US Department of Transportation
Federal Aviation Administration

STAR - Standard Terminal Arrival

1. Bearings, headings, courses and radials are listed to the nearest hundredth (e.g. 360.00)
2. Distances are in nautical miles to nearest hundredth (e.g. 00.00)
3. Altitudes are minimum altitudes unless otherwise indicated

(1) Transition Routes

(a) Transition Name	(b) Transition Computer Codes	(c) From RNAV WP/ FIX/NAVAID	(d) To RNAV WP/ FIX/NAVAID	(e) Mag Course/ Distance	(f) MEA	(g) MOCA	(h) MAA	(i) Crossing Altitudes / Fixes
ATLANTA	ATL.VOLLS8	ATL VORTAC	(CFFHZ)	352.00/17.44 (ATL R-352)	16000			
		(CFFHZ)	GQO VORTAC	332.00/70.37 (GQO R-152)	16000			
		GQO VORTAC	SHNYD INT	312.65/10.00 (GQO R-313)	9000			
		SHNYD INT	JABRD INT	312.65/15.00 (GQO R-313)	8000			
		JABRD INT	VANDD/GQO 51.87 DME	312.65/26.87 (GQO R-313)	6000			
		VANDD/BNA 51.00 DME	VOLLS INT	314.76/11.00 (BNA R-135)	4000			
CHOO CHOO	GQO.VOLLS8	GQO VORTAC	SHNYD INT	312.65/10.00 (GQO R-313)	9000			
		SHNYD INT	JABRD INT	312.65/15.00 (GQO R-313)	8000			
		JABRD INT	VANDD/GQO 51.87 DME	312.65/26.87 (GQO R-313)	6000			
		VANDD/BNA 51.00 DME	VOLLS INT	314.76/11.00 (BNA R-135)	4000			
HINCH MOUNTAIN	HCH.VOLLS8	HCH VORTAC	VOLLS INT	266.07/54.33 (HCH R-266)	7000			
ROCKET	RQZ.VOLLS8	RQZ VORTAC	VANDD/RQZ 57.46 DME	035.46/57.46 (RQZ R-035)	7000			
		VANDD/BNA 51.00 DME	VOLLS INT	314.76/11.00 (BNA R-135)	4000			
VOLUNTEER	VXV.VOLLS8	VXV VORTAC	BAMMA INT	261.68/65.00 (VXV R-262)	10000			
		BAMMA INT	VANDD/VXV 101.11 DME	261.68/36.11 (VXV R-262)	10000			
		VANDD/BNA 51.00 DME	VOLLS INT	314.76/11.00 (BNA R-135)	4000			

(2) Arrival Route Description:
TURBOJETS/TURBOPROPS LANDING NASHVILLE INTL:
LANDING NORTH - FROM OVER VOLLS INT ON BNA R-135 TO BNA VORTAC (MEA 4000), EXPECT VECTORS TO FINAL APPROACH COURSE PASSING VOLLS INT.
LANDING SOUTH - FROM OVER VOLLS INT ON BNA R-135 TO PARKO/BNA 7.00 DME (MEA 4000), THEN ON HEADING 020 DEGREES FOR VECTORS TO FINAL APPROACH COURSE.
NON-TURBINE LANDING NASHVILLE INTL: ALL RUNWAYS - FROM OVER VOLLS INT ON BNA R-135 TO BNA VORTAC (MEA 4000), EXPECT VECTORS TO FINAL APPROACH COURSE PASSING VOLLS INT.

(CONTINUED IN BLOCK 16)

(3) Procedural Data Notes:
NOTE: DME AND RADAR REQUIRED. **NOTE:** TURBOJET VERTICAL PLANNING INFORMATION – VOLLS INT: EXPECT CLEARANCE TO CROSS AT 11000. EXPECT CLEARANCE TO CROSS AT 250 KIAS WHEN LANDING BNA RWY 2L, 2C, 2R, OR 31.

(4) Fixes and/or Holding Patterns:
CHART HOLDING PATTERNS: VANDD INT (HOLD SE, RT, 315.00 INBOUND); VOLLS INT (HOLD SE, RT, 315.00 INBOUND).

(5) Communications: NASHVILLE APPROACH CONTROL; NASHVILLE INTL ATIS.

(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
VOLLS	EIGHT	VOLLS.VOLLS8	SEVEN	14 FEB 2008	

(12) Airports Served

Airport Name	NASHVILLE INTL	**City/State**	NASHVILLE, TN
Airport Name	JOHN C. TUNE	**City/State**	NASHVILLE, TN
Airport Name	SMYRNA	**City/State**	SMYRNA, TN
Airport Name	MURFREESBORO MUNI	**City/State**	MURFREESBORO, TN
Airport Name		**City/State**	
Airport Name		**City/State**	

(13) Lost Communications Procedure:

(14) Remarks:

MAG VARIATIONS: BNA-W2; HCH-W2; VXV-W3; RQZ-E2; GQO-E1; SYI-W1; ATL-W5.

(15) Additional Flight Data:
CHART: (CFFHZ) AT INTERSECTION OF ATL VORTAC R-352 AND GQO VORTAC R-152.
CHART: SYI R-068 AT VOLLS; HCH R-203 AT SHNYD; HCH R-222 AT JABRD; GQO R-356 AT BAMMA.
CHART: PARKO COORDINATES AND 020 HEADING FROM FIX.

(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
VOLLS	EIGHT	VOLLS.VOLLS8	SEVEN	14 FEB 2008	

(16) Continuation:

(2) Arrival Route Description (continued):

LANDING JOHN C. TUNE, SMYRNA, MURFREESBORO MUNI: FROM OVER VOLLS INT ON BNA VORTAC R-135 TO BNA VORTAC (MEA 4000), EXPECT VECTORS TO FINAL APPROACH COURSE PASSING VOLLS INT.

(17) Changes:

1. CHANGED CNF FIX NAME FROM (ONXUV) TO (CFFHZ).
2. AMENDED NOTE DME REQUIRED TO DME AND RADAR REQUIRED.
3. AMENDED ALL INSTANCES OF THE WORD VIA TO ON IN THE ARRIVAL ROUTE DESCRIPTION.
4. AMENDED COURSE FROM ATL VORTAC TO (CFFHZ) FROM 347.00 TO 352.00.
5. ADDED ARRIVAL ROUTE INSTRUCTIONS FOR JOHN C. TUNE, SMYRNA, AND MURFREESBORO.
6. MOVED SHNYD 6.54 FT AND JABRD 13.39 FEET SOUTHWEST.
7. INCREASED MEA ON ATL TO CFFHZ AND CFFHZ TO GQO SEGMENTS FROM 15000 TO 16000.

(18) Reasons for Changes:

1. IAW AJV-3 MEMORANDUM, NAMING OF COMPUTER NAVIGATION FIXES, DATED 12/20/2011.
2. PROCEDURE TERMINATES IN RADAR VECTORS.
3. IAW CURRENT DOCUMENTATION POLICY.
4. ATL VORTAC MAGVAR UPDATED FROM 0W TO 5W.
5. ATC REQUEST.
6. CENTERED FIXES ON GQO R-312.65.
7. ELIMINATES NEED FOR ESV FROM GQO VORTAC.

	Name *(Typed and Signed)*, Title and Organization		DATE
Developed By	RUSSELL C. BEATSE, ZME 530.2		05/21/2012
Approved	**NFPO**	DARRYEL ADAMS, MANAGER, AJV-352	
	Reg. ATD		

(6) Arrival Name	(7) Number	(8) STAR Computer Code	(9) Superseded Nr.	(10) Dated	(11) Effective Date
VOLLS	EIGHT	VOLLS.VOLLS8	SEVEN	14 FEB 2008	

US Department of Transportation
Federal Aviation Administration

STAR (Data Record)

ARINC PACKET - 424-18 - STAR

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        SUSAD        BNA   K7011410VTH  N36081306W086410518    N36081306W086410518W0020005662     NARNASHVILLE
        SUSAD        GQO   K7011580VTHA N34574054W085091214    N34574054W085091214E0010010152     NARCHOO CHOO
        SUSAD        HCH   K7011760VTLA N35465165W084584243    N35465165W084584243W0020030401     NARHINCH MOUNTAIN
        SUSAD        RQZ   K7011220VTLW N34475006W086380185    N34475006W086380185E0020011051     NARROCKET
        SUSAD        VXV   K7011640VTHA N35541742W083534102    N35541742W083534102W0030012902     NARVOLUNTEER

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAEAENRT   CFFHZ K70    W     N33544620W084304920                    W0047     NAR          CNF(CFFHZ)
        SUSAEAENRT   JABRD K70    R     N35145557W085311730                    W0041     NAR          JABRD
        SUSAEAENRT   SHNYD K70    R   B N35043504W085180109                    W0043     NAR          SHNYD
        SUSAEAENRT   VANDD K70    R     N35332363W085551194                    W0039     NAR          VANDD
        SUSAEAENRT   VOLLS K70    R     N35405581W086050242                    W0038     NAR          VOLLS

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KJWNK7AJWN     0     055YHN36105650W086531220W003000495        1800018000C    MNAR    JOHN C TUNE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KJWNK7EVOLLS81ATL   010ATL  K7D 0V       IF                                    18000
        SUSAP KJWNK7EVOLLS81ATL   020CFFHZK7EA0E       TF                35200174
        SUSAP KJWNK7EVOLLS81ATL   030GQO  K7D 0V       TF                33200704
        SUSAP KJWNK7EVOLLS81ATL   040SHNYDK7EA0E       TF                31270100
        SUSAP KJWNK7EVOLLS81ATL   050JABRDK7EA0E       TF                31270150
        SUSAP KJWNK7EVOLLS81ATL   060VANDDK7EA0E  H    TF                31270269
        SUSAP KJWNK7EVOLLS81ATL   070VOLLSK7EA0EE H    TF                31480110
        SUSAP KJWNK7EVOLLS81GQO   010GQO  K7D 0V       IF                                    18000
        SUSAP KJWNK7EVOLLS81GQO   020SHNYDK7EA0E       TF                31270100
        SUSAP KJWNK7EVOLLS81GQO   030JABRDK7EA0E       TF                31270150
        SUSAP KJWNK7EVOLLS81GQO   040VANDDK7EA0E  H    TF                31270269
        SUSAP KJWNK7EVOLLS81GQO   050VOLLSK7EA0EE H    TF                31480110
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QUALITY CHECKED

