

# POTOMAC CONSOLIDATED TRACON SHD AREA STANDARD OPERATING PROCEDURES

# **ZDCARTCC** WASHINGTON DC

July 21, 2023

VIRTUAL WASHINGTON ARTCC VATUSA

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# VIRTUAL AIR TRAFFIC SIMULATION NETWORK VATUSA DIVISION – WASHINGTON ARTCC

# ORDER PCT SOP SHD 7110.65E

Effective Date: July 21, 2023

**SUBJ:** PCT 7110.65E

This order provides direction and guidance for the day-to-day operations of the Potomac Consolidated TRACON and prescribes air traffic control procedures and phraseology. Controllers are required to be familiar with the provisions of these procedures.

This document is only to be used in a simulated environment. This document shall not be referenced or utilized in live operations in the National Airspace System (NAS). The Washington ARTCC, VATUSA, and VATSIM do not take any responsibility for uses of this order outside of the simulation environment.

John Bartlett Air Traffic Manager Washington ARTCC

# **RECORD OF CHANGES**

Version	SUBJECT	AUTHORIZED BY	DATE ENTERED	DATE REMOVED
7110.65A	Addition of SHD midnight ops sector	RG	12.11.2012	07.15.2014
7110.65B	Updated Sectorization	RR	07.15.2014	08.25.2015
7110.65C	- Updated airspace - SID/STAR changes	RR	08.28.2015	2.21.2017
7110.65D	<ul> <li>Added top-down section for each area</li> <li>Updated crossing restrictions to/from ZDC</li> <li>Updated formatting</li> </ul>	RR	2.21.2017	7.21.2023
7110.65E	Major over-haul - Added independent SHD SOP - Remodeled FIGs and TBLs - Added examples and phraseology - Further detailed satellite field ops - Additional info for scratchpads - Added coordination information Changed sector consolidation	JB	7.21.2023	

# **Explanation of Changes**

# Direct questions through appropriate facility staff

#### a. Chapter 1. Positions

This change re-formats and specifies PCT sectors in all areas.

#### b. 2-1. Areas

This change updates wording for clarification.

#### c. 2-2. Consolidating Areas

This change updates wording for clarification.

#### d. 2-3. Callsigns

This change adds examples for clarification.

#### e. 2-4 (c). Consolidating Callsigns

This change removed the ability to split all areas by APP and DEP.

#### f. 3-2 (a). Arrivals

This change adds example phraseology for verifying aircraft were issued a descend via by another controller.

#### g. 3-2 (b). Arrivals

Changed "Altimeter of destination" to "local altimeter."

#### h. 3-2 (c). Arrivals

This change provides clarity on the responsibilities of the SHD controller for DCA/ADW arrivals transitioning through the SHD area.

#### i. 3-2 (d). Arrivals

This change re-words paragraph to ensure clarity.

#### j. 4-1 (a). Airspace

Updated combined SHD area airspace. Added airspace down to surface over FDK.

#### k. Chapter 5. Receiving/Assigning Instructions

This change clarifies and re-formats the previous IFR departures, arrivals, and overflights tables and condenses tables.

#### I. Chapter 6. Satellite IFR Departures

This change updates the satellite field list, specifies which fields have control towers. Additionally adding a new table denoting departure instructions.

#### m. Chapter 7. STARS Scratchpad Entries

This change adds scratchpad entries for arrivals and departures.

#### n. Chapter 8. Intra-Facility Procedures

This change adds more detail to what CHP and surrounding facilities have to and don't have to coordinate.

#### o. 10-1. SHD Area Sectors

This change visually depicts sectors splitting and combining.

#### p. 10-1 (b). SHD Area Sectors

Removed finals positions from table and added paragraph to denote combining and splitting as necessary due to traffic.

#### q. 11-1. BARIN

This change adds a new airspace depiction as well as changing some to and from descriptions in the tables.

#### r. 11-2. MANNE

This change adds a new airspace depiction as well as changing some to and from descriptions in the tables.

#### s. 11-3. MULRR

This change adds a new airspace depiction as well as changing some to and from descriptions in the tables.

#### t. 11-4. ASPER

This change adds a new airspace depiction as well as changing some to and from descriptions in the tables.

#### u. 11-5. IADFE

This change adds a new airspace depiction as well as changing some to and from descriptions in the tables.

## v. 11-6. IADFC

This change adds a new airspace depiction as well as changing some to and from descriptions in the tables.

## w. 11-7. IADFW

This change adds a new airspace depiction as well as changing some to and from descriptions in the tables.

## x. 11-8. RCOLA

This change adds a new airspace depiction as well as changing some to and from descriptions in the tables.

## y. Chapter 12. Prearranged Coordination Procedures (PAC-P)

Added to provide a background on the depicted prearranged coordination that is shown on multiple sector diagrams.

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# **CHAPTER 1. POSITIONS**

The following callsigns and frequencies shall be used when working positions at PCT TRACON's SHD area.

Identifier	Position	Frequency	STARS Handoff
BWI_G_APP	GRACO	124.550	G
BWI_W_APP	WOOLY	128.700	W
BWI_B_APP	BELAY	125.525	В
BWI_H_APP	BUFFR	133.850	Н
BWI_P_APP	PALEO	133.750	Р
BWI_S_APP	BWIFS	119.700	S
BWI_N_APP	BWIFN	119.000	Ν
CHO_W_APP	CHOWE	132.850	2W
CHO_E_APP	CHOEA	120.525	2E
RIC_L_APP	FLTRK	126.750	2L
RIC_F_APP	RICFR	118.200	2F
RIC_P_APP	ТАРРА	126.400	2P
RIC_E_APP	CSIDE	127.200	2X
RIC_W_APP	CSIDW	135.625	2M
IAD_A_APP	ASPER	125.050	3A
IAD_T_APP	TILLY	126.650	3T
IAD_B_APP	BARIN	128.525	3B
IAD_V_APP	BINNS	133.000	3V
IAD_O_APP	BRSTO	120.825	30
IAD_X_APP	IADFE	125.800	3X
IAD_S_APP	IADFC	134.200	3S
IAD_U_APP	IADFW	135.775	3U
IAD_Z_APP	LUCKE	126.825	3Z
IAD_N_APP	MANNE	120.450	3N
IAD_M_APP	MULRR	126.100	3M
IAD_R_APP	RCOLA	135.775	3R
DCA_J_APP	OJAAY	119.850	J
DCA_E_APP	ENSUE	124.200	E
DCA_D_APP	DEALE	128.350	D
DCA_L_APP	LURAY	118.675	L
DCA_V_APP	DCAFR	124.700	V
DCA_F_APP	FLUKY	121.050	F
DCA_Y_APP	TYSON	118.950	Y
DCA_K_APP	KRANT	125.650	К
DCA_A_APP	ADWAR	128.000	A

## NOTE -

Bold text denotes combined frequency and callsign.

# **Chapter 2. Certification Requirements**

# 2-1. Areas

- a. Potomac Consolidated TRACON is split into four areas.
  - 1) Chesapeake Area (CHP) Primarily covers BWI, with MTN and others as satellites. Requires an additional certification to control.
  - 2) Shenandoah Area (SHD) Primarily covers IAD, with FDK, HEF and others as satellites. Requires an additional certification to control.
  - 3) Mount Vernon Area (SHD) Primarily covers DCA. Requires an additional certification to control.
  - 4) James River Area (JRV) Primarily covers CHO and RIC with others as satellites. Considered a "minor area," does NOT require an additional certification to control.

# 2-2. Consolidating Areas

- a. The Potomac training progression begins in either CHP or SHD. After both CHP and SHD ratings are obtained trainees move onto MTV. A controller on PCT is required to include the areas they are covering in their controller ATIS. The controller shall also broadcast their controlling areas in their "online" message in ATC Chat.
- **b.** The JRV area may be controlled by a Potomac controller at their discretion. The controller shall ensure continuous airspace, meaning they may NOT control only CHP and JRV, but may control SHD and JRV.

# 2-3. Callsigns

**a.** When connecting to an area that a controller is certified for, they will use the callsign XXX\_APP/DEP, where XXX is the major airport for that area (BWI, CHO, DCA, RIC, IAD).

## EXAMPLE -

IAD\_APP

**b.** Individual sector callsigns should only be used during events or when the airspace is split. Note that the S (student), M (mentor) and I (instructor) callsigns are still permitted.

## EXAMPLE –

IAD\_B\_APP

**c.** If a controller is controlling a position for which they have a solo cert but not a full certification, they will add an "S" suffix to their callsign. If they are being monitored on an event position that already has an 'S,' they will add a second 'S.'

## EXAMPLE -

IAD\_S\_APP IAD\_SS\_APP

# 2-4. Consolidating Callsigns

- **a.** PCT combined is required to control all areas (JRV, CHP, SHD, MTV) unless delegated to another online sector.
- **b.** PCT Combined is required to update their controller information to include the general areas they are working. A template example is shown below.

- **c.** The primary area for PCT Combined is Mount Vernon (MTV); PCT Combined shall control no less than MTV area combined if the rest of PCT becomes split.
  - 1) If PCT Consolidated is online and another controller wishes to control a Potomac position, the controllers must split sectors by area. APP/DEP splits within one area are not authorized if they are covering multiple areas.

# **Chapter 3. General**

# **3-1.** Departures

 Receipt of a departing aircraft's altitude is required to verify their altitude reporting transponder (Mode C) is functioning. If an aircraft does not check in with their altitude leaving, the controller should ask the pilot to confirm it.

#### PHRASEOLOGY -

#### *"SAY ALTITUDE LEAVING"*

**b.** Issue departing aircraft a climb to the highest altitude as prescribed in the relevant chapter or their filed cruising altitude as soon as practical.

