESTER	VA (US)
DP	JDUBB (RNAV)	KMRB	MARTINSBURG	WV (US)
EN ROUTE	J14			NC (US)
EN ROUTE	J75			NC (US)
EN ROUTE	V103			NC (US)
EN ROUTE	V143			NC (US)
EN ROUTE	V266			NC (US)
EN ROUTE	V310			NC (US)
EN ROUTE	V373			NC (US)
EN ROUTE	V45			NC (US)
IAP	ILS OR LOC RWY 22L	KVUJ	ALBEMARLE	NC (US)
IAP	VOR-A	KHBI	ASHEBORO	NC (US)
IAP	ILS Z OR LOC/NDB Z RWY 6	KBUY	BURLINGTON	NC (US)
IAP	ILS OR LOC RWY 36R	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-A	KZEF	ELKIN	NC (US)
IAP	ILS OR LOC RWY 23L	3 KGSO	GREENSBORO	NC (US)
IAP	ILS OR LOC RWY 23R	KGSO	GREENSBORO	NC (US)
IAP	ILS OR LOC RWY 5L	KGSO	GREENSBORO	NC (US)
IAP	ILS OR LOC RWY 5R	KGSO	GREENSBORO	NC (US)
IAP	ILS RWY 23L (CAT II)	3 KGSO	GREENSBORO	NC (US)
IAP	ILS RWY 5L (CAT II & III)	KGSO	GREENSBORO	NC (US)
IAP	ILS RWY 5R (CAT II)	KGSO	GREENSBORO	NC (US)
IAP	ILS Y OR LOC/DME Y RWY 32	KGSO	GREENSBORO	NC (US)
IAP	ILS Z OR LOC/DME Z RWY 32	KGSO	GREENSBORO	NC (US)
IAP	VOR RWY 5R	KGSO	GREENSBORO	NC (US)
IAP	VOR/DME RWY 23L	1 KGSO	GREENSBORO	NC (US)
IAP	ILS OR LOC/DME RWY 6	KEXX	LEXINGTON	NC (US)
IAP	VOR/DME RWY 24	KEXX	LEXINGTON	NC (US)
IAP	VOR RWY 2	K2A5	LIBERTY	NC (US)
IAP	NDB RWY 31	KSIF	REIDSVILLE	NC (US)
IAP	VOR/DME-A	KSIF	REIDSVILLE	NC (US)
IAP	ILS OR LOC RWY 20	KRUQ	SALISBURY	NC (US)
IAP	NDB RWY 20	KRUQ	SALISBURY	NC (US)
IAP	VOR-A	KSCR	SILER CITY	NC (US)
IAP	ILS OR LOC/DME Z RWY 28	KSVH	STATESVILLE	NC (US)
IAP	VOR/DME OR GPS RWY 34	KN63	WALNUT COVE	NC (US)
IAP	ILS OR LOC RWY 33	KINT	WINSTON-SALEM	NC (US)
IAP	RNAV (GPS) RWY 15	4 KINT	WINSTON-SALEM	NC (US)
IAP	RNAV (GPS) RWY 33	KINT	WINSTON-SALEM	NC (US)
IAP	VOR/DME RWY 15	2 KINT	WINSTON-SALEM	NC (US)
IAP	ILS OR LOC RWY 2	KDAN	DANVILLE	VA (US)
STAR	STWRT	KAGS	AUGUSTA	GA (US)
STAR	STWRT	KDNL	AUGUSTA	GA (US)
STAR	NASCR	KVUJ	ALBEMARLE	NC (US)
STAR	BTSEY	KCLT	CHARLOTTE	NC (US)
STAR	NASCR	KJQF	CONCORD	NC (US)
STAR	BTSEY	KAKH	GASTONIA	NC (US)
STAR	BLOCC	KGSO	GREENSBORO	NC (US)
STAR	BROOK	KGSO	GREENSBORO	NC (US)
STAR	HENBY	KGSO	GREENSBORO	NC (US)
STAR	SMOKN	KGSO	GREENSBORO	NC (US)
STAR	BTSEY	KIPJ	LINCOLNTON	NC (US)
STAR	BTSEY	KEQY	MONROE	NC (US)
STAR	NASCR	KRUQ	SALISBURY	NC (US)
STAR	BTSEY	KEHO	SHELBY	NC (US)
STAR	BTSEY	KAFP	WADESBORO	NC (US)
STAR	BTSEY	KN52	WAXHAW	NC (US)
STAR	BLOCK	KINT	WINSTON-SALEM	NC (US)
STAR	BROOK	KINT	WINSTON-SALEM	NC (US)
STAR	HENBY	KINT	WINSTON-SALEM	NC (US)
STAR	SMOKN	KINT	WINSTON-SALEM	NC (US)
STAR	BTSEY	KDCM	CHESTER	SC (US)
STAR	BTSEY	KLKR	LANCASTER	SC (US)
STAR	BTSEY	KUZA	ROCK HILL	SC (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 20

