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DULLES ATCT SOP

Version I – Effective July 5, 2024

RECORD OF CHANGES

Initial Publication – August 4, 2014

- Initial publication of vZDC IAD ATCT SOP

February 26, 2016 (1.11 Revision)

- Added MCRAV and new PDC's

December 23, 2016 (1.20 Revision)

- General Update

January 18, 2017 (1.21 Revision)

- Added ATIS frequency
- Added gate diagram appendix
- Typo fixes
- Minor formatting changes

February 14, 2017 (1.22 Revision)

- Added altitude restrictions to nearby airports
- Minor formatting changes

February 18, 2017 (1.23 Revision)

- Added runway configuration section
- Added scratchpad entries

March 25, 2017 (1.24 Revision)

- Added reduced separation on final
- Updated departure gate table and naming system

April 2, 2017 (1.30 Revision)

- Updated to new formatting
- Updated departure gate guide
- Removed sections on ground and local control splits
- Updates to runway configurations section

July 1, 2024 (I Revision)

- Entire Publication:
 - o Formatting changes
- Chapter 1 General:

- Added standardized sections and subsections
- Chapter 2 Operations:
 - Moved the positions table to this chapter
 - Changed primary frequencies to Ground West and Local North
 - Added 2-2-1 with more information on using standardized runway configurations
 - Added runway 1R and wordage on usage IAW operational advantage in North with 30 Operations
 - Added runway 19L and wordage on usage IAW operational advantage in South with 30 Operations
 - Added criteria for landing 30 operations
 - Changed runway 19R to 19L in South Operations for departure runways
 - Added 2-2-4 with information on change in runway configuration
 - Added Section 3 regarding ASDE
 - Added Section 4 regarding SFRA operations
- Chapter 3 Clearance Delivery:
 - Added 3-1-1 establishing responsibilities
 - Added 3-1-3 referencing vTDLS
 - Added more information for VFR flight following requirements
 - Simplified departure gates with table and removed associated narratives
- Chapter 4 Ground Control:
 - Added information on runway crossings
 - Added information on runway assignment
 - Specified taxiway usage and ownership
- Chapter 5 Local Control
 - Specified heading requirements for BUNZZ and RNLDI SIDs
 - Formatted departure fixes in new table
 - Added 5-2-3 departure releases
 - Added 5-3-3 runway exiting procedures
- Chapter 6 Ramp Control
 - Added EC and Events Team as Ramp Control delegation authority
 - Added 6-1-3 responsibilities for arrivals
 - Added section 2 and subsequent subsections on different ramp areas and positions
- Appendix:
 - Added Ground Control Split Diagram
 - Updated video maps and diagrams

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Chapter 1. General

Section 1. Introduction

1-1-1. PURPOSE OF THIS ORDER

This order describes the airspace structure, procedures, and relevant control-related policy for all controllers working an operational IAD position on the VATSIM network.

1-1-2. AUDIENCE

This order applies to all vZDC controllers and any non-assigned (i.e., visiting) controller receiving training from the vZDC Training Department to work any facility or airspace delegated to vZDC.

1-1-3. WHERE TO FIND THIS ORDER

This order is available on the vZDC web site at <https://www.vzdc.org/publications/downloads> under the Publications tab.

1-1-4. WHAT THIS ORDER CANCELS

This order cancels the Washington Dulles ATCT SOP Version 1.51 document, dated as effective on August 21, 2020. This document is now the sole document outlining standard policy and procedure for IAD ATCT.

1-1-5. EXPLANATION OF CHANGES

This change introduces the new SOP formatting across the ARTCC along with updated information, diagrams, and providing clarity in certain areas not covered in the previous version.

1-1-6. DENOTATION OF CHANGES

Changes are indicated via the use of the shading tool. The changed text is highlighted in grey to indicate a change. No indication is made where text was removed from the document. Grammatical revisions and other changes to improve readability without changes in policy will not be marked.

EXAMPLE –

Changed or added text is highlighted in grey.