## 3-2. Arrivals

- **a.** If an aircraft is on "a descend via" arrival that is issued by Washington Center, the following must be confirmed on initial contact with Potomac TRACON.
  - 1) Current altitude leaving
  - 2) "Descending via," the name of the procedure and the runway/direction.

#### EXAMPLE -

"Potomac Approach united one fourteen, descending via the GIBBZ four arrival, landing north, information Delta."

- **b.** On initial contact with Potomac TRACON, it is strongly recommended that all IFR arrivals be given the following. If the arrival does NOT check in with the current ATIS, it is required;
  - 1) Current ATIS letter.
- Local altimeter.
   Approach to expect.
- c. DCA/ADW arrivals transitioning through the SHD area via TIKEE# shall be given the local altimeter and landing direction their destination on initial contact with SHD. Items listed in 3-2 (b) will be issued by the first MTV controller.

#### PHRASEOLOGY -

"The Dulles altimeter [altimeter], Washington landing [north/south]."

- **d.** When vectoring to final, aircraft on opposing base legs must be assigned altitudes that ensure vertical separation exists unless other approved separation has already been applied. This ensures approved separation in the event of an overshot or late turn-on to final.
- **e.** 2.5 NM is authorized between aircraft established on the final approach course within 10 NM of the landing runway at the following runways for IAD.
  - 1) IAD Runways 1C/19C, 1R/19L and 12.
  - 2) Wake turbulence separation must still be applied.
- **f.** Simultaneous triple ILS approaches at IAD are not authorized. Recommended approach configurations are;
  - 1) ILS 1C / ILS 1R or ILS 19C / ILS 19L
  - 2) Visual 1L / ILS 1C / Visual 1R or Visual 19L / ILS 19C / Visual 19R

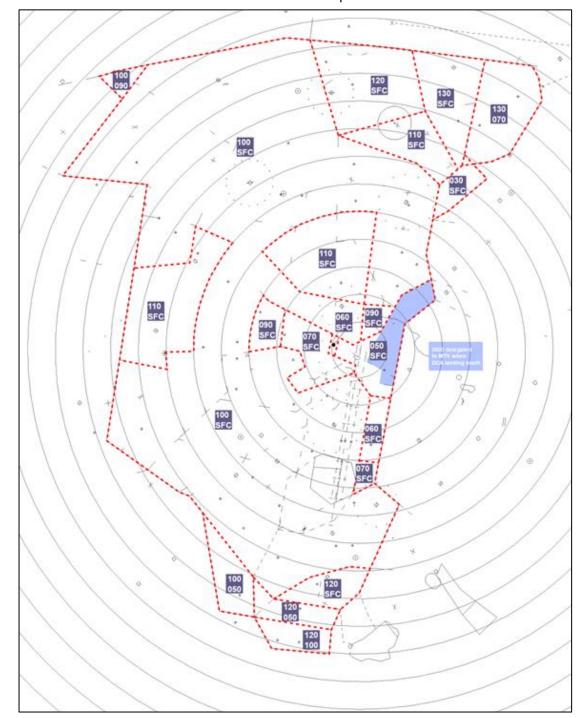
# **Chapter 4. Combined Airspace**

# 4-1. Airspace

L

a. The Shenandoah area is delegated the airspace depicted in FIG 4-1-1

FIG 4-1-1 SHD Combined Airspace



# **Chapter 5. Receiving/Assigning Instructions**

## 5-1. IFR Departures

- **a.** Departures climbing through the SHD area must be issued altitudes according to the TBL 5-1-1 and handed to the appropriate sector. Appendix A contains a memory aid with a visual representation of these routes.
- **b.** RNAV departures via these fixes or radar vectors to join an applicable route are subject to the same altitude requirements.
- Prop and turboprop departures must be handed off climbing to their assigned cruise altitude or 1,000 feet below the relevant altitude for their departure gate unless coordinated otherwise with the next sector.
- **d.** Satellite departures shall be vectored in-trail with IAD departures and handed off to the next sector in accordance with TBL 5-1-1.
- e. Non-RNAV departures, in general, must be cleared on course prior to handoff to the next sector unless coordinated otherwise.
  - 1) Certain departure fixes, such as non-RNAV turbojets via SWANN, PALEO and DAILY, must be delivered on a heading to the next sector.

Area	A/C Type	Route	То	Altitude	Notes
SHD + SATs		LDN/OTTTO/RAMAY	MTV- LURAY	100	On SID or vector towards fix (coordinated)
		JCOBY# or via SWANN/AGARD/COLIN	MTV- KRANT	100	Direct RIGNZ (JCOBY#) or vector through C-gate (non RNAV)
		JERES or MCRAY	CHP-BUFFR	110	Direct HAYGR (MCRAY#) or IDORE (JERES#) or vector (non-RNAV)
	All	JDUBB/SCRAM/CLTCH	MTV-FLUKY	100	Direct HAFNR (JDUBB#), POOCH (SCRAM#) or BUTRZ (CLTCH#), or vector (non- RANV)
		WOOLY# or WOOLY SWANN/AGARD OR HIICH#	110 (Jet), 100 (Tprop), AOB 70 (Prop)	Direct RAZZA (WOOLY#) or vector towards RAZZA HIICH# on SID	

## TBL 5-1-1 IFR Departures

# 5-2. IFR Arrivals

**a.** IFR arrivals to the SHD area will be handed off in accordance with TBL 5-2-1 unless coordinated otherwise. More detailed information can be found in Chapter 8: Intrafacility Procedures.

	Area	A/C Type	Route	From	Altitude	Notes
		CAVLR# ZDC (2C)	ZDC (36)	Descend via	Join by BNTLY	
			COATT#	ZDC (50)	OGATE@130	
•			HVQ/BKW.GIBBZ#		Descend via	Join by OTTTO
			MGW.GIBBZ#		Descend via	Join by MOSLE
				ZDC (01)		Join by LDN
	SHD +	Jet	DOCCS#		11000/250IAS	In-trail with HVQ/BKW.GIBBZ#
	SATs		HYPER#			
	0.110		DELRO#		LIRCH@14000	
		MAPEL# ZINT (A) PRIVO#	ZNY (A)			
			PRIVO#		DAFIX@12000	
I			WIGOL# (SWAP Only)	JRV- CHOWE	70	
		All	TRSTN#	JRV- FLTRC	40-100	Even altitudes
			COATT#	JRV- FLTRK	60	
			DOCCS#	ZDC (01)	AOB 80 ↓ 70	
			SEG#/LEGGO#	ZNY (A)	90	
	SHD		DELRO#	2101 (A)	120	
			CHP- WOOLY	80 or 60		
			V143.MRB	CHP- WOOLY	AOB 80	
			WIGOL# (SWAP Only)	JRV- CHOWE	70	

#### TBL 5-2-1

IFR Arrivals into SHD Area

**b.** IFR arrivals into other PCT areas transitioning through the SHD area will be handed off in accordance with TBL 5-2-2 unless coordinated otherwise. More detailed information can be found in Chapter 8: Intrafacility Procedures.

Area	A/C	Route	From	Alt. From	Notes
	Туре		То	То	
СНР	All Prop	EMI#	ZDC (01) CHP-WOOLY	110 70 or 50	Must immediately descent to 10000 to keep within SHD.
MTV	All	TIKEE#	ZDC (01) MTV-DCAFR (N) or MTV- TYSON (S)	90 or 70 50	On STAR or 090 HDG to MTV.

TBL 5-2-2 IFR Arrivals into other PCT Area/s

# **Chapter 6. Satellite IFR Departures**

# 6-1. Departure Instructions

- **a.** All satellite IFR departures must be cleared with the climb out instructions in the TBL 6-1-1. If an airport is not covered by this table, climb out instructions must be individually coordinated with the controller responsible for that airport.
- **b.** All Airports other than IAD require an IFR release from SHD controller.
  - 1) IAD has blanket releases as long as the aircraft is released in accordance with the IAD ATCT SOP.
- **c.** The following airports are within the SHD area;
  - 1) Primary
    - Washington Dulles International (IAD)
  - 2) Satellite
    - Culpeper (CJR)
    - Shannon (EZF)
    - Frederick (FDK)
    - Front Royal (FRR)
    - Manassas (HEF)
    - Hagerstown (HGR)
    - Warrenton/Fauquier (HWY)
    - Leesburg (JYO)

- Martinsburg (MRB)
- Turner Field/Quantico (NYG)
- Winchester (OKV)
- Stafford (RMN)
- Gettysburg (W05)
- Berkley Springs (W35)
- Airlie (2VA9)
- Upperville (2VG2)

#### NOTE –

Airports in BOLD denote having an operating control tower.