DATE OF REVISION: 01/05/2017

REASON FOR REVISION:

REMOVED OSPRI AND TURTLES RNAV STARS FROM FIX USE AT KCHS AND KJZI.

DEVELOPED BY: **DATE:** 09/21/2016

OFFICE: AJV-5422

NAME: DAVID DOWLING

APPROVED BY: **DATE:** 11/08/2016

OFFICE: AJV-5410

NAME: GEORGE DAVIS

SIGNATURE:**DISTRIBUTION:****NFDC****FPO: EST****ARTCC: ZTL****ATC FACILITY: GSO APP CON, CLT APP CON****OTHER:**

RADIO FIX AND HOLDING DATA RECORD

NAME: LAWRENCEVILLE VORTAC **STATE:** VA **COUNTRY:** US **ICAO REGION CODE:** K6

LATITUDE/LONGITUDE: 364904.93N/0775410.69W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	LAWRENCEVILLE	LVL	VORTAC	L							17500

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	230	TOWER (51-000428)	365202.50N/0775329.90W	873	5D

HOLDING RESTRICTIONS:

UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 2000.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BEXGO (RNAV)			KRDU	RALEIGH/DURHAM	NC (US)
DP	RALEIGH			KRDU	RALEIGH/DURHAM	NC (US)
EN ROUTE	V155					(US)
EN ROUTE	V157					(US)
EN ROUTE	V266					(US)
EN ROUTE	V454					(US)
IAP	RNAV (GPS) RWY 20			KIXA	ROANOKE RAPIDS	NC (US)
IAP	RNAV (GPS) RWY 04			KBKT	BLACKSTONE	VA (US)
IAP	RNAV (GPS) RWY 16			KEMV	EMPORIA	VA (US)
IAP	RNAV (GPS) RWY 36			KLVL	LAWRENCEVILLE	VA (US)
IAP	RNAV (GPS) RWY 05			KPTB	PETERSBURG	VA (US)
IAP	RNAV (GPS) RWY 23			KPTB	PETERSBURG	VA (US)
IAP	LOC RWY 01			KAVC	SOUTH HILL	VA (US)

REQUIRED CHARTING: DP, MILITARY IAP, IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 11 **DATE OF REVISION:** 04/03/2014

REASON FOR REVISION:

UPDATE FIX USE

DEVELOPED BY: **DATE:** 10/30/2013 **OFFICE:** AJV-351 **NAME:** PATRICK MULQUEEN (DAVID TEFFETELLER)

APPROVED BY: **DATE:** 04/03/2014 **OFFICE:** AJV-351 **NAME:** STEVEN SZUKALA

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: EST
ARTCC: ZDC
ATC FACILITY:
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: LIBERTY VORTAC **STATE:** NC **COUNTRY:** US **ICAO REGION CODE:** K7

LATITUDE/LONGITUDE: 354841.84N/0793645.33W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	FEET	MRA	MAA
1	LIBERTY	LIB	VORTAC	L							17500

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	NE	LIB	VORTAC	056.00	236.00	R	1-1 1/2		3000	17500	4	17
2	NW	LIB	VORTAC	324.00	144.00	L	1-1 1/2		2500	17500	4	17
3	NE		WP	056.00	236.00	R		4	3000	10000	5	10

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (37-001112)	355615.00N/0792629.00W	1845	2C
1	265	TOWER (37-002503)	355203.00N/0794925.00W	2649	2C
2	200	TOWER (37-002113)	355423.00N/0794226.00W	1118	2C
2	230	TOWER (37-002503)	355203.00N/0794925.00W	2649	2C
3	200	TOWER (37-001112)	355615.00N/0792629.00W	1845	2C
3	265	TOWER (37-002503)	355203.00N/0794925.00W	2649	2C

REASON FOR NONSTANDARD HOLDING:

PAT 2 AIR TRAFFIC REQUEST

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	HORNET			KVUJ	ALBEMARLE	NC (US)
DP	CHARLOTTE			KCLT	CHARLOTTE	NC (US)
DP	HORNET			KCLT	CHARLOTTE	NC (US)
DP	HORNET			KJQF	CONCORD	NC (US)
DP	MOUNTY			KFAY	FAYETTEVILLE	NC (US)
DP	HORNET			KAKH	GASTONIA	NC (US)
DP	HICKORY			KHKY	HICKORY	NC (US)
DP	HORNET			KIPJ	LINCOLNTON	NC (US)
DP	HORNET			KEQY	MONROE	NC (US)
DP	PACKK			KRDU	RALEIGH/DURHAM	NC (US)
DP	RALEIGH			KRDU	RALEIGH/DURHAM	NC (US)
DP	HORNET			KRUQ	SALISBURY	NC (US)
DP	WINSTON			KINT	WINSTON-SALEM	NC (US)
DP	HORNET			KLKR	LANCASTER	SC (US)
DP	HORNET			KUZA	ROCK HILL	SC (US)
EN ROUTE	J208					NC (US)
EN ROUTE	V194					NC (US)
EN ROUTE	V409					NC (US)
EN ROUTE	V454					NC (US)
IAP	ILS OR LOC RWY 22L			KVUJ	ALBEMARLE	NC (US)
IAP	RNAV (GPS) RWY 21			KHBI	ASHEBORO	NC (US)
IAP	VOR-A			KHBI	ASHEBORO	NC (US)
IAP	ILS Y OR LOC/NDB Y RWY 6	1	1	KBUY	BURLINGTON	NC (US)
IAP	ILS Z OR LOC/NDB Z RWY 6	1	1	KBUY	BURLINGTON	NC (US)
IAP	VOR/DME-A			KBUY	BURLINGTON	NC (US)
IAP	RNAV (GPS) RWY 9			KIGX	CHAPEL HILL	NC (US)
IAP	LOC/DME RWY 5			KHRJ	ERWIN	NC (US)
IAP	ILS OR LOC RWY 23L	1	1	KGSO	GREENSBORO	NC (US)
IAP	ILS OR LOC RWY 23R			KGSO	GREENSBORO	NC (US)
IAP	ILS OR LOC RWY 5L			KGSO	GREENSBORO	NC (US)
IAP	ILS OR LOC RWY 5R	1	1	KGSO	GREENSBORO	NC (US)
IAP	ILS RWY 23L (CAT II)	1	1	KGSO	GREENSBORO	NC (US)
IAP	ILS RWY 5L (CAT II-III)			KGSO	GREENSBORO	NC (US)
IAP	ILS RWY 5R (CAT II)	1	1	KGSO	GREENSBORO	NC (US)
IAP	ILS Z OR LOC/DME Z RWY 26	1	1	KGSO	GREENSBORO	NC (US)
IAP	ILS OR LOC/DME RWY 6			KEXX	LEXINGTON	NC (US)
IAP	VOR RWY 2	1	1	K2A5	LIBERTY	NC (US)
IAP	ILS OR LOC RWY 23L			KRDU	RALEIGH/DURHAM	NC (US)
IAP	ILS OR LOC RWY 23R			KRDU	RALEIGH/DURHAM	NC (US)
IAP	ILS OR LOC RWY 5L			KRDU	RALEIGH/DURHAM	NC (US)
IAP	ILS RWY 23R (CAT II-III)			KRDU	RALEIGH/DURHAM	NC (US)

IAP	VOR RWY 32			KRDU	RALEIGH/DURHAM	NC (US)
IAP	ILS Y OR LOC Y RWY 3			KTTA	SANFORD	NC (US)
IAP	ILS Z OR LOC Z RWY 3			KTTA	SANFORD	NC (US)
IAP	VOR-A	1	2	KSCR	SILER CITY	NC (US)
IAP	RNAV (GPS) RWY 21			K43A	STAR	NC (US)
STAR	MAJIC			KCLT	CHARLOTTE	NC (US)
STAR	SUDSY (RNAV)			KCLT	CHARLOTTE	NC (US)
STAR	NASCR			KJQF	CONCORD	NC (US)
STAR	SOUTH BOSTON			KRDU	RALEIGH/DURHAM	NC (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 16

DATE OF REVISION: 03/31/2016

REASON FOR REVISION:

ADDED PAT 1 CONTROLLING OBSTRUCTIONS FOR AIRSPEED 230, TOWER (37-003136), 354846.49N/0795028.07W, ELEVATION 1101, AC 4D AND FOR AIRSPEED 265, TOWER (37-002503), 355203.00N/0794925.00W, ELEVATION 2649, AC 2C.

