TRANSMITTAL OF AIRWAYS / ROUTE DATA

AIRWAY NO. OR ROUTE	FROM / TO	ROUTINE OR DOCKET NO.	CONTROLLING @ TERRAIN/OBSTRUCTION AND COORDINATES	MRA / MOCA	MAA / MEA	GNSS MEA	CHANGE OVER POINT	FIX MRA/MCA	REMARKS	FLIGHT INSPECTION DATES
V45	RALEIGH DURHAM, NC VORTAC		AAO 883 355045.00N/0790303.00W TERRAIN 683 @ 355045.00N/0790303.00W	2400	17500			* MCA 2800 W	INC MEA NEW CONTROLLING OBS ADD MCA AND MOCA	PENDING
	* CHAPL, NC			1900	2400					
V45	CHAPL, NC		TOWER 2049 @ 355200.00N/0791000.00W TERRAIN 1001 360451.00N/0795321.00W	3100	17500		DL HOJPA		INC MEA NEW CONTROLLING OBS	PENDING
	GREENSBORO, NC VORTAC			-3100-	3100					
									CLEAR FDC NOTAM	

DATE	OFFICE	TITLE	SIGNATURE
	AJV-311	MANAGER	RAY NUSSEAR

QA 3 APPROVED

FAA FORM 8260-16 / October 2002 (computer generated)

RADIO FIX AND HOLDING DATA RECORD

NAME: HOJPA **STATE:** NC **COUNTRY:** US

LATITUDE/LONGITUDE: 355447.54N/0792231.68W **TYPE:** DME

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	DIST FROM FAC FEET	MRA	MAA
1	GREENSBORO	GSO	VORTAC	H	108.00	105.00	30.32	30.32		3000	17500
2	RALEIGH/DURHAM	RDU	VORTAC	H	279.00	275.00		28.97		3000	17500

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

REMARKS:
RALEIGH/DURHAM (FAC 2) AND GREENSBORO (FAC 1) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V45 - V310	1, 2				(US)

REQUIRED CHARTING: CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 11/15/2012

REASON FOR REVISION:
UPDATED FROM CNF USING SAME PRONOUNABLE NAME HOJPA.
COORDINATES ADJUSTED TO BASED ON INTERSECTION COMPUTATION.
REMOVE CNF REMARKS

DEVELOPED BY: **DATE:** 07/09/2012 **OFFICE:** AJV-311 **NAME:** ERIC GREEN

APPROVED BY: **DATE:** **OFFICE:** AJV-311 **NAME:** RAY NUSSEAR

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: ATL
ARTCC: ZDC
ATC FACILITY:
OTHER:

OA
B
APPROVED

RADIO FIX AND HOLDING DATA RECORD

NAME: CHAPL **STATE:** NC **COUNTRY:** US

LATITUDE/LONGITUDE: 355328.15N/0790256.34W **TYPE:** WP, INT, DME

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	DIST FROM FAC FEET	MRA	MAA
1	RALEIGH/DURHAM	RDU	VORTAC	H	279.00	275.00	13.00	13.00		2400	17500
2	SOUTH BOSTON	SBV	VORTAC	L	187.05	182.05		47.00		2400	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
SBV	VORTAC	R-187	47	1500	17500

FIX RESTRICTIONS:
MCA V45-310 2800 WESTBOUND

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

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	W	RDU	VORTAC	279.00	099.00	R	1		3100	14000	6	15
2	W		WP	282.00	102.00	R		4	3100	14000	5	11

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (37-000083)	355200.00N/0791000.00W	2049	1D
2	200	TOWER (37-000083)	355200.00N/0791000.00W	2049	1D

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V45-310	1, 2				NC (US)
IAP	GPS RWY 24			KBUY	BURLINGTON	NC (US)
IAP	VOR/DME RWY 27	1, 2	1	KIGX	CHAPEL HILL	NC (US)
IAP	RNAV (GPS) Y RWY 23R		2	KRDU	RALEIGH/DURHAM	NC (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 6 **DATE OF REVISION:** 11/15/2012

REASON FOR REVISION:
INCREASED FACILITY MAKE-UP FAC 1 MRA FROM 2000 TO 2400 AND FAC 2 MRA FROM 1500 TO 2400.
ADDED MCA FOR FIX RESTRICTION.

