

Washington ARTCC and Boston Virtual ARTCC  
Letter of Agreement

**Effective:** 19 June 2020

**1. PURPOSE:**

This agreement defines the necessary pre-defined air traffic control procedures and coordination responsibilities between the Washington ARTCC (vZDC) and Boston Virtual ARTCC (BVA).

**2. SCOPE:**

The procedures contained herein must apply unless prior coordination has been effected. The procedures contained herein apply during the transfer of IFR aircraft.

**3. DISCLOSURE:**

BVA and vZDC are affiliated with the Virtual Air Traffic Simulation (VATSIM) network. The procedures outlined in this document are intended exclusively for use in the VATSIM flight simulation environment and shall never be used for actual flight or air traffic control operations. BVA and vZDC are not affiliated with the FAA in any manner.

**4. GENERAL PROCEDURES:**

**a. BVA/vZDC ATC shall at all times:**

- (1)** Coordinate and resolve, in a practical manner that provides the smoothest experience to the pilot, all deviations from, and situations not addressed by, this document (e.g., non-standard sectorization, holding, pilots unable to accept LOA routes, aircraft above/below LOA altitudes, etc.).
- (2)** Ensure that all aircraft are at a 1X simulation rate prior to initiating handoff
- (3)** Ensure that aircraft on the same route segment at the same altitude are separated by not less than 10 nm (steady or increasing) or other value specified herein unless greater MIT separation is requested real-time by BVA/vZDC.

**(a) NOTE:** Separation of less than 10 nm is permitted provided the trailing aircraft is operating at a speed that will permit it to overtake the lead aircraft, and both are vertically separated.

- (4)** Ensure that handoff requests are made at least 10nm prior to the relevant airspace boundary unless otherwise specified in this document. Handoff requests may be initiated up to 50nm without prior coordination.

- (5)** Ensure that all conflicts, imminent situations, and MIT separation issues are resolved prior to handoff.
- (6)** Ensure that all scratchpad entries are cleared unless required to convey operational information (e.g. “M80” for assigned Mach number, “H####” for assigned heading) not coordinated by other means (e.g., private message, verbally, etc.).
- (7)** Ensure the datablock is formatted as follows:
  - (a)** For aircraft climbing to an altitude lower than the flight planned altitude:
    - a. If the altitude is consistent with an LOA procedure, no entry.
    - b. If the altitude is non-standard or not contained within this LOA, a temporary altitude reflecting the cleared altitude.
  - (b)** For aircraft descending to meet an issued crossing restriction, a temporary altitude with the applicable crossing altitude.
  - (c)** For aircraft descending to an assigned altitude, no temporary altitude is used, and the filed/planned altitude is amended to the new cleared/assigned altitude.
  - (d)** No scratchpad, except if specific control instructions that differ from LOA procedures have been issued. In these cases, the alternate instruction shall be verbally or textually included as well as included in the scratchpad. Scratchpad entries may include:
    - a. Indicated speed restrictions (e.g., “S210”, “S270+”); clients capable of 4-characters remove the “S” if needed (i.e., “270+”)
    - b. “M” for Mach speed restrictions (e.g., “M81”, “M78+”)
    - c. “H” for heading assignments (e.g., “H230”)
    - d. “H” and direction for deviations (e.g., “H15L” for 15 degrees left of track)
- b.** ARTCCs shall route traffic as described in Attachments #1 and #2.
- c.** ZBW may clear aircraft direct SWL or ZIZZI without prior approval provided aircraft cross the boundary no further west than J150.
- d.** ZDC may clear aircraft direct ORW and HTO without prior approval.
- e.** ZDC shall not route traffic direct TOPPS, EBONY, ALLEX, QUBIS, MILLS, or TAFFY.

- f.** When New York Center (ZNY) is offline, aircraft passing through the New York area destined for airports within ZBW or ZDC, or that will eventually enter ZBW or ZDC airspace, shall be transferred directly between Boston Center and Washington Center.
  - (1)** BVA controllers shall complete the handoff before aircraft reach the ZBW/ZNY border, as if the handoff was to New York Center.
  - (2)** ZDC controllers shall complete the handoff before aircraft reach the ZDC/ZNY border, as if the handoff was to New York Center.
  - (3)** ZDC shall be responsible for separation between tracked aircraft within ZNY airspace when ZNY is offline and direct BVA/ZDC handoffs are in place.
  - (4)** For aircraft destined to PHL on the JIIMS STAR, ZBW shall instruct the aircraft to cross 35 miles northeast of MANTA at FL200 and handoff to ZDC prior to the ZNY boundary.
  - (5)** For aircraft destined to BOS on the ROBUC STAR, ZDC shall instruct the aircraft to cross NEWES at FL270 and handoff to ZBW prior to the ZBW boundary.