UPDATED FIX USE - DELETED START IVANE (RNAV) KCLT CHARLOTTE NC(US); ADDED IAP ILS Y OR LOC Y RWY 3 KTTA SANFORD NC; ADDED IAP ILS Z OR LOC/DME Z RWY 32 KGSO GREENSBORO NC.

DEVELOPED BY: **DATE:** 10/20/2015 **OFFICE:** AJV-5413 **NAME:** JOHN THORNTON

APPROVED BY: **DATE:** 01/28/2016 **OFFICE:** AJV-5410 **NAME:** MARLON ROBINSON

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: EST
ARTCC: ZDC
ATC FACILITY: RDU APP CON, GSO APP CON, CLT APP CON, FAY APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: SANDHILLS VORTAC **STATE:** NC **COUNTRY:** US **ICAO REGION CODE:** K7

LATITUDE/LONGITUDE: 351255.73N/0793516.57W **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	MRA	MAA
1	SANDHILLS	SDZ	VORTAC	L						17500

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	W	SDZ	VORTAC	272.11	092.11	L	1-1 1/2	3300 8000	4 8

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (37-003185)	351720.36N/0793834.53W	975	5D

REASON FOR NONSTANDARD HOLDING:
PAT 1 FACILITY RESTRICTIONS/PERFORMANCE

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
HOLDING OVERLIES A PORTION OF ALERT AREA 531 WITH ACTIVITY UP TO 2235 FT MSL.
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	HORNET			KVUJ	ALBEMARLE	NC (US)
DP	HUGO			KVUJ	ALBEMARLE	NC (US)
DP	PANTHER			KVUJ	ALBEMARLE	NC (US)
DP	HORNET			KCLT	CHARLOTTE	NC (US)
DP	HUGO			KCLT	CHARLOTTE	NC (US)
DP	PANTHER			KCLT	CHARLOTTE	NC (US)
DP	HORNET			KJQF	CONCORD	NC (US)
DP	HUGO			KJQF	CONCORD	NC (US)
DP	PANTHER			KJQF	CONCORD	NC (US)
DP	MOUNTY			KFAY	FAYETTEVILLE	NC (US)
DP	HORNET			KAKH	GASTONIA	NC (US)
DP	HUGO			KAKH	GASTONIA	NC (US)
DP	PANTHER			KAKH	GASTONIA	NC (US)
DP	TRIAD			KGSO	GREENSBORO	NC (US)
DP	HICKORY			KHKY	HICKORY	NC (US)
DP	HORNET			KIPJ	LINCOLNTON	NC (US)
DP	HUGO			KIPJ	LINCOLNTON	NC (US)
DP	PANTHER			KIPJ	LINCOLNTON	NC (US)
DP	HORNET			KEQY	MONROE	NC (US)
DP	HUGO			KEQY	MONROE	NC (US)
DP	PANTHER			KEQY	MONROE	NC (US)
DP	RALEIGH			KRDU	RALEIGH/DURHAM	NC (US)
DP	HORNET			KRUQ	SALISBURY	NC (US)
DP	HUGO			KRUQ	SALISBURY	NC (US)
DP	PANTHER			KRUQ	SALISBURY	NC (US)
DP	TRIAD			KINT	WINSTON-SALEM	NC (US)
DP	WINSTON			KINT	WINSTON-SALEM	NC (US)
DP	HORNET			KLKR	LANCASTER	SC (US)
DP	HUGO			KLKR	LANCASTER	SC (US)
DP	PANTHER			KLKR	LANCASTER	SC (US)
DP	HORNET			KUZA	ROCK HILL	SC (US)
DP	HUGO			KUZA	ROCK HILL	SC (US)
DP	PANTHER			KUZA	ROCK HILL	SC (US)
EN ROUTE	V155					(US)
EN ROUTE	V3					(US)
EN ROUTE	V373					(US)
EN ROUTE	V39					(US)
EN ROUTE	V54					(US)
EN ROUTE	V66					(US)
IAP	ILS Y OR LOC/DME Y RWY 5		1	KSOP	PINEHURST/SOUTHERN PINES	NC (US)
IAP	ILS Z OR LOC/DME Z RWY 5		1	KSOP	PINEHURST/SOUTHERN PINES	NC (US)
IAP	VOR/DME OR GPS-A			K5W4	RAEFORD	NC (US)
STAR	BUZZY			KIGX	CHAPEL HILL	NC (US)
STAR	BLOCC			KGSO	GREENSBORO	NC (US)
STAR	BUZZY			KHNZ	OXFORD	NC (US)
STAR	BUZZY			KRDU	RALEIGH/DURHAM	NC (US)
STAR	BUZZY			KTDF	ROXBORO	NC (US)

