

**Washington-Dulles Air Traffic Control Tower**

**Standard Operating Procedures**

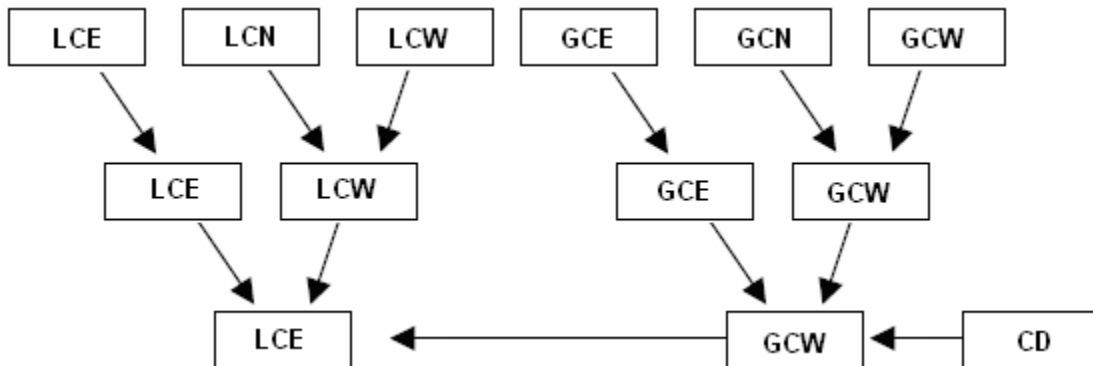
- 1) **Purpose** This order defines duties and responsibilities, depicts areas of airspace, runways, and taxiways allocated to each position and provides supplemental direction as necessary for each position of operation within the Dulles Air Traffic Control Tower (ATCT).
- 2) **Distribution** This order is distributed to all IAD 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 East***	LCE	120.100	3T	IAD_E_TWR	IAD_E1_TWR	IAD_3T
Local Control West	LCW	128.420	3W	IAD_W_TWR	IAD_W1_TWR	IAD_3W
Local Control North	LCN	120.250	3V	IAD_N_TWR	IAD_N1_TWR	IAD_3V
Ground Control East	GCE	121.950	3E	IAD_E_GND	IAD_E1_GND	IAD_3E
Ground Control West***	GCW	132.450	3G	IAD_W_GND	IAD_W1_GND	IAD_3G
Ground Control North	GCN	121.620	3D	IAD_N_GND	IAD_N1_GND	IAD_3D
Clearance Delivery	CD	135.700	3C	IAD_DEL	IAD_C_DEL	IAD_3C

- a. \*\*\*Indicates primary positions
- b. All Local Control positions have "T" ARTS Tag.
- c. When operating with only one (1) Local and one (1) Ground Controller
  - i. LCE shall use IAD\_TWR as the callsign.
  - ii. GCW shall use IAD\_GND as the callsign.

- 4) **Opening Additional Positions** Additional IAD ATCT positions may be opened only when authorized by the ATM or DATM.

- 5) **Combining Positions** Positions and responsibilities shall be combined as follows:



- 6) **Status Information** Local Control East is the Tower Cab Supervisor and is responsible for the accuracy of:
  - a. Number of Local Control positions in use.
  - b. Where Locals are combined, if other than at LCE.
  - c. Active Runway(s)
  - d. Runway closures.
  - e. Current ATIS and code.

- f. Other items affecting ATC.

**7) Change in Runway Direction of Operation Checklist**

- a. Coordinate the first and last arrival/departure for each runway with SHD IADFW.
- b. Upon notification by SHD IADFW, ensure departures are stopped for sector reconfiguration.
- c. Ensure departures are held until SHD IADFW releases them.
- d. Inform Ground Control and Ramp Control of the new departure configuration and where to stage aircraft for departure.
- e. Ensure coordination is accomplished with all tower personnel.
- f. SHD IADFW shall inform LCE the sector reconfiguration is complete and when departures are released.
- g. Ensure the ATIS has been updated and reflects the proper status.

- 8) Distance Remaining From Intersections** Using the chart below, issue distance remaining from an intersection upon taxi if the pilot requests. Distances are in feet.

<b>Runway 1R</b>		<b>Runway 1C</b>		<b>Runway 12</b>	
At K8	11,000	At Y8	11,000	At Q1	6,750
At K7	7,500	At Y7	7,500	At Q3	4,250
At K5	5,750	At Y5	5,750	At Y	900
At K3	4,000	At Y3	4,000	At Z	500
At K1	500	At Y1	500		

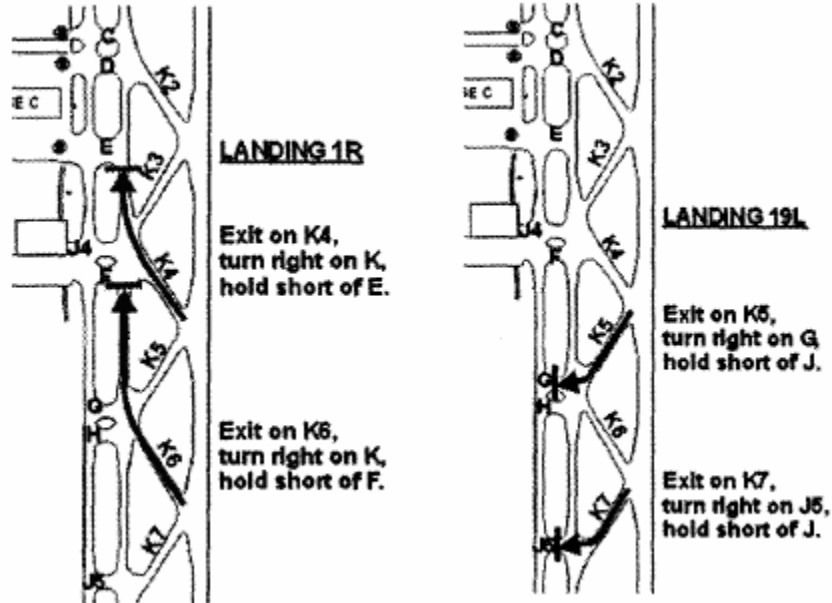
<b>Runway 19L</b>		<b>Runway 19C</b>		<b>Runway 30</b>	
At K1	11,000	At Y1	11,000	At Z	10,000
At K2	7,500	At Y2	7,500	At Y	6,900
At K4	5,750	At Y4	5,750	At Q4	6,250
At K6	4,000	At Y6	4,000	At Q2	3,750
At K8	500	At Y8	500		

### Runway Exiting Procedures

Runway exiting procedures are intended to expedite the movement of arrival aircraft exiting the runways on high-speed taxiways. Tower shall instruct arriving aircraft to “contact ground” as outlined below unless GC determines that “monitor ground” may be used instead.