Satellite Departure Instructions				
Airport	Climb Out Instructions			
	CLTCH#/JDUBB#/SCRAM#: Via SID, enter controlled airspace heading 300, maintain 3000.			
OAI	POTMC# SID: Via SID, climb via SID			
	No SID: Fly heading 300, maintain 3000			
HEF	ARSNL#: Via SID, climb via SID			
	GABBE#/HIICH# SID: Via SID, transition. Maintain 3000			
	CLTCH#/JDUBB#/SCRAM#: Via SID, assign heading, maintain 4000.			
MRB	TRIXY5# SID: Via SID, transition. Climb via SID except maintain 4000.			
	No SID: Fly assigned heading, maintain 4000			
	CLTCH#/JDUBB#/SCRAM#: Via SID, assign heading, maintain 4000.			
ΟΚV	No SID: Direct LDN, maintain 4000 -or-			
	Direct MRB/COGAN, maintain 5000			
NYG	Direct BRV, maintain 3000			
EZF	Direct BRV, maintain 3000			
2VG2	Direct COGAN, maintain 4000			
CJR	Direct CSN, maintain 3000			
HWY	Direct CSN, maintain 3000			
2VA9	Direct CSN, maintain 3000			
FRR	Direct MRB MRB R-216 HOAGE, maintain 5000 -or-			
	Direct COGAN, maintain 4000			
RMN	Direct BRV, maintain 3000			
HGR	Direct HGR, maintain 4000			
W05	Direct HGR, maintain 4000			
W35	Direct HGR, maintain 4000			

TBL 6-1-1

# **Chapter 7. STARS Scratchpad Entries**

# 7-1. Departures

**a.** SHD controllers shall utilize scratchpad entries in conjunction with TBL 7-1-1 for IFR departures.

TBL 7-1-1 STARS Scratchpad Entries for Departures Airport Via Scratchpad JDUBB# JDUBB BNTLY WAIKS ORF (Landing ORF) CLTCH# CLH JCOBY# COLIN AME JCOBY# SWANN SOK JCOBY# AGARD DCR JDUBB# JDB IAD BUNZZ# RAM JERES# JERES J211 JS1 JERES# JERES J220 JS2 MCRAY# MCR RNLDI# OTO SCRAM# SCR WOOLY# WOL BUTRZ BTZ HAFNR HAF FLUKY FLU All CHP/MTV/SHD non-RNAV/No-SID WHINO/COLIN/DAILY COL Q178 T78 J211/J220/J227 J11/J20/J27

# 7-2. Arrivals

**a.** All arrivals shall have the runway of landing placed into the Y scratchpad. If the runway is only two characters, use the formatting R##.

#### EXAMPLE -

RWY 30: R30

RWY 19L: 19L

# **Chapter 8. Intra-Facility Procedures**

# 8-1. New York ARTCC (ZNY) and SHD Area

- **a.** The minimum separation of aircraft from ZNY to SHD along the same route is 10nm and/or increasing unless coordinated.
- **b.** SHD has control for turns 30° left and right 5nm NE LIRCH.
- c. SHD has control for descent at LIRCH.
- d. SHD has control for turns 30° left and right and descent to 10,000 via DAFIX.
  1) This does not include MTD departures.
- e. SHD has control for turns 30° left and right at PRTZL.

# 8-2. Johnstown RAPCON (JST) and SHD Area

- **a.** JST has control for turns toward destination and descent upon contact via JST.
- **b.** JST has control for turns and descent upon contact via CBE.

# **Chapter 9. Simultaneous ILS Approaches (SIMULS)**

## 9-1. General

**a.** These procedures allow IADFE and IADFW to operate independently of each other when conducting SIMULS at IAD.

# 9-2. Pullouts

- **a.** When an aircraft on the final approach course is observed penetrating, or, in the controller's judgment, will penetrate the No-Transgression-Zone (NTZ), the controller responsible for the aircraft at the time will instruct the aircraft to return to the correct final approach course immediately. Traffic alert phraseology specified in FAAO 7110.65 shall be used.
- **b.** When a pullout has entered the lateral confines of IAD ATCT airspace, apply the following:
  - 1) East runway Pull-outs shall be turned at least 30 but no more than 90 degrees away from the No-Transgression-Zone (NTZ) and climbed to 2,000 feet.
  - 2) West runway (South) pull-outs shall be turned right heading 220 and climbed to 4,000 feet.
  - 3) West runway (North) pull-outs shall be turned left heading 340 and climbed to 4,000 feet.
- **c.** When a turn off the final approach course must be initiated to ensure separation, timely coordination must be affected with all appropriate controllers.

# 9-3. North Operation

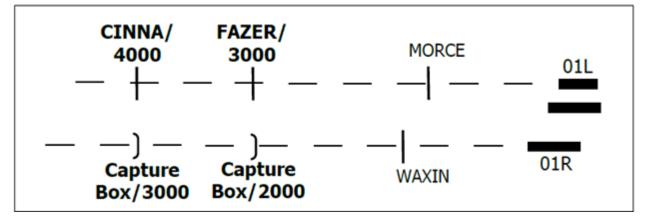
- **a.** MULRR shall feed IADFE on the east downwind at 4,000 feet.
- **b.** MANNE shall feed IADFW on the west downwind at 6,000 feet.
- c. BARIN feed:
  - When landing 1L/1C BARIN shall feed aircraft to IADFW on a heading to join the runway 1L localizer level at 6,000 feet, and to IADFC established on the 1C localizer descending to 7,000 feet.
  - 2) When landing 1C/1R BARIN shall feed aircraft to IADFC established on the 1C localizer descending to 7,000 feet, and to IADFE on a heading to join the 1R localizer level at 4,000 feet.
  - 3) When landing 1L/1R BARIN shall feed aircraft to IADFW established on the 1L localizer descending to 6,000 feet, and to IADFE on a heading to join the 1R localizer level at 4,000 feet.
- **d.** IADFE/IADFC/IADFW North Simultaneous ILS Altitude Separation during Turn-On: Standard separation shall be maintained until aircraft are established on the appropriate localizer prior to either the capture box and the adjacent intersection, or prior to the adjacent intersections using the altitudes in TBL 9-3-1 and FIG 9-3-1.

Runway Configuration		Established on the Localizer Prior to: Altitud	
0		Capture Box Abeam LUSIE	AOB 30
011/010	A	LUSIE	AOA 50
01L/01C		CINNA	AOB 40
	В —	LUSIE	AOA 50
		Capture Box Abeam CINNA	AOB 30
011 /01 0	A	CINNA	AOA 40
01L/01R		Capture Box Abeam FAZER	AT 20
	В —	FAZER	AOA 30
040/045		PEPRR	AOA 39
01C/01R		Capture Box Abeam PEPRR	AOB 29

TBL 9-3-1 North Simultaneous ILS Altitude Separation

FIG 9-3-1

Example of Capture Box Altitudes (01L/01R)



# 9-4. South Operation

- a. MULRR feed:
  - When landing runways 19R/19C, MULLR shall feed aircraft to IADFW established on the runway 19R localizer level at 6,000 feet, and to IADFC on a heading to join the runway 19C localizer descending to 7,000 feet.
  - 2) When landing runways 19C/19L, MULLR shall feed aircraft to IADFC established on the runway 19C localizer descending to 7,000 feet, and to IADFE on a heading to join the runway 19L localizer level at 4,000 feet.
  - 3) When landing runways 19R/19L, MULLR shall feed aircraft to IADFW established on the runway 19R localizer descending to 6,000 feet, and to IADFE on a heading to join the runway 19L localizer level at 4,000 feet.
- **b.** MANNE shall feed IADFW on the west downwind at 6,000.

- **c.** BARIN shall feed IADFE on the east downwind at 4,000.
- **d.** IADFW/IADFC/IADFE South Simultaneous ILS Altitude Separation Prior to Turn-On: Standard separation must be maintained until aircraft are established on the appropriate localize prior to the capture box and the adjacent intersection, or prior to adjacent intersections using the following altitudes in TBL 9-4-1 and FIG 9-4-1.

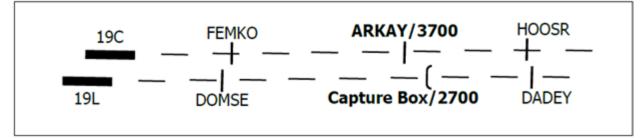
Runway Configuration	Established on the Localizer Prior to:		Altitude
	٨	BEEZY	AOB 40
19R/19C	A	HOOSR	AOA 50
198/190	В	Capture Box Abeam ARKAY	AOB 27
	Б	ARKAY	AOA 30
	•	DADEY	AOB 30
19C/19L	A	HOOSR	AOA 50
190/190		Capture Box Abeam ARKAY	AOB 27
	В	ARKAY	AOA 37
		BEEZY	AOA 40
19R/19L	A	Capture Box Abeam BEEZE	AOB 30
19K/ 19L		LAUGH	AOA 30
	В	Capture Box Abeam LAUGH	AT 20

#### TBL 9-4-1

#### South Simultaneous ILS Altitude Separation

FIG 9-4-1

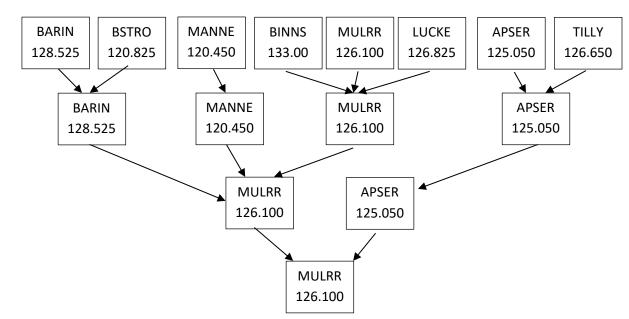
#### Example of Capture Box Altitudes (19C/19L)



# **Chapter 10. Sector Consolidation**

# **10-1. SHD Area Sectors**

- **a.** The combined SHD sector is MULRR 126.1. A approach/departure split is MULRR on 126.1 and ASPER on 125.05. TBL 10-1-1 depicts other combinations and splits.
- **b.** IADFE, IADFW, IADFC and RCOLA (if open) may be split or combined as dictated for an event.



TBL 10-1-1 Sector Consolidation

# **Chapter 11. Sectors**

## 11-1. BARIN

- **a.** Sector Identification The STARS position symbol for BARIN is "3B" and the assigned frequency is 128.525.
- **b.** Delegated Airspace BARIN is delegated the airspace as depicted in FIG 11-1-1 and FIG 11-1-2.
- **c.** General:
  - 1) Primary feeder for CAVLR/COATT arrival streams.
  - 2) Receives jet arrivals from ZDC or JRV-CHOWE and JRV-FLTRK and shall provide adequate sequencing before handing off to the final/s controller.
  - 3) BARIN serves as primary arrival and departure controller for HEF.

#### TBL 11-1-1

#### Sector Туре Dest/Route Altitude Heading/Information CAVLR# Descend via Join by BNTLY. ZDC (36) Jet @OGATE in trail with COATT# 130 CAVLR# as one. Jet 80 Direct OGATE/BNTLY for COATT#/CAVLR#. Control Landing IAD Prop 60 for turns/descent. JRV-FLTRK RNAV-On TRSTN# STAR All Landing MRB, HGR, Sats 40,60,80,100 Non-RNAV- CSN direct. JRV-All WIGOL# 70 Non-RNAV included. CHOEA Departures via CSN/FLUKY ASPER All AOB 100 Req QOB 120 MANNE All AOB 70 TIKEE# or CSN Landing MTV area MANNE Prop Landing IAD 50 Vector towards MIKEJ IAD N

#### To BARIN From

#### TBL 11-1-2

#### From BARIN To

Sector	Туре	Dest/Route	Altitude	Heading/Information
IADFE IAD S	All	Landing IAD	40	East downwind.
IADFE IAD N	All	Landing IAD RWY 01R	40	On heading to intercept LOC.
IADFC IAD N	All	Landing IAD RWY 01C	70	On LOC.
IADFW IAD N	All	Landing IAD RWY 01L	60	On LOC.
RCOLA	All	Landing IAD RWY 12	40	From SW – Vector towards KNUCK.

			60	From S – Direct CSN of vector.
титу	TILLY All	GABEE#	个50	On SID, non-RNAV on vector
		HIICH#	个30	Control for turns.
MANNE	All	TRSTN#	60,80,100	On route.
MTV- TYSON DCA S				
MTV- DCAFR DCA N	All	TIKEE# or CSN direct	50 On STAR or	On STAR or heading 090

FIG 11-1-1 BARIN North

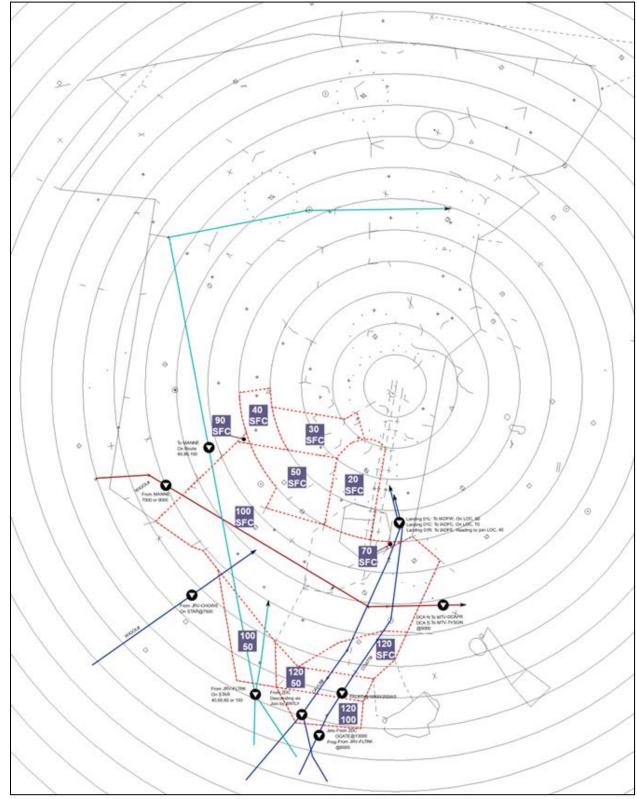
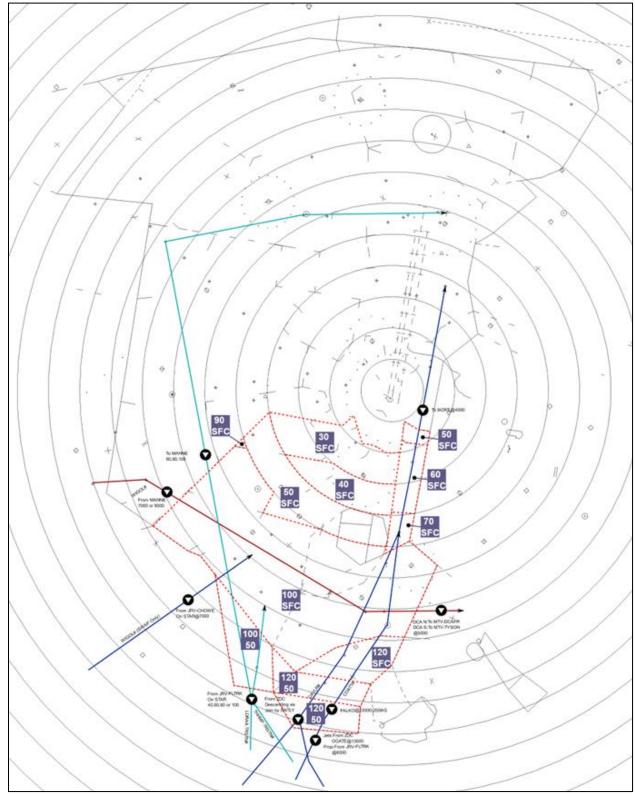


FIG 11-1-2 BARIN South



# **11-2. MANNE**

- **a.** Sector Identification The STARS position symbol for MANNE is "3N" and the assigned frequency is 120.450.
- **b.** Delegated Airspace MANNE is delegated the airspace as depicted in FIG 11-2-1 and FIG 11-2-2.
- **c.** General:
  - 1) Primary feeder for GIBBZ# and DOCCS# streams.
  - 2) Establish in-trail separation prior to handoff to IADFW.

#### TBL 11-2-1

#### To MANNE from

Sector	Туре	Dest/Route	Altitude	Heading/Information
		MGW GIBBZ#	Descend via	Join by MOSLE.
ZDC (01)		BKW/HVQ GIBBZ#	Descend via	JOIN by OTTTO.
	Jets	DOCCS#	110/250 kts	In-trail as one with 110/250 kts BKW/HQV GIBBZ#. Join by LDN.
	Props	DOCCS#	AOB 90 ↓80	Join by LDN.
BARIN	All	TRSTN#	60,80,100	On STAR/route.
TILLY	Prop	West departures	60,80	On course.

# TBL 11-2-2

#### From MANNE to

Sector	Туре	Dest/Route	Altitude	Heading/Information
	All	GIBBZ# / DOCCS#	60	On STAR.
IADFW	All	Base feed	50	Heading towards MATTC. Requires approval from IADFW.
	All	Landing RWY 12 IGGGY feed	60	On FAC.
RCOLA	All	Landing RWY 12 DOCCS/KILMR feed	50	On a vector at or west of KUNCK.
MULRR	All	TRSTN#	50,70,90	On STAR.
BARIN	All	Landing IAD, base feed	50	Requires approval from IADFW.
	All	TIKEE# or MTV via CSN	70	On STAR or direct CSN.

FIG 11-2-1 MANNE North

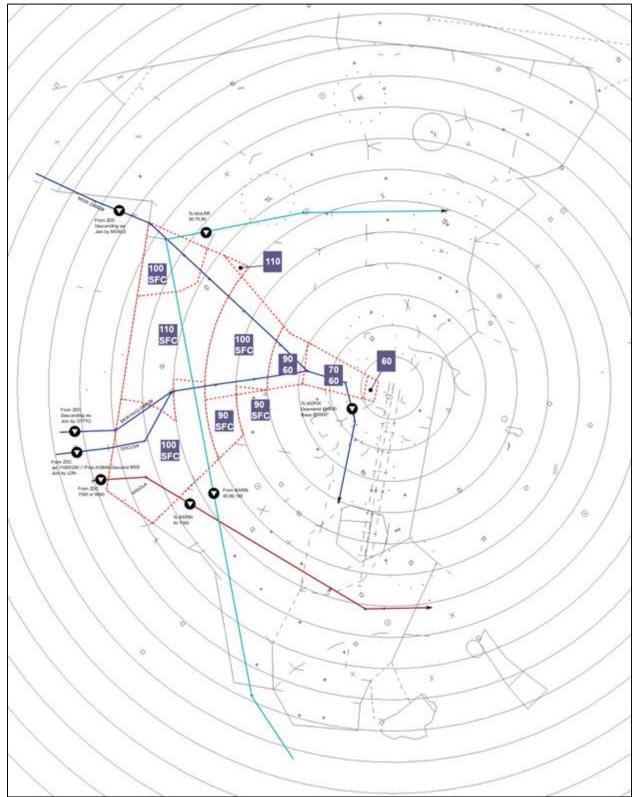
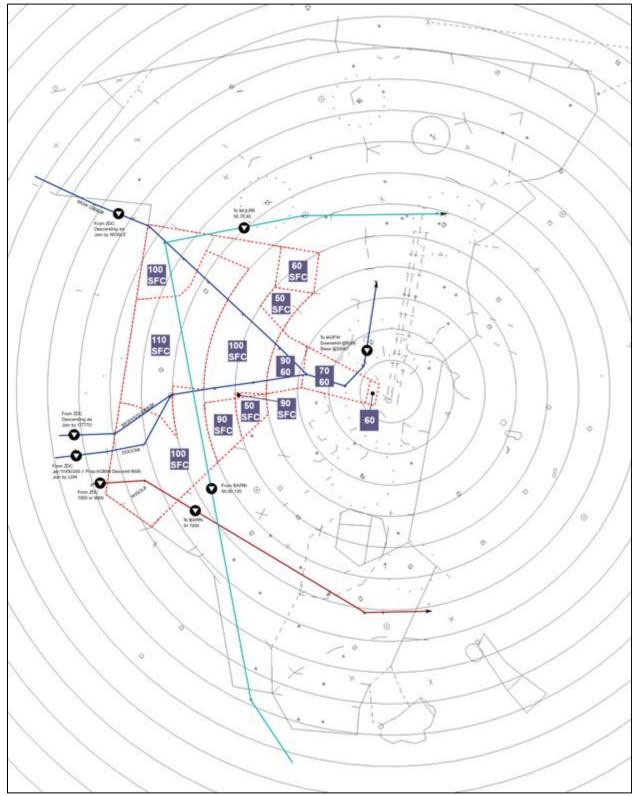


FIG 11-2-2 MANNE South



# 11-3. MULRR

- **a.** Sector Identification The STARS position symbol for MULRR is "3M" and the assigned frequency is 126.100.
- **b.** Delegated Airspace MULRR is delegated the airspace as depicted in FIG 11-3-1 and FIG 11-3-2.
- **c.** General:
  - 1) Primary arrival sector for aircraft coming from ZNY.
  - 2) In north operation, aircraft are generally assigned the east downwind for RWY 01R as west downwind requires coordination with other sectors.

#### TBL 11-3-1

#### To MULRR from

Sector	Туре	Dest/Route	Altitude	Heading/Information
ZDC (01)	Prop	CHP arrivals via EMI#	110	Must descend to 100 to remain within airspace.
	1	MAPEL# / PRIVO#	120	@DAFIX
ZNY (A)	Jet	HYPER# / DELRO#	140	@LIRCH
ZNT (A)	Dron	SEG# / LEGGO#	90	
	Prop	DELRO#	120	
CHP-BELAY	All	V143 MRV	80	
CHP- WOOLY	All	V44 MRB	60,80	
MANNE	All	TRSTN#	50,70,90	

## TBL 11-3-2

#### From MULRR to

Sector	Туре	Dest/Route	Altitude	Heading/Information
IADFE IAD S	All	IAD landing RWY 19L	40	
IADFC IAD S	All	IAD landing RWY 19C	70	On STAR or vector to intercept LOC.
IADFW IAD S	All	IAD landing RWY 19R	60	
IADFE IAD N	All	IAD landing RWY 01R	40	On IAD E downwind.
APSER IAD N	All	IAD landing RWY 01L/01C	50	On IAD W downwind.
CHP- WOOLY	Prop	EMI#	50.70	
ASPER IAD N	All	Landing JYO	40	Direct STILL/CACAS. If unable then on a heading towards
IADFW IAD S	All		40	STILL.

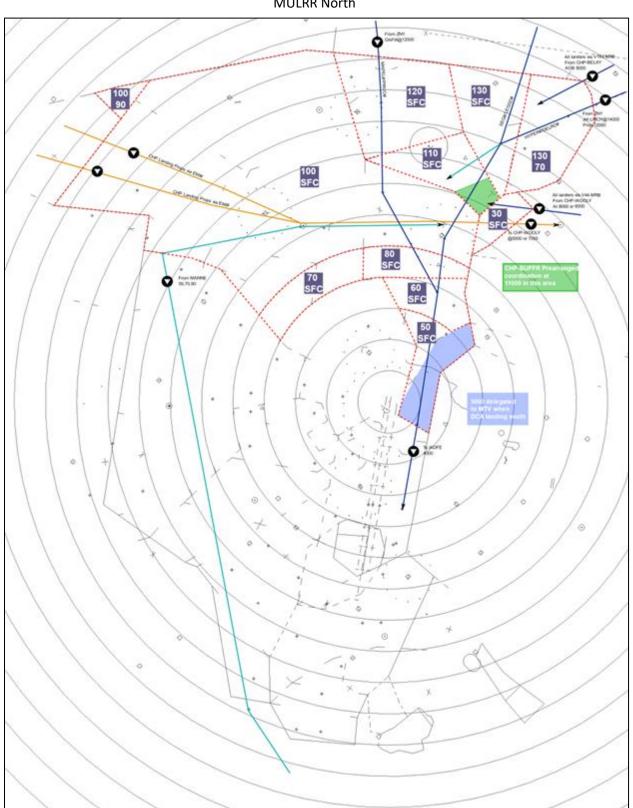
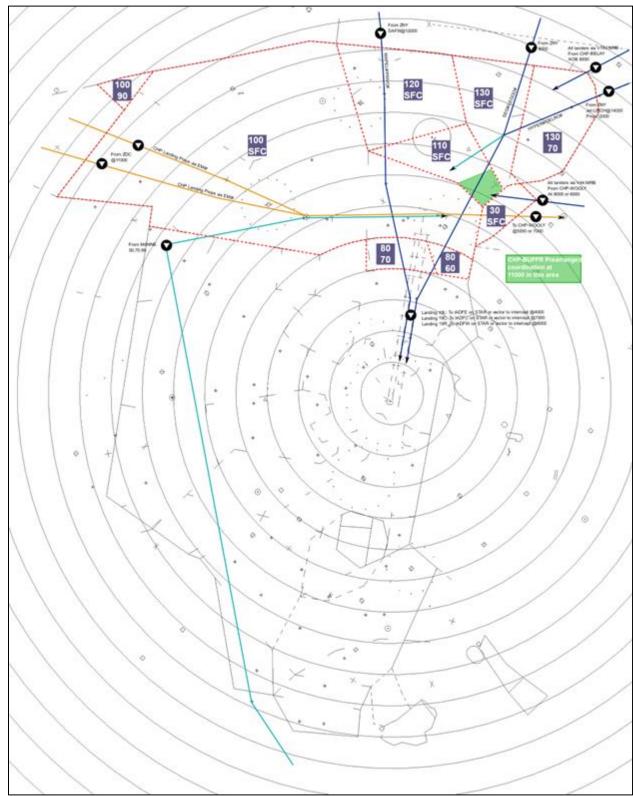


FIG 11-3-1 MULRR North





# **11-4. ASPER**

- **a.** Sector Identification The STARS position symbol for ASPER is "3A" and the assigned frequency is 125.050.
- **b.** Delegated Airspace ASPER is delegated the airspace as depicted in FIG 11-4-1 and FIG 11-4-2.
- **c.** General:
  - 1) Primary departure sector for all IAD departures
  - 2) Coordinate with IAD LC to amend departure headings no further north than 280 with JYO runway 17 departures.
  - 3) If IAD is south operations, coordinate above with IADFW.

## TBL 11-4-1

#### To ASPER from

Sector	Туре	Dest/Route	Altitude	Heading/Information
MTV – TYSON	Prop req AOA 100	West via CSN V140, V128, V286, LDN, GVE	80	Heading 270 between HEF and BARIN.
BARIN	All	GABEE#	个50	On SID, non-RNAV on vector
DARIN	All	HIICH#	个30	Control for turns.
MULLR IAD N	All	Landing JYO	40	Direct STILL/CACAS. If unable direct, then on a heading towards STILL.
		Landing IAD RWY 01L	50	On IAD west downwind.

## TBL 11-4-2

#### To ASPER from

Sector	Туре	Dest/Route	Altitude	Heading/Information
MTV-	Prop and non-RNAV Jet	SWANN,SOOKI,PALEO DOCTR,AGARD,WHINO, COLIN	100	Vector through the C-Gate.
KRANT	RNAV Jet	JCOBY#		On SID direct RIGNZ or to join.
MTV-	Jet	RNAV via CLTCH#, SCRAM#, JDUBB#	100	Direct BUTRZ, POOCH, HAFNR. Control for turns leaving 80.
TYSON		Non-RNAV via FLUKY MOL or HAFNR GVE		On course. Control for turns leaving 80.
	Jet	RNAV via RNLDI# / BUNZZ#		On SID or direct RNLDI/BUNZZ.
MTV- LURAY		Non-RNAV to west via LDN J149	100	Vector towards RNLDI/BUNZZ.
		Satellite departures		On SID or vector with APREQ.
	RNAV Jet	WOOLY#	110	Direct RAZZA to join. WOOLY has control for turns and climb to 110.
CHP-BELAY		НІІСН#		On SID. BELAY has control for turns.
	All	WOOLY (non-RNAV)	AOB 90 (Tprops) AOB 70 (Props)	Vector to join radial. BELAY has control for turns.
	All	MRB Req. 110-170		Direct MRB
CHP-BUFFR	RNAV Jet	Q178, J211, J220, J227 (BUFFR, MCRAY, JERES)	110	Direct IDORE/HAYGR to join SID.
	Non-RNAV Jet	]		On a vector between MRB and FDK.
BARIN	All	Departures via CSN/FLUKY	AOB 100	Req. AOB 120.
IADFW IAD N	All	Landing IAD RWY 01L	50	West downwind.

