

Washington-National Air Traffic Control Tower

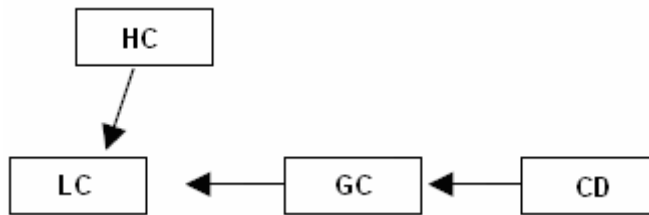
Standard Operating Procedures

- 1) **Purpose** This order defines duties and responsibilities, depicts areas of airspace, runways, and taxiways allocated to each position and provides supplemental direction as necessary for each position of operation within Washington National Air Traffic Control Tower (ATCT).
- 2) **Distribution** This order is distributed to all DCA ATCT personnel.
- 3) **Positions**

<u>Position</u>	<u>Abbreviation</u>	<u>Frequency</u>	<u>ARTS ID</u>	<u>Callsign</u>	<u>Relief Callsign</u>	<u>Voice Room</u>
Local Control	LC	119.100	4T	DCA_TWR	DCA_1_TWR	DCA_4T
Helicopter Control	HC	120.750	4U	DCA_U_TWR	DCA_U1_TWR	DCA_4U
Ground Control	GC	121.700	4G	DCA_GND	DCA_1_GND	DCA_4G
Clearance Delivery	CD	128.250	4C	DCA_DEL	DCA_1_DEL	DCA_4C

LC and HC positions have "T" ARTS Tag.

- 4) **Opening Additional Positions** HC shall not be opened unless authorized by the ATM or DATM.
- 5) **Combining Positions** Positions and responsibilities shall be combined as follows:



- 6) **Status Information** LC is responsible for the accuracy of:
 - a. Active Runway(s)
 - b. Runway closures.
 - c. Current ATIS and code.
 - d. Other items affecting ATC.
- 7) **Change in Direction of Operation Checklist**
 - a. Coordinate the first and last arrival/departure for each runway with MTV DCAFR.
 - b. Upon notification by MTV DCAFR, ensure departures are stopped for sector reconfiguration.
 - c. Ensure departures are held until MTV DCAFR releases them.
 - d. Inform GC of the new departure configuration and where to stage aircraft for departure.
 - e. Inform CD of the new departure configuration to assign the correct departure heading.
 - f. Ensure coordination is accomplished with all tower personnel.
 - g. MTV DCAFR shall inform LC the sector reconfiguration is complete and when departures are released.
 - h. Ensure the ATIS has been updated and reflects the proper status.

- 8) **Prohibited Airspace** The proximity of P-56 to DCA requires constant awareness and precise instructions to assist pilots in remaining clear of these areas. Do not issue right turns to turbojet aircraft departing Runway 1.
- 9) **Distance Remaining From Intersections** Using the chart below, issue distance remaining from an intersection upon taxi if the pilot requests. Distances are in feet.

Runway 1		Runway 4		Runway 33	
Full Length	6,869	Full Length	4,911	Full Length	5,204
At A	6,250	At A	4,400	At M	3,600
At F	4,500	At C	4,000	At J	1,700
At G	3,350	At H	1,650	At K	1,600
At M	3,100				
At N	2,150				

Runway 19		Runway 22		Runway 15	
Full Length	6,869	Full Length	4,911	Full Length	5,204
At S	4,400	At H	3,250	At S	4,050
At N	3,750			At K	3,400
At M	3,250			At J	3,200
At G	2,350				
At F					

Local Control (LC)
General Information and Procedures

1) General

- a. Local Control shall be responsible for separation between:
 - i. Successive departures.
 - ii. Departures and arrivals.
 - iii. Departures and missed approaches/go-arounds.
 - iv. Tower local traffic and over flights – from departures, arrivals and go-arounds.
- b. Local Control shall determine the active runways
- c. Local Control shall maintain the ATIS.

2) Position Information

- a. Frequency: 119.100
- b. Callsign: DCA_TWR
- c. ARTS ID: 4T

3) Areas of Jurisdiction

- a. LC has primary responsibility for operations conducted on the active runways and must control the use of those runways. Positive coordination and control is required at all times.
- b. LC is delegated the airspace within the Washington Class B surface area, at and below 1,500 MSL as depicted in Appendix 1.
- c. Departures may call LC when holding short of Runway 15/33 or Runway 4/22. LC is responsible for taxiing these aircraft the remainder of the way to the runway.

4) Active Runway Selection

- a. South Operation is the ***Calm Wind*** runway configuration. This shall be used when winds are less than 5 knots. Other runway configurations may be used with calm winds if it provides an operational advantage.
- b. Use the following table to determine the active runways based on the wind direction when the winds are 5 knots or greater.

<u>Wind Direction</u>	<u>Operation</u>	<u>Active Runways</u>
281 clockwise to 100	North Operations	1, 4, 33
101 clockwise to 280	South Operations	19, 15, 22

5) Runway Configurations

- a. The following table shows the possible runway configurations and uses.

<u>Operation</u>	<u>Runway</u>	<u>Arrivals / Departures</u>	<u>Aircraft Types</u>
North Operations	1	Both	All types
	4	Departures**	Props/RJ*
	33	Both	Props/RJ*
South Operations	19	Both	All types
	15	Both	Props/RJ*
	22	Arrivals**	Props/RJ*

- i. *All references to RJ's refer to Regional Jets and smaller. This includes Corporate Jets.
- ii. **May be used for departures and arrivals. The primary use of the runway is listed in the table.

- b. The TRACON shall select the approach in use and coordinate with the appropriate Local Control prior to change. If an aircraft is conducting other than the advertised approach in use to the service runway, coordination shall be effected either verbally or through the use of the scratchpad.

6) Departure Runway Assignments

- a. Use the following table to assign the runway to departing aircraft.

<u>Configuration</u>	<u>Runway</u>	<u>Aircraft Type</u>	<u>Departure Fix</u>
North Operation	1	All types	All exits.
	4	Props/RJ	Via SWANN PALEO, or DAILY
	33***	Props/RJ	All exits
South Operation	15	Props/RJ	All exits
	19	All types	Via all exits.
	22***	Props/RJ	via FLUKY, HAFNR, LDN, AML, MRB, BUFFR, JERES***

*** Only use Runways 22 and 33 for departures when required to accommodate heavy volume. The primary use should be for propeller aircraft, avoid using these runways for Regional Jet departures. The lengthy taxi and multiple runway crossings cause excessive coordination between LC and GC and should be avoided.

- b. Runway 15 may be used for Airbus A319 and smaller turbo-jet departures only if requested by the pilot.
- c. Pilot runway requests may be accommodated if traffic volume allows.
- d. Other runway may assignments may be used if they provide an operational benefit.

7) Forwarding Departure Information Forward departure information and the departure sequence to KRANT or TYSON via the chat box or override unless requested otherwise.

- a. Rolling Calls shall be made no sooner than when the aircraft commences departure roll and no later than the aircraft reaching the departure end of the runway.
- b. Release Requests shall be made up to five (5) minutes prior to aircraft beginning their departure roll.
- c. Rolling Calls and Release Requests shall include the following information:
 - i. Call sign.
 - ii. Departure runway.
 - iii. IFR departure fix, initial route, or name of local airport/destination, and the term "VFR" if appropriate.
 - iv. Heading if non-standard or additional information/restrictions as needed/required.
 - v. Ensure that aircraft taxied to non-designated departure runways have been coordinated accordingly with the appropriate Local Control positions.

8) Taxi Into Position and Hold (TIPH) TIPH procedures are authorized at DCA. Such operations are generally viewed as necessary to maintain airport efficiency. Use TIPH 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 TIPH procedures.

- a. The landing clearance need not be withheld if traffic is holding in position.
- b. Departures may be held in position on Runway 15/33 and Runway 4/22 for excessive amounts of time if LC does not foresee a need to use the runway prior

to the aircraft departing. This practice is encouraged if waiting for separation or a release from the departure controller.

- c. Withhold landing clearance when the ceiling is less than 800 ft or visibility is less than 2 miles. Or do not use TIPH for departures between successive arrivals.

9) Departure Headings CD shall assign initial headings to jet departures only via Runway 1 or 19. LC shall issue initial headings to all other departures. Coordinate with the KRANT to determine whether to issue runway heading, the predetermined headings, or another heading. If KRANT determines the predetermined initial headings are required, use the following tables:

Configuration	Runway	Initial Heading
North Operation	1	Jets & RJ's: Heading 320 or DCA 328 Radial. Must remain over the river. Props: Turn left heading 280
	4	All: Turn right heading 060. Maintain 2,000 (IFR) or 2,500 (VFR)
	33	Jets & RJ's: Heading 320 or DCA 328 Radial. Must remain over the river. Props: Turn left heading 280
South Operation	15	Jets & RJ's: Heading 190 or DCA 185 Radial. Must remain over the river. Props to KRANT: Fly heading 150 Props to TYSON: Fly heading 185 or DCA 185 Radial. Maintain 3,000.
	19	Jets & RJ's: Heading 185 or DCA 185 Radial. Must remain over the river. Props to KRANT: Fly heading 150 Props to TYSON: Fly heading 230. Maintain 3,000.
	22	Props to KRANT: Fly heading 190. Maintain 3,000 Props to TYSON: Fly heading 230. Maintain 3,000.

Departure instructions other than the above require a boundary check with the appropriate controller. For example, northeast turns in a south operation must be coordinated with KRANT.

10) Missed Approaches / Go Arounds The Tower shall verbally inform the appropriate departure controller of a missed approach/go-around. Unless otherwise coordinated, issue the following instructions to missed approach/go-around aircraft for the corresponding runways:

- a. In a north operation issue go-around instructions via the DCA328 radial, heading 320 or northwest over the river, climb and maintain 3000. Aircraft south of the DCA VOR must be instructed to maintain 2000 until over the airport to avoid a conflict with traffic in a climbing left turn off ADW. Handoff to TYSON.
- b. In a south operation, issue go-around instructions via the DCA185 radial or heading 185 and climb and maintain 3000. Handoff to TYSON.
- c. When traffic warrants, issue alternate instructions when necessary to ensure separation.

11) Transfer of Communications

- a. Communications transfer should take place within 1 NM of the departure runway end. Transfer of control and communications occur simultaneously.
- b. LC must notify departure control of any take-off cancellations or aborts which occur after the Release Request or Rolling Call has been made.

12) Runway Exiting Procedures

- a.** Once aircraft are clear of the runway, they shall taxi across all other active runways prior to being handed off to GC. If the aircraft does not need to cross an active runway, they shall be handed off to GC as soon as they are clear of the runway holding short of J, N, or P.
- b.** Runway 33 may be used as a high speed exit when using Runway 1
- c.** Runway 22 may be used as a high speed exit when using Runway 19

Helicopter Control (HC)
General Information and Procedures

1) General

- a. Issue boundary checks and/or handoff IFR helicopter departures.
- b. Coordinate IFR departure routes other than the standard noise abatement routes with the appropriate sectors.
- c. Use the EFSTS as appropriate.
- d. Clear VFR aircraft on routes or into zones as depicted on the Baltimore - Washington Helicopter Route Chart using appropriate Class B procedures.
- e. Ensure aircraft is squawking appropriate beacon codes.
- f. Authorize a frequency change when the pilot reports or you observe the aircraft/helicopter clear of the DCA airspace.

2) Position Information

- a. Frequency: 120.750
- b. Callsign: DCA_U_TWR
- c. ARTS ID: 4U

3) Area of Jurisdiction

- a. HC is delegated the airspace underneath Washington Class B airspace at and below 1,499 MSL (excludes Class B surface area) as depicted in Appendix 1.
- b. HC shall be familiar with the Helicopter Routes through, under, and around the Washington Class B.

4) Arrival and Departure Procedures

- a. Helicopter operations are authorized on all movement areas.
- b. Helicopters arriving or departing an area on the airport must be coordinated with GC and LC as appropriate before authorizing the operation.
- c. It may be necessary to handoff arriving helicopters to LC for landing clearance.

Ground Control (GC)
General Information and Procedures

- 1) **General** Control aircraft operating on movement areas. Ensure that proper read back of runway hold short instructions are received from the pilot.

- 2) **Position Information**
 - a. Frequency: 121.700
 - b. Callsign: DCA_GND
 - c. ARTS ID: 4G

- 3) **Ramp Non-Movement Area** The ramp and alleys are non-movement areas. GC cannot approve push backs or startups in this area. GC may only approve push backs or startups when the aircraft is pushing into the movement area.

- 4) **Helicopter Movements** Helicopter operations are authorized on all movement areas. Coordinate with LC.

- 5) **ATIS** Ensure all departing aircraft have current ATIS code.

- 6) **Taxiway Information and Routes**
 - a. Taxiways must be kept clear for landing traffic to exit the runway. Taxiing aircraft should hold for aircraft exiting the runway. Coordinate with LC when necessary to have Runway 1/19 arrivals avoid exiting the runway at taxiways that are unavoidably congested.
 - b. Runway 1 departures shall hold short of Runway 4 on J and contact tower. Tower shall issue the runway crossing and the remaining taxi instructions.
 - c. Runway 19 departures shall hold short of Runway 33 on J or K and contact tower. Tower shall issue the runway crossing and the remaining taxi instructions.
 - d. Runway 22 departures shall hold short of M on J (if taxiing south of J) or hold short of M on K (if taxiing north on K) and contact tower. Hold aircraft short of J to give way to aircraft exiting Runway 1/19. Tower shall issue the runway crossing and the remaining taxi instructions.
 - e. Runway 33 departures shall hold short of Runway 1 on F and contact tower. Tower shall issue the runway crossing and the remaining taxi instructions. Other taxi routes may be used if coordinated with LC in advance.
 - f. Runway 15 and 4 departures shall taxi to the runway and contact tower when holding short.
 - g. Taxiways shall be used in any direction to maximize efficiency. Taxiways J and K shall be used as directed in the table below. A deviation from this is approved as long as coordinated with Local Control.

<u>Active Runways</u>	<u>Taxiway</u>	<u>Direction</u>	<u>Active Runway</u>	<u>Taxiway</u>	<u>Direction</u>
1 / 4 / 33	JULIET	Southbound	19 / 15 / 22	JULIET	Northbound
	KILO	Northbound		KILO	Southbound

- 7) **Departure Runway Assignments** After considering such things as flow restrictions, current arrival demand and the overall efficiency of the departure flow, assign runways/intersections to departing aircraft as follows:

<u>Configuration</u>	<u>Runway</u>	<u>Aircraft Type</u>	<u>Departure Fix</u>
North Operation	1	All types	All exits.
	4	Props/RJ	Via SWANN PALEO, or DAILY

	33***	Props/RJ	All exits
South Operation	15	Props/RJ	All exits
	19	All types	Via all exits.
	22***	Props/RJ	via FLUKY, HAFNR, LDN, AML, MRB, BUFFR, JERES***

*** Only use Runways 22 and 33 for departures when required to accommodate heavy volume. The primary use should be for propeller aircraft, avoid using these runways for Regional Jet departures. The lengthy taxi and multiple runway crossings cause excessive coordination between LC and GC and should be avoided.

- a. Deviation from the above assignments is approved if coordinated with LC.
- b. Pilot runway requests may be accommodated if traffic volume allows.
- c. Other runway may assignments may be used if they provide an operational benefit.

Clearance Delivery (CD)

- 1) **Responsibilities** Issue ATC clearances to all departing aircraft.
- 2) **Position Information**
 - a. Frequency: 128.250
 - b. Callsign: DCA_DEL
 - c. ARTS ID: 4C
- 3) **IFR Departure Instructions**
 - a. Departure Procedures
 - i. Non-Turbojet aircraft on all runways and all Runway 4/15/22/33 departures shall not be issued an initial heading in the IFR clearance. Tower shall issue this heading in the takeoff clearance.
 - ii. Runway 1 Jet departures, assign initial departure instructions...
 - 1. "Depart Northwest via initial heading 320, radar vectors to [Radial/Airway/Fix]" ... Maintain 5,000
 - 2. "Depart Northwest via Washington 328 Radial outbound, radar vectors to [Radial/Airway/Fix]" ... Maintain 5,000
 - iii. Runway 19 Jet departures, assign initial departure instructions...
 - 1. "Depart South via initial heading 185, radar vectors to [Radial/Airway/Fix]" ... Maintain 5,000
 - 2. "Depart South via initial Washington 185 radial outbound, radar vectors to [Radial/Airway/Fix]" ... Maintain 5,000
 - b. Assign 5,000 feet to all IFR Turbo-jet departures and 3,000 to all non-turbojet departures and an altitude to expect 10 minutes after departure.
 - c. Issue the appropriate departure frequency (see table below)
 - d. Assign a beacon code
 - e. Do not amend flight plan routes unless the pilot can accept and fly the new routing.
- 4) **VFR Departures**
 - a. Assign VFR aircraft to depart as [*indicated in the following table*] and for "VECTORS OUT OF THE WASHINGTON CLASS B AIRSPACE" and maintain the altitude specified for the direction of departure. If LC advises other runways are in use, include only, "VECTORS OUT OF THE WASHINGTON CLASS B AIRSPACE" and inform tower that initial departure instructions are needed.

<u>Direction</u>	<u>Initial Departure Instructions</u>	<u>Altitude (or lower requested altitude)</u>
Northeast (Rwy 4)	"DEPART NORTHEAST HEADING 060"	"MAINTAIN 2,500"
Northwest (Rwy 33)	"NORTHWEST OVER THE RIVER"	"MAINTAIN 4,500"
Southeast (Rwy 15)	"SOUTH OVER THE RIVER"	"MAINTAIN 2,500"
Southwest (Rwy 22)	"SOUTH OVER THE RIVER"	"MAINTAIN 2,500"

Example: Depart northeast heading 060 for vectors out of the Washington Class B airspace, maintain 2,500...

- b. Issue the appropriate departure control frequency (see table below)

5) Departure Fixes

- a. Unless coordinated with the departure controller, all aircraft shall use one of the following departure gates:

For Flight Simulation use only.

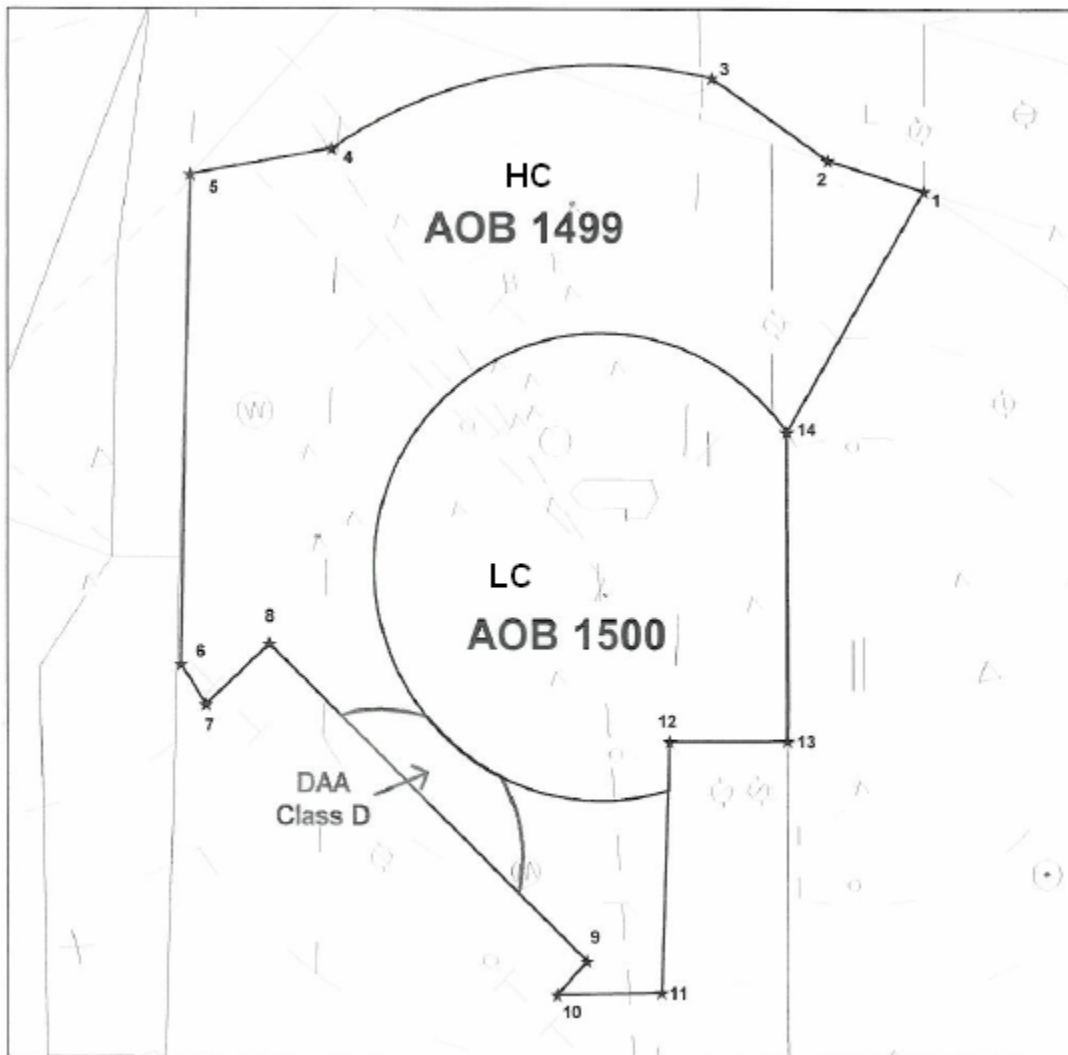
Direction	Gate
North	WOOLY, EMI
East	SWANN, PALEO
South / Southeast	DAILY
South / Southwest	HAFNR, FLUKY
West	LDN, AML (J149)
Northwest	MRB, BUFFR, JERES

6) Departure Frequency

TYSON – 118.95	KRANT – 125.65
MRB	SWANN
JERES	PALEO
BUFFR	DAILY
LDN	WOOLY
AML	EMI
FLUKY	
HANEY	
HAFNR	
GVE	
CSN	
MOL	
BRV	

7) Aircraft Clearances and Delays In the event aircraft will be delayed due to weather and/or traffic management initiatives, issue clearances to all aircraft regardless of the status of a particular route. After the clearance has been read back correctly, inform aircraft there are delays and to contact ground for an estimated departure time.

8) Assigning a Ground Control Once the pilot has correctly read back the clearance, instruct all aircraft to “Contact ground on 121.7 for taxi”

Appendix 1**Tower Airspace**

- a) Local Control (LC) is delegated the airspace within the Washington Class B surface area, at and below 1,500 MSL, excluding the segment east of the DCA/ADW common boundary (points 13-14), as depicted.
- b) Helicopter Control (HC) is delegated the airspace underneath the Washington Class B airspace at and below 1,499 MSL as depicted.
- c) When DAA Tower is closed, HC shall assume control of the portion of the Davidson Class D inside of HC airspace.