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
VOLLS	EIGHT	VOLLS.VOLLS8	SEVEN	14 FEB 2008	

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SUSAP KJWNK7EVOLLS81HCH   010HCH  K7D 0V       IF                                    18000
SUSAP KJWNK7EVOLLS81HCH   020VOLLSK7EA0EE H    TF                 26610543
SUSAP KJWNK7EVOLLS81RQZ   010RQZ  K7D 0V       IF                                    18000
SUSAP KJWNK7EVOLLS81RQZ   020VANDDK7EA0E  H    TF                 03550575
SUSAP KJWNK7EVOLLS81RQZ   030VOLLSK7EA0EE H    TF                 31480110
SUSAP KJWNK7EVOLLS81VXV   010VXV  K7D 0V       IF                                    18000
SUSAP KJWNK7EVOLLS81VXV   020BAMMAK7EA0E       TF                 26170650
SUSAP KJWNK7EVOLLS81VXV   030VANDDK7EA0E  H    TF                 26170361
SUSAP KJWNK7EVOLLS81VXV   040VOLLSK7EA0EE H    TF                 31480110
SUSAP KJWNK7EVOLLS82ALL   010VOLLSK7EA0E  H    IF                                    18000
SUSAP KJWNK7EVOLLS82ALL   020BNA  K7D 0VE      TF                 3150

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RUNWAY  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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SUSAP KJWNK7GRW02    0055000178 N36103019W086532071+0700    +01104004580000051100R
SUSAP KJWNK7GRW20    0055001978 N36111801W086530517-0700    +01209004930500531001IJWN1
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QUALITY CHECKED

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
VOLLS	EIGHT	VOLLS.VOLLS8	SEVEN	14 FEB 2008	

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STAR (Data Record)

ARINC SUMMARY - 424-18 - STAR

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	ATL	ATL	010		IF		FB					
	ATL	CFFHZ	020		TF		FB		352.0()	017.4		
	ATL	GQO	030		TF		FB		332.0()	070.4		
	ATL	SHNYD	040		TF		FB		312.7()	010.0		
	ATL	JABRD	050		TF		FB		312.7()	015.0		
	ATL	VANDD	060		TF		FB		312.7()	026.9		
	ATL	VOLLS	070		TF		FB		314.8()	011.0		
	GQO	GQO	010		IF		FB					
	GQO	SHNYD	020		TF		FB		312.7()	010.0		
	GQO	JABRD	030		TF		FB		312.7()	015.0		
	GQO	VANDD	040		TF		FB		312.7()	026.9		
	GQO	VOLLS	050		TF		FB		314.8()	011.0		
	HCH	HCH	010		IF		FB					
	HCH	VOLLS	020		TF		FB		266.1()	054.3		
	RQZ	RQZ	010		IF		FB					
	RQZ	VANDD	020		TF		FB		035.5()	057.5		
	RQZ	VOLLS	030		TF		FB		314.8()	011.0		
	VXV	VXV	010		IF		FB					
	VXV	BAMMA	020		TF		FB		261.7()	065.0		
	VXV	VANDD	030		TF		FB		261.7()	036.1		
	VXV	VOLLS	040		TF		FB		314.8()	011.0		
	ALL	VOLLS	010		IF		FB					
	ALL	BNA	020		TF		FB		315.0()			

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	ATL	N333744.66	W0842606.26	N3337.744	W08426.104
	BNA	N360813.06	W0864105.18	N3608.218	W08641.086
	GQO	N345740.54	W0850912.14	N3457.676	W08509.202
	HCH	N354651.65	W0845842.43	N3546.861	W08458.707
	RQZ	N344750.06	W0863801.85	N3447.834	W08638.031
	VXV	N355417.42	W0835341.02	N3554.290	W08353.684
	BAMMA	N354105.22	W0851155.47	N3541.087	W08511.925
	CFFHZ	N335446.20	W0843049.20	N3354.770	W08430.820
	JABRD	N351455.57	W0853117.30	N3514.926	W08531.288
	SHNYD	N350435.04	W0851801.09	N3504.584	W08518.018
	VANDD	N353323.63	W0855511.94	N3533.394	W08555.199
	VOLLS	N354055.81	W0860502.42	N3540.930	W08605.040

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
VOLLS	EIGHT	VOLLS.VOLLS8	SEVEN	14 FEB 2008	

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RW02	N361030.19	W0865320.71	N3610.503	W08653.345
RW20	N361118.01	W0865305.17	N3611.300	W08653.086

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW02	00458	51
RW20	00493	53

QUALITY CHECKED

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
VOLLS	EIGHT	VOLLS.VOLLS8	SEVEN	14 FEB 2008	

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         SUSAD        GQO   K7011580VTHA N34574054W085091214    N34574054W085091214E0010010152     NARCHOO CHOO
         SUSAD        HCH   K7011760VTLA N35465165W084584243    N35465165W084584243W0020030401     NARHINCH MOUNTAIN
         SUSAD        RQZ   K7011220VTLW N34475006W086380185    N34475006W086380185E0020011051     NARROCKET
         SUSAD        VXV   K7011640VTHA N35541742W083534102    N35541742W083534102W0030012902     NARVOLUNTEER

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP       12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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         SUSAEAENRT   CFFHZ K70    W     N33544620W084304920                    W0047     NAR          CNF(CFFHZ)
         SUSAEAENRT   JABRD K70    R     N35145557W085311730                    W0041     NAR          JABRD
         SUSAEAENRT   SHNYD K70    R   B N35043504W085180109                    W0043     NAR          SHNYD
         SUSAEAENRT   VANDD K70    R     N35332363W085551194                    W0039     NAR          VANDD
         SUSAEAENRT   VOLLS K70    R     N35405581W086050242                    W0038     NAR          VOLLS

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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SEGMENT  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
         ------------------------------------------------------------------------------------------------------------------------------
         SUSAP KMQYK7EVOLLS81ATL   010ATL  K7D 0V       IF                                          18000
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         SUSAP KMQYK7EVOLLS81ATL   030GQO  K7D 0V       TF                  33200704
         SUSAP KMQYK7EVOLLS81ATL   040SHNYDK7EA0E       TF                  31270100
         SUSAP KMQYK7EVOLLS81ATL   050JABRDK7EA0E       TF                  31270150
         SUSAP KMQYK7EVOLLS81ATL   060VANDDK7EA0E  H    TF                  31270269
         SUSAP KMQYK7EVOLLS81ATL   070VOLLSK7EA0EE H    TF                  31480110
         SUSAP KMQYK7EVOLLS81GQO   010GQO  K7D 0V       IF                                          18000
         SUSAP KMQYK7EVOLLS81GQO   020SHNYDK7EA0E       TF                  31270100
         SUSAP KMQYK7EVOLLS81GQO   030JABRDK7EA0E       TF                  31270150
         SUSAP KMQYK7EVOLLS81GQO   040VANDDK7EA0E  H    TF                  31270269
         SUSAP KMQYK7EVOLLS81GQO   050VOLLSK7EA0EE H    TF                  31480110
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QUALITY CHECKED

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
VOLLS	EIGHT	VOLLS.VOLLS8	SEVEN	14 FEB 2008	

FAA Form 7100-3 (9/02)

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SUSAP KMQYK7EVOLLS81HCH   010HCH  K7D 0V       IF                                    18000
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SUSAP KMQYK7EVOLLS81RQZ   010RQZ  K7D 0V       IF                                    18000
SUSAP KMQYK7EVOLLS81RQZ   020VANDDK7EA0E  H    TF                 03550575
SUSAP KMQYK7EVOLLS81RQZ   030VOLLSK7EA0EE H    TF                 31480110
SUSAP KMQYK7EVOLLS81VXV   010VXV  K7D 0V       IF                                    18000
SUSAP KMQYK7EVOLLS81VXV   020BAMMAK7EA0E       TF                 26170650
SUSAP KMQYK7EVOLLS81VXV   030VANDDK7EA0E  H    TF                 26170361
SUSAP KMQYK7EVOLLS81VXV   040VOLLSK7EA0EE H    TF                 31480110
SUSAP KMQYK7EVOLLS82ALL   010VOLLSK7EA0E  H    IF                                    18000
SUSAP KMQYK7EVOLLS82ALL   020BNA  K7D 0VE      TF                 3150
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          1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY    12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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SUSAP KMQYK7GRW14    0080481411 N36010428W086314345-0300    +01366005430000050150R
SUSAP KMQYK7GRW19    0055461861 N36005695W086311126+0000    +01300005210000032100V
SUSAP KMQYK7GRW32    0080483212 N36000409W086303937+0300    +01288005170000051150IIMQY1
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QUALITY CHECKED

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
VOLLS	EIGHT	VOLLS.VOLLS8	SEVEN	14 FEB 2008	

US Department of Transportation
Federal Aviation Administration

STAR (Data Record)

