

**Potomac Consolidated TRACON: Shenandoah Area (SHD)**

- 1) **Disclaimer:** The information contained on all pages of this website is to be used for flight simulation purposes only on the VATSIM network. It is not intended nor should it be used for real world navigation. This site is not affiliated with the FAA, the actual Potomac TRACON or any governing aviation body. All content contained herein is approved only for use on the VATSIM network.
- 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.
- 3) **Scope of Responsibilities:** The Shenandoah area is responsible for arrivals and departures to Washington-Dulles Airport (KIAD) and over flights to and from Washington-National Airport (KDCA) and Baltimore-Washington Airport (KBWI). The Shenandoah area also provides services to Manassas Regional (KHEF), Leesburg Executive (KJYO), and Eastern WV Regional (KMRB) airports.
- 4) **Shenandoah Area Sectors / Positions:**
- a) 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	120.820	3O	O	IAD_O_APP	IAD_3O_APP	PCT_3O
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

- b) 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_DEP	PCT_3A
TILLY	126.650	3Q	Q	IAD_Q_DEP	IAD_3Q_DEP	PCT_3Q

- 5) **Order for Opening Sectors:**
- a) When operating at minimal staffing and only MANNE and ASPER are open, use the following callsigns:
- i) MANNE shall use IAD\_APP as the primary callsign and IAD\_N\_APP in relief.
  - ii) ASPER shall use IAD\_DEP as the primary callsign and IAD\_A\_DEP in relief
- b) Additional Arrival Sectors may be opened as needed, in the following order, without prior permission:

**(1) North Operations**

**(a) BARIN**

Once BARIN is opened:

- (i) MANNE assumes control of MULRR.
- (ii) BARIN assumes control of IADFW.

**(2) South Operations**

*For Flight Simulation use only.*

- (a) MULRR
  - Once MULRR is opened:
    - (i) MANNE assumes control of BARIN.
    - (ii) MULRR assumes control of IADFW.

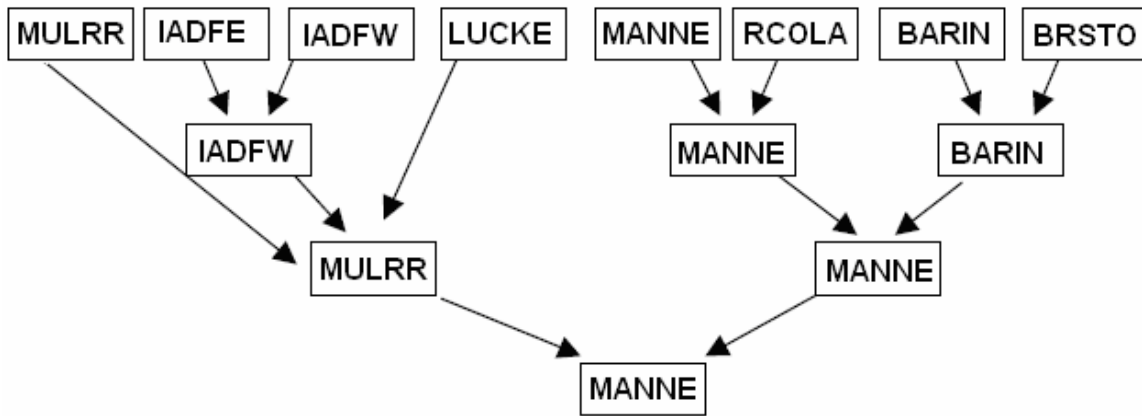
- c) Additional Departure Sectors may be opened as needed, in the following order, without prior permission:
  - (1) TILLY

**6) Combining Positions:**

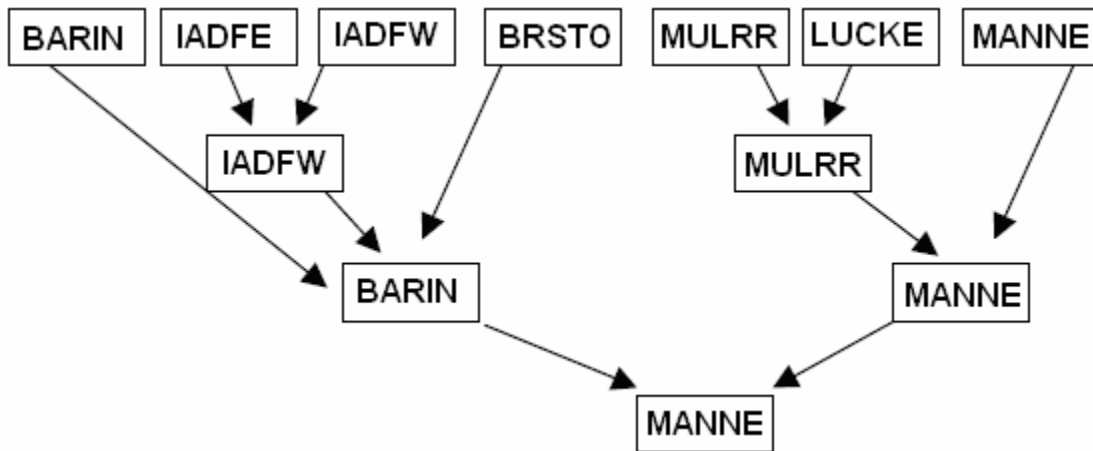
SHD area positions are normally combined as indicated in the following diagram.

**a) Arrival Sectors**

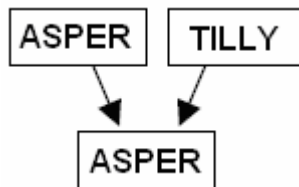
**i) South Operations**



**ii) North Operations**



**b) Departure Sectors**



### Radar Team Responsibilities

#### 1) Position Responsibilities:

- a) Unless otherwise coordinated, the controller receiving a handoff from another SHD Area position shall have control within the transferring controller's airspace for the following:
- IAD Arrivals – Turns toward receiving position's boundary, descent, and speed.
  - IAD Departures – Climbs and turns toward receiving position's boundary.

#### 2) Holding Aircraft:

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

- \*BUBBI – Hold West, right turns
- \*MANNE – Hold Northwest, left turns
- CSN – Hold Northeast on the 035 radial, right turns (departures)
- CSN – Hold Southwest on V140, left turns (arrivals)
- \*DRUZZ – Hold West, left turns
- \*DOCCS – Hold Southwest, right turns
- RUANE – Hold West, right turns
- BUFFR – Hold East, left turns, one min/10 mile legs
- \*BRV – Hold south of V155, left turns. Must coordinate with ZDC Azalea Sector for airspace at 10,000 feet and JRV Area for airspace at 9,000 feet.

(\* indicates published holding patterns)

- 3) **Satellite Departure** 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 Operations</u>	<u>IAD South Operations</u>	<u>LUCKE Open</u>
JYO	Rwy 17: Turn right, direct MRB, maintain 3,000 until reaching 20 DME SE of MRB, maintain 4,000. (Note: RNAV a/c turn right direct STILL, maintain 3000.)	ASPER	IADFW**	
	Rwy 35: Turn left, direct MRB, maintain 3,000 until reaching 20 DME SE of MRB, maintain 4,000. (Note: RNAV a/c proceed direct STILL, maintain 3000.)	ASPER	IADFW**	
HEF N	Cleared via ARSNL DP	BRSTO	BRSTO	
HEF S	Cleared via 230 heading, maintain 2,000	BRSTO	BRSTO	
MRB	Cleared via MRB VOR, maintain 3,000	MULRR	N/A	LUCKE
OKV	Cleared via MRB VOR, maintain 4,000	MANNE	MANNE	LUCKE
	or Cleared via LDN VOR, maintain 6,000	MANNE	MANNE	LUCKE
	or Cleared via COGAN NDB, maintain 4,000	MANNE	MANNE	LUCKE
NYG	Cleared via BRV VOR, maintain 3,000	BARIN	BARIN	
EZF	Cleared via BRV VOR, maintain 3,000	BARIN	BARIN	
2VG2	Cleared via COGAN NDB, maintain 4,000	MANNE*	MANNE*	LUCKE *
CRJ	Cleared via CSN VOR, maintain 3,000	BARIN	BARIN	
W66	Cleared via CSN VOR, maintain 3,000	BARIN	BARIN	
2VA9	Cleared via CSN VOR, maintain 4,000	BARIN	BARIN	
FRR	Cleared via COGAN NDB, maintain 4,000	MANNE	MANNE	LUCKE
RMN	Cleared via BRV VOR, maintain 3,000	BARIN	BARIN	

\* Point out required to ASPER.

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

**4) Temporary Altitudes and Scratchpad**

Note: Scratchpad and Temporary Altitude information is not required if all arrival sectors are combined together and all departure sectors are combined together.

**a) STAR Information:**

- i) 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.

<u>STAR</u>	<u>Scratchpad Entry</u>
BARIN-STAR	"bar"
HYPER-STAR	"hyp"
SHNON-STAR	"shn"

- ii) For Non-RNAV arrivals, STAR information shall not be entered into the scratchpad.

**b) 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 into the temporary altitude field when aircraft are being descended within the TRACON. Clear all altitudes once approach clearance is 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.

- c) **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. If using the primary approach type and primary arrival runway for the airport or the runway for direction of flight, no scratchpad information is required.

<u>Runway</u>	<u>Scratchpad Entry</u>	
	<u>ILS Approach</u>	<u>Visual Approach</u>
1R	i1r	v1r
1C	i1C	v1C
19C	i9r	v9r
19L	i9l	v9l
12	i12	v12

**Sector: MANNE****1) Responsibilities:**

- a) MANNE is feeder arrival sector which is primarily responsible for sequencing Washington-Dulles arrivals on the SHNON-STAR, ROYIL-STAR and arrivals from the West.
- b) This sector also sequences Washington-National prop arrivals.

**2) Sector Identification:**

- a) Frequency: 120.450
- b) Callsign: IAD\_N\_APP
- c) ARTS ID: 3N

**3) Opening the Sector:**

- a) This is the primary arrival sector and must be opened first.

**4) Airspace:**

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

**5) Combining Positions:** This sector 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

**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.**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 1C"
  - iii) Once aircraft have departed ELISN they 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" and then instructed to "Depart DARIC heading 190."
  - iii) Once aircraft have departed DARIC and are established on the downwind they will be handed off to IADFW.
- c) All Other Arrivals:
  - i) Vector aircraft onto a left downwind for Runway 1C to pass the airport at 6,000 feet or as directed by IADFW.

**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..."

- iii) Once aircraft have departed ELISN they 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" and then instructed to "Depart DARIC heading 010."
    - iii) Once aircraft have departed DARIC and are established on the downwind they will be handed off to IADFW.
  - c) All Other Arrivals:
    - i) Vector aircraft onto a right downwind for Runway 19C to pass the airport at 6,000 feet or as directed by IADFW.
- 9) Required Coordination**
- a) North Operation
    - i) MANNE shall advise TILLY/ASPER if DCA prop arrivals are descending below 7,000 feet.
  - b) South Operation
    - i) Release the "12 Final" airspace when RCOLA position is opened
- 10) 19L/19C/30 Operations**      MANNE may enter MULRR airspace with an IAD arrival

**Sector: MULRR****1) Responsibilities:**

- a) MULRR is a feeder arrival sector for Washington-Dulles arrivals on the HYPER-STAR, DELRO-STAR, PSB-STAR, LEGGO-STAR, PRTZL-STAR and arrivals from the North and Northeast.

**2) Sector Identification:**

- a) Frequency: 126.100
- b) Callsign: IAD\_M\_APP
- c) ARTS ID: 3M

**3) Opening the Sector:** May 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: When IAD is in North Operations, this sector is combined with MANNE
- ii) South Operations: When IAD is in South Operations, IADFW and IADFE are combined with MULRR, unless IADFW is opened.

**4) Airspace:**

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

**5) Combining Positions:** This sector shall assume control for the following sectors when they are closed.

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

**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.**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 HYPER-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 feet or as directed by IADFE.

**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 shall be instructed to "Depart MULRR heading 220" for vectors to join the approach course.
  - iv) A descent to 5,000 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 their airspace and position the aircraft on a left downwind west of JYO at 5,000 feet.
- 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 toward BAL 35NM west of BAL.
  - c) CHP shall have control of IAD and SHD satellite departure traffic landing BWI and CHP satellites for turns toward 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 128.700
    - ii) IAD North. CHP shall handoff VFR aircraft 6,000 feet and below to MULRR.
- 10) Northwest Bound Departures** MULRR shall hand off aircraft requesting above 10,000 feet over V214/V44/V8/ELG to BUFFR climbing to 10,000 feet. BUFFR will have control for climb on initial contact and advise MULRR if there will be any delay in climbing out of 10,000 feet.
- 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 operating, on a traffic permitting basis.

**Sector: BARIN****1) Responsibilities:**

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

**2) Sector Identification:**

- a) Frequency: 124.650
- b) Callsign: IAD\_B\_APP
- c) ARTS ID: 3B

**3) Opening the Sector:**

- a) May only be opened when IAD is in a North Operation unless authorized by the ZDC ATM, ZDC DATM, or PCT Operations Manager in Charge.
- b) North Operations: When IAD is in North Operations, IADFW and IADFE are combined with BARIN unless IADFW is opened.
- c) South Operations: When IAD is in South Operations, this sector is normally combined with MANNE.

**4) Airspace:**

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

**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.**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 for vectors to join the Runway 1R approach course.
    - (2) BARIN shall feed IADFE established on the Runway 1R localizer level at 3,000 feet.
  - iv) Runway 1C
    - (1) These aircraft shall be descended to 6,000 on initial contact and depart BRV on a 340 heading to join the Runway 1C approach course.
    - (2) BARIN shall feed aircraft to IADFW established on the Runway 1C localizer level at 6,000 feet.
  - v) Handoff aircraft prior to entering IADFE or IADFW airspace.

**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 to "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"
  - iii) Then instructed to depart BARIN heading 010 for vectors onto the downwind leg for runway 19L.
  - iv) Aircraft shall be issued a descent to 4,000 once they are established on the 010 heading.

- 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 left downwind for Runway 19L to pass the airport at 4,000 feet or as directed by IADFE.
- 8) **SHD/MTV Coordination and Procedures** MTV will coordinate those aircraft executing an instrument approach to DAA Runway 14.
- 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 turns 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 toward 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.

**Sector: IADFW****1) Responsibilities:**

- a) IADFW has separation responsibility for arrival separation of IAD traffic on the Runway 1C/19C final approach course.
- b) South Operation. IADFW shall cross BOYDS at or above 4000. IADFE has separation responsibility from IADFW traffic.
- c) North Operation. IADFW shall cross ERACE at or above 4000. 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.
- e) Prearranged Coordination.
  - i) North Operation. TILLY may enter IADFW with an IAD departure.
  - ii) 19L/19C/30 Operation: ASPER may enter IADFW with an IAD departure.

**2) Sector Identification:**

- a) Frequency: 134.200
- b) Callsign: IAD\_U\_APP
- c) ARTS ID: 3U

**3) Opening the Sector:**

- a) This sector may 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

**4) Combining Positions:** This sector shall assume control for the following sectors when they are closed.

- a) IADFE

**5) Airspace:**

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

**6) Approach Type**

- a) IADFW shall decide what type of approach is being used for runway 19C/1C.
  - 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) 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 the 1C localizer.

**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 5,000 on a vector to join or established on the 19C localizer.

**9) Low Level Traffic**

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

**Sector: IADFE****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 BOYDS at or above 4000. IADFE has separation responsibility from IADFW traffic.
- c) North Operation. IADFW shall cross ERACE at or above 4000. 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

**2) Sector Identification:**

- a) Frequency: 125.800
- b) Callsign: IAD\_X\_APP
- c) ARTS ID: 3X

**3) Opening the Sector:**

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

**4) Airspace:**

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

**5) Approach Type**

- a) 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.

**6) Initial Contact for Arrivals from the East**

- a) When IAD is in a south operation, FE is the initial contact position for traffic landing IAD from the MTV area.
- b) When IAD is in a north operation, FE is the initial contact position for traffic landing IAD from MTV. In these instances, FE shall ensure that required advance approach information is transmitted.

**7) North Operation Arrival Flow**

- a) BARIN-STAR and COATT-STAR arrivals will be 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

**8) 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 5,000 on a vector to join or established on the 19L localizer

**9) SHD/MTV Coordination and Procedures**

- a) MTV will coordinate those aircraft executing an instrument approach to DAA Runway 14.

**12) 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 toward BAL 35NM west of BAL.
- c)** CHP shall have control of IAD and SHD satellite departure traffic landing BWI and CHP satellites for turns toward 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 128.700
  - ii)** IAD North. CHP shall handoff VFR aircraft 6,000 feet and below to IADFE.

**Sector: RCOLA****1) Responsibilities:**

- a) Provides final approach services to Washington-Dulles.
- b) This sector is only used when Washington-Dulles is using Runway 12 for arrivals.

**2) Sector Identification:**

- a) Frequency: 135.770
- b) Callsign: IAD\_R\_APP
- c) ARTS ID: 3R

**3) Opening the Sector:**

- a) May 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) North Operations: Not utilized when IAD is in a North Operation
  - ii) South Operations: When IAD is in South Operations, this sector is normally combined with MANNE.

**4) Airspace:**

- a) North Operations: Not utilized when IAD is in a North Operation
- b) [South Operations](#)

**5) Approach Type**

- a) 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.

**Sector: LUCKE****1) Responsibilities:**

- a) Martinsburg (MRB): Provide IFR separation to VFR practice approaches at MRB when MRB Tower is operating.
- b) Leesburg (JYO): When conducting approaches to JYO, make all point outs to affected positions. Additionally, coordinate when the approach is terminated.
- c) Upperville (2VG2): When conducting approaches to 2VG2, make all point outs to affected positions. Coordinate when the approach is terminated.
- d) Unless otherwise coordinated, LUCKE shall, after receiving an intra-facility handoff, have control for turns and descent towards LUCKE airspace, within the transferring controller's airspace.
- e) Prearranged Coordination: In a 19L/19C/30 operation, ASPER may enter LUCKE with an IAD departure when JYO shelf is delegated to LUCKE

**2) Sector Identification:**

- a) Frequency: 126.820
- b) Callsign: IAD\_Z\_APP
- c) ARTS ID: 3Z

**3) Delegating LUKE:** When LUCKE is not staffed, the LUCKE airspace and responsibilities are delegated to MULRR.**4) Opening the Sector:** This sector may only be opened when authorized by the ZDC ATM, ZDC DATM, or PCT Operations Manager in Charge.**5) Airspace:**

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

**Sector: BRSTO****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 2VA9, CJR, and W66.

**2) Sector Identification:**

- a) Frequency: 120.820
- b) Callsign: IAD\_O\_APP
- c) ARTS ID: 30

**3) Delegating BRSTO:**

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

**4) Opening the Sector:** This sector may only be opened when authorized by the ZDC ATM, ZDC DATM, or PCT Operations Manager in Charge.**5) Airspace:**

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

**6) 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 turns 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 toward 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.

**Sector: ASPER****1) Responsibilities:**

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

**2) Sector Identification:**

- a) Frequency: 125.050
- b) Callsign: IAD\_A\_DEP
- c) ARTS ID: 3A

- 3) **Opening the Sector:** This is the primary departure sector and must be opened first.

**4) Airspace:**

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

- 5) **Combining Positions:** This sector shall assume control of TILLY when TILLY is closed.

**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 the ASPER sector 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 NM from IAD or is leaving 3,000 feet.
- f) Pay attention to arrivals on the west downwind for Runway 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.

**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 060-080 heading and then eastbound on a 110 heading over KGAI
  - iii) Climb to 10,000 and handoff to DAILY. Be sure the aircraft will reach 10,000 prior to the handoff
- 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 060-080 heading toward WOOLY.
  - iii) Climb departures requesting at or above 9,000 to 9,000 and handoff to WOOLY
  - iv) Climb all other departures to 7,000 and handoff to WOOLY

**8) South Operation Departure Flow**

- a) MRB, BUFFR, 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 BUFFR 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 060-080 heading and then eastbound on a 110 heading over KGAI
  - iii) Climb to 10,000 and handoff to DAILY. Be sure the aircraft will reach 10,000 prior to the handoff
- 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 060-080 heading toward WOOLY.
  - iii) Climb departures requesting at or above 9,000 to 9,000 and handoff to WOOLY
  - iv) Climb all other departures to 7,000 and handoff to WOOLY

**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 airspace with an IAD departure during a 19C/19L/30 operation.
  - iv) ASPER may enter LUCKE with an IAD departure when the JYO shelf is delegated to LUCKE.

**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) 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) ASPER, IAD North Operations**

- a) Handoff east through Southeast-bound VFR departures to MULRR at 2,000 feet.
- 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.

**13) SHD/CHP Coordination and Procedures (IAD South Operations)**

- a) CHP shall have control of IAD departure traffic for turns toward BAL 35NM west of BAL.
- b) CHP shall have control of IAD and SHD satellite departure traffic landing BWI and CHP satellites for turns toward BAL on contact.
- c) CHP west satellites (GAI, FDK, DMW, 2W2). Transfer of communication constitutes control for descent and control for turns towards the arrival airport.
- d) 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 128.700
  - ii) IAD North. CHP shall handoff VFR aircraft 6,500 feet and above to ASPER.

iii) IAD South. CHP shall handoff VFR aircraft 5,500 feet and above to ASPER

**14) Enroute Traffic**

- a) Control enroute aircraft via MANNE ARRIVAL when IAD is in a south and 19L/19C/30 operation.
- b) In a 19L/19C/30 operation, ASPER shall advise TILLY/ASPER if DCA Prop arrivals are descending below 7000 feet.

**Sector: TILLY****1) Responsibilities:**

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

**2) Sector Identification:**

- a) Frequency: 126.650
- b) Callsign: IAD\_Q\_DEP
- c) ARTS ID: 3Q

- 3) **Opening the Sector:** This sector may be opened only if MANNE, ASPER, and IAD Tower are already opened.

**4) Airspace:**

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

**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 MANNE Box, climb the aircraft to 11,000 feet prior to frequency change. Same route aircraft will be in-trail. LURAY has control in TILLY's airspace for turns up to 45 degrees left or right on aircraft that are handed off from the TILLY sector provided that the aircraft are within the lateral confines of LURAY's airspace.
- c) 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 NM from IAD or is leaving 3,000 feet.
- d) Pay attention to arrivals on the west downwind for Runway 1C/19C at 6,000. TILLY is responsible for separating departures from these arrivals. An initial climb to 5,000 may be required for separation until clear of arrival traffic.

**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/GINYA J149 Departure Gate:
  - i) Vector departures to join their route and clear on course.
  - ii) Climb departures to 11,000 and handoff to LURAY.

**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/GINYA J149 Departure Gate:
  - 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 11,000 and handoff to LURAY.

**8) 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) TILLY may enter IADFW airspace with an IAD departure during a north operation.
  - ii) TILLY may enter MANNE airspace with an IAD departure during a north.
- 9) **Coordination of JYO Departures** The departure controller shall provide a point out to local control on JYO operations that will impact IAD airport departures.
- 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.
- 11) **TILLY, IAD North Operations** When IAD is in a north operation, TILLY has control of southbound aircraft in the ASPER sector's portion of the MANNE box.
- 12) **TILLY, IAD South Operations**
  - a) Handoff southeast through Northeast bound VFR departures to BARIN sector at 2,000 feet.
  - b) Handoff or point out IFR aircraft departing IAD for DCA/ADW to BARIN sector. If handed off, leave the aircraft on runway heading.

## **IAD Simultaneous Instrument Arrivals**

### **1) General**

- a) These procedures allow IADFE and IADFW to operate independently 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 feet.

### **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 without coordination.
  - ii) Assign Runway 1R pullouts 2,000 feet.
  - iii) Assign Runway 1C pullouts 3,000 feet.
  - iv) Assign Runway 19L pullouts 2,000 feet.
  - v) Assign Runway 19C pullouts 3,000 feet.
  - vi) MW shall point out a Runway 19C pullout to ASPER immediately if the pullout occurs inside of a 10 mile final.

### **3) North Operational Arrival Feeds**

- 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) IADFE shall be at or below 3000 by a point 3 miles east of the Runway 1C localizer and IADFW will intercept Runway 1C localizer at or above 4000.
- d) BARIN shall feed aircraft to IADFW established on the Runway 1C localizer level at 6,000 feet and to IADFE established on the Runway 1R localizer level at 3,000 feet.

### **4) South Operational Arrival Feeds**

- a) Casanova Feed:
  - i) IADFW shall cross BOYDS intersection at or above 4,000 feet.
  - ii) MULLR shall feed IADFW established on the Runway 19C localizer descending to 5000 feet.
  - iii) MANNE shall feed BRSTO traffic in-trail direct CSN at 6000 feet.
  - iv) BRSTO shall feed BARIN traffic in-trail direct BARIN intersection at 4000 feet.
  - v) BARIN shall feed IADFE on the east downwind at 4000 feet.
- b) Martinsburg Feed:
  - i) MANNE shall vector aircraft on a northeast-bound heading placing the aircraft between the MRB VOR and STILL at 5000 feet. Handoff to MULRR at 5000 feet.
  - ii) MULLR shall feed IADFW established on the Runway 19C localizer descending to 5000 feet.
- c) IADFE and IADFW:
  - i) IADFE shall be at or below 3000 by a point 3 miles east of the Runway 19C localizer and IADFW will intercept Runway 19C localizer at or above 4000.
  - ii) Shall ensure vertical separation is established and maintained until aircraft are switched to the tower.
  - iii) Shall provide the appropriate final approach in-trail spacing.
  - iv) Shall transfer communications to the tower prior to the FAF.

- v) Shall ensure separation between aircraft on final approach and the downwind will exist in the event of a pullout.