STAR	BUZZY	KTTA	SANFORD	NC (US)
STAR	BLOCC	KINT	WINSTON SALEM	NC (US)

REQUIRED CHARTING: DP, MILITARY IAP, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 13

DATE OF REVISION: 01/05/2017

REASON FOR REVISION:

REMOVED KRDU MALNR STAR FROM FIX USE.

DEVELOPED BY: **DATE:** 09/13/2016 **OFFICE:** AJV-5422 **NAME:** DAVID DOWLING

APPROVED BY: **DATE:** 11/08/2016 **OFFICE:** AJV-5420 **NAME:** TONY LAWSON

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: EST
ARTCC: ZDC
ATC FACILITY: FAY APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: SOUTH BOSTON VORTAC STATE: VA COUNTRY: US ICAO REGION CODE: K6
 LATITUDE/LONGITUDE: 364030.14N/0790052.20W 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	MRA FEET	MAA
1	SOUTH BOSTON	SBV	VORTAC	L						17500

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	NE	SBV	VORTAC	032.00	212.00	R	1	10000 14000	9 10
2	W	SBV	VORTAC	260.55	080.55	R	1	3000 6000	4 5

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	TOWER (51-001114)	364359.21N/0785602.02W	975	1A
2	200	AAO	364218.00N/0790836.00W	804	4E

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.
 PAT 1 HOLDING PATTERN FOR ATC USE.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	JDUBB (RNAV)			KDCA	WASHINGTON	DC (US)
DP	GABBE (RNAV)			KHEF	WASHINGTON	DC (US)
DP	JDUBB (RNAV)			KIAD	WASHINGTON	DC (US)
DP	FIXET (RNAV)			KBWI	BALTIMORE	MD (US)
DP	TERPZ (RNAV)			KBWI	BALTIMORE	MD (US)
DP	TERPZ (RNAV)			KMTN	BALTIMORE	MD (US)
DP	JEFSN (RNAV)			KADW	CAMP SPRINGS	MD (US)
DP	TERPZ (RNAV)			KESN	EASTON	MD (US)
DP	TERPZ (RNAV)			KFDK	FREDERICK	MD (US)
DP	TERPZ (RNAV)			KGAI	GAITHERSBURG	MD (US)
DP	TERPZ (RNAV)			KDMW	WESTMINSTER	MD (US)
DP	QUAKER			KGSO	GREENSBORO	NC (US)
DP	HICKORY			KHKY	HICKORY	NC (US)
DP	RALEIGH			KRDU	RALEIGH/DURHAM	NC (US)
DP	QUAKER			KINT	WINSTON SALEM	NC (US)
DP	WINSTON			KINT	WINSTON SALEM	NC (US)
DP	BLACKSTONE			KBKT	BLACKSTONE	VA (US)
DP	JDUBB (RNAV)			KDAA	FORT BELVOIR	VA (US)
DP	JDUBB (RNAV)			KJYO	LEESBURG	VA (US)
DP	JDUBB (RNAV)			KOKV	WINCHESTER	VA (US)
DP	JDUBB (RNAV)			KMRB	MARTINSBURG	WV (US)
EN ROUTE	V136					(US)
EN ROUTE	V20					(US)
EN ROUTE	V266					(US)
EN ROUTE	V39					(US)
IAP	VOR/DME RWY 27			KIGX	CHAPEL HILL	NC (US)
IAP	ILS OR LOC RWY 5L			KGSO	GREENSBORO	NC (US)
IAP	ILS OR LOC RWY 5R			KGSO	GREENSBORO	NC (US)
IAP	ILS RWY 5L (CAT II & III)			KGSO	GREENSBORO	NC (US)
IAP	ILS RWY 5R (CAT II)			KGSO	GREENSBORO	NC (US)
IAP	VOR RWY 5R			KGSO	GREENSBORO	NC (US)
IAP	ILS OR LOC RWY 5			KLHZ	LOUISBURG	NC (US)
IAP	LOC RWY 6			KHNZ	OXFORD	NC (US)
IAP	NDB RWY 6			KHNZ	OXFORD	NC (US)
IAP	ILS OR LOC RWY 23L			KRDU	RALEIGH/DURHAM	NC (US)
IAP	ILS OR LOC RWY 23R			KRDU	RALEIGH/DURHAM	NC (US)
IAP	ILS OR LOC RWY 5L			KRDU	RALEIGH/DURHAM	NC (US)
IAP	ILS OR LOC RWY 5R			KRDU	RALEIGH/DURHAM	NC (US)
IAP	ILS RWY 23R (CAT II & III)			KRDU	RALEIGH/DURHAM	NC (US)
IAP	ILS RWY 5R (SA CAT I & II)			KRDU	RALEIGH/DURHAM	NC (US)
IAP	VOR RWY 23L			KRDU	RALEIGH/DURHAM	NC (US)
IAP	VOR RWY 32			KRDU	RALEIGH/DURHAM	NC (US)
IAP	VOR RWY 5R			KRDU	RALEIGH/DURHAM	NC (US)
IAP	RNAV (GPS) RWY 18			KCXE	CHASE CITY	VA (US)
IAP	RNAV (GPS) RWY 36			KCXE	CHASE CITY	VA (US)
IAP	ILS OR LOC RWY 2	2		KDAN	DANVILLE	VA (US)
IAP	RNAV (GPS) RWY 2			KDAN	DANVILLE	VA (US)
IAP	RNAV (GPS) RWY 20			KDAN	DANVILLE	VA (US)
IAP	VOR RWY 2			KDAN	DANVILLE	VA (US)