ARINC SUMMARY - 424-18 - STAR

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	ATL	ATL	010		IF		FB					
	ATL	CFFHZ	020		TF		FB		352.0()	017.4		
	ATL	GQO	030		TF		FB		332.0()	070.4		
	ATL	SHNYD	040		TF		FB		312.7()	010.0		
	ATL	JABRD	050		TF		FB		312.7()	015.0		
	ATL	VANDD	060		TF		FB		312.7()	026.9		
	ATL	VOLLS	070		TF		FB		314.8()	011.0		
	GQO	GQO	010		IF		FB					
	GQO	SHNYD	020		TF		FB		312.7()	010.0		
	GQO	JABRD	030		TF		FB		312.7()	015.0		
	GQO	VANDD	040		TF		FB		312.7()	026.9		
	GQO	VOLLS	050		TF		FB		314.8()	011.0		
	HCH	HCH	010		IF		FB					
	HCH	VOLLS	020		TF		FB		266.1()	054.3		
	RQZ	RQZ	010		IF		FB					
	RQZ	VANDD	020		TF		FB		035.5()	057.5		
	RQZ	VOLLS	030		TF		FB		314.8()	011.0		
	VXV	VXV	010		IF		FB					
	VXV	BAMMA	020		TF		FB		261.7()	065.0		
	VXV	VANDD	030		TF		FB		261.7()	036.1		
	VXV	VOLLS	040		TF		FB		314.8()	011.0		
	ALL	VOLLS	010		IF		FB					
	ALL	BNA	020		TF		FB		315.0()			

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	ATL	N333744.66	W0842606.26	N3337.744	W08426.104
	BNA	N360813.06	W0864105.18	N3608.218	W08641.086
	GQO	N345740.54	W0850912.14	N3457.676	W08509.202
	HCH	N354651.65	W0845842.43	N3546.861	W08458.707
	RQZ	N344750.06	W0863801.85	N3447.834	W08638.031
	VXV	N355417.42	W0835341.02	N3554.290	W08353.684
	BAMMA	N354105.22	W0851155.47	N3541.087	W08511.925
	CFFHZ	N335446.20	W0843049.20	N3354.770	W08430.820
	JABRD	N351455.57	W0853117.30	N3514.926	W08531.288
	SHNYD	N350435.04	W0851801.09	N3504.584	W08518.018
	VANDD	N353323.63	W0855511.94	N3533.394	W08555.199
	VOLLS	N354055.81	W0860502.42	N3540.930	W08605.040

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
VOLLS	EIGHT	VOLLS.VOLLS8	SEVEN	14 FEB 2008	

FAA Form 7100-3 (9/02)

RW01	N360002.24	W0863116.12	N3600.037	W08631.269
RW14	N360104.28	W0863143.45	N3601.071	W08631.724
RW19	N360056.95	W0863111.26	N3600.949	W08631.188
RW32	N360004.09	W0863039.37	N3600.068	W08630.656

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW01	00519	27
RW14	00543	50
RW19	00521	32
RW32	00517	51

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
VOLLS	EIGHT	VOLLS.VOLLS8	SEVEN	14 FEB 2008	

US Department of Transportation
Federal Aviation Administration

STAR (Data Record)

ARINC PACKET - 424-18 - STAR

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAD        ATL   K7011690VTH  N33374466W084260626    N33374268W084260626W0050010002     NARATLANTA
        SUSAD        BNA   K7011410VTH  N36081306W086410518    N36081306W086410518W0020005662     NARNASHVILLE
        SUSAD        GQO   K7011580VTHA N34574054W085091214    N34574054W085091214E0010010152     NARCHOO CHOO
        SUSAD        HCH   K7011760VTLA N35465165W084584243    N35465165W084584243W0020030401     NARHINCH MOUNTAIN
        SUSAD        RQZ   K7011220VTLW N34475006W086380185    N34475006W086380185E0020011051     NARROCKET
        SUSAD        VXV   K7011640VTHA N35541742W083534102    N35541742W083534102W0030012902     NARVOLUNTEER

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   BAMMA K70    R   H N35410522W085115547                    W0045     NAR          BAMMA
        SUSAEAENRT   CFFHZ K70    W     N33544620W084304920                    W0047     NAR          CNF(CFFHZ)
        SUSAEAENRT   JABRD K70    R     N35145557W085311730                    W0041     NAR          JABRD
        SUSAEAENRT   SHNYD K70    R   B N35043504W085180109                    W0043     NAR          SHNYD
        SUSAEAENRT   VANDD K70    R     N35332363W085551194                    W0039     NAR          VANDD
        SUSAEAENRT   VOLLS K70    R     N35405581W086050242                    W0038     NAR          VOLLS

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMBTK7AMBT     0     038YHN35523890W086223910W002000614        1800018000C    MNAR    MURFREESBORO MUNI

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMBTK7EVOLLS81ATL   010ATL  K7D 0V       IF                                          18000
        SUSAP KMBTK7EVOLLS81ATL   020CFFHZK7EA0E       TF                   35200174
        SUSAP KMBTK7EVOLLS81ATL   030GQO  K7D 0V       TF                   33200704
        SUSAP KMBTK7EVOLLS81ATL   040SHNYDK7EA0E       TF                   31270100
        SUSAP KMBTK7EVOLLS81ATL   050JABRDK7EA0E       TF                   31270150
        SUSAP KMBTK7EVOLLS81ATL   060VANDDK7EA0E  H    TF                   31270269
        SUSAP KMBTK7EVOLLS81ATL   070VOLLSK7EA0EE H    TF                   31480110
        SUSAP KMBTK7EVOLLS81GQO   010GQO  K7D 0V       IF                                          18000
        SUSAP KMBTK7EVOLLS81GQO   020SHNYDK7EA0E       TF                   31270100
        SUSAP KMBTK7EVOLLS81GQO   030JABRDK7EA0E       TF                   31270150
        SUSAP KMBTK7EVOLLS81GQO   040VANDDK7EA0E  H    TF                   31270269
        SUSAP KMBTK7EVOLLS81GQO   050VOLLSK7EA0EE H    TF                   31480110
```

QUALITY 1 CHECKED

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
VOLLS	EIGHT	VOLLS.VOLLS8	SEVEN	14 FEB 2008	

FAA Form 7100-3 (9/02)

```
SUSAP KMBTK7EVOLLS81HCH   010HCH  K7D 0V      IF                                  18000
SUSAP KMBTK7EVOLLS81HCH   020VOLLSK7EA0EE H   TF                 26610543
SUSAP KMBTK7EVOLLS81RQZ   010RQZ  K7D 0V      IF                                  18000
SUSAP KMBTK7EVOLLS81RQZ   020VANDDK7EA0E  H   TF                 03550575
SUSAP KMBTK7EVOLLS81RQZ   030VOLLSK7EA0EE H   TF                 31480110
SUSAP KMBTK7EVOLLS81VXV   010VXV  K7D 0V      IF                                  18000
SUSAP KMBTK7EVOLLS81VXV   020BAMMAK7EA0E       TF                 26170650
SUSAP KMBTK7EVOLLS81VXV   030VANDDK7EA0E  H    TF                 26170361
SUSAP KMBTK7EVOLLS81VXV   040VOLLSK7EA0EE H    TF                 31480110
SUSAP KMBTK7EVOLLS82ALL   010VOLLSK7EA0E  H    IF                                  18000
SUSAP KMBTK7EVOLLS82ALL   020BNA  K7D 0VE      TF                 3150