Chapter 2. Operations

Section 1. Operational Positions

2-1-1. ALL POSITIONS AND FREQUENCIES

TBL 2-1-1
IAD ATCT Positions & Frequencies

<u>Identifier</u>	<u>Position</u>	<u>Frequency</u>
South Area Ramp	Ramp	130.550
North Area Ramp	Ramp	119.125
Midfield Area Ramp	Ramp	129.550
Clearance	Clearance Delivery	135.700
Ground East	Ground Control	121.900
Ground North	Ground Control	123.775
Ground West	Ground Control	121.625
Local East	Local Control	120.100
Local North	Local Control	134.425
Local West	Local Control	120.250

NOTE –

Bold text is the primary frequency.

NOTE –

Ramp control shall not be utilized unless authorized by vZDC Events Coordinator.

Section 2. Runway Configurations

2-2-1. USAGE OF ESTABLISHED RUNWAY CONFIGURATIONS

It is preferred to utilize the established runway configurations as listed in 2-2-2 – 2-2-7. However, the local controller may utilize non-standard runway configurations as weather and traffic conditions permit so long as:

- a. The configuration does not negatively affect traffic flow.
- b. The configuration is deemed necessary due to weather and traffic conditions.
- c. Potomac Consolidated TRACON (PCT) is aware of the non-standard runway configuration.

2-2-2. NORTH OPERATION

Runways 1L, 1C and 1R are the primary arrival runways. Runways 1C and 1R are the primary departure runways. North and east departures should be assigned runway 1R. South and west

departures should be assigned runway 1C. This operation should only be used when the sustained wind is greater than 15 knots coming from the north.

2-2-3. NORTH WITH 30 OPERATION

Runways 1L, 1R, and 1R are the primary arrival runways. Runways 30 and 1R are the primary departure runways. All departures should be assigned runway 30 unless operational advantage can be gained utilizing runway 1R. Runway 30 departures may not be cleared for takeoff if a runway 1C arrival is within 2.27nm of the threshold or a runway 1L arrival is within 3.56 NM of the threshold. This operation should be used when the sustained wind is 15 knots or less coming from the north. This operation should only be used when the sustained wind is greater than 15 knots coming from the south.

2-2-4. SOUTH OPERATION

Runways 19L, 19C, and 19R are the primary arrival runways. Runways 19C and 19L are the primary departure runways. North and east departures should be assigned runway 19C. South and west departures should be assigned runway 19L.

2-2-5. SOUTH WITH 30 OPERATION

Runways 19L, 19C, and 19R are the primary arrival runways. Runways 30 and 19L are the primary departure runways. All departures should be assigned runway 30 unless operational advantage can be gained utilizing runway 19L. This operation should be used when the sustained wind is 15 knots or less coming from the south.

2-2-6. SOUTH WITH 12

Runway 12 is the primary arrival runway. Runways 19L and 19C are the primary departure runways. North and east departures should be assigned runway 19C. South and west departures should be assigned runway 19L. This operation should only be used when the sustained wind is greater than 20 knots and closely aligns with runway 12.

2-2-7. LANDING 30

Runway 30 is the primary arrival and departure runway. PCT shall utilize an instrument approach for runway 1R and IAD local control shall issue circling instructions for runway 30. This operation should be used when the sustained wind is greater than 25 knots and closely aligns with runway 30.

2-2-8. CHANGE IN RUNWAY CONFIGURATION

The CIC must determine the need for making any active runway changes. A routine runway change occurs when traffic and/or weather conditions are such that the change can be made with little or no degradation in service. In this instance, departures are allowed to depart from the runway originally assigned. Use the following procedures to complete a routine runway change:

- 1) Provide PCT with the last departure's identification, its estimated time of departure, and the departure runway.

- 2) Once the last aircraft departures, ensure that no other aircraft departs BWI without a release from PCT.
- 3) Ensure that departures off the new runway have received the appropriate DP and departure control frequency, as needed.
- 4) PCT shall inform the CIC when the sector reconfiguration has been completed.
- 5) Ensure the ATIS has been updated and reflects the proper status.

Section 3. Airport Surface Detection Equipment (ASDE)

2-3-1. REQUIREMENTS

Ground Control and Local Control shall ensure all aircraft operating in a movement area have transponders on.