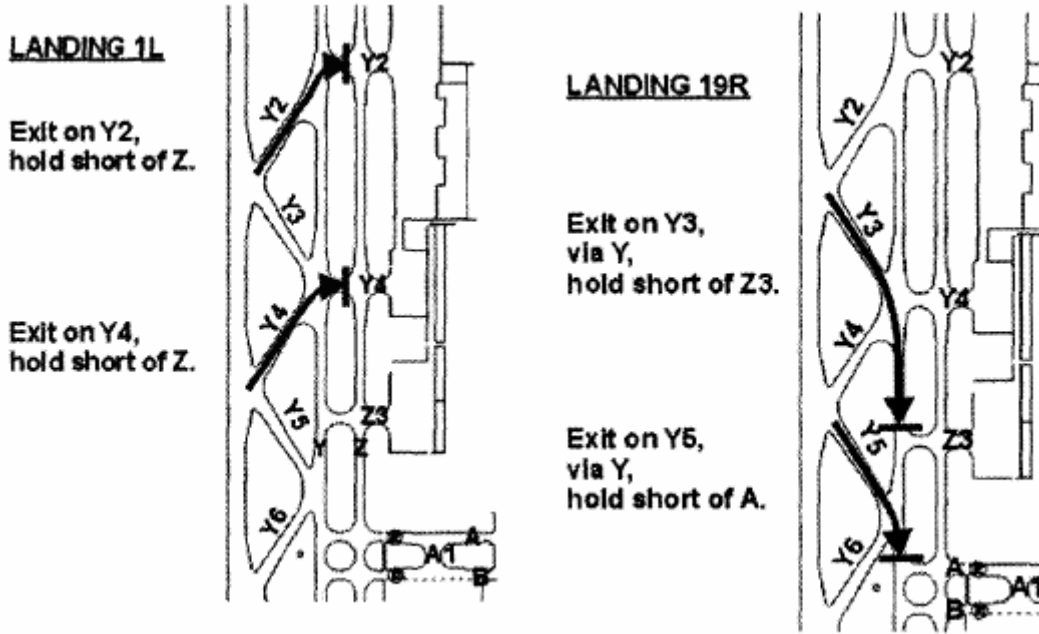
#### 1) Runway 1R and 19L

- a. Ground Control East (GCE) shall:
  - i. Maintain an awareness of Runway 1R/19L arrivals. Give way to aircraft exiting on Taxiways K4/K6 when landing Runway 1R. Give way to aircraft exiting on Taxiways K5/K7 when landing Runway 19L.
  - ii. Coordinate with Local Control East (LCE) to resolve any potential conflicts between previous and subsequent arrivals.
- b. LCE shall issue the following instructions to Runway 1R arrivals as appropriate:
  - i. Exit on K4, turn right on K and hold short of E, contact ground
  - ii. Exit on K6, turn right on K and hold short of F, contact ground
- c. LCE shall issue the following instructions to Runway 19L arrivals as appropriate:
  - i. Exit on K5, turn right on G and hold short of J, contact ground
  - ii. Exit on K7, turn right on J5 and hold short of J, contact ground



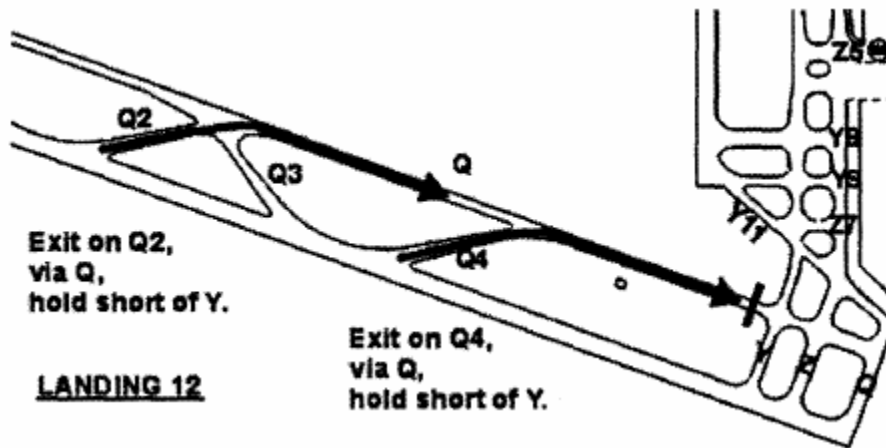
#### 2) Runway 1C and 19C

- a. Ground Control West/Ground Control North (GCW/GCN), as appropriate, shall:
  - i. Maintain an awareness of Runway 1C/19C arrivals. Give way to aircraft exiting on Taxiways Y2/Y4 when landing Runway 1C. Give way to aircraft exiting on Taxiways Y3/Y5 when landing Runway 19C.
  - ii. Coordinate with LCW to resolve any potential conflicts between previous and subsequent arrivals.
- b. LCW shall issue the following instructions to Runway 1C arrivals as appropriate:
  - i. Exit on Y2, hold short of Z, contact ground
  - ii. Exit on Y4, hold short of Z, contact ground
- c. LCW shall issue the following instructions to Runway 19C arrivals as appropriate:
  - i. Exit on Y3, via Y, hold short of Z3, contact ground
  - ii. Exit on Y5, via Y, hold short of A, contact ground



3) Runway 12

- a. LCW shall issue the following instructions to Runway 12 arrivals as appropriate:
  - i. Exit on Q2, via Q and hold short of Y, contact ground
  - ii. Exit on Q4, via Q and hold short of Y, contact ground



**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) Active Runway Selection**

- a. The Runway 19C/19L/30 configuration is the **Calm Wind** runway configuration and 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.