DEVELOPED BY: **DATE:** 04/27/2012 **OFFICE:** AJV-311 **NAME:** LORETTA ZUEST

APPROVED BY: **DATE:** **OFFICE:** AJV-311 **NAME:** RAY NUSSEAR

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZDC
ATC FACILITY: RDU ATCT
OTHER:

OA B APPROVED

INFO ONLY

RADIO FIX AND HOLDING DATA RECORD

NAME: GREENSBORO VORTAC **STATE:** NC **COUNTRY:** US

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						2500	45000

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	SW	GSO	VORTAC	221.00	041.00	R	1-1 1/2		3100	17500	4	16
2	W	GSO	VORTAC	283.00	103.00	R	1-1 1/2		3000	17500	4	16
3	E	GSO	VORTAC	108.00	288.00	R	1-1 1/2		3100	17500	4	16
4	W		WP	287.00	107.00	R		4	3000	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (37-000034)	355511.00N/0800146.00W	1337	1D
1	310	TOWER (37-001292)	355642.00N/0795144.00W	2046	5D
2	200	TOWER (37-002786)	360636.00N/0800436.00W	1441	5D
3	200	TOWER (37-000148)	360217.00N/0794744.00W	1546	2C
3	310	TOWER (37-001292)	355642.00N/0795144.00W	2046	5D
4	200	TOWER (37-002786)	360636.00N/0800436.00W	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)
1	VOR RWY 5R	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 COMPLETE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	CHATT (RNAV)			KAGS	AUGUSTA	GA (US)
DP	CHATT (RNAV)			KDNL	AUGUSTA	GA (US)
DP	CHATT (RNAV)			KHQU	THOMSON	GA (US)
DP	HORNET			KVUJ	ALBEMARLE	NC (US)
DP	BLUE DEVIL			KIGX	CHAPEL HILL	NC (US)
DP	LILLS			KCLT	CHARLOTTE	NC (US)
DP	MERIL			KCLT	CHARLOTTE	NC (US)
DP	MOUNTY			KFAY	FAYETTEVILLE	NC (US)
DP	QUAKER			KGSO	GREENSBORO	NC (US)
DP	TRIAD			KGSO	GREENSBORO	NC (US)
DP	HICKORY			KHKY	HICKORY	NC (US)
DP	BLUE DEVIL			KRDU	RALEIGH/DURHAM	NC (US)
DP	BULZZ (RNAV)			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	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	YEAST			KRIC	RICHMOND	VA (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 OR LOC/NDB RWY 6			KBUY	BURLINGTON	NC (US)
IAP	ILS OR LOC RWY 36R			KCLT	CHARLOTTE	NC (US)
IAP	ILS RWY 36R (CAT II)			KCLT	CHARLOTTE	NC (US)
IAP	ILS RWY 36R (CAT III)			KCLT	CHARLOTTE	NC (US)
IAP	ILS OR LOC RWY 20			KJQF	CONCORD	NC (US)

QA B APPROVED

IAP	NDB OR GPS RWY 25		KZEF	ELKIN	NC (US)
IAP	ILS OR LOC RWY 14		KGSO	GREENSBORO	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)		KGSO	GREENSBORO	NC (US)
IAP	ILS RWY 5L (CAT III)		KGSO	GREENSBORO	NC (US)
IAP	ILS RWY 5R (CAT II)		KGSO	GREENSBORO	NC (US)
IAP	NDB RWY 14		KGSO	GREENSBORO	NC (US)
IAP	VOR RWY 5R		KGSO	GREENSBORO	NC (US)
IAP	VOR/DME RWY 23L	1	KGSO	GREENSBORO	NC (US)
IAP	GPS RWY 24		KEXX	LEXINGTON	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 36		KMWK	MOUNT AIRY	NC (US)
IAP	NDB RWY 31		KSIF	REIDSVILLE	NC (US)
IAP	VOR/DME-A		KSIF	REIDSVILLE	NC (US)
IAP	ILS RWY 20		KRUQ	SALISBURY	NC (US)
IAP	NDB RWY 20		KRUQ	SALISBURY	NC (US)
IAP	VOR OR GPS-A		K5W8	SILER CITY	NC (US)
IAP	ILS OR LOC/DME 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 ARRIVAL		KDNL	AUGUSTA	GA (US)
STAR	SUDSY ARRIVAL (RNAV)		KCLT	CHARLOTTE	NC (US)
STAR	NASCR		KJQF	CONCORD	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)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 13 **DATE OF REVISION:** 06/30/2011

REASON FOR REVISION:
DELETED HOLDING PATTERN #5.
CHANGED PATTERN 4 MIN/MAX TEMPLATES FROM 4/5 TO 5/6.
DELETED CONTROLLING OBSTRUCTION FOR PATTERN #5.
UPDATED FIX USE INFORMATION.

DEVELOPED BY: **DATE:** 12/28/2010 **OFFICE:** AVN-101 **NAME:** GEORGETTE BARNETT

APPROVED BY: **DATE:** 04/11/2011 **OFFICE:** AVN-110 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZTL, ZDC
ATC FACILITY: GSO APP CON
OTHER:

QA B APPROVED