                1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
SUSAP KMBTK7GRW18    0038981845 N35525820W086223809+0400    +01539005990000040100R
SUSAP KMBTK7GRW36    0038980045 N35521969W086224013-0400    +01583006140000040100R
```

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
VOLLS	EIGHT	VOLLS.VOLLS8	SEVEN	14 FEB 2008	

US Department of Transportation
Federal Aviation Administration

STAR (Data Record)

ARINC SUMMARY - 424-18 - STAR

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	ATL	ATL	010		IF		FB					
	ATL	CFFHZ	020		TF		FB		352.0()	017.4		
	ATL	GQO	030		TF		FB		332.0()	070.4		
	ATL	SHNYD	040		TF		FB		312.7()	010.0		
	ATL	JABRD	050		TF		FB		312.7()	015.0		
	ATL	VANDD	060		TF		FB		312.7()	026.9		
	ATL	VOLLS	070		TF		FB		314.8()	011.0		
	GQO	GQO	010		IF		FB					
	GQO	SHNYD	020		TF		FB		312.7()	010.0		
	GQO	JABRD	030		TF		FB		312.7()	015.0		
	GQO	VANDD	040		TF		FB		312.7()	026.9		
	GQO	VOLLS	050		TF		FB		314.8()	011.0		
	HCH	HCH	010		IF		FB					
	HCH	VOLLS	020		TF		FB		266.1()	054.3		
	RQZ	RQZ	010		IF		FB					
	RQZ	VANDD	020		TF		FB		035.5()	057.5		
	RQZ	VOLLS	030		TF		FB		314.8()	011.0		
	VXV	VXV	010		IF		FB					
	VXV	BAMMA	020		TF		FB		261.7()	065.0		
	VXV	VANDD	030		TF		FB		261.7()	036.1		
	VXV	VOLLS	040		TF		FB		314.8()	011.0		
	ALL	VOLLS	010		IF		FB					
	ALL	BNA	020		TF		FB		315.0()			

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	ATL	N333744.66	W0842606.26	N3337.744	W08426.104
	BNA	N360813.06	W0864105.18	N3608.218	W08641.086
	GQO	N345740.54	W0850912.14	N3457.676	W08509.202
	HCH	N354651.65	W0845842.43	N3546.861	W08458.707
	RQZ	N344750.06	W0863801.85	N3447.834	W08638.031
	VXV	N355417.42	W0835341.02	N3554.290	W08353.684
	BAMMA	N354105.22	W0851155.47	N3541.087	W08511.925
	CFFHZ	N335446.20	W0843049.20	N3354.770	W08430.820
	JABRD	N351455.57	W0853117.30	N3514.926	W08531.288
	SHNYD	N350435.04	W0851801.09	N3504.584	W08518.018
	VANDD	N353323.63	W0855511.94	N3533.394	W08555.199
	VOLLS	N354055.81	W0860502.42	N3540.930	W08605.040

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
VOLLS	EIGHT	VOLLS.VOLLS8	SEVEN	14 FEB 2008	

FAA Form 7100-3 (9/02)

RW18	N355258.20	W0862238.09	N3552.970	W08622.635
RW36	N355219.69	W0862240.13	N3552.328	W08622.669

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW18	00599	40
RW36	00614	40

(11) Arrival Name	(12) Number	(13) STAR Computer Code	(14) Superseded Nr.	(15) Dated	(16) Effective Date
VOLLS	EIGHT	VOLLS.VOLLS8	SEVEN	14 FEB 2008	

RADIO FIX AND HOLDING DATA RECORD

NAME: ATLANTA VORTAC **STATE:** GA **COUNTRY:** US

LATITUDE/LONGITUDE: 333744.66N/0842606.26W **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	DIST FROM FAC FEET	MRA	MAA
1	ATLANTA	ATL	VORTAC	H							45000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
ON FILE					

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

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	265	TOWER (13-003629)	334441.00N/0842136.00W	2049	2C

HOLDING RESTRICTIONS:
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3100.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BIRMINGHAM			KBHM	BIRMINGHAM	AL (US)
DP	ATLANTA			KATL	ATLANTA	GA (US)
DP	HERKO (RNAV)			KATL	ATLANTA	GA (US)
DP	CHATTANOOGA			KCHA	CHATTANOOGA	TN (US)
DP	KNOXVILLE			KTYS	KNOXVILLE	TN (US)
DP	TITAN (OBSTACLE)			KBNA	NASHVILLE	TN (US)
EN ROUTE	J14					(US)
EN ROUTE	J239					(US)
EN ROUTE	J43					(US)
EN ROUTE	J45					(US)
EN ROUTE	J52					(US)
EN ROUTE	J89					(US)
EN ROUTE	J91					(US)
EN ROUTE	V179					(US)
EN ROUTE	V18					(US)
EN ROUTE	V222					(US)
EN ROUTE	V323					(US)
EN ROUTE	V325					(US)
EN ROUTE	V97					(US)
IAP	ILS OR LOC RWY 08L			KATL	ATLANTA	GA (US)
IAP	ILS OR LOC RWY 08R			KATL	ATLANTA	GA (US)
IAP	ILS OR LOC RWY 09L			KATL	ATLANTA	GA (US)
IAP	ILS OR LOC RWY 09R			KATL	ATLANTA	GA (US)
IAP	ILS OR LOC RWY 10			KATL	ATLANTA	GA (US)
IAP	ILS OR LOC RWY 26L			KATL	ATLANTA	GA (US)
IAP	ILS OR LOC RWY 26R			KATL	ATLANTA	GA (US)
IAP	ILS OR LOC RWY 27L			KATL	ATLANTA	GA (US)
IAP	ILS OR LOC RWY 27R			KATL	ATLANTA	GA (US)
IAP	ILS OR LOC RWY 28			KATL	ATLANTA	GA (US)
IAP	ILS PRM RWY 08L (CAT II)(SCP)			KATL	ATLANTA	GA (US)
IAP	ILS PRM RWY 08L (CAT III)(SCP)			KATL	ATLANTA	GA (US)
IAP	ILS PRM RWY 08L (SCP)			KATL	ATLANTA	GA (US)
IAP	ILS PRM RWY 08R (SCP)			KATL	ATLANTA	GA (US)
IAP	ILS PRM RWY 09L (SCP)			KATL	ATLANTA	GA (US)
IAP	ILS PRM RWY 09R (CAT II)(SCP)			KATL	ATLANTA	GA (US)
IAP	ILS PRM RWY 09R (SCP)			KATL	ATLANTA	GA (US)
IAP	ILS PRM RWY 09R(CAT III)(SCP)			KATL	ATLANTA	GA (US)
IAP	ILS PRM RWY 10 (CAT II) (SCP)			KATL	ATLANTA	GA (US)
IAP	ILS PRM RWY 10 (CAT III)(SCP)			KATL	ATLANTA	GA (US)
IAP	ILS PRM RWY 10 (SCP)			KATL	ATLANTA	GA (US)
IAP	ILS PRM RWY 26L (SCP)			KATL	ATLANTA	GA (US)
IAP	ILS PRM RWY 26R (CAT II)(SCP)			KATL	ATLANTA	GA (US)
IAP	ILS PRM RWY 26R (SCP)			KATL	ATLANTA	GA (US)
IAP	ILS PRM RWY 27L (CAT II)(SCP)			KATL	ATLANTA	GA (US)
IAP	ILS PRM RWY 27L (SCP)			KATL	ATLANTA	GA (US)
IAP	ILS PRM RWY 27R (SCP)			KATL	ATLANTA	GA (US)
IAP	ILS PRM RWY 28 (SCP)			KATL	ATLANTA	GA (US)
IAP	ILS PRM RWY 28 (CAT II) (SCP)			KATL	ATLANTA	GA (US)
IAP	ILS RWY 08L (CAT II)			KATL	ATLANTA	GA (US)
IAP	ILS RWY 08L (CAT III)			KATL	ATLANTA	GA (US)
IAP	ILS RWY 09R (CAT II)			KATL	ATLANTA	GA (US)
IAP	ILS RWY 10 (CAT II)			KATL	ATLANTA	GA (US)
IAP	ILS RWY 10 (CAT III)			KATL	ATLANTA	GA (US)

QUALITY CHECKED 4

IAP	ILS RWY 10 (SA CAT I)	KATL	ATLANTA	GA (US)
IAP	ILS RWY 26R (CAT II)	KATL	ATLANTA	GA (US)
IAP	ILS RWY 27L (CAT II)	KATL	ATLANTA	GA (US)
IAP	ILS RWY 28 (CAT II)	KATL	ATLANTA	GA (US)
IAP	ILS RWY 28 (SA CAT I)	KATL	ATLANTA	GA (US)
IAP	ILS RWY 9R (CAT III)	KATL	ATLANTA	GA (US)
IAP	ILS OR LOC RWY 31	KFFC	ATLANTA	GA (US)
IAP	NDB RWY 31	KFFC	ATLANTA	GA (US)
IAP	ILS OR LOC RWY 08	KFTY	ATLANTA	GA (US)
IAP	NDB RWY 08	KFTY	ATLANTA	GA (US)
IAP	VOR-A	KFTY	ATLANTA	GA (US)
IAP	ILS OR LOC RWY 20L	KPDK	ATLANTA	GA (US)
IAP	RNAV (GPS) RWY 27	KPDK	ATLANTA	GA (US)
IAP	VOR/DME RWY 20L	KPDK	ATLANTA	GA (US)
IAP	VOR/DME RWY 27	KPDK	ATLANTA	GA (US)
IAP	ILS OR LOC RWY 27	KRYY	ATLANTA	GA (US)
IAP	VOR/DME RWY 10	K9A1	COVINGTON	GA (US)
IAP	ILS OR LOC/DME RWY 31	KPUJ	DALLAS	GA (US)
IAP	ILS OR LOC/DME RWY 5	KGVL	GAINESVILLE	GA (US)
IAP	HI-TACAN X RWY 23	KNBC	BEAUFORT	SC (US)
IAP	HI-TACAN Y RWY 23	KNBC	BEAUFORT	SC (US)
IAP	HI-TACAN Z RWY 23	KNBC	BEAUFORT	SC (US)
STAR	CANUK (RNAV)	KATL	ATLANTA	GA (US)
STAR	ERLIN (RNAV)	KATL	ATLANTA	GA (US)
STAR	FLCON (RNAV)	KATL	ATLANTA	GA (US)
STAR	HERKO (RNAV)	KATL	ATLANTA	GA (US)
STAR	HONIE (RNAV)	KATL	ATLANTA	GA (US)
STAR	LA GRANGE	KATL	ATLANTA	GA (US)
STAR	PECHY (RNAV)	KATL	ATLANTA	GA (US)
STAR	ROME	KATL	ATLANTA	GA (US)
STAR	RPTOR (RNAV)	KATL	ATLANTA	GA (US)
STAR	SINCA	KATL	ATLANTA	GA (US)