IAP	VOR RWY 20		KDAN	DANVILLE	VA (US)
IAP	ILS OR LOC RWY 4		KLYH	LYNCHBURG	VA (US)
IAP	VOR RWY 4		KLYH	LYNCHBURG	VA (US)
IAP	RNAV (GPS) RWY 1		KW78	SOUTH BOSTON	VA (US)
IAP	VOR-A	2	KW78	SOUTH BOSTON	VA (US)
STAR	SOUTH BOSTON		KIGX	CHAPEL HILL	NC (US)
STAR	SOUTH BOSTON		KLHZ	LOUISBURG	NC (US)
STAR	SOUTH BOSTON		KHNZ	OXFORD	NC (US)
STAR	ALDAN (RNAV)		KRDU	RALEIGH/DURHAM	NC (US)
STAR	SOUTH BOSTON		KRDU	RALEIGH/DURHAM	NC (US)
STAR	SOUTH BOSTON		KTDF	ROXBORO	NC (US)
STAR	SOUTH BOSTON		KTTA	SANFORD	NC (US)
STAR	SOUTH BOSTON		KJNX	SMITHFIELD	NC (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 13

DATE OF REVISION: 03/31/2016

REASON FOR REVISION:

1. DELETED BULRN DP AT IAD FROM FIX USE.
2. DELETED HAFNR DP AT DCA FROM FIX USE.
2. ADDED JDUBB DP AT DCA, IAD, DAA, JYO, OKV, AND MRB TO FIX USE.
3. DELETED MAJIC STAR AT CLT FROM FIX USE (APPEARS ON SBV HITLIST BUT NOT DEPICTED ON THE PROCEDURE).

DEVELOPED BY:	DATE: 11/04/2015	OFFICE: AJV-5413	NAME: PETER GUIMOND
APPROVED BY:	DATE: 02/05/2016	OFFICE: AJV-5410	NAME: MARLON ROBINSON

SIGNATURE:

DISTRIBUTION: NFDC
FPO: EST
ARTCC: ZDC
ATC FACILITY: RDU APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: TAR RIVER VORTAC **STATE:** NC **COUNTRY:** US **ICAO REGION CODE:** K7

LATITUDE/LONGITUDE: 355836.20N/0774213.43W **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	TAR RIVER	TYI	VORTAC	L						17500