<b><u>Wind Direction</u></b>	<b><u>Active Runways</u></b>
281 clockwise to 030	1R, 1C, and 30
031 clockwise to 100	1R and 1C
101 clockwise to 210	19C, 19L, and 12
211 clockwise to 280	19C, 19L and 30

**3) Runway Configurations**

- a. The following table shows the possible runway configurations. The runways are listed in the order they shall be used.

<b><u>Operation</u></b>	<b><u>Landing Runways</u></b>	<b><u>Departing Runways</u></b>
North Op	1R, 1C	30, 1C, 1R
South Op	19C, 19L, 12	19L, 19C
19C/19L/30 Op	19C, 19L	30, 19L, 19C
30 Op	30	30

- b. See Ground Control (GC) Section 8 for the runway assignments table.
- c. 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.
- d. If Runway 30 is required for arrivals, SHD IADFE shall use the ILS 1R circle to 30.
- e. A Runway 30 and 1C departure configuration requires prior coordination with SHD ASPER.
- f. The primary configuration for North Operations is landing Runway 1R and 1C and departing Runway 30. Runway 1C shall be used to handle any departure overflow.

- 4) Forwarding Departure Information** Forward departure information and the departure sequence to ASPER or TILLY 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.

**5) Simultaneous Runway Use**

- a. Runways 1R/19L and 1C/19C shall be operated independently of each other. LC shall ensure there will be no conflicts with traffic departing or executing a missed approach on another runway when assigning departure headings.
- b. Issue traffic advisories to landing traffic when conducting simultaneous approaches by advising them of other arriving and departing traffic.

**6) Taxi Into Position and Hold (TIPH)**

TIPH procedures are authorized at IAD. 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. 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.

**7) Departure Headings**

Predetermined departure headings are listed in Appendix 2 (these will move to the Letter of Agreement (LOA) with the Potomac TRACON). The headings in the LOA shall only be used when requested by ASPER. In all other cases, use the following departure headings for all departure gates. These headings are designed to keep departures separated from departures using the parallel runway and to keep departures separated from arrivals.

Runway	Heading
1R	011
1C	011
19L	191
19C	191
30	301

**8) 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. Runways 19C or 19L – assign a heading from 190 thru 230 as necessary, climb to 2000 feet, and handoff to TILLY, 126.65.
- b. Runways 1R or 1C – assign a heading from 340 thru 360 as necessary, climb to 2500 feet, and handoff to ASPER, 125.05.

- c. Runway 12 – after ensuring separation from other arrivals and departures, assign a heading from 190 thru 230 as necessary, climb to 2000 feet, and handoff to TILLY, 126.65.
- d. Runway 30 – fly runway heading, climb to 2000 feet, and handoff to ASPER, 125.05.

**9) 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.

**Local Control East (LCE)****1) Responsibilities**

- a. LCE is the Tower Cab Supervisor.
- b. LCE shall have jurisdiction for the LCE airspace and for Runway 1R/19L.
- c. LCE is responsible for determining the active runways.
- d. LCE is responsible for maintaining the ATIS.

**2) Position Information**

- a. Frequency: 120.100
- b. Callsign: IAD\_E\_TWR
- c. ARTS ID: 3T

**3) Areas of Jurisdiction** LCE shall have jurisdiction for the LCE airspace depicted in Appendix 1 and for Runway 1R/19L.**4) Helicopter Operations** LCE shall control helicopters landing/departing the airport to/from the east.

- a. Accept or deny handoff/point-out from LCW on helicopter traffic over flying the airport west to east at or below 2,000 feet.
- b. Handoff or point out helicopters inbound to Landmark from northeast through southeast clockwise or traffic over flying the airport east to west at or below 2,000 feet to LCW.

**Local Control West (LCW)**

- 1) **Responsibilities** LCW shall have jurisdiction for the LCW airspace and for Runways 12/30 and 1C/19C.
- 2) **Position Information**
  - a. Frequency: 128.425
  - b. Callsign: IAD\_W\_TWR
  - c. ARTS ID: 3W
- 3) **Areas of Jurisdiction** LCW shall have jurisdiction for the LCW airspace depicted in Appendix 1 and for Runways 12/30 and 1C/19C.
- 4) **Normal Operations**
  - a. Ensure aircraft are established in a turn southwest bound no later than ½ mile from the departure end of Runway 19C, and are separated from Runway 12 arrivals. Coordinate with LCE if the turn will be delayed.
  - b. When departing Runways 1R and 1C, ensure Runway 1C departures are established in a turn northwest bound no later than the runway end. Coordinate with LCE if the turn will be delayed.
- 5) **Aircraft Movements on Taxiways Y9 and Y11**
  - a. When aircraft with wingspans of 118 feet or less (All aircraft except Boeing 747 and 777, Airbus A340, C5) are utilizing Taxiway Y11, aircraft may operate without restriction on Taxiways Y9 and Y11.
  - b. When aircraft with wingspans greater than 118 feet are utilizing Taxiway Y11, aircraft established on Taxiway Y9 must depart prior to the aircraft on Taxiway Y11.
- 6) **Helicopter Operations**
  - a. LCW shall control helicopters landing/departing Landmark to/from the west.
  - b. LCW shall accept or deny handoff/point-out from LCE on helicopter traffic inbound to Landmark from the east or traffic over flying the airport east to west at or below 2,000 feet.

**Local Control North (LCN)**

- 1) Responsibilities**      This position is reserved for future use.
  
- 2) Position Information**
  - a. Frequency:      120.25
  - b. Callsign:        IAD\_N\_TWR
  - c. ARTS ID:        3V

**Ground Control (GC)**  
**General Information and Procedures**

- 1) **General** GC shall be responsible for aircraft movement on taxiways and those runways designated as non-active.
- 2) **Helicopter Movements** When advised of helicopter movement by LC to/from other than active runways, exchange pertinent traffic information and approve or disapprove the movement as appropriate.
- 3) **ATIS** Ensure all departing aircraft have current ATIS code.
- 4) **General Aviation Parking** Requests from general aviation aircraft for parking at air carrier gates shall be denied due to safety and security on the airport unless approved by airport operations. Those aircraft shall be directed to one of the fixed base operator parking areas.
  - a. Dulles Jet Center – Approach end of RWY 19L
  - b. Landmark Aviation – Approach end of RWY 19C
- 5) **Midfield Ramp Area** The Midfield Ramp is a non-movement area. GC cannot approve push backs or startups. When RAMP is not open and multiple departure runways are in use, CD shall inform departures to contact GC prior to pushback to determine the runway in use. If multiple GC's are open, CD shall instruct departures to contact GCE for runway assignments.  
 Note: If only one runway is being used for departures, that information is included in the ATIS and departures should not be instructed to contact CG for their runway assignment. Be sure they have the proper ATIS code prior to taxi.
- 6) **Taxiway Directions** Use the following taxi routes for arrival and departure aircraft. A deviation from this is approved as long as coordinated with all other Local and Ground Control's.

<b><u>North Operations</u></b>		
<b><u>Active Runway</u></b>	<b><u>Taxiway</u></b>	<b><u>Taxiway Direction</u></b>
1C	YANKEE North of ALPHA	Northbound
	YANKEE South of ALPHA	Southbound
	ZULU	Southbound
1R	KILO	Northbound
	JULIET	Southbound
30	Departures - ZULU to QUEBEC	

<b><u>South Operations</u></b>		
<b><u>Active Runway</u></b>	<b><u>Taxiway</u></b>	<b><u>Taxiway Direction</u></b>
19C	YANKEE	Southbound
	ZULU	Northbound
19L	JULIET	Arrivals Only
	KILO	Departures Only
12	Arrivals - QUEBEC then left on ZULU***	
30	Departures - YANKEE left on Y11 or QUEBEC	

\*\*\*LCW shall instruct Runway 12 arrival aircraft to hold short of Y and handoff to GCW.

- 7) Frequency Change to Tower** LC shall decide whether departures shall **contact** or **monitor** tower's frequency. This must be coordinated with the appropriate GC. The following are suggestions on when to use each method that provide the most efficiency.
- a. GC shall use "**contact tower**" once the departure is sequenced and holding short of the departure runway. This is recommended during periods when traffic is light. In most cases the pilot will call tower when they are ready for takeoff.
  - b. GC shall use "**monitor tower**" once the departure is in line in the departure sequence. This is recommended during periods when traffic is heavy. In most cases, the departures are in line and on the tower frequency waiting for instructions. Tower will call the departure when instructions need to be given. This reduces LC's frequency congestions because pilots are not wasting frequency time checking in, rather waiting for somebody to call them.
- 8) 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:

a. North Configurations

<u>Active Runways</u>	<u>Landing Runway</u>	<u>Departure Runway</u>	<u>Departure Fixes</u>
Runways 1R, 1C and 30	1R / 1C	1R or 1C***	SWANN, PALEO, DAILY, JERES, BUFFR, WOOLY, MRB
		30	LDN, AML, FLUKY, HANEY, HAFNR, GVE, CSN, MOL, BRV
			*** A Runway 30 and 1C departure configuration requires prior coordination with SHD ASPER.
Runways 1R, 1C and 30	1R / 1C	30 Only	All Departure Fixes (use Runway 1C for overflow)
Runways 1R and 1C <i>12/30 unavailable</i>	1R / 1C	1R	SWANN, PALEO, DAILY, JERES, BUFFR, WOOLY, MRB
		1C	LDN, AML, FLUKY, HANEY, HAFNR, GVE, CSN, MOL, BRV
Runway 30 Only	30	30	All Departure Fixes

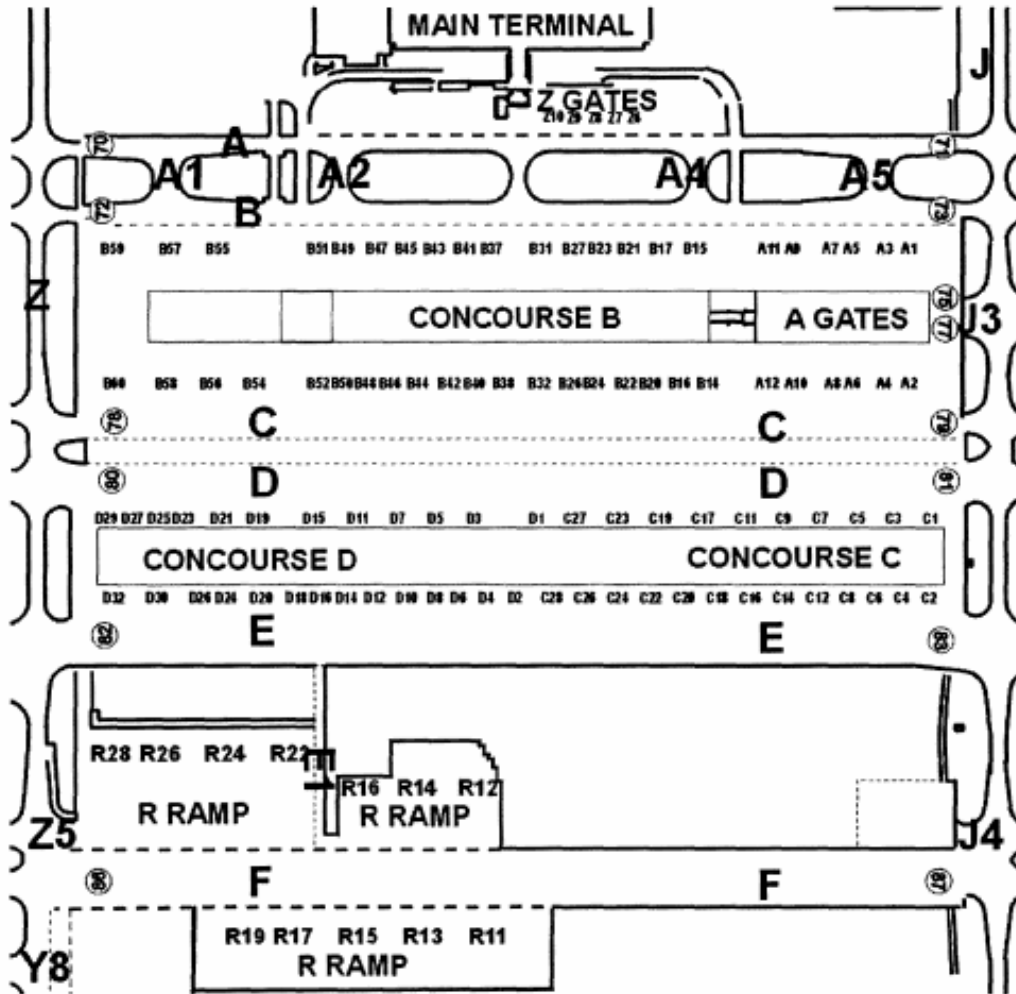
b. South Configurations

<u>Active Runways</u>	<u>Landing Runway</u>	<u>Departure Runway</u>	<u>Departure Fixes</u>
Runway 19C, 19L, and 12	19L/19C/12	19L or 19C	All Departure Fixes
Runways 19C and 19L <i>12/30 unavailable</i>	19L / 19C	19C	SWANN, PALEO, DAILY, JERES, BUFFR, WOOLY, MRB
		19L	LDN, AML, FLUKY, HANEY, HAFNR, GVE, CSN, MOL, BRV
Runways 19C, 19L and 30	19L / 19C	30	SWANN, PALEO, DAILY, JERES, BUFFR, WOOLY, MRB
		19L or 19C (or 30)	LDN, AML, FLUKY, HANEY, HAFNR, GVE, CSN, MOL, BRV
Runways 19C, 19L and 30	19L / 19C	30 only	All Departure Fixes

- c. Prior to taxiing a departing aircraft to a runway other than the appropriately designated runway for the configuration in use, obtain approval from the appropriate LC.

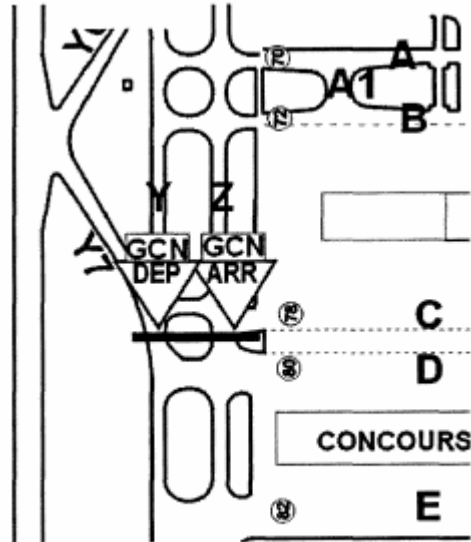
**9) Procedures for Multiple Ground Controls Assigning Ground Controls**

- a. Clearance Delivery shall...
  - i. Instruct aircraft parked at Landmark to contact GC on 121.625. (132.45 if combined at GCW).
  - ii. Instruct aircraft parked at Dulles Jet Center to contact GC on 121.950.
- b. Two Ground Controls
  - i. Aircraft taxiing off the Midfield Ramp from spots 70, 72, 78, 80 and 82 shall contact GCW on 132.45
  - ii. Aircraft taxiing off the Midfield Ramp from spots 71, 73, 75, 77, 79, 81, and 83 shall contact GCE on 121.9.
- c. Three Ground Controls
  - i. Aircraft taxiing off the Midfield Ramp from spots 70, 72, and 78 shall contact GCN on 121.625
  - ii. Aircraft taxiing off the Midfield Ramp from spots 80 and 82 shall contact GCW on 132.45
  - iii. Aircraft taxiing off the Midfield Ramp from spots 71, 73, 75, 77, 79, 81, and 83 shall contact GCE on 121.9.

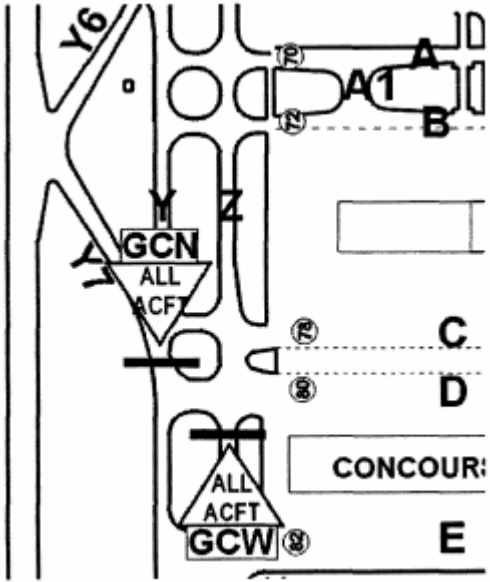


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- d. GCW and GCN Coordination when in a North Operation (Arriving Runway 1C and Departing Runway 30)
- i. GCN shall deliver arrival aircraft to GCW on Taxiway Z holding short of Taxiway D.
  - ii. GCN shall deliver departure aircraft to GCW on Taxiway Y holding short of Taxiway D.
  - iii. GCN shall instruct all aircraft to monitor GCW on 132.45 after resolving any conflicts.



- e. GCW and GCN Coordination when in a South Operation (Landing Runways 19C and 12).
  - i. GCW shall deliver aircraft to GCN on Taxiway Z holding short of Taxiway D.
  - ii. GCN shall deliver aircraft to GCW on Taxiway Y holding short of Taxiway D.
  - iii. GCW shall instruct all aircraft to monitor GCN on 121.72 after resolving any conflicts.
  - iv. GCN shall instruct all aircraft to monitor GCW on 132.45 after resolving any conflicts.



**Ground Control East (GCE)****1) Position Information**

- a. Frequency: 121.950
- b. Callsign: IAD\_E\_GND
- c. ARTS ID: 3E

- 2) Areas of Jurisdiction** GCE has jurisdiction for all J and K taxiways, and Runway 19L/1R run-up blocks.

**Ground Control West (GCW)****1) Position Information**

- a. Frequency: 132.450
- b. Callsign: IAD\_W\_GND
- c. ARTS ID: 3G

- 2) Areas of Jurisdiction** GCW has jurisdiction for all Z, Y, and Q taxiways south of Taxiway D and the Runway 30 run up block.

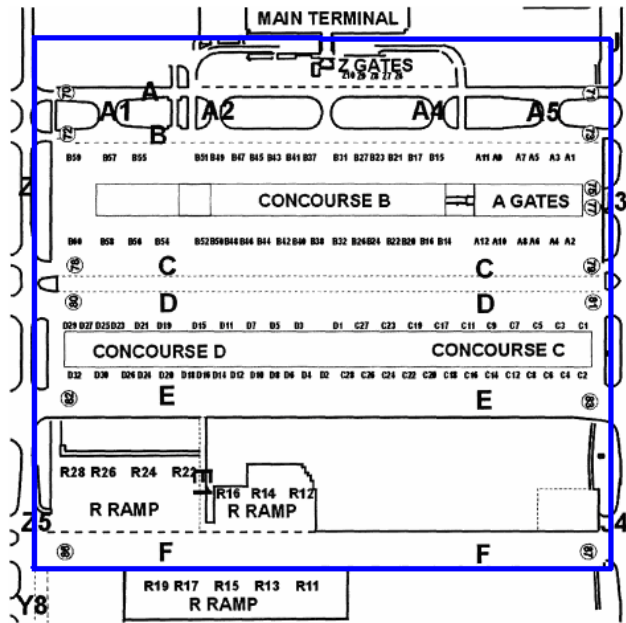
**Ground Control North (GCN)****1) Position Information**

- a. Frequency: 121.625
- b. Callsign: IAD\_N\_GND
- c. ARTS ID: 3H

- 2) Areas of Jurisdiction** GCN has jurisdiction for all Z and Y taxiways north of Taxiway D, and for the Runway 19C run up block.

**Ramp Control (RAMP)**

- 1) **General** The midfield ramp area is a non-movement area and in the real world it is operated by the Metropolitan Washington Airport Association (MWAA), not the FAA. We have created a Ramp Control position to establish order on the midfield ramp area during events or periods of heavy traffic. During normal operations on VATSIM, no controller is responsible for aircraft movement in this area. That means pilots may push back and startup at will.
- 2) **Opening RAMP** Ramp Control may only be opened when authorized by the ATM or DATM. When RAMP is closed, GC does not assume the ramp position or duties.
- 3) **Position Information**
  - a. Frequency: 129.550
  - b. Callsign: IAD\_R\_GND
  - c. ARTS ID: 3P
- 4) **Areas of Jurisdiction** RAMP has jurisdiction for the midfield ramp area (outlined in blue below) which includes taxiways A, B, C, D, E, and F between J and Z.



- 5) **Procedures**
  - a. RAMP shall approve all push backs in the midfield ramp area and inform aircraft which way to push their tail. Runway 1R/19L shall “push tail west” and Runways 1C/19C and 30 shall “push tail east.”  
Example: “UAL123 push approved, push tail west, call when ready to taxi.”
  - b. Use the table in the Runway Assignments section to determine which runway to use based on the departure gate and runway configuration. Ground Control may change runway assignments as needed.
  - c. When aircraft are ready to taxi, instruct aircraft to:
    - i. Runway 1R/19L: Taxi east off the ramp, hold short of J, and contact ground on 121.9 when #1.
    - ii. Runway 1C/19C/30: Taxi west off the ramp, hold short of Z, and contact ground on 132.45\*\* when #1.  
\*\*If GCN is open, aircraft on taxiways A, B, and C shall use 121.625 and aircraft on taxiways D and E shall use 132.45.

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### Clearance Delivery (CD)

- 1) **Responsibilities** Issue ATC clearances to all departing aircraft.
- 2) **Position Information**
  - a. Frequency: 135.750
  - b. Callsign: IAD\_DEL
  - c. ARTS ID: 3C
- 3) **IFR Departures**
  - a. Issue either the CAPITAL standard instrument departure or a clearance to expect "radar vectors" to the first fix (see table below).
  - b. Assign 3,000 feet to all IFR departures and an altitude to expect 10 minutes after departure. When an aircraft's clearance has been revised, restate the altitude to maintain and the 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. Issue a clearance to depart the Class Bravo airspace.
  - b. Assign runway heading.
  - c. Issue an altitude at or below 3,000 feet.
  - d. 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:

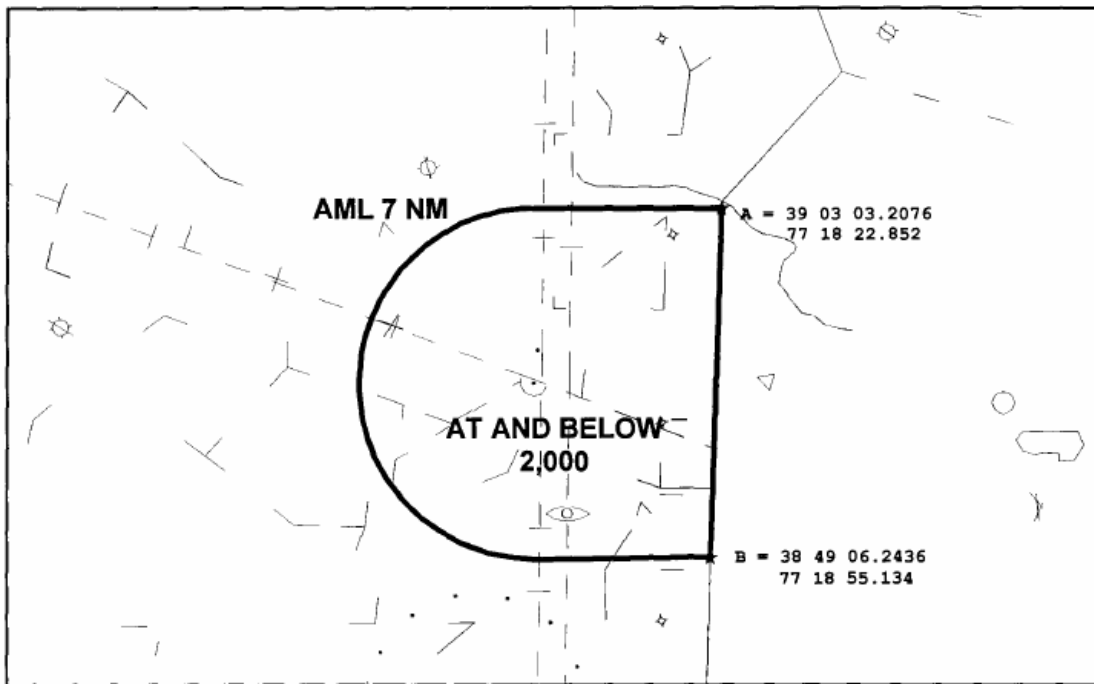
Direction	Gate
North	WOOLY, EMI
East	SWANN, PALEO
South / Southeast	DAILY
South / Southwest	HAFNR, FLUKY
West	LDN, AML (J149)
Northwest	MRB, BUFFR, JERES
  - b. Departures exiting via AML J149 will be cleared via "... radar vectors to GINYA join J149 ..."
  - c. If EMI is the first waypoint in the flight plan, clear aircraft "... via radar vectors WOOLY direct EMI ..."
- 6) **Departure Frequency**

<u>TILLY – 126.65</u>	<u>ASPER – 125.05</u>
LDN	SWANN
AML	PALEO
FLUKY	DAILY
HANEY	JERES
HAFNR	BUFFR
GVE	WOOLY
CSN	MRB
MOL	
BRV	

*For Flight Simulation use only.*

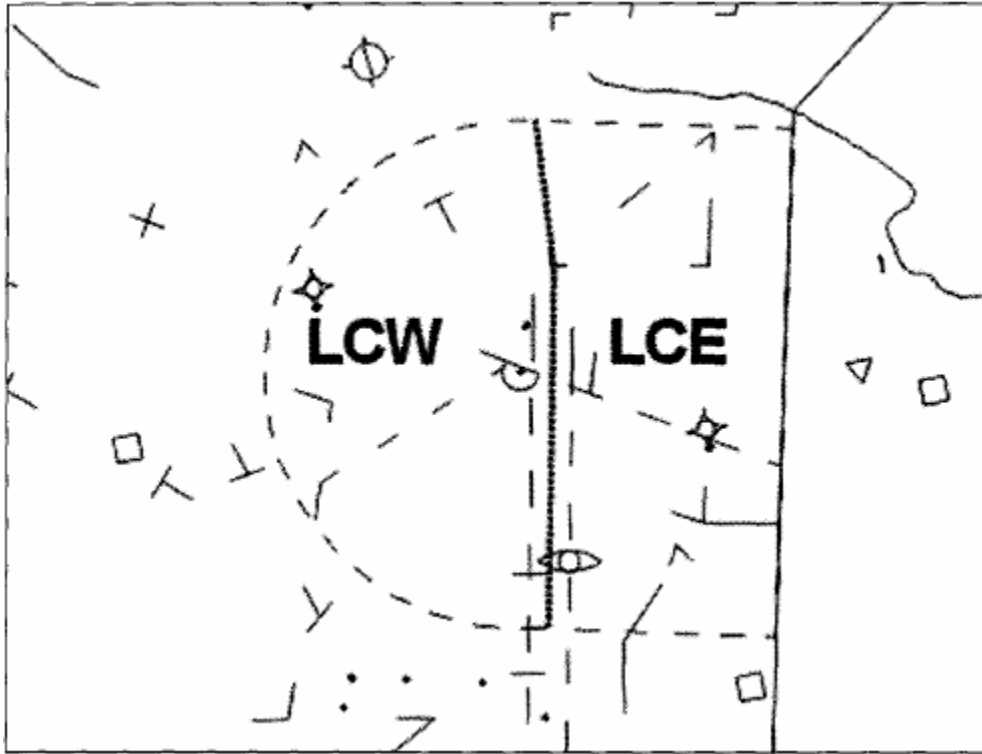
- 7) Aircraft Clearances and Delays** In the event aircraft will be delayed due to weather and/or traffic management initiatives, issue clearances to all aircraft regardless of the status of a particular route. After the clearance has been read back correctly, inform aircraft there are delays and to contact ground for an estimated departure time.
- 8) Assigning a Ground Control** The configuration of the airport requires aircraft to know which departure runway to expect prior to pushback to be sure the aircraft has pushed in the proper direction. Ground Control assigns the runways. When RAMP is not open and only one runway is being used for departures, this information is included in the ATIS and departures should not be instructed to contact CG for their runway assignment. Be sure they have the proper ATIS code prior to taxi. Note: If Ground Control is not online, another position may be covering ground control.
- a. During normal periods when there is one Ground Control online. Instruct aircraft to "Contact ground on 132.45 prior to pushback for runway assignment."
  - b. If RAMP is open, instruct aircraft to "Contact Ramp Control on 129.55 for pushback."
  - c. If multiple Ground Controls are open, Instruct aircraft to "Contact ground on 121.95 prior to pushback for runway assignment."

**Appendix 1**  
**Tower Airspace**

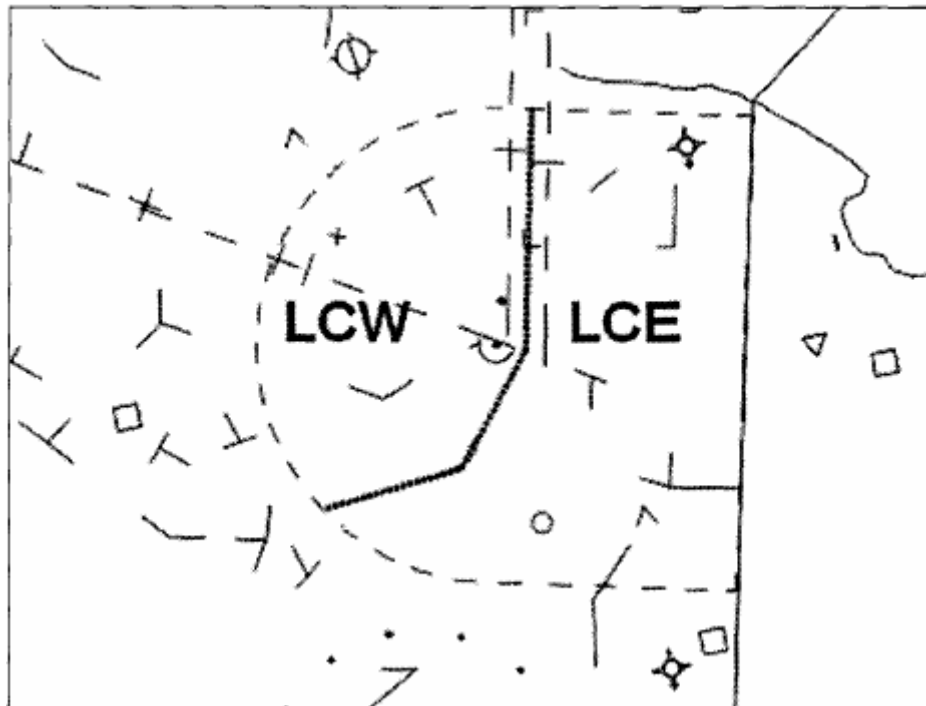


Dulles Tower is delegated 2,000 feet MSL and below within the AML 7 NM Class B surface area plus the area encompassed by eastward extensions from the northern and southernmost points terminating at points A & B as depicted above.

**North Operation**



**South Operation**



*For Flight Simulation use only.*

**Appendix 2****Departure Headings****1) North Operations**

<u>Active Runways</u>	<u>Landing Runway</u>	<u>Departure Runway</u>	<u>Departure Fixes</u>	<u>Heading</u>	<u>Frequency</u>	<u>Sector</u>
Runways 1R, 1C and 30	1R / 1C	1R or 1C***	SWANN, PALEO, DAILY	360	125.05	ASPER
			WOOLY, J518, J211, J220, J227	340	125.05	ASPER
		30	MRB	320	125.05	ASPER
			LDN J134, AML J149, CSN	270	126.65	TILLY
			FLUKY, HAFNR, GVE, MOL	250	126.65	TILLY
			Note: A Runway 30 and 1C departure configuration requires prior coordination with PCT. *** Tower shall not launch departures off 1R/1C/30 simultaneously to fixes listed in the same box.			
Runways 1R, 1C and 30	1R / 1C	30 Only	SWANN, PALEO, DAILY	360	125.05	ASPER
			WOOLY, J518, J211, J220, J227	340	125.05	ASPER
			MRB	320	125.05	ASPER
			LDN J134, AML J149, CSN	270	126.65	TILLY
			FLUKY, HAFNR, GVE, MOL	250**	126.65	TILLY
			** TILLY has control for turns to the south.			
Runways 1R and 1C 12/30 unavailable	1R / 1C	1R	SWANN, PALEO, DAILY, WOOLY, J518, J211, J220, J227	010	125.05	ASPER
			LDN J134, AML J149, CSN	260	126.65	TILLY
			FLUKY, HAFNR, GVE, MOL	240**	126.65	TILLY
			** TILLY has control for turns to the south.			
Runway 30 Only	30	30	SWANN, PALEO, DAILY	360	125.05	ASPER
			WOOLY, J518, J211, J220, J227	340	125.05	ASPER
			MRB	320	125.05	ASPER
			LDN J134, AML J149, CSN	270	126.65	TILLY
			FLUKY, HAFNR, GVE, MOL	250**	126.65	TILLY
			** TILLY has control for turns to the south.			

## 2) South Operations

<u>Active Runways</u>	<u>Landing Runway</u>	<u>Departure Runway</u>	<u>Departure Fixes</u>	<u>Heading</u>	<u>Frequency</u>	<u>Sector</u>
Runway 19C, 19L, and 12	19L/19C/12	19L or 19C	SWANN, DAILY, PALEO, MRB, WOOLY, J518, J211, J220, J227	250*	125.05	ASPER
			AML J149, LDN J134	230	126.65	TILLY
			CSN	215	126.65	TILLY
			FLUKY, HAFNR, GVE, MOL, BRV	190	126.65	TILLY
			* ASPER has control for turns to the north.			
Runways 19C and 19L 12/30 unavailable	19L / 19C	19C	SWANN, DAILY, PALEO, MRB, WOOLY, J518, J211, J220, J227	250*	125.05	ASPER
		19L	AML J149, LDN J134	230	126.65	TILLY
			CSN	215	126.65	TILLY
			FLUKY, HAFNR, GVE, MOL, BRV	190	126.65	TILLY
		* ASPER has control for turns to the north.				
Runways 19C, 19L and 30	19L / 19C	30	SWANN, DAILY, PALEO	330	125.05	ASPER
			WOOLY, J518, J211, J220, J227	315	125.05	ASPER
			MRB	300	125.05	ASPER
		19L or 19C (or 30***)	AML J149, LDN J134	230	126.65	TILLY
			CSN	215	126.65	TILLY
			FLUKY, HAFNR, GVE, MOL, BRV	190	126.65	TILLY
			*** Tower shall not launch departures off 19L/19C/30 simultaneously to fixes listed in the same box.			
Runways 19C, 19L and 30	19L / 19C	30 only	SWANN, DAILY, PALEO	330	125.05	ASPER
			WOOLY, J518, J211, J220, J227	315	125.05	ASPER
			MRB	300	125.05	ASPER
			AML J149, LDN J134	230	126.65	TILLY
			CSN	215	126.65	TILLY
			FLUKY, HAFNR, GVE, MOL, BRV	190	126.65	TILLY