Section 4. DC SFRA Procedures

2-4-1. PROCEDURES

DC SFRA procedures are simulated on the VATSIM network using a modified procedure. VFR departures are expected to file a DC SFRA flight plan. However, the FRZ does not impose higher requirements for operations within. Therefore, normal VFR operations, including pattern work, shall be allowed if workload permits.

REFERENCE –

VATSIM DC SFRA Procedures – vzdc.org/publications/downloads

VATSIM DC SFRA Pilot Guide – vzdc.org/publications/downloads

Chapter 3. Clearance Delivery

Section 1. Duties

3-1-1. RESPONSABILITIES

Clearance Delivery must:

- a. Formulate and issue IFR and VFR clearances to aircraft departing IAD.
- b. Review proposed flight plan information received and verify for accuracy and amend routings and altitudes, as necessary, in accordance with appropriate LOA's.

3-1-2. IFR DEPARTURE INSTRUCTIONS

All IFR departures should be assigned a departure and transition consistent with their direction of flight. If an aircraft is unable to fly a SID, they shall be assigned the CPTAL1 Departure Procedure. All IFR departures shall be issued an initial altitude of 3,000 and to expect their filed cruise altitude ten minutes after departure.

3-1-3. TOWER DATA-LINK SERVICES (VTDLs)

IAD is equipped with vTDLS to issue Pre-Departure Clearances (PDCs) to IFR aircraft.

3-1-4. VFR DEPARTURE INSTRUCTIONS

VFR aircraft requesting flight following shall have the following in their VFR flight plan prior to departure:

- a. Destination airport
- b. Aircraft type
- c. Requested VFR altitude

VFR aircraft remaining in the pattern require a squawk code assigned to them. All VFR departures shall receive a class B clearance with a restriction to maintain VFR at or below:

- a. Turbojet Aircraft – 3,000
- b. Propeller Aircraft – 2,500
- c. Helicopters – 1,300

NOTE –

VFR aircraft remaining in the pattern do not require an altitude restriction.

3-1-5. DEPARTURE FREQUENCY ASSIGNMENT

Assign departure frequencies in accordance with an aircraft's SID, departure gate, or direction of flight.

- a. East/North – ASPER (125.050)
- b. South/West – TILLY (126.650)

Section 2. Restrictions**3-2-1. ALTITUDE RESTRICTIONS**

TBL 3-2-1
IAD Altitude Restrictions

Destination	Turbojet	Turboprop/Propeller
BWI, DCA, HEF	4,000	4,000
EWR, TEB, LGA	FL210	N/A
JFK	17,000	N/A
ORF	14,000	N/A
PHL	11,000	7,000
RIC	14,000	10,000

Section 3. Departure Gates**3-3-1. GENERAL**

To standardize departure flows and ensure proper and expeditious routing of traffic, PCT uses departure exit gates for IFR Departures to destinations outside of PCT airspace. Every IFR aircraft leaving IAD must leave PCT airspace bound for one of these gates, unless coordinated otherwise.

3-3-2. HIGH ALTITUDE DEPARTURE GATES

High altitude departure gates should be utilized for aircraft filed above 10,000 feet.

NOTE –

Prop and turboprop aircraft may be routed via a low altitude gate regardless of altitude.

TBL 3-3-2

IAD High Altitude Departure Gates

<u>Gate</u>	<u>Routing/Direction</u>
BUFFR	NW
CLTCH	SW
HANEY	SW
JERES	N/NW
JDUBB	SW
MCRAY	NW
OTTTO	W
PALEO/AGARD	NE
RAMAY	W
SCRAM	SW
SWANN	NE
WHINO/COLIN	S/SE
WOOLY	NE

3-3-3. LOW ALTITUDE DEPARTURE GATES

Low altitude departure gates should be utilized for aircraft filed at or below 10,000 feet.

NOTE –

Low altitude aircraft may receive vectors to join any low altitude airway.

TBL 3-3-3

IAD Low Altitude Departure Gates

<u>Gate</u>	<u>Routing/Direction</u>
BRV	S
CSN/LDN	W/SW
EMI	N/NE
GVE	S/SW
HANEY	SW
PXT	SE
MRB	N/NW

Chapter 4. Ground Control

Section 1. Duties

4-1-1. RESPONSIBILITIES

Ground Control must:

- a. Sequence aircraft that have the same first fix or direction of departure with other aircraft.
- b. Keep runway exits clear for landing aircraft.

4-1-2. RUNWAY CROSSINGS

Blanket crossings are not approved at IAD. Ground control must verbally coordinate with local control for any aircraft that require a runway crossing.

4-1-3. RUNWAY ASSIGNMENT

When using the North with 30 or South with 30 configurations, assign all departures runway 30. If operationally advantageous, aircraft may be assigned runway 1R/19L.

In North Operation, assign runways to departure aircraft as follows:

- a. North/East bound – Runway 1R
- b. South/West bound – Runway 1C

In South Operation, assign runway to departure aircraft as follows:

- a. North/East bound – Runway 19C
- b. South/West bound – Runway 19L

NOTE –

Assigning an aircraft a non-standard runway requires coordination with local control via verbal or nonverbal methods.

Section 2. Taxiway Utilization

4-2-1. GROUND EAST

Ground East is responsible for the movement areas as depicted in Appendix A.

4-2-2. GROUND NORTH

Ground North is responsible for the movement areas as depicted in Appendix A.

4-2-3. GROUND WEST

Ground West is responsible for the movement areas as depicted in Appendix A.

4-2-4. PUSHBACK PROCEDURES

Ground control should not approve pushbacks, this responsibility falls under ramp control if online. If ramp control is not online, aircraft should be advised their pushback is at their discretion.

Chapter 5. Local Control

Section 1. Airspace Utilization

5-1-1. AIRSPACE

Local Control assumes responsibility for the airspace depicted in Appendix B at or below 2,000 feet.

5-1-2. LOCAL EAST

Local East is responsible for runway 1R/19L.

5-1-3. LOCAL NORTH

Local North is responsible for runway 1C/19C.

5-1-4. LOCAL WEST

Local West is responsible for runways 1L/19R and 12/30.

Section 2. Departure Procedures

5-2-1. DEPARTURE INSTRUCTIONS

All departures should be issued departure headings in accordance with table 5-2-1. Aircraft on the BUNZZ or RNLDI SID may be issued a heading if operational advantage will be gained.

TBL 5-2-1
Departure Headings

RWY's IN USE	DEPARTURE FIX	HEADINGS
1L, 1C, 1R, and/or 30	ASPER	300 – 010
	TILLY	245 – 300
When departing RWY 30 and SIMULS are in use, turn no further west than 280 and no further northwest than 310.		
19L, 19C, 19R and landing 12	ASPER	210 – 250
	TILLY	190 – 210
19R, 19C, 19R and/or 30	ASPER	280 – 320
	TILLY	190 – 280
When departing RWY 30 and SIMULS are in use, turn no further northwest than 300 and no further southwest than 250.		

TBL 5-2-2
Departure Fixes

ASPER	TILLY		
BUFFR	AML	GVE	MRB
JCOBY	BRV	HAFNR	OTTTO
JERES	BUNZZ	HANEY	RAMAY
MCRAV	CLTCH	JDUBB	RNDLI
PALEO	CSN	LDN	SCRAM
SWANN	FLUKY	MOL	
WOOLY			

5-2-2. LINE UP AND WAIT (LUAW)

LUAW Procedures are authorized at IAD. Such operations are generally viewed as necessary to maintain airport efficiency. Use LUAW when it is expected the aircraft will depart after conflicting traffic is clear of the runway/ intersection. Utilize good operating practices and memory aids as needed when using LUAW procedures.

- a. Landing clearances need not be withheld for traffic holding in position.

5-2-3. DEPARTURE RELEASES

IAD has blanket IFR releases unless one of the following conditions is met:

- a. There was a previous missed approach/go around and automatic departure releases have not been given back by PCT.
- b. PCT cancels automatic releases and local control must call for release.
- c. An aircraft is departing a non-standard departure runway.

When one or more of the above conditions are met, Local Control must call PCT for release stating the following information:

- a. ACID
- b. Runway and departure heading
- c. SID and transition or Initial fix

Section 3. Arrival Procedures

5-3-1. REDUCED SEPARATION MINIMA

Separation of IFR arrivals may be reduced to 2.5 NM within 10 NM of the runway on the final approach course, regardless of operation or runways in use, providing that wake turbulence is not a factor.

5-3-2. MISSED APPROACH/GO AROUND PROCEDURES

Local control shall immediately coordinate with PCT when a missed approach/go around occurs. Unless otherwise coordinated, aircraft shall be instructed to fly runway heading and maintain 2,000 feet.

- a. After a missed approach/go around automatic releases are suspended until released by PCT.
- b. Tower may re-sequence props providing the Tower ensures separation between the go around and all other pertinent traffic and does not affect the sequence of other IFR arrivals sequenced by PCT.

5-3-3. RUNWAY EXITING PROCEDURES

Once aircraft are clear of the runway, they shall be transferred to ground control unless otherwise coordinated.

Chapter 6. Ramp Control

Section 1. Duties

6-1-1. SUMMARY

Ramp Control is responsible for the non-movement area between taxiways Zulu and Juliet. Ramp Control may be split as necessary due to traffic conditions or as permitted by the vZDC Events Coordinator. Ramp Control shall only be utilized when approved by the vZDC Events Coordinator or a delegated member of the vZDC Events Team. When not being utilized, Ground Control does not assume responsibility for Ramp Control.

6-1-2. RESPONSABILITIES - DEPARTURES

Ramp Control shall:

- a. Approve pushbacks and specify tail direction
- b. Issue runway assignments
- c. Provide Ground Control departure sequencing based on departure runway and departure gate.
- d. Instruct aircraft to taxi via the appropriate taxiway and to hold short of taxiway Zulu or Juliet and to contact Ground Control.

NOTE –

Ground Control may change runway assignments as necessary.

6-1-3. RESPONSABILITIES – ARRIVALS

Ramp Control Shall:

- a. Issue taxi instructions to aircraft entering the ramp from the movement areas.
- b. Transition aircraft taxiing across the ramp and transfer communications to the appropriate ground controller.

Section 2. Ramp Utilization

6-2-1. SOUTH AREA RAMP

South Area Ramp is responsible for taxiways E and F and their associated gates between taxiways J and Z.

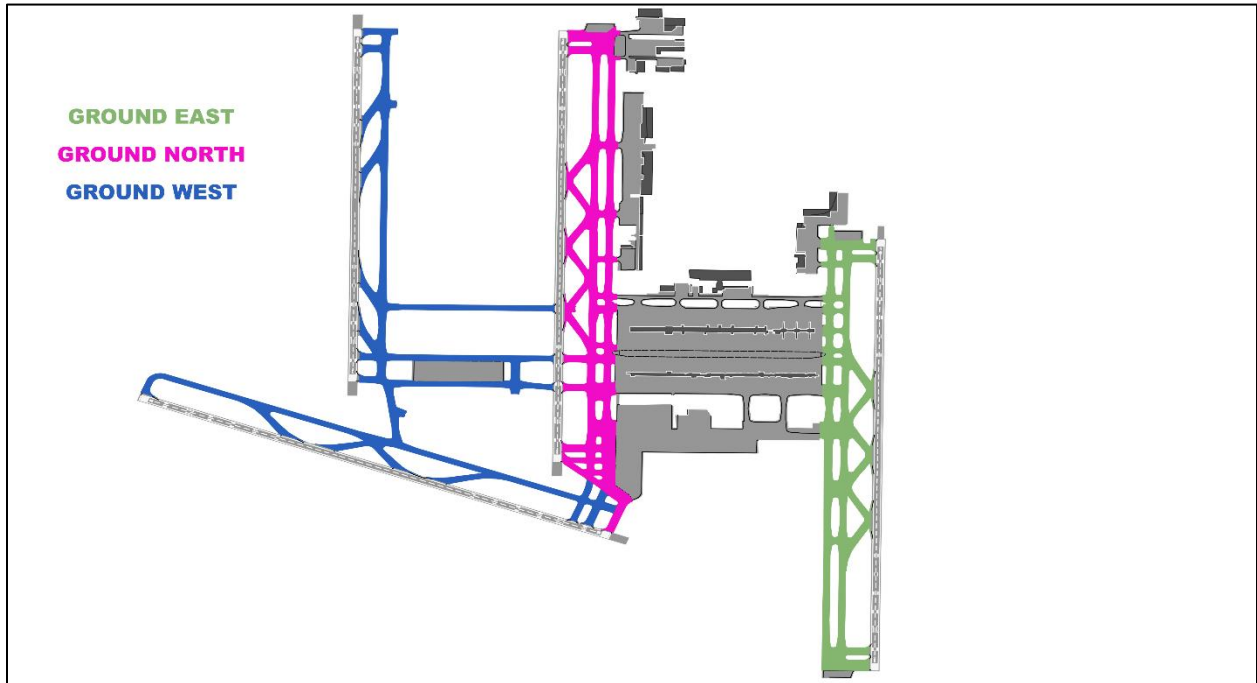
6-2-2. NORTH AREA RAMP

North Area Ramp is responsible for taxiways A and B and their associated gates between taxiways J and Z.

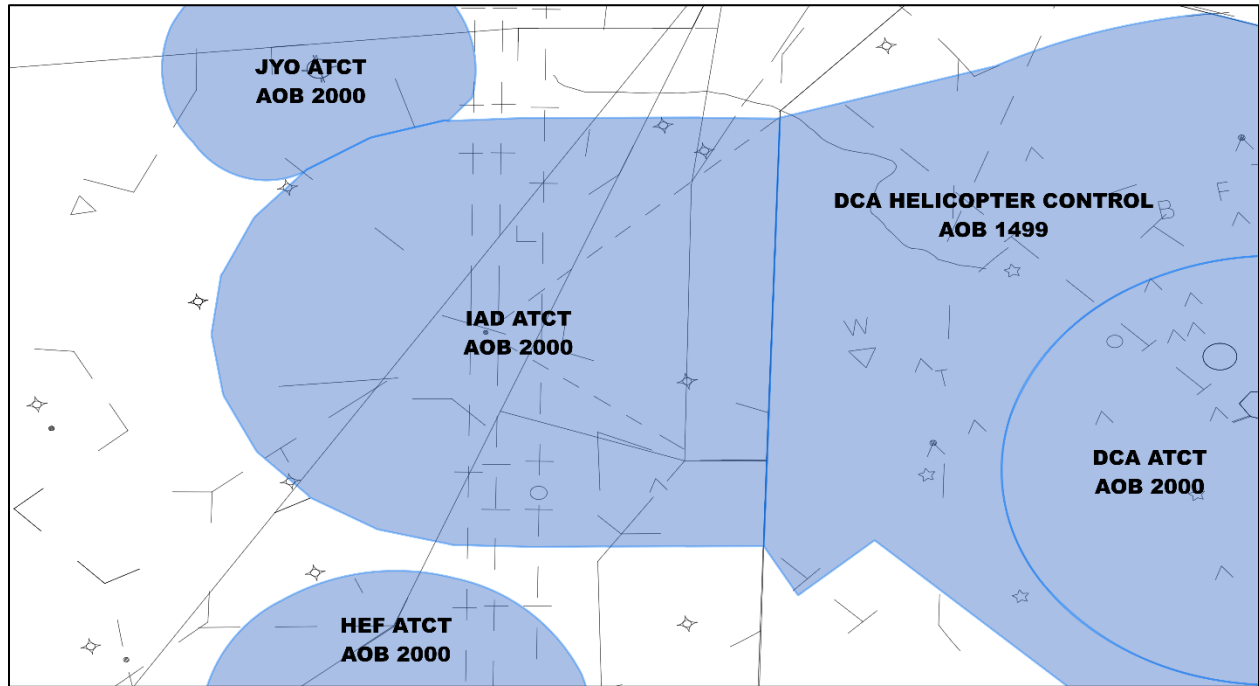
6-2-3. MIDFIELD AREA RAMP

Midfield Area Ramp is responsible for taxiways C and D and their associated gates between taxiways J and Z.

APPENDIX A. GROUND CONTROL SPLIT



APPENDIX B. LOCAL CONTROL AIRSPACE



APPENDIX C. RUNWAY INTERSECTION DISTANCES AVAILABLE