## **5. ZDC SECTOR SPLITS**

### **a. General**

- (1)** ZDC normally operates in a combined single sector mode using the CTL/ATL area GVE32 sector frequency on 133.72. When traffic warrants a variety of splits may be utilized. Though splits are not limited to those outlined herein and other splits may be used as operations dictate.
  - (a)** Two-way
  - (b)** Three-way

**b. Two-Way Splits:**

**TWO WAY SPLITS**

**North/South**



**East/West**



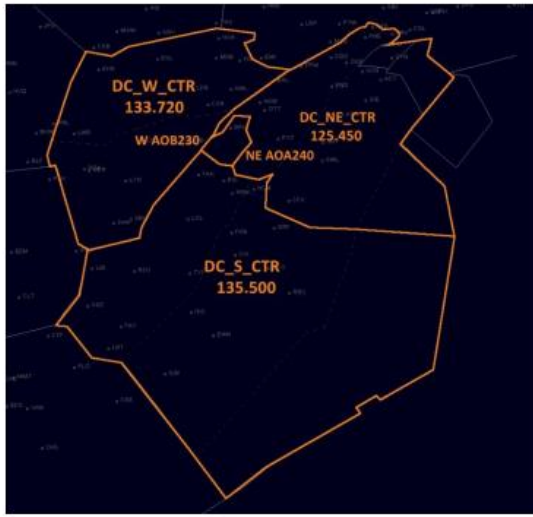
**New York Heavy**



NOTE – Other splits may be coordinated for events on a case by case basis. These are simply recommended splits that are used for most events. Splits of 4+ people will also need to be coordinated individually. It is recommended to decide the splits by dividing up the areas.

c. Three-Way Splits:

3-Way Splits – Normal



New York Heavy



## 6. ZBW SECTOR SPLITS

### a. General

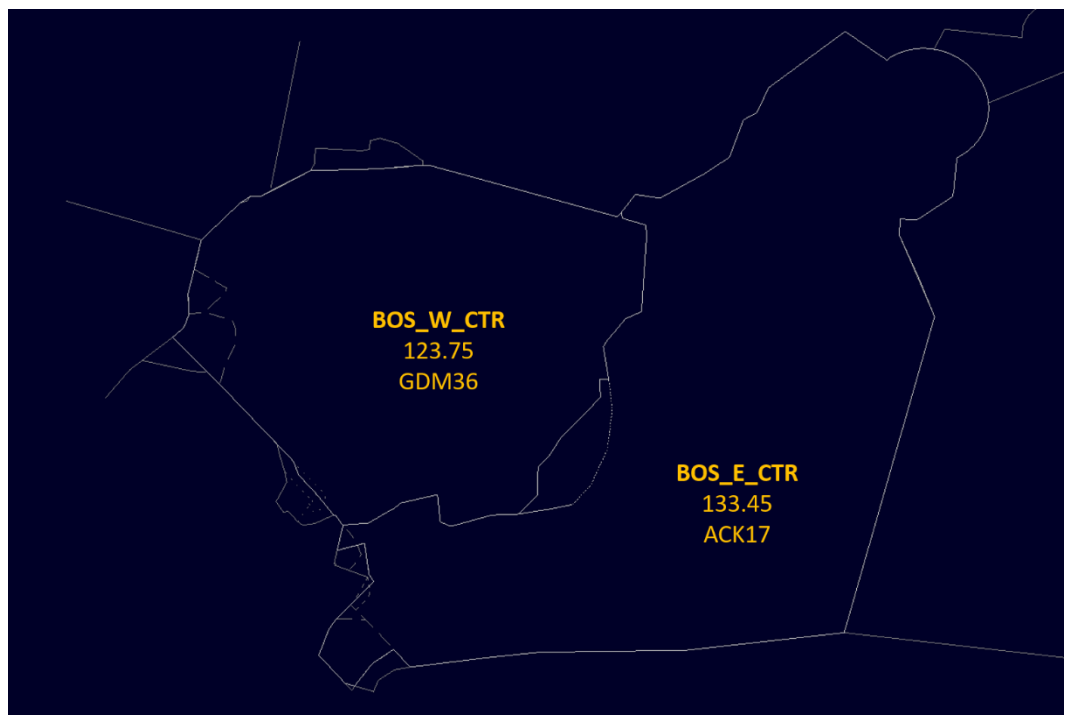
- (1) When Boston Center is combined, it will be operated as BOS\_CTR on frequency 134.700.
- (2) Outside of events, Boston Center splits will be coordinated with adjacent facilities through the use of the air traffic control channels. Standard sector splits are shown below.

### b. Altitudes

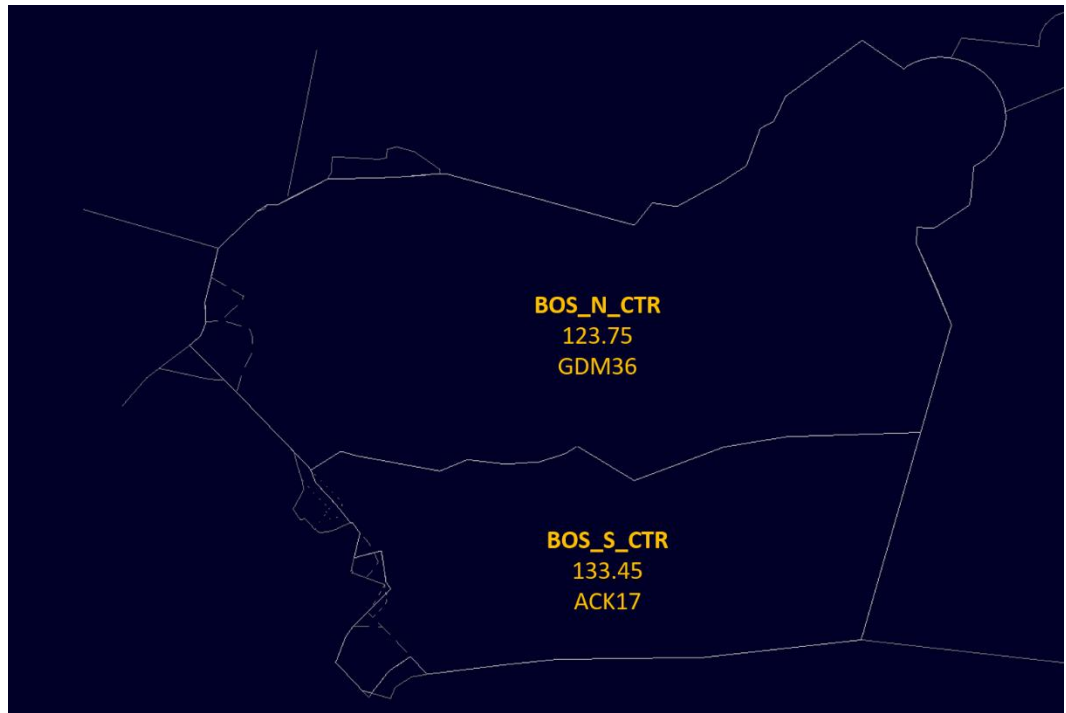
- (1) Unless otherwise defined, high-altitude sectors cover FL240 – FL600. Low-altitude sectors cover the surface to FL239.

### c. Splits:

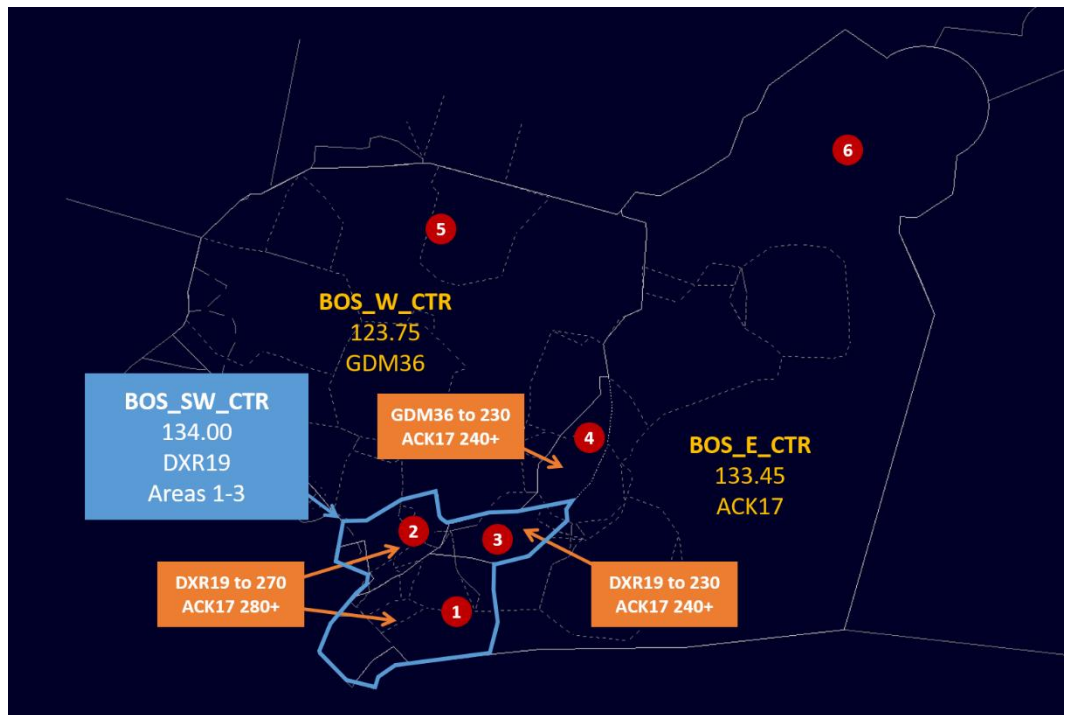
- (1) Two-Way Geographical Split (E/W):



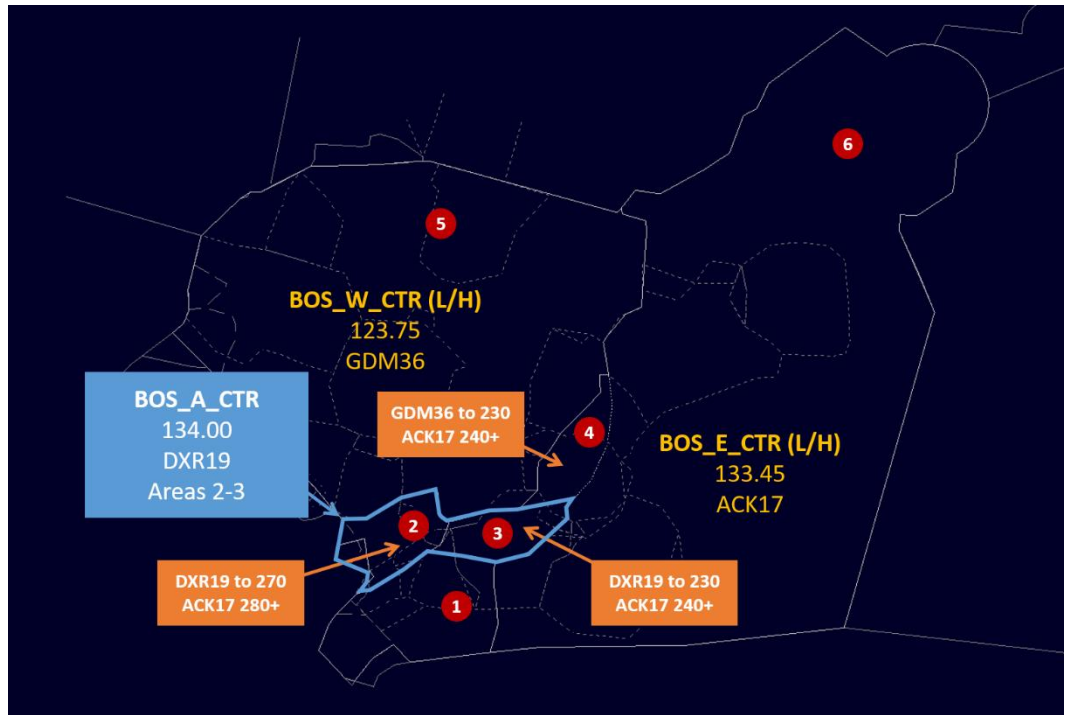
(1) Two-Way Geographical Split (N/S):



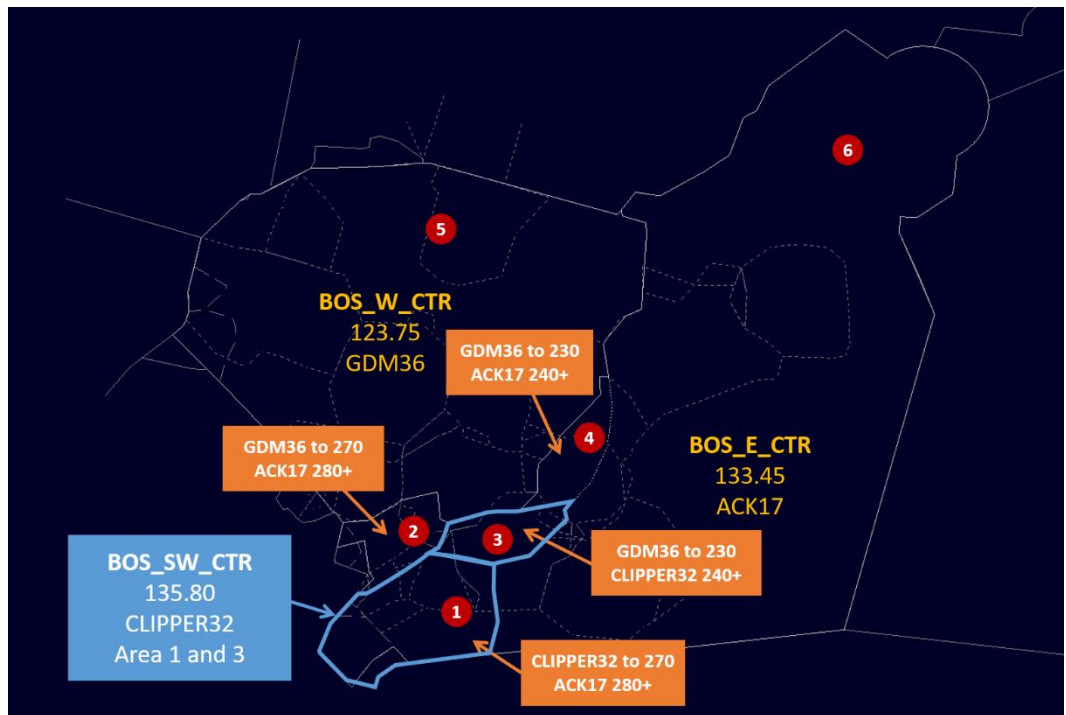
(2) Three-Way Geographical Split:



(1) Three-Way Geographical Split (Heavy BOS Arrival Traffic):

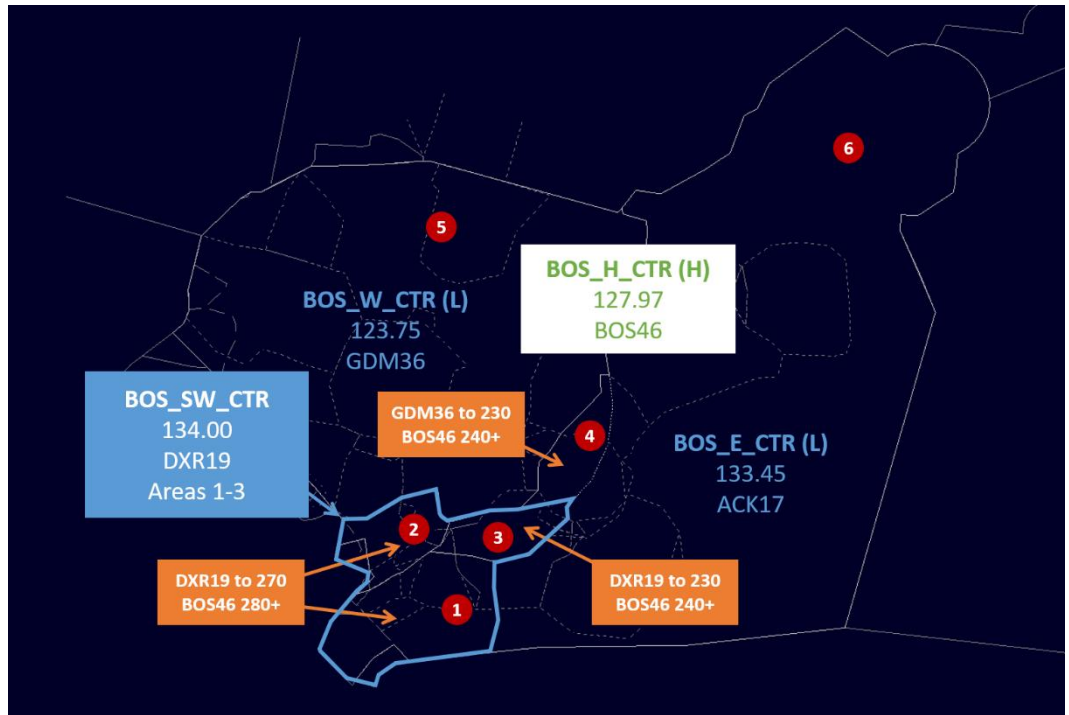


(2) Three-Way Geographical Split (Heavy JFK Arrival Traffic):