FIG 11-4-1 ASPER North

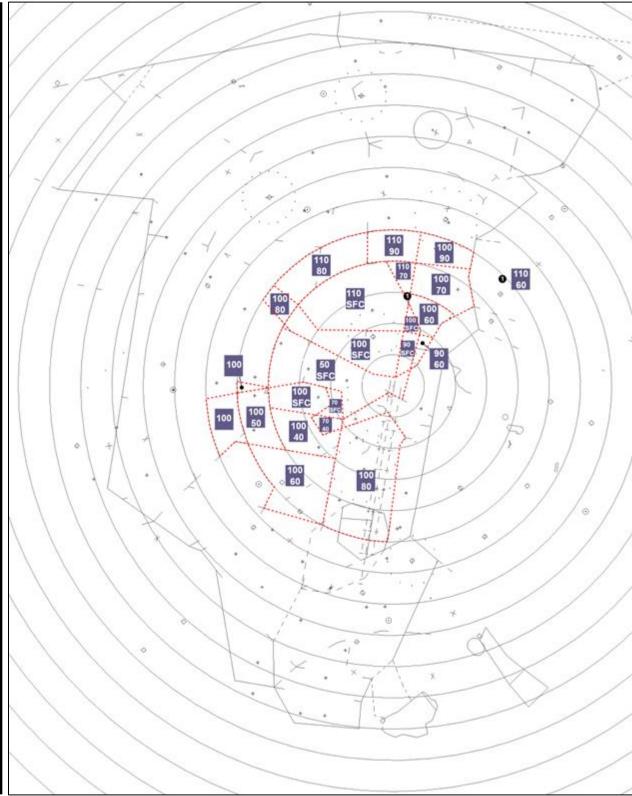
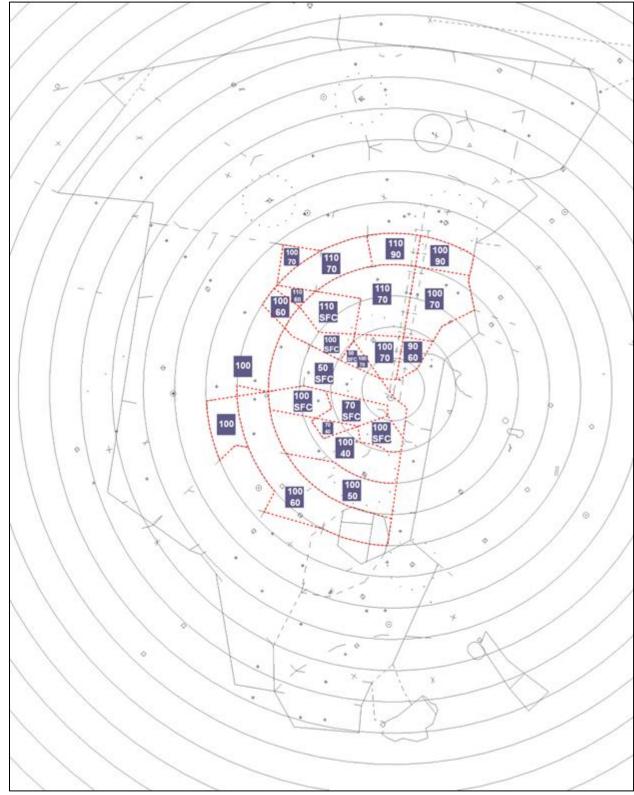


FIG 11-4-2 ASPER South



## 11-5. IADFE

- **a.** Sector Identification The STARS position symbol for IADFE is "3X" and the assigned frequency is 125.800.
- **b.** Delegated Airspace IADFE is delegated the airspace as depicted in FIG 11-5-1 and FIG 11-5-2.
- c. General:
- 1) IADFE is the primary controller for Runways 01R/19L at IAD.
- 2) On initial contact with landing traffic, IADFE should restate the landing runway assignment.
- 3) South Operation:
  - (a) Unless the aircraft is cleared for a visual approach, IADFW must remain at a vertically separated higher altitude than IADFE traffic until BEEZY. IADFW must cross BEEZY at or above 4,000.
  - (b) IADFW has separation responsibility from IADFC traffic established on the 19C LOC inside HOOSR.
  - (c) Unless the aircraft is cleared for a visual approach, IADFC must remain at a vertically separated higher altitude than IADFW and IADFE traffic until HOOSR. IADFW must cross HOOSR at or above 5,000.
  - (d) IADFE has separation responsibility from IADFW traffic established on the 19R LOC inside BEEZY, and IADFC traffic established on the 19C LOC inside HOOSR.
- 4) North Operation:
  - (a) Unless the aircraft is cleared for a visual approach, IADFW must remain at a vertically separated higher altitude than IADFE traffic until CINNA. IADFW must cross CINNA at or above 4000.
  - (b) IADFW has separation responsibility from IADFC traffic established on the 01C LOC inside of LUSIE.
  - (c) Unless the aircraft is cleared for a visual approach, IADFC must remain at a vertically separated higher altitude than IADFW and IADFE traffic until LUSIE. IADFW must cross LUSIE at or above 5000.
  - (d) IADFE has separation responsibility from IADFW traffic established on the 01L LOC inside FAZER, and from IADFC traffic established on the 01C LOC inside LUSIE.

TO TADFE ITOTT					
Sector	Туре	Dest/Route	Altitude	Heading/Information	
TYSON IAD N	All	DCA landing IAD		Heading 230.	
TYSON IAD S	All			Heading 330.	
MULRR IAD N	All	Landing RWY 01R	40	East downwind.	
BARIN IAD N	All		40	On heading to intercept LOC.	
MULRR IAD S	All	Landing RWY 19L		On runway transition of heading to intercept LOC.	
BARIN IAD S	All			East downwind.	

### TBL 11-5-1 To IADFE from

### TBL 11-5-2

### From IADFE to

Sector Type		Dest/Route	Altitude	Heading/Information
IAD ATCT	All	On final	AOB 40	Cleared for approach

FIG 11-5-1 IADFE North

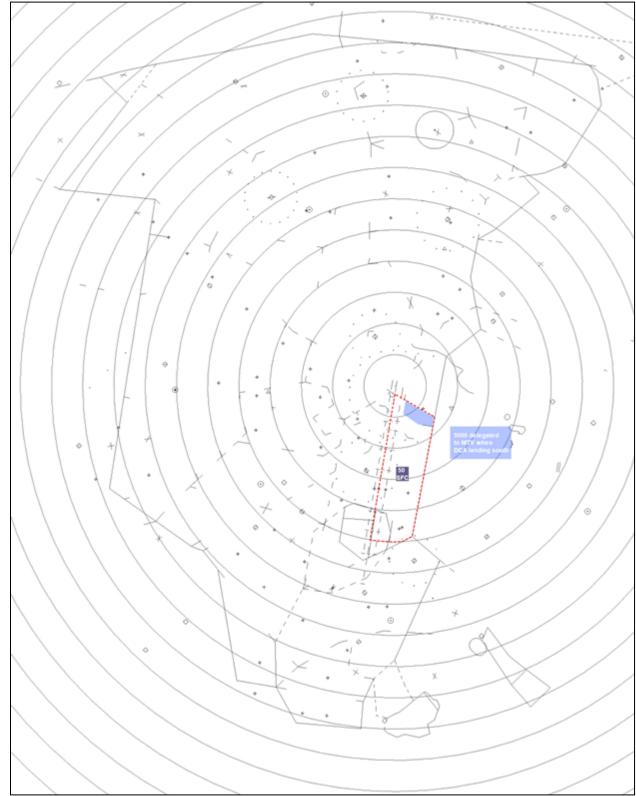
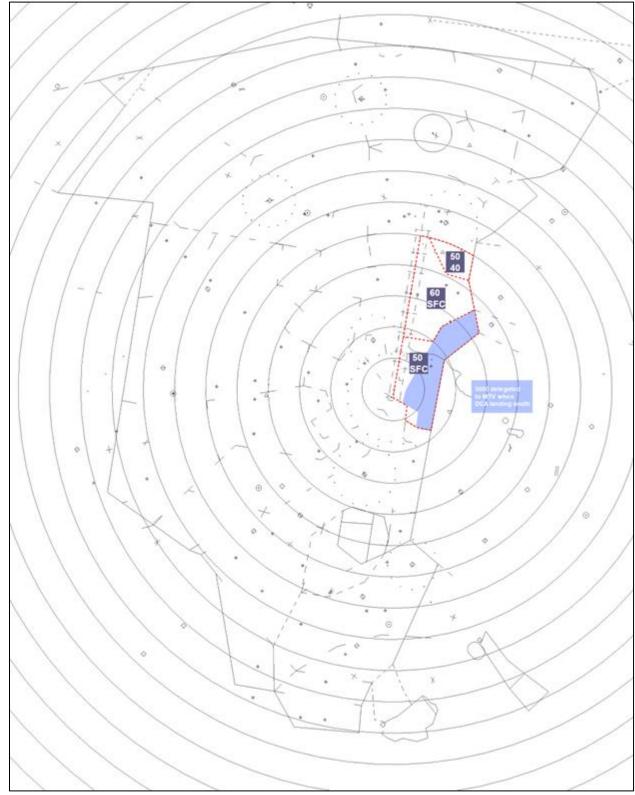


FIG 11-5-2 IADFE South



## 11-6. IADFC

- **a.** Sector Identification The STARS position symbol for IADFC is "3S" and the assigned frequency is 134.200.
- **b.** Delegated Airspace IADFC is delegated the runway 01C/19C final approach course to the 25nm range ring.
- **c.** General:
  - 1) IADFC is the primary controller for Runways 01C/19C at IAD.
  - 2) On initial contact with landing traffic, IADFC should restate the landing runway assignment.
  - 3) South Operation:
    - (a) Unless the aircraft is cleared for a visual approach, IADFW must remain at a vertically separated higher altitude than IADFE traffic until BEEZY. IADFW must cross BEEZY at or above 4,000.
    - (b) IADFW has separation responsibility from IADFC traffic established on the 19C LOC inside HOOSR.
    - (c) Unless the aircraft is cleared for a visual approach, IADFC must remain at a vertically separated higher altitude than IADFW and IADFE traffic until HOOSR. IADFW must cross HOOSR at or above 5,000.
    - (d) IADFE has separation responsibility from IADFW traffic established on the 19R LOC inside BEEZY, and IADFC traffic established on the 19C LOC inside HOOSR.
  - 4) North Operation:
    - (a) Unless the aircraft is cleared for a visual approach, IADFW must remain at a vertically separated higher altitude than IADFE traffic until CINNA. IADFW must cross CINNA at or above 4,000.
    - (b) IADFW has separation responsibility from IADFC traffic established on the 01C LOC inside of LUSIE.
    - (c) Unless the aircraft is cleared for a visual approach, IADFC must remain at a vertically separated higher altitude than IADFW and IADFE traffic until LUSIE. IADFW must cross LUSIE at or above 5,000.
    - (d) IADFE has separation responsibility from IADFW traffic established on the 01L LOC inside FAZER, and from IADFC traffic established on the 01C LOC inside LUSIE.