STAR	WHINZ	KATL	ATLANTA	GA (US)
STAR	AWSON	KPDK	ATLANTA	GA (US)
STAR	BUNNI	KPDK	ATLANTA	GA (US)
STAR	DIFFI	KPDK	ATLANTA	GA (US)
STAR	ADENA (RNAV)	KCLT	CHARLOTTE	NC (US)
STAR	UNARM	KCLT	CHARLOTTE	NC (US)
STAR	VOLLS	KMBT	MURFREESBORO	TN (US)
STAR	VOLLS	KBNA	NASHVILLE	TN (US)
STAR	VOLLS	KJWN	NASHVILLE	TN (US)
STAR	VOLLS	KMQY	SMYRNA	TN (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 7 **DATE OF REVISION:** 11/15/2012

REASON FOR REVISION:
UPDATED FAC 1 FROM 0E MAGVAR (ACTIVE) TO 5W (PENDING).
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 04/25/2012 **OFFICE:** AJV-352 **NAME:** MICHAEL CURRAN

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: BAMMA **STATE:** TN **COUNTRY:** US

LATITUDE/LONGITUDE: 354105.22N/0851155.47W **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	VOLUNTEER	VXV	VORTAC	H	261.68	258.68	65.00	65.00		10000	24000
2	CHOO CHOO	GQO	VORTAC	H	356.07	357.07		43.40		10000	24000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
VXV	VORTAC	R-262	65	10000	15800
GQO	VORTAC	R-356	44	10000	15600

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

REMARKS:
VOLUNTEER (FAC 1) AND CHOO CHOO (FAC 2) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	VOLLS	1, 2		KMBT	MURFREESBORO	TN (US)
STAR	SWFTT (RNAV)			KBNA	NASHVILLE	TN (US)
STAR	VOLLS	1, 2		KBNA	NASHVILLE	TN (US)
STAR	VOLLS	1, 2		KJWN	NASHVILLE	TN (US)
STAR	VOLLS	1, 2		KMQY	SMYRNA	TN (US)

REQUIRED CHARTING: STAR, CONTROLLER, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2 **DATE OF REVISION:** 11/15/2012

REASON FOR REVISION:
1. ADDED WP TO FIX TYPE.
2. ADDED DIST FROM FAC TO FAC 1 AND 2.
3. POPULATED ESV DATA.
4. UPDATED FIX USE.

DEVELOPED BY: **DATE:** 05/23/2012 **OFFICE:** AJV-352 **NAME:** PETER GUIMOND

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZTL
ATC FACILITY:
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: CFFHZ **STATE:** GA **COUNTRY:** US

LATITUDE/LONGITUDE: 335446.20N/0843049.20W **TYPE:** CNF

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

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	VOLLS			KMBT	MURFREESBORO	TN (US)
STAR	VOLLS			KBNA	NASHVILLE	TN (US)
STAR	VOLLS			KJWN	NASHVILLE	TN (US)
STAR	VOLLS			KMQY	SMYRNA	TN (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

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

REASON FOR REVISION:
1. CHANGED NAME FROM ONXUV TO CFFHZ.
2. UPDATED FIX USE.

DEVELOPED BY: **DATE:** 05/22/2012 **OFFICE:** AJV-352 **NAME:** PETER GUIMOND

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZME
ATC FACILITY:
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: CHOO CHOO VORTAC **STATE:** TN **COUNTRY:** US

INFO ONLY

LATITUDE/LONGITUDE: 345740.54N/0850912.14W **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	DIST FROM FAC FEET	MRA	MAA
1	CHOO CHOO	GQO	VORTAC	H							45000

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

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	SE	GQO	VORTAC	152.00	332.00	R	1		3100	10000	4	9

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	200' AAO	345750.90N/0851512.50W	1586	6A
1	310	TOWER (13-001346)	345557.00N/0845832.00W	2049	5D

HOLDING RESTRICTIONS:
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 18000

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	ILS OR LOC RWY 20	KCHA	CHATTANOOGA	TN (US)
1	ILS RWY 20 (CAT II)	KCHA	CHATTANOOGA	TN (US)

REMARKS:
PRECIPITIOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BIRMINGHAM			KBHM	BIRMINGHAM	AL (US)
DP	HUNTSVILLE			KHSV	HUNTSVILLE	AL (US)
DP	CADIT (RNAV)			KATL	ATLANTA	GA (US)
DP	COKEM (RNAV)			KATL	ATLANTA	GA (US)
DP	NUGGT (RNAV)			KATL	ATLANTA	GA (US)
DP	SUMMT (RNAV)			KATL	ATLANTA	GA (US)
DP	UZOVO			KRMG	ROME	GA (US)
DP	BOBCAT			KVUJ	ALBEMARLE	NC (US)
DP	BOBCAT			KCLT	CHARLOTTE	NC (US)
DP	BOBCAT			KJQF	CONCORD	NC (US)
DP	BOBCAT			KAKH	GASTONIA	NC (US)
DP	BOBCAT			KIPJ	LINCOLNTON	NC (US)
DP	BOBCAT			KEQY	MONROE	NC (US)
DP	BOBCAT			KRUQ	SALISBURY	NC (US)
DP	BOBCAT			KLKR	LANCASTER	SC (US)
DP	BOBCAT			KUZA	ROCK HILL	SC (US)
DP	CHATTANOOGA			KCHA	CHATTANOOGA	TN (US)
DP	KNOXVILLE			KTYS	KNOXVILLE	TN (US)
DP	EVVAN (RNAV)			KBNA	NASHVILLE	TN (US)
DP	TITAN (OBSTACLE)			KBNA	NASHVILLE	TN (US)
EN ROUTE	V5					(US)
EN ROUTE	V67					SD (US)
EN ROUTE	J118					TN (US)
EN ROUTE	V115					TN (US)
EN ROUTE	V209					TN (US)
EN ROUTE	V243					TN (US)
EN ROUTE	V333					TN (US)
EN ROUTE	V54					TN (US)
IAP	LOC RWY 35			KCZL	CALHOUN	GA (US)
IAP	ILS OR LOC RWY 14			KDNN	DALTON	GA (US)
IAP	RNAV (GPS) RWY 20			K9A5	LAFAYETTE	GA (US)
IAP	ILS OR LOC RWY 2			KCHA	CHATTANOOGA	TN (US)
IAP	ILS OR LOC RWY 20		1	KCHA	CHATTANOOGA	TN (US)
IAP	ILS RWY 20 (CAT II)		1	KCHA	CHATTANOOGA	TN (US)
IAP	RNAV (GPS) RWY 15			KCHA	CHATTANOOGA	TN (US)
IAP	RNAV (GPS) RWY 20			KCHA	CHATTANOOGA	TN (US)
IAP	RNAV (GPS) RWY 33			KCHA	CHATTANOOGA	TN (US)
IAP	VOR RWY 33			KCHA	CHATTANOOGA	TN (US)
IAP	NDB RWY 3			KHDI	CLEVELAND	TN (US)
IAP	NDB RWY 4			KAPT	JASPER	TN (US)
IAP	RNAV (GPS) RWY 4			KAPT	JASPER	TN (US)
STAR	WENDO (RNAV)			KBHM	BIRMINGHAM	AL (US)
STAR	ROME			KATL	ATLANTA	GA (US)
STAR	BUNNI			KCVC	ATLANTA	GA (US)
STAR	BUNNI			KFTY	ATLANTA	GA (US)

QUALITY 4

STAR	BUNNI	KPDK	ATLANTA	GA (US)
STAR	BUNNI	KPUJ	ATLANTA	GA (US)
STAR	BUNNI	KRYY	ATLANTA	GA (US)
STAR	BUNNI	KVPC	CARTERSVILLE	GA (US)
STAR	BUNNI	KLZU	LAWRENCEVILLE	GA (US)
STAR	BUNNI	KMGE	MARIETTA	GA (US)
STAR	JAKIE (RNAV)	KCVG	COVINGTON	KY (US)
STAR	LUGOH	KMEM	MEMPHIS	TN (US)
STAR	MASHH (RNAV)	KMEM	MEMPHIS	TN (US)
STAR	MONAA (RNAV)	KMEM	MEMPHIS	TN (US)
STAR	VOLLS	KMBT	MURFREESBORO	TN (US)
STAR	VOLLS	KBNA	NASHVILLE	TN (US)
STAR	VOLLS	KJWN	NASHVILLE	TN (US)
STAR	VOLLS	KMQY	SMYRNA	TN (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5 **DATE OF REVISION:** 01/13/2011

REASON FOR REVISION:
UPDATED FIX USE
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 18000 NOTE MOVED TO HOLDING RESTRICTION AREA
PRECIPITIOUS TERRAIN EVALUATION COMPLETED NOTE ADDED
UPDATED 310 HOLDING PATTERN OBSTACLE INFORMATION
REMOVED ILS RWY 20 CLIMB IN HOLD REQUIREMENT

DEVELOPED BY: **DATE:** 06/25/2010 **OFFICE:** AVN-110 **NAME:** PETER GETZ (NICHOLE HEISE)

APPROVED BY: **DATE:** 10/22/2010 **OFFICE:** AVN-110 **NAME:** GEORGE DAVIS

SIGNATURE:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: HINCH MOUNTAIN VORTAC **STATE:** TN **COUNTRY:** US

LATITUDE/LONGITUDE: 354651.65N/0845842.43W **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	DIST FROM FAC FEET	MRA	MAA
1	HINCH MOUNTAIN	HCH	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	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	SW		WP	211.02	031.02	R		5	5000	6000	6	6
2	SE	HCH	VORTAC	155.04	335.04	R	1		5000	6000	5	5

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	354552.80N/0845852.60W	3248	6C
2	200	AAO	354552.80N/0845852.60W	3248	6C

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

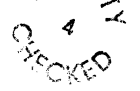
USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	HUNTSVILLE			KHSV	HUNTSVILLE	AL (US)
DP	CHATTANOOGA			KCHA	CHATTANOOGA	TN (US)
DP	KNOXVILLE			KTYS	KNOXVILLE	TN (US)
EN ROUTE	V136					(US)
EN ROUTE	V16					(US)
EN ROUTE	V311					(US)
EN ROUTE	V333					(US)
EN ROUTE	V347					(US)
EN ROUTE	V51					(US)
IAP	ILS OR LOC RWY 26 (ALT MA)		2	KCSV	CROSSVILLE	TN (US)
IAP	RNAV (GPS) RWY 26		1	KCSV	CROSSVILLE	TN (US)
IAP	VOR/DME-A		2	KCSV	CROSSVILLE	TN (US)
IAP	NDB RWY 3			K2A0	DAYTON	TN (US)
IAP	ILS OR LOC RWY 23R			KTYS	KNOXVILLE	TN (US)
IAP	ILS OR LOC RWY 5L			KTYS	KNOXVILLE	TN (US)
IAP	ILS RWY 23R (CAT II)			KTYS	KNOXVILLE	TN (US)
IAP	VOR RWY 23L			KTYS	KNOXVILLE	TN (US)
IAP	VOR RWY 23R			KTYS	KNOXVILLE	TN (US)
IAP	VOR/DME RWY 22			KRKW	ROCKWOOD	TN (US)
STAR	DARBY			KJVY	JEFFERSONVILLE	IN (US)
STAR	DARBY			KLOU	LOUISVILLE	KY (US)
STAR	DARBY			KSDF	LOUISVILLE	KY (US)
STAR	GUITR			KMBT	MURFREESBORO	TN (US)
STAR	VOLLS			KMBT	MURFREESBORO	TN (US)
STAR	GUITR			KBNA	NASHVILLE	TN (US)
STAR	VOLLS			KBNA	NASHVILLE	TN (US)
STAR	GUITR			KJWN	NASHVILLE	TN (US)
STAR	VOLLS			KJWN	NASHVILLE	TN (US)
STAR	GUITR			KMQY	SMYRNA	TN (US)
STAR	VOLLS			KMQY	SMYRNA	TN (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 8 **DATE OF REVISION:** 11/15/2012

REASON FOR REVISION:
1. DELETED PAT 1.
2. RENUMBERED CURRENT PAT 2 TO PAT 1.
3. RENUMBERED CURRENT PAT 3 TO PAT 2.
4. UPDATED PAT 2 CONTROLLING OBSTACLE LAT/LONG.
5. UPDATED PAT 3 CONTROLLING OBSTACLE FROM 3259 MSL AAO TO 3248 MSL AAO, NO CHANGE TO MINIMUM HOLDING ALTITUDE.
6. ADDED DP TO REQUIRED CHARTING.
7. UPDATED FIX USE.



DEVELOPED BY:	**DATE:** 05/23/2012	**OFFICE:** AJV-352	**NAME:** PETER GUIMOND
APPROVED BY:	**DATE:**	**OFFICE:** AJV-352	**NAME:** DARRYEL ADAMS
	SIGNATURE:		

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZTL
ATC FACILITY:
OTHER:

QUALITY CHECKED 4

RADIO FIX AND HOLDING DATA RECORD

NAME: JABRD **STATE:** TN **COUNTRY:** US

LATITUDE/LONGITUDE: 351455.57N/0853117.30W **TYPE:** 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	CHOO CHOO	GQO	VORTAC	H	312.65	313.65	25.00	25.00		8000	24000
2	HINCH MOUNTAIN	HCH	VORTAC	L	221.99	219.99		41.52		8000	24000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
HCH	VORTAC	R-222	42	8000	24000

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

REMARKS:
CHOO CHOO (FAC 1) AND HINCH MOUNTAIN (FAC 2) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	VOLLS	1, 2		KMBT	MURFREESBORO	TN (US)
STAR	VOLLS	1, 2		KBNA	NASHVILLE	TN (US)
STAR	VOLLS	1, 2		KJWN	NASHVILLE	TN (US)
STAR	VOLLS	1, 2		KMQY	SMYRNA	TN (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2 **DATE OF REVISION:** 11/15/2012

REASON FOR REVISION:
1. MOVED FIX 13.39 FEET SOUTHWEST.
2. AMENDED FAC 2 MAG BRG FROM 222 TO 221.99.
3. ADDED DIST FROM FAC TO FAC 1 AND 2.
4. POPULATED ESV DATA.
5. UPDATED FIX USE.

DEVELOPED BY: **DATE:** 05/22/2012 **OFFICE:** AJV-352 **NAME:** PETER GUIMOND

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZTL
ATC FACILITY:
OTHER:

QUALITY
4

RADIO FIX AND HOLDING DATA RECORD

NAME: NASHVILLE VORTAC **STATE:** TN **COUNTRY:** US

LATITUDE/LONGITUDE: 360813.06N/0864105.18W **TYPE:**

INFO ONLY

PENDING CHART: 7/26/12

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	DIST FROM FAC FEET	MRA	MAA
1	NASHVILLE	BNA	VORTAC	H							45000

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

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	NW	BNA	VORTAC	315.19	135.19	R	1		3000	6000	4	5
2	NW	BNA	VORTAC	336.00	156.00	R	1-1 1/2		7000	16000	8	15
3	E	BNA	VORTAC	080.87	260.87	L		15	18000	45000	28	29
4	E		WP	078.00	258.00	L		15	18000	45000	28	30

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (47-000685)	361550.00N/0864739.00W	2049	3D
2	230	TOWER (47-000685)	361550.00N/0864739.00W	2049	3D

REASON FOR NONSTANDARD HOLDING:
PAT 4 ATC REQUEST. 15 NM LEG LENGTHS ATC REQUEST.
PAT 3 ATC REQUEST. 15 NM LEG LENGTHS ATC REQUEST.

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
DO NOT CHART HOLD PAT 2/USED FOR ATC OVERFLOW.
HOLD PAT 1 CONTROLLING OBSTACLE IS IN THE SECONDARY AREA.
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BIRMINGHAM			KBHM	BIRMINGHAM	AL (US)
DP	HUNTSVILLE			KHSV	HUNTSVILLE	AL (US)
DP	PLESS			KALN	ALTON/ST LOUIS	IL (US)
DP	PLESS			KBLV	BELLEVILLE	IL (US)
DP	PLESS			KCPS	CAHOKIA/ST LOUIS	IL (US)
DP	DRUSE (RNAV)			KSTL	ST LOUIS	MO (US)
DP	PLESS			KSTL	ST LOUIS	MO (US)
DP	PLESS			KSUS	ST LOUIS	MO (US)
DP	JACKSON			KJAN	JACKSON	MS (US)
DP	ZAVER (RNAV)			KCLT	CHARLOTTE	NC (US)
DP	CHATTANOOGA			KCHA	CHATTANOOGA	TN (US)
DP	KNOXVILLE			KTYS	KNOXVILLE	TN (US)
DP	MEMPHIS			KMEM	MEMPHIS	TN (US)
DP	TITAN			KBNA	NASHVILLE	TN (US)
EN ROUTE	J39					(US)
EN ROUTE	J42					(US)
EN ROUTE	J45					(US)
EN ROUTE	J46					(US)
EN ROUTE	J73					(US)
EN ROUTE	Q19					(US)
EN ROUTE	Q32					(US)
EN ROUTE	Q34					(US)
EN ROUTE	Q36					(US)
EN ROUTE	V140					(US)
EN ROUTE	V49					(US)
IAP	RNAV (GPS) RWY 18			KHOP	FT CAMPBELL	KY (US)
IAP	RNAV (GPS) RWY 23			KHOP	FT CAMPBELL	KY (US)
IAP	RNAV (GPS) RWY 35			KM33	GALLATIN	TN (US)
IAP	VOR/DME-A			KM33	GALLATIN	TN (US)
IAP	NDB RWY 19			KM54	LEBANON	TN (US)
IAP	RNAV (GPS) RWY 01			KM54	LEBANON	TN (US)
IAP	RNAV (GPS) RWY 19			KM54	LEBANON	TN (US)
IAP	VOR/DME-A			KM54	LEBANON	TN (US)
IAP	NDB RWY 20			KLUG	LEWISBURG	TN (US)
IAP	NDB RWY 18			KMBT	MURFREESBORO	TN (US)
IAP	ILS RWY 2R (CAT II)			KBNA	NASHVILLE	TN (US)
IAP	ILS OR LOC RWY 20L			KBNA	NASHVILLE	TN (US)
IAP	ILS OR LOC RWY 20R			KBNA	NASHVILLE	TN (US)
IAP	ILS OR LOC RWY 2C			KBNA	NASHVILLE	TN (US)
IAP	ILS OR LOC RWY 2L			KBNA	NASHVILLE	TN (US)
IAP	ILS OR LOC RWY 2R			KBNA	NASHVILLE	TN (US)

IAP	ILS OR LOC RWY 31		KBNA	NASHVILLE	TN (US)
IAP	ILS RWY 2L (CAT II)		KBNA	NASHVILLE	TN (US)
IAP	ILS RWY 2L (CAT III)		KBNA	NASHVILLE	TN (US)
IAP	ILS RWY 2R (CAT III)		KBNA	NASHVILLE	TN (US)
IAP	RNAV (GPS) RWY 13		KBNA	NASHVILLE	TN (US)
IAP	RNAV (GPS) Y RWY 20L		KBNA	NASHVILLE	TN (US)
IAP	RNAV (GPS) Y RWY 20R		KBNA	NASHVILLE	TN (US)
IAP	RNAV (GPS) Y RWY 2L		KBNA	NASHVILLE	TN (US)
IAP	RNAV (GPS) Y RWY 2R		KBNA	NASHVILLE	TN (US)
IAP	RNAV (GPS) Y RWY 31		KBNA	NASHVILLE	TN (US)
IAP	VOR/DME RWY 13		KBNA	NASHVILLE	TN (US)
IAP	ILS OR LOC/DME RWY 20		KJWN	NASHVILLE	TN (US)
IAP	ILS OR LOC RWY 32		KMQY	SMYRNA	TN (US)
IAP	NDB RWY 32		KMQY	SMYRNA	TN (US)
IAP	VOR/DME RWY 14	1	KMQY	SMYRNA	TN (US)
IAP	VOR/DME RWY 32		KMQY	SMYRNA	TN (US)
IAP	LOC RWY 4 (ALT MISS)	1	KM91	SPRINGFIELD	TN (US)
STAR	ERLIN (RNAV)		KATL	ATLANTA	GA (US)
STAR	HERKO (RNAV)		KATL	ATLANTA	GA (US)
STAR	ROME		KATL	ATLANTA	GA (US)
STAR	RPTOR (RNAV)		KATL	ATLANTA	GA (US)
STAR	VIKNN (RNAV)		KATL	ATLANTA	GA (US)
STAR	QBALL		KSTL	ST LOUIS	MO (US)
STAR	LTOWN (RNAV)	4	KMEM	MEMPHIS	TN (US)
STAR	WLDER	3	KMEM	MEMPHIS	TN (US)
STAR	GRAHAM		KMBT	MURFREESBORO	TN (US)
STAR	GUITR		KMBT	MURFREESBORO	TN (US)
STAR	HEHAW		KMBT	MURFREESBORO	TN (US)
STAR	VOLLS		KMBT	MURFREESBORO	TN (US)
STAR	GRAHAM		KBNA	NASHVILLE	TN (US)
STAR	GUITR		KBNA	NASHVILLE	TN (US)
STAR	HEHAW		KBNA	NASHVILLE	TN (US)
STAR	VOLLS		KBNA	NASHVILLE	TN (US)
STAR	GRAHAM		KJWN	NASHVILLE	TN (US)
STAR	GUITR		KJWN	NASHVILLE	TN (US)
STAR	HEHAW		KJWN	NASHVILLE	TN (US)
STAR	VOLLS		KJWN	NASHVILLE	TN (US)
STAR	GRAHAM		KMQY	SMYRNA	TN (US)
STAR	GUITR		KMQY	SMYRNA	TN (US)
STAR	HEHAW		KMQY	SMYRNA	TN (US)
STAR	VOLLS		KMQY	SMYRNA	TN (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 18 **DATE OF REVISION:** 07/26/2012

REASON FOR REVISION:
1. ADDED HOLDING PAT 3 AND PAT 4 TO SUPPORT MEM STARS.
2. UPDATED FIX USE.

DEVELOPED BY: **DATE:** 03/14/2012 **OFFICE:** AJV-352 **NAME:** PETER GUIMOND

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZME
ATC FACILITY: BNA APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: PARKO **STATE:** TN **COUNTRY:** US

LATITUDE/LONGITUDE: 360327.32N/0863444.88W **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	NASHVILLE	BNA	VORTAC	H	134.76	132.76	7.00	7.00		4000	10000

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	VOLLS	1		KMBT	MURFREESBORO	TN (US)
STAR	VOLLS	1		KBNA	NASHVILLE	TN (US)
STAR	VOLLS	1		KJWN	NASHVILLE	TN (US)
STAR	VOLLS	1		KMQY	SMYRNA	TN (US)

REQUIRED CHARTING: STAR, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

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

REASON FOR REVISION:
1. ADDED DIST FROM FAC TO FAC 1.
2. UPDATED FIX USE.

DEVELOPED BY: **DATE:** 05/23/2012 **OFFICE:** AJV-352 **NAME:** PETER GUIMOND

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZME
ATC FACILITY: BNA APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: ROCKET VORTAC **STATE:** AL **COUNTRY:** US

LATITUDE/LONGITUDE: 344750.06N/0863801.85W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

INFO ONLY

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	ROCKET	RQZ	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	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	NE	RQZ	VORTAC	042.40	222.40	R	1		3000	14000	4	10
2	N	RQZ	VORTAC	010.00	190.00	R	1		3000	6000	8	9
3	N	RQZ	VORTAC	003.00	183.00	R	1		3000	14000	4	10

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TWR12 (KHUA0030)	344752.52N/0863821.51W	1843	1A
2	265	TOWER (01-000040)	344905.95N/0864417.22W	1946	1A
3	200	TWR12 (KHUA0030)	344752.52N/0863821.51W	1843	1A

HOLDING RESTRICTIONS:
PRIOR COORDINATION REQUIRED WITH CONTROLLING AGENCY FOR HOLDING OVER R-2104C.
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BIRMINGHAM			KBHM	BIRMINGHAM	AL (US)
DP	BOUNT (RNAV)			KBHM	BIRMINGHAM	AL (US)
DP	HUNTSVILLE			KHSV	HUNTSVILLE	AL (US)
DP	UZOVO			KRMG	ROME	GA (US)
DP	CHATTANOOGA			KCHA	CHATTANOOGA	TN (US)
DP	KNOXVILLE			KTYS	KNOXVILLE	TN (US)
EN ROUTE	V321					(US)
EN ROUTE	V54					(US)
IAP	ILS OR LOC RWY 18			KDCU	DECATUR	AL (US)
IAP	RNAV (GPS) RWY 18			KDCU	DECATUR	AL (US)
IAP	VOR RWY 18			KDCU	DECATUR	AL (US)
IAP	ILS OR LOC RWY 18L			KHSV	HUNTSVILLE	AL (US)
IAP	ILS OR LOC RWY 18R			KHSV	HUNTSVILLE	AL (US)
IAP	ILS OR LOC RWY 36L			KHSV	HUNTSVILLE	AL (US)
IAP	ILS OR LOC RWY 36R		3	KHSV	HUNTSVILLE	AL (US)
IAP	ILS RWY 18R (CAT II)			KHSV	HUNTSVILLE	AL (US)
IAP	ILS OR LOC/DME RWY 18			KMDQ	HUNTSVILLE	AL (US)
IAP	VOR/DME-B		1	KMDQ	HUNTSVILLE	AL (US)
IAP	NDB RWY 17		2	KHUA	REDSTONE ARSENAL	AL (US)
IAP	RADAR-1			KHUA	REDSTONE ARSENAL	AL (US)
IAP	RADAR-2		2	KHUA	REDSTONE ARSENAL	AL (US)
IAP	RNAV (GPS) RWY 17			KHUA	REDSTONE ARSENAL	AL (US)
IAP	RNAV (GPS) RWY 35			KHUA	REDSTONE ARSENAL	AL (US)
IAP	VOR/DME RWY 35		2	KHUA	REDSTONE ARSENAL	AL (US)
IAP	NDB RWY 20			KFYM	FAYETTEVILLE	TN (US)
IAP	SDF RWY 20			KFYM	FAYETTEVILLE	TN (US)
IAP	VOR/DME RWY 2			KFYM	FAYETTEVILLE	TN (US)
IAP	NDB RWY 17			K2M2	LAWRENCEBURG	TN (US)
IAP	VOR/DME RWY 34			KGZS	PULASKI	TN (US)
IAP	VOR RWY 36			KSYI	SHELBYVILLE	TN (US)
IAP	NDB RWY 18			KBGF	WINCHESTER	TN (US)
STAR	BUNNI			KCVC	ATLANTA	GA (US)
STAR	BUNNI			KFTY	ATLANTA	GA (US)
STAR	BUNNI			KPDK	ATLANTA	GA (US)
STAR	BUNNI			KPUJ	ATLANTA	GA (US)
STAR	BUNNI			KRYY	ATLANTA	GA (US)
STAR	BUNNI			KVPC	CARTERSVILLE	GA (US)
STAR	BUNNI			KLZU	LAWRENCEVILLE	GA (US)
STAR	BUNNI			KMGE	MARIETTA	GA (US)
STAR	LUGOH			KMEM	MEMPHIS	TN (US)
STAR	VOLLS			KMBT	MURFREESBORO	TN (US)
STAR	VOLLS			KBNA	NASHVILLE	TN (US)
STAR	VOLLS			KJWN	NASHVILLE	TN (US)
STAR	VOLLS			KMQY	SMYRNA	TN (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 13 **DATE OF REVISION:** 11/18/2010

REASON FOR REVISION:
1. CHANGED AND MOVED REMARK FOR HOLD PATTERNS OVER R-2104 TO HOLDING RESTRICTIONS.
2. MOVED REMARK, HOLDING LIMITED TO ESTABLISHED PATTERNS, TO HOLDING RESTRICTIONS.
3. ADDED REMARK, PRECIPITOUS TERRAIN EVALUATION COMPLETED.
4. CHANGED PAT 1, 2, AND 3 CONTROLLING OBSTACLES.

DEVELOPED BY:	**DATE:** 05/17/2010	**OFFICE:** AVN-110	**NAME:** PETER GETZ (DAVID SAUER)
APPROVED BY:	**DATE:** 11/02/2010	**OFFICE:** AVN-110	**NAME:** GEORGE DAVIS
	SIGNATURE:		

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZME
ATC FACILITY: HSV APP CON
OTHER: USAASA

RADIO FIX AND HOLDING DATA RECORD

NAME: SHNYD **STATE:** TN **COUNTRY:** US

LATITUDE/LONGITUDE: 350435.04N/0851801.09W **TYPE:** 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	CHOO CHOO	GQO	VORTAC	H	312.65	313.65	10.00	10.00		9000	24000
2	HINCH MOUNTAIN	HCH	VORTAC	L	202.59	200.59		45.07		9000	24000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
HCH	VORTAC	R-203	46	9000	24000

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

REMARKS:
CHOO CHOO (FAC 1) AND HINCH MOUNTAIN (FAC 2) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	VOLLS	1, 2		KMBT	MURFREESBORO	TN (US)
STAR	VOLLS	1, 2		KBNA	NASHVILLE	TN (US)
STAR	VOLLS	1, 2		KJWN	NASHVILLE	TN (US)
STAR	VOLLS	1, 2		KMQY	SMYRNA	TN (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3 **DATE OF REVISION:** 11/15/2012

REASON FOR REVISION:
1. MOVED FIX 6.54 FEET SOUTHWEST.
2. ADDED DIST FROM FAC TO FAC 1 AND 2.
3. POPULATED ESV DATA.
4. UPDATED FIX USE.

DEVELOPED BY: **DATE:** 05/22/2012 **OFFICE:** AJV-352 **NAME:** PETER GUIMOND

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZTL
ATC FACILITY:
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: VANDD **STATE:** TN **COUNTRY:** US