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

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	S	TYI	VORTAC	174.00	354.00	R	1-1 1/2	2000 17500	4 16
2	NE	TYI	VORTAC	057.79	237.79	R	1	2000 10000	4 9
3	S	TYI	VORTAC	193.93	013.93	R	1	2000 10000	4 9
4	SW	WP	WP	246.38	066.38	L	10	18000 45000	17 30

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	230	TOWER (37-001056)	354841.00N/0774432.00W	748	5D
1	200	TOWER (37-001938)	355646.00N/0773936.00W	549	2D
2	200	TOWER (37-000889)	355819.00N/0774743.00W	625	3C
3	200	TOWER (37-001129)	355407.00N/0774657.00W	635	5D

REASON FOR NONSTANDARD HOLDING:

PAT 4 ATC REQUEST

HOLDING RESTRICTIONS:

UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3000.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.
HOLDING PAT 4 CRS INBOUND DOCUMENTED IN TRUE, CHART ON Q64.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BARMY (RNAV)			KVUJ	ALBEMARLE	NC (US)
DP	BARMY (RNAV)			KCLT	CHARLOTTE	NC (US)
DP	BARMY (RNAV)			KJQF	CONCORD	NC (US)
DP	MOUNTY			KFAY	FAYETTEVILLE	NC (US)
DP	BARMY (RNAV)			KAKH	GASTONIA	NC (US)
DP	BARMY (RNAV)			KIPJ	LINCOLNTON	NC (US)
DP	BARMY (RNAV)			KEQY	MONROE	NC (US)
DP	HURIC (RNAV)			KRDU	RALEIGH/DURHAM	NC (US)
DP	RALEIGH			KRDU	RALEIGH/DURHAM	NC (US)
DP	BARMY (RNAV)			KRUQ	SALISBURY	NC (US)
DP	BARMY (RNAV)			KLKR	LANCASTER	SC (US)
DP	BARMY (RNAV)			KUZA	ROCK HILL	SC (US)
EN ROUTE	J209					(US)
EN ROUTE	J40					(US)
EN ROUTE	J79					(US)
EN ROUTE	Q64		4			(US)
EN ROUTE	V157					(US)
EN ROUTE	V189					(US)
EN ROUTE	V194					(US)
EN ROUTE	V213					(US)
EN ROUTE	V290					(US)
EN ROUTE	V310					(US)
IAP	ILS OR LOC RWY 23			KGWW	GOLDSBORO	NC (US)
IAP	VOR-A			KGWW	GOLDSBORO	NC (US)
IAP	ILS OR LOC RWY 5			KLHZ	LOUISBURG	NC (US)
IAP	LOC RWY 6			KHNZ	OXFORD	NC (US)
IAP	ILS OR LOC RWY 23L			KRDU	RALEIGH/DURHAM	NC (US)
IAP	ILS OR LOC RWY 5R			KRDU	RALEIGH/DURHAM	NC (US)
IAP	RNAV (GPS) RWY 2			KIXA	ROANOKE RAPIDS	NC (US)
IAP	VOR/DME RWY 2		3	KIXA	ROANOKE RAPIDS	NC (US)
IAP	ILS OR LOC RWY 4		2	KRWI	ROCKY MOUNT	NC (US)
IAP	VOR/DME RWY 22		2	KRWI	ROCKY MOUNT	NC (US)
IAP	ILS OR LOC Z RWY 3			KJNX	SMITHFIELD	NC (US)
IAP	NDB RWY 27			KETC	TARBORO	NC (US)
IAP	VOR/DME OR GPS RWY 27		1	KETC	TARBORO	NC (US)
IAP	LOC RWY 5			KOCW	WASHINGTON	NC (US)
STAR	NASCR			KVUJ	ALBEMARLE	NC (US)
STAR	NASCR			KJQF	CONCORD	NC (US)
STAR	ARGAL			KRDU	RALEIGH/DURHAM	NC (US)
STAR	BLOGS (RNAV)			KRDU	RALEIGH/DURHAM	NC (US)
STAR	BRAD			KRDU	RALEIGH/DURHAM	NC (US)

STAR	NASCR	KRUQ	SALISBURY	NC (US)
STAR	DRONE	KLFI	HAMPTON	VA (US)
STAR	DRONE	KPHF	NEWPORT NEWS	VA (US)
STAR	DRONE	KCPK	NORFOLK	VA (US)
STAR	DRONE	KNGU	NORFOLK	VA (US)
STAR	DRONE	KORF	NORFOLK	VA (US)
STAR	DRONE	KPVG	NORFOLK	VA (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 15

DATE OF REVISION: 07/21/2016

REASON FOR REVISION:

ADDED HOLDING PAT 4.