#### TBL 11-6-1

#### To IADFC from

Sector Type		Dest/Route	Altitude	Heading/Information
BARIN	All	Landing RWY 01C	70	On a heading to intercept the localizer
IAD N				
MULRR		Landing DW/V 10C	70	
IAD S		Landing RWY 19C		

From IADFC to

Sector Type		Dest/Route	Altitude	Heading/Information
IAD ATCT	All	On final	AOB 40	Cleared for approach

## 11-7. IADFW

- **a.** Sector Identification The STARS position symbol for IADFW is "3U" and the assigned frequency is 135.775.
- **b.** Delegated Airspace IADFW is delegated the airspace as depicted in FIG 11-7-1 and FIG 11-7-2.
- **c.** General:
  - 1) IADFC is the primary controller for Runways 01C/19C at IAD.
  - 2) On initial contact with landing traffic, IADFC should restate the landing runway assignment.
  - 3) South Operation:
    - (a) Unless the aircraft is cleared for a visual approach, IADFW must remain at a vertically separated higher altitude than IADFE traffic until BEEZY. IADFW must cross BEEZY at or above 4m000.
    - (b) IADFW has separation responsibility from IADFC traffic established on the 19C LOC inside HOOSR.
    - (c) Unless the aircraft is cleared for a visual approach, IADFC must remain at a vertically separated higher altitude than IADFW and IADFE traffic until HOOSR. IADFW must cross HOOSR at or above 5,000.
    - (d) IADFE has separation responsibility from IADFW traffic established on the 19R LOC inside BEEZY, and IADFC traffic established on the 19C LOC inside HOOSR.
  - 4) North Operation:
    - (a) Unless the aircraft is cleared for a visual approach, IADFW must remain at a vertically separated higher altitude than IADFE traffic until CINNA. IADFW must cross CINNA at or above 4000.
    - (b) IADFW has separation responsibility from IADFC traffic established on the 01C LOC inside of LUSIE.
    - (c) Unless the aircraft is cleared for a visual approach, IADFC must remain at a vertically separated higher altitude than IADFW and IADFE traffic until LUSIE. IADFW must cross LUSIE at or above 5000.
    - (d) IADFE has separation responsibility from IADFW traffic established on the 01L LOC inside FAZER, and from IADFC traffic established on the 01C LOC inside LUSIE.
- **d.** IADFW is responsible for releasing JYO departures in a south operation. IADFW must coordinate with ASPER to release the departure. IADFW must complete an automated point-out or handoff with ASPER when the departure is airborne and turning away from IAD departures.
- e. Prearranged Coordination:

## (a) ASPER may enter IADFW airspace with IAD departures.

#### TBL 11-7-1

### To IADFW from

Sector	Туре	Dest/Route	Altitude	Heading/Information
MANNE	All	GIBBZ# / DOCCS#	60	On STAR
MANNE IAD S	All	Base leg	50	Vector towards MATTC
BARIN IAD	All	Base leg	50	Vector towards MIKEJ
Ν	All	Landing RWY 1L	60	On a heading to join the LOC
MULRR IAD S	All	Landing RWY 19R	60	On runway transition or heading to join the LOC
ASPER IAD N	All	Landing RWY 1L	50	On the IAD west downwind.
MULRR IAD S	All	Landing JYO	40	Direct STILL/CACAS. If unable direct, on a heading towards STILL.

## TBL 11-7-2

#### From IADFW to

Sector Type I		Dest/Route	Altitude	Heading/Information
IAD ATCT	All	On final	AOB 40	Cleared for approach

FIG 11-7-1 IADFW North

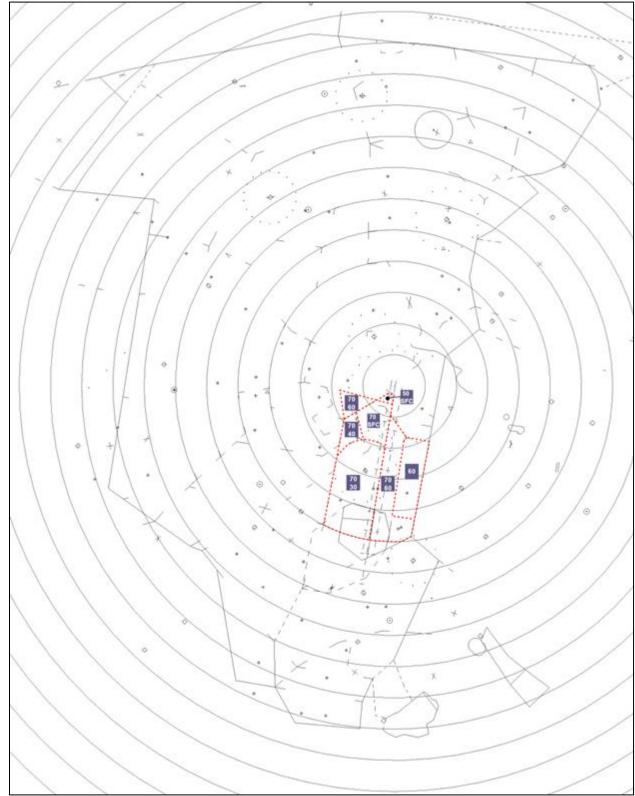
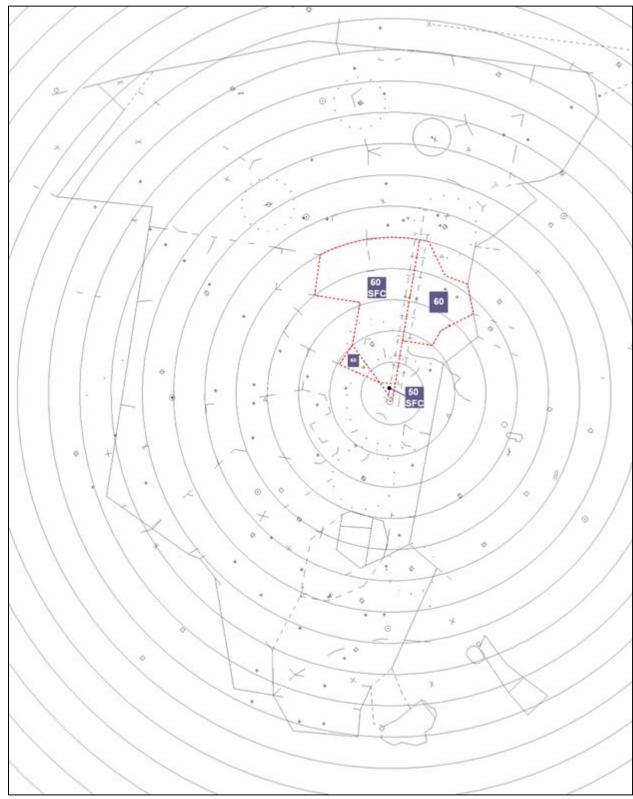


FIG 11-7-2 IADFW South



## 11-8. RCOLA

- **a.** Sector Identification The STARS position symbol for RCOLA is "3R" and the assigned frequency is 135.775.
- **b.** Delegated Airspace RCOLA is delegated the airspace as depicted in FIG 11-8-1.
- **c.** General:
  - 1) RCOLA is not utilized when IAD is in north operation, nor when IADFC is open.
  - 2) Final approach controller when landing runway 12.
  - 3) RCOLA and IADFW share the same frequency and cannot be open simultaneously.

#### TBL 11-8-1

#### To RCOLA from

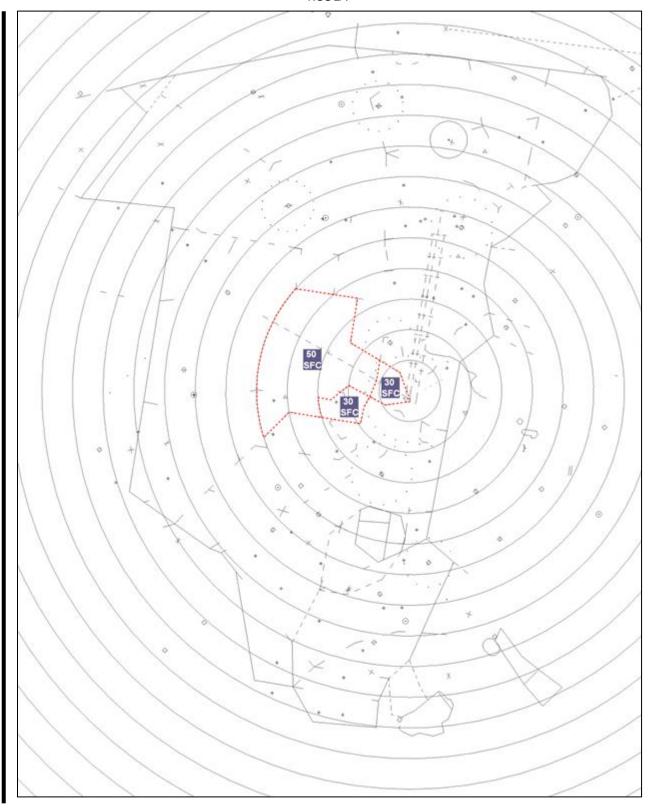
Sector	Туре	Dest/Route	Altitude	Heading/Information
	All	Landing RWY 12	60	On final approach course
MANNE		IGGGY feed		
	All	Landing RWY 12	50	On a vector towards KNUCK
BSTRO	All	DOCCS/KILMR feed	40	On a vector towards KNUCK