LATITUDE/LONGITUDE: 353323.63N/0855511.94W **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	NASHVILLE	BNA	VORTAC	H	134.76	132.76	51.00	51.00		6000	24000
2	CHOO CHOO	GQO	VORTAC	H	312.65	313.65	51.87	51.87		6000	24000
3	ROCKET	RQZ	VORTAC	L	035.46	037.46	57.46	57.46		7000	20000
4	VOLUNTEER	VXV	VORTAC	H	261.68	258.68	101.11	101.11		10000	24000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
BNA	VORTAC	R-135	51	4000	17500
GQO	VORTAC	R-313	52	6000	15600
RQZ	VORTAC	R-035	58	7000	20000
VXV	VORTAC	R-262	102	10000	19300

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	SE	BNA	VORTAC	315.00	315.00	R	1-1 1/2		7000	24000	10	21

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	AAO	322854.00N/0854818.00W	2307	4E

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
NASHVILLE (FAC 1) USED TO ESTABLISH FIX COORDINATES
PRECIPITIOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC PAT	AIRPORT IDENT	CITY	STATE
STAR	VOLLS	1, 2, 3, 4 1	KMBT	MURFREESBORO	TN (US)
STAR	VOLLS	1, 2, 3, 4 1	KBNA	NASHVILLE	TN (US)
STAR	VOLLS	1, 2, 3, 4 1	KJWN	NASHVILLE	TN (US)
STAR	VOLLS	1, 2, 3, 4 1	KMQY	SMYRNA	TN (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4 **DATE OF REVISION:** 11/15/2012

REASON FOR REVISION:
1. ADDED DIST FROM FAC TO FAC 1 AND FAC 2.
2. ADDED FAC 3 (RQZ) AND FAC 4 (VXV) TO SUPPORT DEPICTION ON VOLLS STAR.
3. POPULATED ESV DATA.
4. UPDATED FIX USE.

DEVELOPED BY: **DATE:** 05/22/2012 **OFFICE:** AJV-352 **NAME:** PETER GUIMOND

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZME
ATC FACILITY:
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: VOLLS **STATE:** TN **COUNTRY:** US

LATITUDE/LONGITUDE: 354055.81N/0860502.42W **TYPE:** 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	NASHVILLE	BNA	VORTAC	H	134.76	132.76	40.00	40.00		4000	24000
2	SHELBYVILLE	SYI	VOR/DME	L	068.38	067.38		18.81		4000	24000
3	HINCH MOUNTAIN	HCH	VORTAC	L	266.07	264.07	54.33	54.33		7000	24000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
SYI	VOR/DME	R-068	19	18000	24000
HCH	VORTAC	R-266	55	7000	24000

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

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	SE	BNA	VORTAC	135.00	315.00	R	1-1 1/2		4000	24000	6	21

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (47-002335)	353948.00N/0860340.00W	1536	5D

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
NASHVILLE (FAC 1) AND SHELBYVILLE (FAC 2) USED TO ESTABLISH FIX COORDINATES
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	VOLLS	1, 2, 3	1	KMBT	MURFREESBORO	TN (US)
STAR	VOLLS	1, 2, 3	1	KBNA	NASHVILLE	TN (US)
STAR	VOLLS	1, 2, 3	1	KJWN	NASHVILLE	TN (US)
STAR	VOLLS	1, 2, 3	1	KMQY	SMYRNA	TN (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3 **DATE OF REVISION:** 11/15/2012

REASON FOR REVISION:
1. ADDED DIST FROM FAC TO FAC 1 AND FAC 2.
2. AMENDED FAC 2 MAG BRG FROM 068.39 TO 068.38.
3. ADDED FAC 3 (HCH) TO SUPPORT DEPICTION ON VOLLS STAR.
4. UPDATED PAT 1 CONTROLLING OBSTACLE NUMBER TO CURRENT FORMAT.
5. UPDATED FIX USE.

DEVELOPED BY: **DATE:** 05/22/2012 **OFFICE:** AJV-352 **NAME:** PETER GUIMOND

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZME
ATC FACILITY: BNA APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: VOLUNTEER VORTAC **STATE:** TN **COUNTRY:** US

LATITUDE/LONGITUDE: 355417.42N/0835341.02W **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	DIST FROM FAC FEET	MRA	MAA
1	VOLUNTEER	VXV	VORTAC	H							45000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
VXV	VORTAC	R-173	55	90	14500

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	NE	VXV	VORTAC	053.00	233.00	L	1-1 1/2	-	4000	36000	4	25
2	NE		WP	053.00	233.00	L		5	4000	14000	5	11

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	355441.65N/0834603.68W	1739	2C
1	310	TOWER (47-002285)	360012.82N/0835634.04W	2849	2C
2	200	AAO	355441.65N/0834603.68W	1739	2C
2	310	TOWER (47-002285)	360012.82N/0835634.04W	2849	2C

REASON FOR NONSTANDARD HOLDING:
PAT 1 AIR TRAFFIC REQUEST
PAT 2 AIR TRAFFIC REQUEST

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
2	RNAV (GPS) RWY 5L	KTYS	KNOXVILLE	TN (US)
2	RNAV (GPS) RWY 5R	KTYS	KNOXVILLE	TN (US)

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	CADIT (RNAV)			KATL	ATLANTA	GA (US)
DP	COKEM (RNAV)			KATL	ATLANTA	GA (US)
DP	NUGGT (RNAV)			KATL	ATLANTA	GA (US)
DP	SUMMT (RNAV)			KATL	ATLANTA	GA (US)
DP	FEDRA (RNAV)			KSDF	LOUISVILLE	KY (US)
DP	ASHEVILLE			KAVL	ASHEVILLE	NC (US)
DP	BOBCAT			KCLT	CHARLOTTE	NC (US)
DP	ZAVER (RNAV)			KCLT	CHARLOTTE	NC (US)
DP	BOBCAT			KJQF	CONCORD	NC (US)
DP	BOBCAT			KAKH	GASTONIA	NC (US)
DP	HICKORY			KHKY	HICKORY	NC (US)
DP	BOBCAT			KEQY	MONROE	NC (US)
DP	BOBCAT			KUZA	ROCK HILL	SC (US)
DP	CHATTANOOGA			KCHA	CHATTANOOGA	TN (US)
DP	TAKE-OFF MINIMUMS			KJAU	JACKSBORO	TN (US)
DP	KNOXVILLE			KTYS	KNOXVILLE	TN (US)
DP	TITAN (OBSTACLE)			KBNA	NASHVILLE	TN (US)
DP	TAKE-OFF MINIMUMS			KGKT	SEVIERVILLE	TN (US)
EN ROUTE	J22					(US)
EN ROUTE	J43					(US)
EN ROUTE	J46					(US)
EN ROUTE	J91					(US)
EN ROUTE	J99					(US)
EN ROUTE	V115					(US)
EN ROUTE	V136					(US)
EN ROUTE	V16					(US)
EN ROUTE	V185					(US)
EN ROUTE	V267					(US)
EN ROUTE	V384					(US)
EN ROUTE	V466					(US)
EN ROUTE	V519					(US)
EN ROUTE	V97					(US)
IAP	LOC RWY 26			KDKX	KNOXVILLE	TN (US)

IAP	VOR/DME-B		KDKX	KNOXVILLE	TN (US)
IAP	ILS OR LOC RWY 23R		KTYS	KNOXVILLE	TN (US)
IAP	ILS OR LOC RWY 5L	1	KTYS	KNOXVILLE	TN (US)
IAP	ILS RWY 23R (CAT II)		KTYS	KNOXVILLE	TN (US)
IAP	RNAV (GPS) RWY 5L	2	KTYS	KNOXVILLE	TN (US)
IAP	RNAV (GPS) RWY 5R	2	KTYS	KNOXVILLE	TN (US)
IAP	VOR RWY 23L		KTYS	KNOXVILLE	TN (US)
IAP	VOR RWY 23R		KTYS	KNOXVILLE	TN (US)
IAP	RNAV (GPS) RWY 23		KMNV	MADISONVILLE	TN (US)
IAP	NDB RWY 5		KMOR	MORRISTOWN	TN (US)
IAP	SDF RWY 5		KMOR	MORRISTOWN	TN (US)
IAP	RNAV (GPS) RWY 10		KGKT	SEVIERVILLE	TN (US)
IAP	VOR/DME RWY 10		KGKT	SEVIERVILLE	TN (US)
STAR	WHINZ		KATL	ATLANTA	GA (US)
STAR	AWSON		KPDK	ATLANTA	GA (US)
STAR	HARDU		KCVG	COVINGTON	KY (US)
STAR	JAKIE (RNAV)		KCVG	COVINGTON	KY (US)
STAR	DARBY		KLOU	LOUISVILLE	KY (US)
STAR	DARBY		KSDF	LOUISVILLE	KY (US)
STAR	JOHNS (RNAV)		KCLT	CHARLOTTE	NC (US)
STAR	SHINE		KCLT	CHARLOTTE	NC (US)
STAR	UNMAN (RNAV)		KGYH	GREENVILLE	SC (US)
STAR	UNMAN (RNAV)		KGSP	GREER	SC (US)
STAR	VOLLS		KMBT	MURFREESBORO	TN (US)
STAR	VOLLS		KBNA	NASHVILLE	TN (US)
STAR	VOLLS		KJWN	NASHVILLE	TN (US)
STAR	VOLLS		KMQY	SMYRNA	TN (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 8 **DATE OF REVISION:** 11/15/2012

REASON FOR REVISION:
ADDED ESV INFORMATION.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 05/16/2012 **OFFICE:** AJV-352 **NAME:** FRANK JACKSON

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZTL
ATC FACILITY: TYS APP CON
OTHER: NGB/ANG/C4AT

QUALITY 1 CHECKED