UPDATE FIX USE: ADDED PAT 4 HOLDING TO Q64.

ADDED REMARK: HOLDING PAT 4 CRS INBOUND DOCUMENTED IN TRUE, CHART ON Q64.

DEVELOPED BY: **DATE:** 03/17/2016 **OFFICE:** AJV-5412 **NAME:** MICHAEL CURRAN

APPROVED BY: **DATE:** 05/25/2016 **OFFICE:** AJV-5410 **NAME:** MARLON ROBINSON

SIGNATURE:

DISTRIBUTION: **NFDC**
 FPO: EST
 ARTCC: ZDC
 ATC FACILITY: RDU APP CON
 OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: WILMINGTON VORTAC **STATE:** NC **COUNTRY:** US **ICAO REGION CODE:** K7
LATITUDE/LONGITUDE: 342105.93N/0775227.77W **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 NM	FAC FEET	MRA	MAA
1	WILMINGTON	ILM	VORTAC	H							45000

FIX RESTRICTIONS:

10/07/2013 VOR UNUSABLE R-186 THRU R-229 BLO 3000
10/07/2013 VOR UNUSABLE R-316 THRU R-050 BLO 8000
10/07/2013 VOR UNUSABLE R-230 THRU R-315 BYD 5.0 NM BLO 17,500
10/07/2013 VOR UNUSABLE R-051 THRU R-185
10/07/2013 TACAN AZIMUTH UNUSABLE R-129 THRU R-160 BYD 30.0 NM BLO 2500
10/07/2013 TACAN DME UNUSABLE R-015 THRU R-305 BYD 30.0 NM BLO 2500
10/07/2013 VOR UNUSABLE R-164 THRU R-051 BLO 17,500

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	230	TOWER (37-002223)	341438.00N/0780721.00W	853	5D

HOLDING RESTRICTIONS:

UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3000.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	MOUNTY			KFAY	FAYETTEVILLE	NC (US)
DP	RALEIGH			KRDU	RALEIGH/DURHAM	NC (US)
DP	ROZBO (RNAV)			KRDU	RALEIGH/DURHAM	NC (US)
DP	WINSTON			KINT	WINSTON-SALEM	NC (US)
DP	PLMTO (RNAV)			KCHS	CHARLESTON	SC (US)
EN ROUTE	AR15					(US)
EN ROUTE	AR16					(US)
EN ROUTE	AR17					(US)
EN ROUTE	AR21					(US)
EN ROUTE	J109					(US)
EN ROUTE	J174					(US)
EN ROUTE	J191					(US)
EN ROUTE	J193					(US)
EN ROUTE	J210					(US)
EN ROUTE	J4					(US)
EN ROUTE	J40					(US)
EN ROUTE	V139					(US)
EN ROUTE	V213					(US)
EN ROUTE	V296					(US)
EN ROUTE	V70					(US)
IAP	RNAV (GPS) RWY 5			KOAJ	JACKSONVILLE	NC (US)
IAP	GPS RWY 27			KACZ	WALLACE	NC (US)
IAP	ILS Y OR LOC RWY 24			KILM	WILMINGTON	NC (US)
IAP	ILS Y OR LOC RWY 35			KILM	WILMINGTON	NC (US)
IAP	ILS Y OR LOC/DME RWY 6			KILM	WILMINGTON	NC (US)
IAP	RNAV (GPS) RWY 6			KILM	WILMINGTON	NC (US)
STAR	BLOGS (RNAV)			KRDU	RALEIGH/DURHAM	NC (US)
STAR	BRAD			KRDU	RALEIGH/DURHAM	NC (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 13

DATE OF REVISION: 12/10/2015

REASON FOR REVISION:

1. UPDATED FAC 1 FROM HISTORICAL TO ACTIVE NAVAID.
2. ADDED FIX RESTRICTIONS.

DEVELOPED BY: **DATE:** 07/06/2015 **OFFICE:** AJV-5410 **NAME:** STEVE BRUMMETT

APPROVED BY: **DATE:** 10/09/2015 **OFFICE:** AJV-5410 **NAME:** ADOLFO URRUTIA

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: EST
ARTCC: ZDC
ATC FACILITY: RDU APP CON
OTHER: