

Potomac Consolidated TRACON: Shenandoah Area (SHD)

Section 1. General

1-1. Disclaimer:

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1-2. Purpose:

This chapter establishes the standard operation procedures for the Shenandoah specialty and prescribes operation procedures unique to the Shenandoah area. Personnel assigned to the Shenandoah area shall be familiar with and adhere to the information and procedures described in this chapter to provide safe, orderly, and expeditious flow of air traffic in Potomac TRACON and Shenandoah area airspace.

1-3. Scope of Responsibilities:

The Shenandoah Area is responsible for arrivals, departures, and overflights into and out of the Potomac TRACON Shenandoah airspace.

1-4. Shenandoah Sectors/Positions:

Arrival Sectors

<u>Sector</u>	<u>Frequency</u>	<u>ARTS ID</u>	<u>ARTS TAG</u>	<u>Callsign</u>	<u>Relief Callsign</u>	<u>Voice Room</u>
MANNE	120.450	3N	N	IAD_N_APP	IAD_3N_APP	PCT_3N
LUCKE	126.820	3Z	Z	IAD_Z_APP	IAD_3Z_APP	PCT_3Z
RCOLA	135.770	3R	R	IAD_R_APP	IAD_3R_APP	PCT_3R
MULRR	126.100	3M	M	IAD_M_APP	IAD_3M_APP	PCT_3M
BARIN	124.650	3B	B	IAD_B_APP	IAD_3B_APP	PCT_3B
BRSTO	120.800	3O	O	IAD_O_APP	IAD_3O_APP	PCT_3O
BINNS	133.000	3V	V	IAD_V_APP	IAD_3V_APP	PCT_3V
IADFW	134.200	3U	U	IAD_U_APP	IAD_3U_APP	PCT_3U
IADFE	125.800	3X	X	IAD_X_APP	IAD_3X_APP	PCT_3X

Departure Sectors

<u>Sector</u>	<u>Frequency</u>	<u>ARTS ID</u>	<u>ARTS TAG</u>	<u>Callsign</u>	<u>Relief Callsign</u>	<u>Voice Room</u>
ASPER	125.050	3A	A	IAD_A_DEP	IAD_3A_APP	PCT_3A
TILLY	126.650	3Q	Q	IAD_Q_DEP	IAD_3Q_APP	PCT_3Q

1-5. Order for Opening Sectors:

When operating at minimal staffing and only MANNE and ASPER are open, use the following callsigns:

- 1) MANNE shall use IAD_APP as the primary callsign and IAD_N_APP in relief.
- 2) ASPER shall use IAD_DEP as the primary callsign and IAD_A_DEP in relief.

Additional arrival sectors may be opened as needed, in the following order, without prior permission:

- 1) North Operations
 - i) BARIN
 - BARIN assumes control of IADFW.
 - MANNE assumes control of MULRR.
- 2) South Operations
 - i) MULRR
 - MANNE assumes control of BARIN.
 - MULRR assumes control of IADFW.

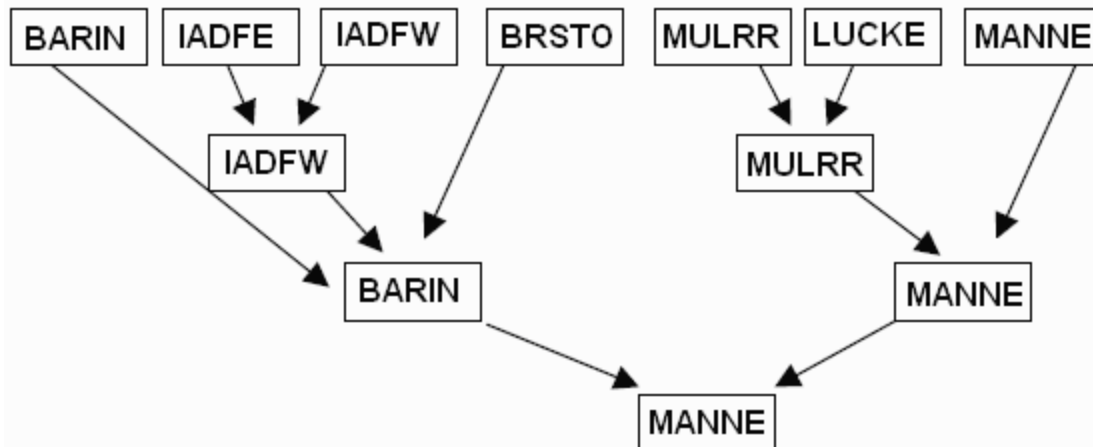
Additional departure sectors may be opened as needed, in the following order, without prior permission:

- 1) TILLY

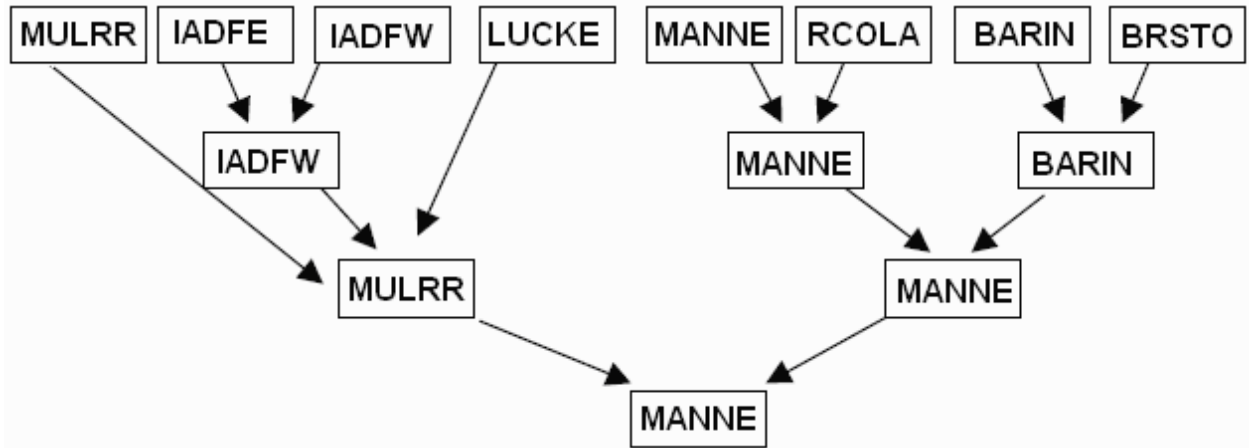
1-6. Combining Positions:

Shenandoah area positions are normally combined as indicated in the following diagrams.

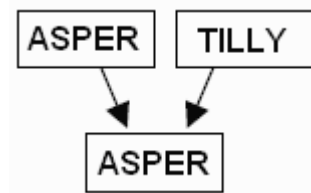
- 1) Arrival Sectors
 - i) North Operations



- ii) South Operations



2) Departure Sectors



Section 2. Radar Team Procedures

2-1. Position Responsibilities:

Unless otherwise coordinated, the controller receiving a handoff from another Shenandoah area position shall have control within the transferring controller's airspace for the following:

- 1) IAD Arrivals: Turns towards receiving position's boundary, descent, and speed.
- 2) IAD Departures: Climb and turns towards receiving position's boundary.

2-2. Holding Aircraft:

When holding aircraft becomes necessary, utilize the following patterns to the maximum extent possible:

- a) *KEWPY: Hold west, left turns.
- b) CSN (Departures): Hold northeast on the 035 radial, right turns.
- c) CSN (Arrivals): Hold southwest on V140, left turns.
- d) *DRUZZ: Hold west, left turns.
- e) *DOCCS: Hold southwest, right turns.
- f) RUANE: Hold west, right turns.
- g) *BRV: Hold south on V155, left turns.
- h) *HYPER: Hold northeast, left turns.
- i) *MULRR: Hold northeast, left turns.

Note: * denotes published holding pattern.

2-3. Satellite Departures:

Unless otherwise coordinated, issue the following initial departure fix and altitude in conjunction with satellite clearances.

<u>Airport</u>	<u>Departure Procedures</u>	<u>IAD North Ops</u>	<u>IAD South Ops</u>	<u>LUCKE Open</u>
JYO N	Turn left, direct MRB VOR, maintain 3000 until 20DME SE of MRB, maintain 4000. (Note: RNAV a/c proceed direct STILL, maintain 3000)	ASPER	IADFW**	
JYO S	Rwy 35: Turn right, direct MRB VOR, maintain 3000 until 20DME SE of MRB, maintain 4000. (Note: RNAV a/c turn right direct STILL, maintain 3000)	ASPER	IADFW**	
HEF N	Cleared via ARSNL DP	BRSTO	BRSTO	
HEF S	Cleared via 230 heading, maintain 2000	BRSTO	BRSTO	
MRB	Cleared via MRB VOR, maintain 3000	MULRR	N/A	LUCKE
OKV	Cleared via MRB VOR or COGAN NDB, maintain 4000 <u>OR</u> Cleared via LDN VOR, maintain 6000	MANNE	MANNE	LUCKE
NYG	Cleared via BRV VOR, maintain 3000	BARIN	BARIN	
EZF	Cleared via BRV VOR, maintain 3000	BARIN	BARIN	

2VG2	Cleared via COGAN NDB, maintain 4000	MANNE*	MANNE*	LUCKE*
CRJ	Cleared via CSN VOR, maintain 3000	BARIN	BARIN	
W66	Cleared via CSN, maintain 3000	BARIN	BARIN	
2VA9	Cleared via CSN, maintain 4000	BARIN	BARIN	
FRR	Cleared via COGAN NDB, maintain 4000	MANNE	MANNE	LUCKE
RMN	Cleared via BRV, maintain 3000	BARIN	BARIN	

* Point out required to ASPER.

** Point out required to MANNE in South operation, ASPER in 19L/19C/19R/30 operations. In a South SIMUL operation, request release from IADFW, ASPER, and LUCKE

a) Pilots shall be instructed to expect filed or assigned final altitude ten (10) minutes after departure and to "hold for release" while the release is coordinated.

b) Issue release times, clearance void times, and callback times as directed by controllers. Void times shall be no more than three (3) minutes after the release time. Callback times shall normally be ten (10) minutes after void time.

2-4. Temporary Altitudes and Scratchpad

a) STAR information:

For all RNAV arrivals where "Descend via..." is used, enter the following information into the scratchpad as long as the aircraft is **still on the STAR**. Temporary altitudes are not required unless a specific altitude is assigned. Once the aircraft is vectored off of the STAR, use the information contained in paragraph b) of this section.

STAR	Scratchpad Entry
BARIN-STAR	"bar"
HYPER-STAR	"hyp"
SHNON-STAR	"shn"

Note: For non-RNAV arrivals, STAR information shall not be entered into the scratchpad.

a) Vectors and Altitudes:

i) Vectors:

Enter the assigned heading ("hxx") into the scratchpad when aircraft are being vectored and handed off from one sector to another.

ii) Altitudes:

1) Arrivals: Enter the assigned altitude in the temporary altitude field when aircraft are being descended within the TRACON. Clear all altitudes once an approach clearance has been given.

2) Departures: No temporary altitude information is needed when climbing aircraft per SOP. If climbs that are not per SOP are used, enter the information into the scratchpad.

b) Runway and Approach Information:

Enter the approach information below in the scratchpad for aircraft on downwind legs, base legs, or localizer intercept turns if the aircraft are either using 1) a runway other than the primary arrival runway, or 2) a runway that is not per SOP for the entry fix to the PCT. The first Shenandoah area position to provide service to an IFR or VFR aircraft shall be responsible for entering and ensuring that scratchpad data is complete and correct.

Landing Runway	Visual Approach	ILS Approach
1L	01L	I1L
1C	01C	I1C
1R	01R	I1R
19L	19L	I9L
19C	19C	I9C
19R	19R	I9R
12	R12	I12
30	N/A	I30
1R Circle 30	N/A	C30

2-5. Operational Advantage:

Any altitude, vector, runway, or approach type can be given if it gives the controller an operational advantage.

Section 3. MANNE

3-1. Responsibilities:

MANNE is a feeder arrival sector which is primarily responsible for sequencing Washington-Dulles arrivals on the SHNON-STAR, ROYIL-STAR, and arrivals from the west.

This sectors also sequences Washington-National prop arrivals.

3-2. Sector Identification:

- a) Frequency: 120.450
- b) Callsign: IAD_N_APP
- c) ARTS ID: 3N

3-3. Opening the Sector:

MANNE is the primary arrival sector and must be opened first.

3-4. Airspace:

- a) [North Operations](#)
- b) [South Operations](#)

3-5. Combining Positions:

MANNE shall assume control for the following sectors when they are closed:

- a) BARIN
- b) BRSTO
- c) IADFW
- d) IADFE
- e) LUCKE
- f) MULRR
- g) RCOLA
- h) ASPER
- i) TILLY

3-6. Approach Type:

Approach type and runway information shall be given on initial contact with the arrival. Coordinate with IADFW and IADFE to determine the type of approach in use. [Enter into the scratchpad the planned arrival runway.](#)

3-7. North Operation Arrival Flow:

a) SHNON-STAR Arrivals:

- i) Shall be handed off from ZDC prior to DOCCS or DRUZZ at 11,000.
- ii) These aircraft shall remain on the STAR and be instructed to "Descend via the SHNON-STAR arrival, runway [1L/1C](#)."

iii) Once the aircraft has departed ELISN, it will be handed off to IADFW.

b) ROYIL-STAR Arrivals:

i) Shall be handed off from ZDC prior to DOCCS or DRUZZ at 11,000.

ii) These aircraft shall remain on the STAR and be instructed to "Cross DARIC at 6,000", then "Depart DARIC heading 190".

iii) Once the aircraft has departed DARIC and established on the downwind, it will be handed off to IADFW.

c) All Other Arrivals:

i) Vector aircraft onto a left downwind for runway 1L/1C and the pass the airport at 6,000 or as directed by IADFW.

3-8. South Operation Arrival Flow:

a) SHNON-STAR Arrivals:

i) Shall be handed off from ZDC prior to DOCCS or DRUZZ at 11,000.

ii) These aircraft shall remain on the STAR and be instructed to "Descend via the SHNON-STAR arrival, runway 19C/19R."

iii) Once the aircraft has departed ELISN, it will be handed off to IADFW.

b) ROYIL-STAR Arrivals:

i) Shall be handed off from ZDC prior to DOCCS or DRUZZ at 11,000.

ii) These aircraft shall remain on the STAR and be instructed to "Cross DARIC at 6,000", then "Depart DARIC heading 010".

iii) Once the aircraft has departed DARIC and established on the downwind, it will be handed off to IADFW.

c) All Other Arrivals:

i) Vector aircraft onto a right downwind for runway 19C/19R and the pass the airport at 6,000 or as directed by IADFW.

3-9. Required Coordination:

a) North Operation:

i) MANNE shall advise TILLY/ASPER if DCA prop arrivals are descending below 7,000.

b) South Operation:

i) Release the "12 Final" airspace when RCOLA is opened.

3-10. 19L/19C/19R/30 Operations:

MANNE may enter MULRR airspace with an IAD arrival.

Section 4. MULRR

4-1. Responsibilities:

MULRR is a feeder arrival sector for Washington-Dulles arrivals on the HYPER-STAR, DELRO-STAR, PSB-STAR, LEGGO-STAR, PRTZL-STAR, [SEG-STAR](#), and arrivals from the north and northeast.

4-2. Sector Identification:

- a) Frequency: 126.100
- b) Callsign: IAD_M_APP
- c) ARTS ID: 3M

4-3. Opening the Sector:

MULRR should only be opened when IAD is in a South Operation unless authorized by the ZDC ATM, ZDC DATM, or PCT Operations Manager in Charge.

- i) North Operations: MULRR is normally combined with MANNE.
- ii) South Operations: IADFW and IADFE are combined with MULRR, unless IADFW is opened.

4-4. Airspace:

- a) [North Operations](#)
- b) [South Operations](#)

4-5. Combining Positions:

MULRR assumes control of the following sectors when they are closed:

- a) LUCKE
- b) IADFW
- c) IADFE

4-6. Approach Type:

Approach type and runway information shall be given on initial contact with the arrival. Coordinate with IADFW and IADFE to determine the type of approach in use. [Enter into the scratchpad the planned arrival runway.](#)

4-7. North Operation Arrival Flow:

- a) HYPER-STAR, PRTZL-STAR (Jets only), LEGGO-STAR (Props only) arrivals:
 - i) Jets: Shall be handed off from ZNY prior to MULRR at 10,000 and 250kts.
 - ii) Props: Shall be handed off from ZNY prior to MULRR at 8,000.
 - iii) These aircraft shall remain on the STAR and be instructed to "Descend via the [XXXXX-STAR](#) arrival, runway 1R."
 - iv) Once aircraft are abeam the airport, they will be handed off to IADFE.

- b) DELRO-STAR, PSB-STAR (Jets only), and SEG-STAR (Props only) arrivals:

- i) Jets: Shall be handed off from ZNY prior to MULRR at 10,000 and 250kts.
- ii) Props: Shall be handed off from ZNY prior to MULRR at 8,000.
- iii) These aircraft shall depart MULRR heading 190 for vectors onto the downwind leg for runway 1R.
- iv) Aircraft shall be issued a descent to 4,000 once they are established on the 190 heading and shall remain at 4,000 while abeam the airport.
- v) Once aircraft are abeam the airport and established on the downwind, they will be handed off to IADFE.

c) All Other Arrivals:

- i) Vector aircraft onto a right downwind for runway 1R to pass the airport at 4,000 or as directed by IADFE.

4-8. South Operations Arrival Flow:

a) HYPER-STAR, PRTZL-STAR (Jets only), LEGGO-STAR (Props only), DELRO-STAR, PSB-STAR (Jets only), and SEG-STAR (Props only) arrivals:

- i) Jets: Shall be handed off from ZNY prior to MULRR at 10,000 and 250kts.
- ii) Props: Shall be handed off from ZNY prior to MULRR at 8,000.
- iii) These aircraft should be instructed to "Depart MULRR heading 200" for vectors to join the approach course.
- iv) A descent to 3,000-6,000 should be issued as soon as practical.
- v) Handoff aircraft on a vector to intercept the approach course prior to entering IADFW or IADFE airspace.

b) During periods when arrivals are being vectored exclusively to runway 12, assume responsibility for IADFW and IADFE airspace. Acceptance of a handoff by RCOLA constitutes approval to enter the airspace and position the aircraft on a left downwind west of JYO at 5,000.

4-9. SHD/CHP Coordination and Procedures (IAD North Operations):

a) CHP shall coordinate for instrument approaches to GAI as follows:

- i) VOR RWY 14: A verbal or automated handoff between areas constitutes coordination for SHD to protect the appropriate airspace.
- ii) RNAV (GPS) RWY 14: Coordinate verbally at all times.

b) CHP shall have control of IAD departure traffic for turns towards BAL 35NM west of BAL.

c) CHP shall have control of IAD and SHD satellite departure traffic landing BWI and CHP satellites for turns towards BAL on contact.

d) CHP west satellites (GAI, FDK, DMW, 2W2); Transfer of communication constitutes control for descent and control for turns towards the arrival airport.

e) The point of entry for VFR aircraft entering SHD/CHP portion of Class B airspace will be northwest of GAI airport clear of MTV airspace.

- i) SHD shall handoff aircraft to WOOLY (128.7).
- ii) IAD North; CHP shall handoff VFR aircraft 6,000 and below to MULRR.

4-10. Northwest-bound Departures:

MULRR shall handoff aircraft requesting above 10,000 over V214/V44/V8/ELG to BUFFR climbing to 10,000. BUFFR will have control for climb on initial contact and advise MULRR if there will be any delay in climbing out of 10,000.

4-11. Martinsburg Operations:

When LUCKE is not staffed, MULRR shall assume all of the airspace and responsibilities delegated to LUCKE. Provide IFR separation to VFR practice approaches at MRB, when MRB tower is operation, on a traffic permitting basis.

Section 5. BARIN

5-1. Responsibilities:

BARIN is a feeder arrival sector for Washington-Dulles airport for arrivals on the BARIN-STAR, COATT-STAR, and arrivals from the south.

5-2. Sector Identification:

- a) Frequency: 124.650
- b) Callsign: IAD_B_APP
- c) ARTS ID: 3B

5-3. Opening the Sector:

BARIN should **only be opened when IAD is in a North Operation** unless authorized by the ZDC ATM, ZDC DATM, or PCT Operation Manager in Charge.

- a) North Operations: IADFW and IADFE are combined with BARIN unless IADFW is opened.
- b) South Operations: BARIN is normally combined with MANNE.

5-4. Airspace:

- a) [North Operations](#)
- b) [South Operations](#)

5-5. Approach Type:

Approach type and runway information shall be given on initial contact with the arrival. Coordinate with IADFW and IADFE to determine the type of approach in use. [Enter into the scratchpad the planned arrival runway.](#)

5-6. North Operation Arrival Flow:

a) BARIN-STAR and COATT-STAR arrivals:

- i) Shall be handed off from ZDC prior to FALKO at 10,000 and 250kts.
- ii) Runway 1R shall be used to the extent possible.
- iii) [Runway 1R](#)

(1) These aircraft shall be instructed to cross BARIN at 5,000 and depart BARIN heading 340 to join the runway 1R approach course.

(2) BARIN shall feed IADFE established on the runway 1R localizer level at 3,000.

iv) [Runway 1C](#)

(1) These aircraft shall be instructed to depart BRV VOR direct LUSIE or heading 350 to join the 1C approach course. Then, descend and maintain 5,000.

(2) BARIN shall feed IADFW established on the runway 1C localizer level at 5,000.

v) Runway 1L

(1) These aircraft shall be instructed to depart BRV VOR direct CINNA or heading 350 to join the 1L approach course. Then, descend and maintain 4,000.

(2) BARIN shall feed IADFW established on the runway 1L localizer at 4,000.

vi) Handoff aircraft prior to entering IADFE or IADFW airspace.

5-7. South Operation Arrival Flow

a) BARIN-STAR arrivals:

- i) Shall be handed off from ZDC prior to FALKO at 10,000 and 250kts.
- ii) These aircraft shall be instructed "Descend via the BARIN-STAR arrival, runway 19L."
- iii) Once aircraft are abeam the airport and established on the downwind, they will be handed off to IADFE.

b) COATT-STAR arrivals:

- i) Shall be handed off from ZDC prior to FALKO at 10,000 and 250kts.
- ii) These aircraft shall be instructed to "Cross BARIN at 5,000, then depart BARIN heading 010 for vectors for the visual/ILS runway 19L."
- iii) Aircraft shall be issued a descent to 4,000 once they are established on the 010 heading.

5-8. SHD/MTV Coordination and Procedures:

MTV will coordinate those aircraft executing an instrument approach to DAA runway 14.

5-9. SHD/JRV Coordination and Procedures:

- a) FDK and GAI are CHP airports authorized through SHD.
- b) JRV shall have control direct RIC south of BRV.
- c) JRV shall have control for turn thirty degrees either side of a track south of FLUKY or shall ensure these aircraft remain clear of DEMO MOA airspace.
- d) SHD shall have control for turns towards the destination airport and for descent of arrival traffic within the confines of JRV HPASA. SHD assumes responsibility to coordinate with adjacent facilities/sectors as needed.

Section 6. IADFW

6-1. Responsibilities:

- a) IADFW has separation responsibility for arrival separation of IAD traffic on runways 1L/19R and 1C/19C final approach course.
- b) South Operation: IADFW shall cross BOYDS (19C) or BEEZY (19R) at or above 4,000. IADFE has separation responsibility from IADFW traffic.
- c) North Operation: IADFW shall cross CINNA (1L) at or above 4,000 and LUSIE (1C) at or above 5,000. IADFE has separation responsibility from IADFW traffic.
- d) Ensure data blocks are updated with the landing runway or appropriate scratchpad data prior to transferring communications to IAD Tower.
- e) Prearranged Coordination:
 - i) North Operation; TILLY may enter IADFW with an IAD departure.
 - ii) 19L/19C/19R/30 Operation: ASPER may enter IADFW with an IAD departure.

6-2. Sector Identification:

- a) Frequency: 134.200
- b) Callsign: IAD_U_APP
- c) ARTS ID: 3U

6-3. Opening the Sector:

- a) This sector should be opened if a final controller is needed. Unless IADFE is authorized to be opened, IADFE will always be combined with IADFW.
- b) During normal operations with multiple arrival controllers, IADFW is combined as follows:
 - i) North Operations - IADFW is combined with BARIN.
 - ii) South Operations - IADFW is combined with MULRR.

6-4. Combining Positions:

IADFW shall assume control of IADFE when IADFE is closed.

6-5. Airspace:

- a) [North Operations](#)
- b) [South Operations](#)

6-6. Approach Type:

IADFW shall decide what types of approach are being used for runways 19C/1C and 19R/1L.

- i) Visual approaches shall be used when the weather is VFR.
- ii) May vector arrivals to join the localizer and report the field or traffic in sight for a visual approach.

6-7. North Operation Arrival Flow:

- a) SHNON-STAR and ROYIL-STAR arrivals will be at 6,000 on the downwind heading 190.

b) BARIN-STAR and COATT-STAR arrivals will be at 6,000 on a vector to join or established on either 1C or 1L localizer.

6-8. South Operation Arrival Flow:

a) SHNON-STAR and ROYIL-STAR arrivals will be at 6,000 on the downwind heading 010.

b) HYPER-STAR and DELRO-STAR arrivals will be at either 5,000 (1C) or 4,000 (1L) on a vector to join or established on either 19C or 19R.

6-9. Low Level Traffic:

a) Final control, unless otherwise coordinated, shall not descend turbojet aircraft established on the downwind below 3,000.

Section 7. IADFE

7-1. Responsibilities:

- a) IADFE is responsible for arrival separation of IAD traffic on the runway 1R/19L final approach course.
- b) South Operation; IADFW shall cross IZUMI at or above 3,000. IADFE has separation responsibility from IADFW traffic.
- c) North Operation; IADFW shall cross MOSBY at or above 3,000. IADFE has separation responsibility from IADFW traffic.
- d) Ensure data blocks are updated with the landing runway or appropriate scratch pad data prior to transferring communications to IAD Tower.

7-2. Sector Identification:

- a) Frequency: 125.800
- b) Callsign: IAD_X_APP
- c) ARTS ID: 3X

7-3. Opening the Sector:

IADFE should only be opened when authorized by the ZDC ATM, ZDC DATM, or PCT Operations Manager in Charge.

7-4. Combining Positions:

IADFE shall assume control of IADFW when IADFW is closed.

7-5. Airspace:

- a) [North Operations](#)
- b) [South Operations](#)

7-6. Approach Type:

IADFE shall decide what type of approach is being used for runway 19L/1R.

- i) Visual approaches shall be used when the weather is VFR.
- ii) May vector arrivals to join the localizer and report the field or traffic in sight for a visual approach.

7-7. Initial Contact for Arrivals from the East:

- a) When IAD is in South Operations, IADFE is the initial contact position for traffic landing IAD from the MTV area.
- b) When IAD is in North Operations, IADFE is the initial contact position for traffic landing IAD from MTV. In these instances, IADFE shall ensure that required advanced approach information is transmitted.

7-8. North Operation Arrival Flow:

- a) BARIN-STAR and COATT-STAR arrivals will at 3,000 on a vector to join or established on the 1R localizer.
- b) HYPER-STAR and DELRO-STAR arrivals will be at 4,000 on the downwind heading 190.

7-9. South Operation Arrival Flow:

- a) BARIN-STAR and COATT-STAR arrivals will be at 4,000 on the downwind heading 010.
- b) HYPER-STAR and DELRO-STAR arrivals will be at 3,000-6,000 on a vector to join or established on the 19L localizer.

7-10. SHD/MTV Coordination and Procedures:

MTV will coordinate aircraft executing an instrument approach to DAA runway 14.

7-11. SHD/CHP Coordination and Procedures (IAD South Operations):

- a) CHP shall coordinate for instrument approaches to GAI as follows:
 - i) VOR RWY 14: A verbal or automated handoff between areas constitutes coordination for SHD to protect the appropriate airspace.
 - ii) RNAV (GPS) RWY 14: Coordinate verbally at all times.

- b) CHP shall have control of IAD departure traffic for turns towards BAL 35NM west of BAL.
- c) CHP shall have control of IAD and SHD satellite departure traffic landing BWI and CHP satellites for turns towards BAL on contact.
- d) CHP west satellites (GAI, FDK, DMW, 2W2); Transfer of communication constitutes control for descent and control for turns towards the arrival airport.
- e) The point of entry for VFR aircraft entering SHD/CHP portion of Class B airspace will be northwest of GAI airport clear of MTV airspace.
 - i) SHD shall handoff aircraft to WOOLY (128.7).
 - ii) IAD North; CHP shall handoff VFR aircraft 6,000 and below to MULRR.

Section 8. RCOLA

8-1. Responsibilities:

RCOLA provides final approach services to Washington-Dulles, and is only opened when Washington-Dulles is using runway 12 for arrivals.

8-2. Sector Identification:

- a) Frequency: 135.770
- b) Callsign: IAD_R_APP
- c) ARTS ID: 3R

8-3. Opening the Sector:

RCOLA should only be opened when IAD is in a South Operation and landing runway 12, and must be authorized by the ZDC ATM, ZDC DATM, or PCT Operations Manager in Charge.

- i) When IAD is in South Operations, this sector is normally combined with MANNE.

8-4. Airspace:

- a) [South Operations](#)

8-5. Approach Type:

RCOLA shall decide what type of approach is being used for runway 12.

- i) Visual approaches shall be used when the weather is VFR.
- ii) May vector arrivals to join the localizer and report the field or traffic in sight for a visual approach.

Section 9. BRSTO

9-1. Responsibilities:

- a) Assume responsibility for all Manassas (KHEF) departure and arrival traffic.
- b) Be responsible for all point outs for Manassas arrivals.
- c) Work traffic into and out of 2VA9, CJR, and W66.

9-2. Sector Identification:

- a) Frequency: 120.820
- b) Callsign: IAD_O_APP
- c) ARTS ID: 30

9-3. Delegating BRSTO:

When BRSTO is not staffed, the BRSTO airspace and responsibilities are delegated to BARIN.

9-4. Opening the Sector:

This sector should only be opened when authorized by the ZDC ATM, ZDC DATM, or PCT Operations Manager in Charge.

9-5. Airspace:

- a) [North Operations](#)
- b) [South Operations](#)

9-6. SHD/JRV Coordination and Procedures:

- a) FDK and GAI are CHP airports authorized though SHD.
- b) JRV shall have control direct RIC south of BRV.
- c) JRV shall have control for turns thirty (30) degrees either side of a track south of FLUKY or shall ensure these aircraft remain clear of DEMO MOA airspace.
- d) SHD shall have control for turns towards the destination airport and for descent of arrival traffic within the confines of HRV HPASA. SHD assumes responsibility to coordinate with adjacent facilities/sectors as needed.

Section 10. BINNS

10-1. Responsibilities:

BINNS sequences Washington-Dulles arrivals on the HYPER-STAR, DELRO-STAR, PSB-STAR, SEG-STAR, PRTZL-STAR, LEGGO-STAR, and arrivals from the north.

10-2. Sector Identification:

- a) Frequency: 133.000
- b) Callsign: IAD_V_APP
- c) ARTS ID: 3V

10-3. Opening the Sector:

BINNS should only be opened when authorized by the ZDC ATM, ZDC DATM, or PCT Operations Manager in Charge.

10-4. Airspace:

- a) North Operations
- b) South Operations

10-5. Combining Positions:

BINNS is most normally combined with MULRR when MULRR is open.

10-6. Airspace:

- a) North and South Operations

10-7. Procedures:

- a) Jets: BINNS shall receive aircraft from ZNY descending to cross MULRR at 10,000 and 250kts. On initial contact, advise aircraft of their arrival runway after coordinating with IADFE. Ensure that scratchpads are correct and complete.
- b) Props: BINNS shall receive aircraft from ZNY descending to cross MULRR at 8,000. On initial contact, advise aircraft of their arrival runway after coordinating with IADFE. Ensure that scratchpads are correct and complete.
- c) Hand off to MULRR no greater than 10 nm from MULRR.

Section 11. ASPER

11-1. Responsibilities:

ASPER is the initial departure controller for Washington-Dulles departures to the North and East.

11-2. Sector Identification:

- a) Frequency: 125.050
- b) Callsign: IAD_A_DEP
- c) ARTS ID: 3A

11-3. Opening the Sector:

ASPER is the primary departure sector and must be opened first.

11-4. Airspace:

- a) [North Operations](#)
- b) [South Operations](#)

11-5. Combining Positions:

ASPER shall assume control of TILLY when TILLY is closed.

11-6. Vectoring Departures:

- a) TILLY is responsible for separating departures from arrivals on the SHNON-STAR, ROYIL-STAR, ELDEE-STAR, and WZRDD-STAR.
- b) Vector departures direct to a fix on the route within PCT airspace or on a radar vector to join J518/J211/J220/227 within the lateral confines of HGR ZDC airspace.
- c) After the handoff to BUFFR is accepted and prior to frequency change, climb the aircraft to 11,000 when the aircraft is within BUFFR airspace. BUFFR has control in ASPER's airspace for turns up to 45 degrees left or right on aircraft that are handed off from ASPER provided that the aircraft are within the lateral confines of BUFFR's airspace.
- d) Same route aircraft shall be in-trail.
- e) Departure controllers shall not assign an aircraft departing IAD a heading that will turn back towards the departure runway centerline until the aircraft is five (5) NM from IAD or is leaving 3,000.
- f) Pay attention to arrivals on the west downwind for runways 1L/19R and 1C/19C at 6,000. ASPER is responsible for separating departures from these arrivals. An initial climb to 5,000 may be required for separation until clear of arrival traffic.
- g) [Assign MRB departures direct MRB.](#)

11-7. North Operation Departure Flow:

- a) MRB, BUFFR, JERES departure gates:
 - i) Vector aircraft west of the extended runway centerline on a 340-360 heading until 5nm from IAD.
 - ii) Vector departures to join their route and clear on course.
 - iii) Climb to 11,000 and handoff to BUFFR prior to 11,000.
- b) SWANN, PALEO, DAILY departure gates:

- i) Vector aircraft west of the extended runway centerline on a 340-360 heading until 5nm from IAD.
- ii) Turn departures to the northeast on a 060-070 heading, then eastbound on a 110 heading over KGAI.
- iii) Climb to 10,000 and handoff to KRANT. **Be sure the aircraft will reach 10,000 prior to communications change.**

c) WOOLY, EMI departure gates:

- i) Vector aircraft west of the extended runway centerline on a 340-360 heading until 5nm from IAD.
- ii) Turn departures to the northeast on a 060-070 heading towards WOOLY.
- iii) Climb departures requesting at or above 9,000 to 9,000 and hand off to WOOLY.
- iv) Climb all other departures to 7,000 and handoff to WOOLY.

11-8. South Operation Departure Flow:

a) MRB, BUFR, JERES departure gates:

- i) Turn departures northbound on a 350-360 heading. Be sure these departures are above any runway 12 arrivals.
- ii) Vector departures to join their route and clear on course.
- iii) Climb to 11,000 and handoff to BUFR prior to 11,000.

b) SWANN, PALEO, DAILY departure gates:

- i) Turn departures northbound on a 350-360 heading. Be sure these departures are above any runway 12 arrivals.
- ii) Turn departures to the northeast on a 060-070 heading, then eastbound on a 110 heading over KGAI.
- iii) Climb to 10,000 and handoff to KRANT. **Be sure the aircraft will reach 10,000 prior to communications change.**

c) WOOLY, EMI departure gates:

- i) Turn departures northbound on a 350-360 heading. Be sure these departures are above any runway 12 arrivals.
- ii) Turn departures to the northeast on a 060-070 heading towards WOOLY.
- iii) Climb departures requesting at or above 9,000 to 9,000 and hand off to WOOLY.
- iv) Climb all other departures to 7,000 and handoff to WOOLY.

11-9. Pre-Arranged Coordination Procedures:

a) Prearranged coordination procedures are in effect unless cancelled. Prearranged coordination procedures are approved for the following positions in the following configurations:

- i) ASPER may enter MANNE airspace with an IAD departure during a north operation.
- ii) ASPER may enter RCOLA airspace with an IAD departure during a south operation.

- iii) ASPER may enter IADFW with an IAD departure during a 19L/19C/19R/30 operation.
- iv) ASPER may enter LUCKE with an IAD departure when the JYO shelf is delegated to LUCKE.
- v) TILLY may enter ASPER airspace south of the KEWPY box with IAD departures in a south operation.

11-10. Coordination of JYO and HEF Departures:

The departure controller shall provide a point out to local control on HEF/JYO operations that will impact IAD airport departures.

11-11. Simultaneous Parallel Departures:

When IAD is departing the parallel runways simultaneously, the departure controller shall not turn the runway 1R, 19L departure prior to 5 DME from the airport.

11-12. ASPER, IAD North Operations:

- a) Handoff east through Southeast-bound VFR departures to MULRR at 2,000.
- b) Handoff or point out IFR aircraft departing IAD for DCA/ADW to MULRR. If handed off, leave aircraft on runway heading.
- c) ASPER authorizes TILLY control of aircraft once established within the confines of the MANNE box.

11-13. SHD/CHP Coordination and Procedures:

- a) CHP shall have control of IAD departure traffic for turns towards BAL 35NM west of BAL.
- b) BUFFR has control in ASPER's airspace for turns to the left on contact and control for turns to the right leaving 10,000 on an aircraft handed off from ASPER.

11-14. Enroute Traffic:

- a) Control enroute aircraft via MANNE arrival when IAD is in a South and 19L/19C/19R/30 operation.
- b) In a 19L/19C/19R/30 operation, ASPER shall advise TILLY/ASPER/ if DCA prop arrivals are descending below 7,000.
- c) Aircraft arriving in the MTV area will be instructed to proceed direct AML, then direct DCA.

Section 12. TILLY

12-1. Responsibilities:

TILLY is the initial departure controller for Washington-Dulles departures to the South and West.

12-2. Sector Identification:

- a) Frequency: 126.650
- b) Callsign: IAD_Q_DEP
- c) ARTS ID: 3Q

12-3. Opening the Sector:

TILLY may only be opened if MANNE, ASPER, and IAD Tower are already opened.

12-4. Airspace:

- a) [North Operations](#)
- b) [South Operations](#)

12-5. Vectoring Departures:

- a) TILLY is responsible for separating departures from arrivals on the SHNON-STAR, ROYIL-STAR, ELDEE-STAR, and WZRDD-STAR.
- b) Have aircraft direct to a fix on the route or radar vectors to join the route within PCT airspace. When the handoff to LURAY is accepted and the aircraft is clear of the lateral confines of the [KEWPY](#) box, climb the aircraft to 11,000 prior to frequency change. LURAY has control in TILLY's airspace for turns up to 45 degrees left or right on aircraft that are handed off from TILLY provided that the aircraft are within the lateral confines of LURAY's airspace.
- c) Same route aircraft shall be in-trail.
- d) Departure controllers shall not assign an aircraft departing IAD a heading that will turn back towards the departure runway centerline until the aircraft is five (5) NM from IAD or is leaving 3,000.
- e) Pay attention to arrivals on the west downwind for runways 1L/19R and 1C/19C at 6,000. ASPER is responsible for separating departures from these arrivals. An initial climb to 5,000 may be required for separation until clear of arrival traffic.
- f) [Assign CSN departures direct CSN.](#)

12-6. North Operation Departure Flow

- a) FLUKY, HAFNR, GVE departure gates:
 - i) Vector departures to join their route and clear on course.
 - ii) Climb departures to 10,000 and handoff to FLUKY.
- b) LDN (J134 and V144) and AML/BLUES (J149) departure gates:
 - i) Vector departures to join their route and clear on course.
 - ii) Climb departures to [12,000](#) and handoff to LURAY.

12-7. South Operation Departure Flow:

- a) FLUKY, HAFNR, GVE departure gates:

- i) Vector aircraft west of the extended runway centerline on a 200-220 heading until 5nm from IAD.
- ii) Vector departures to join their route and clear on course.
- iii) Climb departures to 10,000 and handoff to FLUKY.

b) LDN (J134 and V144) and AML/BLUES (J149) departure gates:

- i) Vector aircraft west of the extended runway centerline on a 200-220 heading until 5nm from IAD.
- ii) Vector departures to join their route and clear on course.
- iii) Climb departures to 12,000 and handoff to LURAY.

12-8. Prearranged Coordination Procedures:

Prearranged coordination procedures are in effect unless cancelled. Prearranged coordination procedures are approved for the following positions in the following configurations:

- a) TILLY may enter IADFW airspace with IAD departures during a north operation.
- b) TILLY may enter MANNE airspace with IAD departures. MANNE shall advise TILLY if DCA prop arrivals are descending below 7,000.
- c) TILLY may enter ASPER airspace south of the KEWPY box with IAD departures in a south operation.

12-9. Coordination of JYO Departures:

The departure controller shall provide a pointout to local control on JYO operations that will impact IAD airport departures.

12-10. Simultaneous Parallel Departures:

When IAD is departing the parallel runways simultaneously, the departure controller shall not turn the runway 1R/19L departure prior to 5 DME from the airport.

12-11. TILLY, IAD North Operations:

When IAD is in a north operation, TILLY has control of southbound aircraft in the ASPER portion of the MANNE box.

12-12. TILLY, IAD South Operations:

- a) Handoff Southeast through Northeast bound VFR departures to BARIN sector at 2,000.
- b) Handoff or point out IFR aircraft departing IAD for DCA/ADW to BARIN. If handed off, leave the aircraft on runway heading.

Section 13. IAD Simultaneous Instrument Arrivals

13-1. General:

- a) These procedures allow IADFE and IADFW to operate independantly of each other when conducting SIMULS at IAD.
- b) The initial approach controller (MANNE, MULRR, BARIN) shall issue the approach and runway to expect.
- c) IADFW shall ensure separation between pullout aircraft and aircraft on approach to JYO and HEF.
- d) In a south operation, coordinate with CHP for acquisition of the southern portion of the FDK shelf at 4,000.

13-2. IADFE and IADFW shall:

- a) Assume responsibility for lateral and longitudinal separation for aircraft when the following conditions have been met:

- i) The aircraft is established on the localizer.
- ii) The aircraft is cleared for the approach.

b) Pullout aircraft:

- i) Shall not be issued a turn which exceeds 90 degrees away from the NTZ (Non-Transgression Zone) without coordination.
- ii) Assign runway 1R/19L pullouts 2,000
- iii) Assign runway 1C/19C pullouts 3,000
- iv) Assign runway 1L/19R pullouts 5,000.
- v) IADMW (Monitor West) shall point out a runway 19C pullout to ASPER immediately if the pullout occurs inside of a 10 mile final.

13-3. North Operation Arrival Feeds:

- a) MULRR shall feed IADFE on the east downwind at 3,000.
- b) MANNE shall feed IADFW on the west downwind.
 - i) MANNE shall feed runway 1C at 5,000.
 - ii) MANNE shall feed runway 1L at 4,000.

13-4. South Operation Arrival Feeds:

- a) MULRR shall feed IADFE established on the runway 19L localizer at 4,000.
- b) MULRR shall feed IADFW established on the runway 19C localizer at 5,000.
- c) MULRR shall feed IADFW established on the runway 19R localizer at 3,000.
- d) IADFW shall not descend below 5,000 prior to HOOSR.
- e) IADFW shall point out approaches to JYO airport to IADMW.

13-5 IADFE and IADFW shall:

- a) Ensure vertical separation is established and maintained until aircraft are switched to the tower.
- b) Provide the appropriate final approach in-trail spacing.
- c) Transfer commucations to the tower prior to the FAF.
- d) Ensure separation between aircraft on final approach and the downwind will exist in the event of a pullout.