## TBL 11-8-2

#### From RCOLA to

Sector	Туре	Dest/Route	Altitude	Heading/Information
IAD ATCT	All	On final	AOB 40	Cleared for approach

FIG 11-8-1 RCOLA



## **Chapter 12. Prearranged Coordination Procedures (PAC-P)**

## 12-1. SHD PAC-P

- a. The following prearranged coordination may be applied by sectors with "Prearranged Coordination" boxes drawn on their respective airspace delegations, in accordance with the procedures below. Coordination is considered to have been affected under the following conditions. SHD controllers whose airspace is designated for prearranged coordination purposes must:
  - 1) Start a track on all radar identified primary targets under their control.
  - 2) Point out non-tracked aircraft to the appropriate authorized controller.
  - 3) Have the option to suspend this procedure at any time.
- **b.** controllers authorized to penetrate another sector's airspace must:
  - 1) Ensure separation from all targets operating within the designated airspace.
  - 2) Not penetrate designated airspace within 5nm miles of a converging target
- **c.** The following sectors may penetrate airspace in accordance with the PAC-P (within the airspace as depicted on the respective sector's airspace delegation):

1) ZDC

**d.** Prearranged coordination airspace is depicted in the individual sector diagrams, except as shown in FIG 12-1-1.

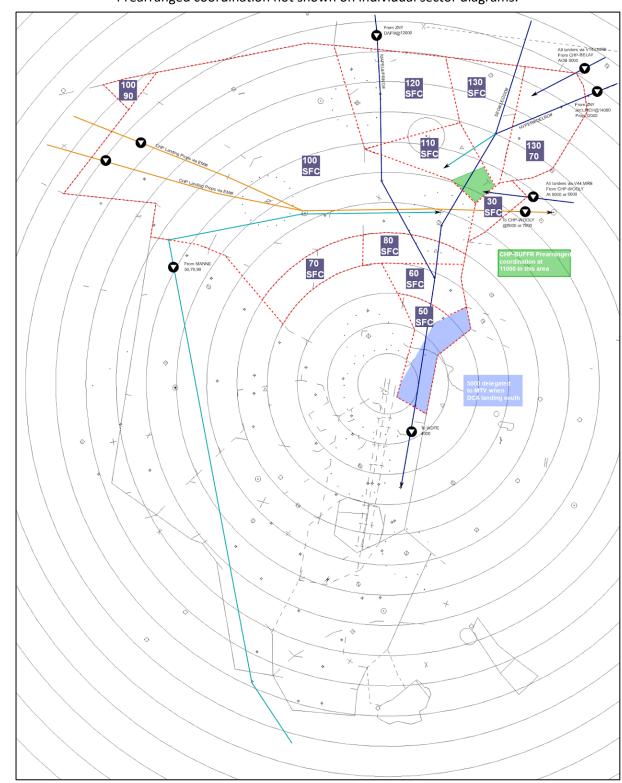
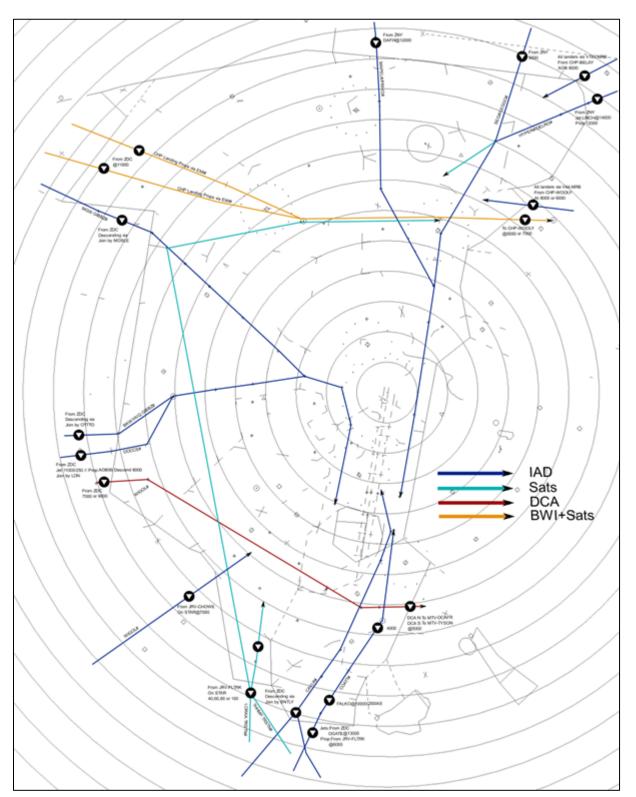


FIG 12-1-1

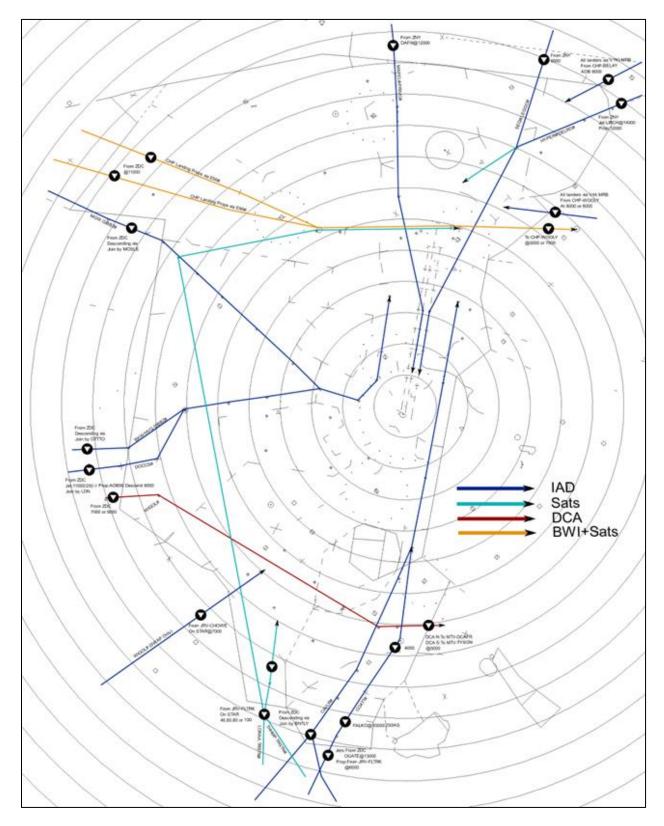
Prearranged coordination not shown on individual sector diagrams.



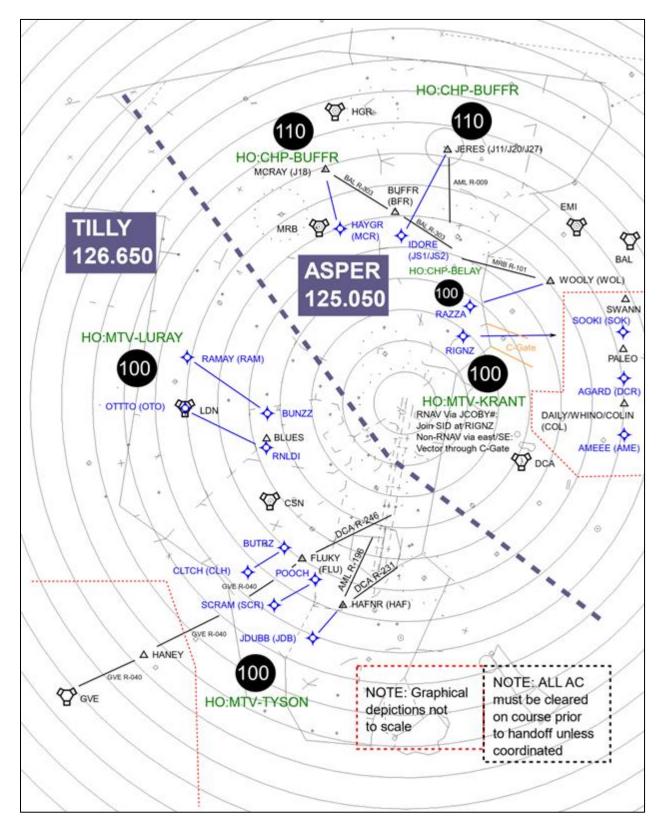
# **Appendix A. General Flows**

## A-1. Arrivals North Flow

## A-2. Arrivals South Flow



## A-3. Departure Aid



# Appendix B. Special Use Airspace

The following special use airspace is contained within Chesapeake area. Provide radar separation of 3 miles from special use airspace except when Prohibited/Restricted/Warning areas are established for security reasons (ex. P-56).

Name	Area	Altitude	Separation
R4009 Camp David	SHD	5000 to 12500 MSL	Boundary
R6608 A, B, C Quantico	SHD	Surface to 10000 MSL	Boundary
DEMO 1 MOA	SHD	500 to 4000 MSL	Boundary
DEMO 2 MOA	SHD	10000 to 15000 MSL	Boundary
DEMO 3 MOA	SHD	5001 to 15000 MSL	Boundary
P40 Camp David	SHD	Surface to 4999 MSL	Boundary