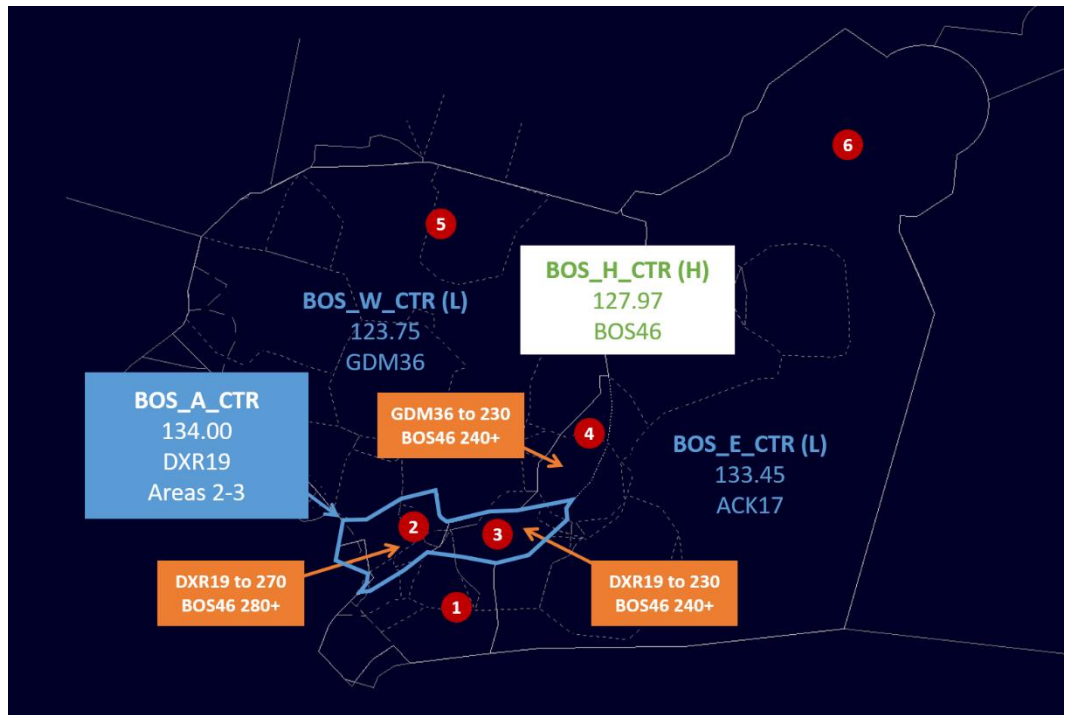




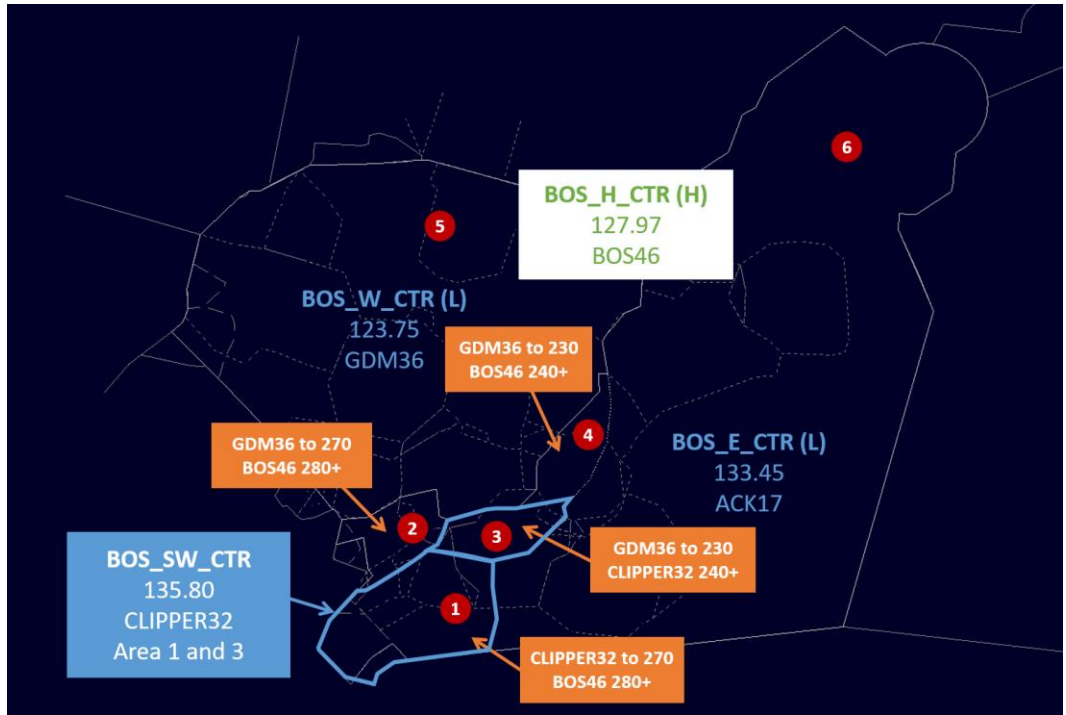
(1) Three-Way Geographical Split with a High Sector:



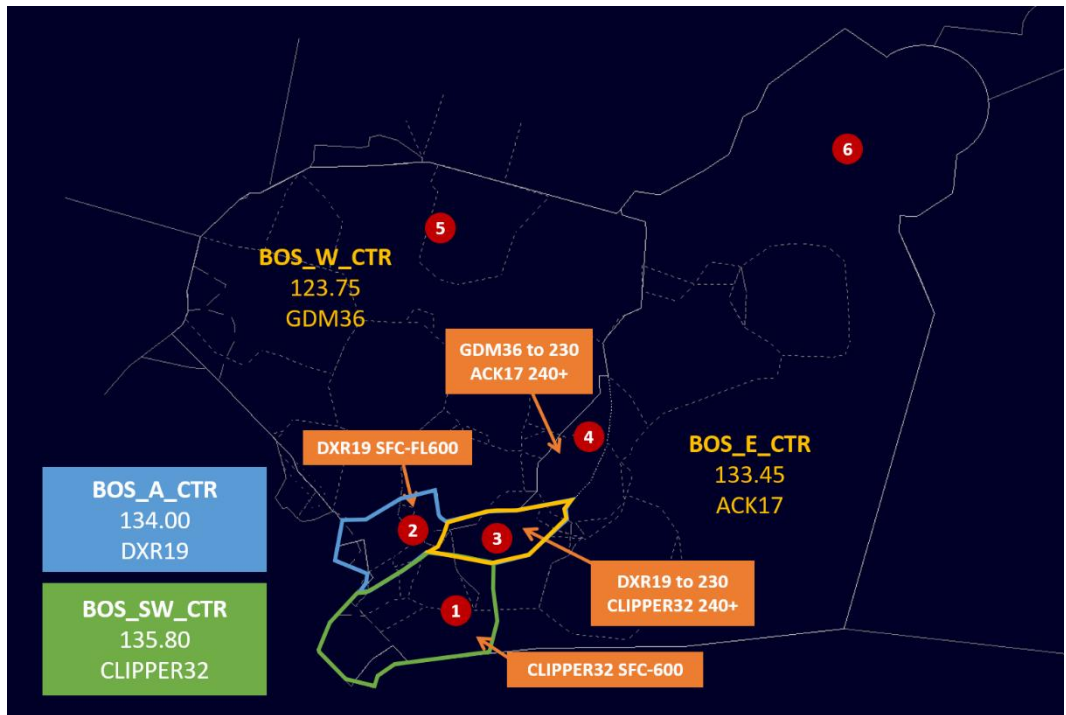
(2) Three-Way Geographical Split with a High Sector (Heavy BOS Arrival Traffic):



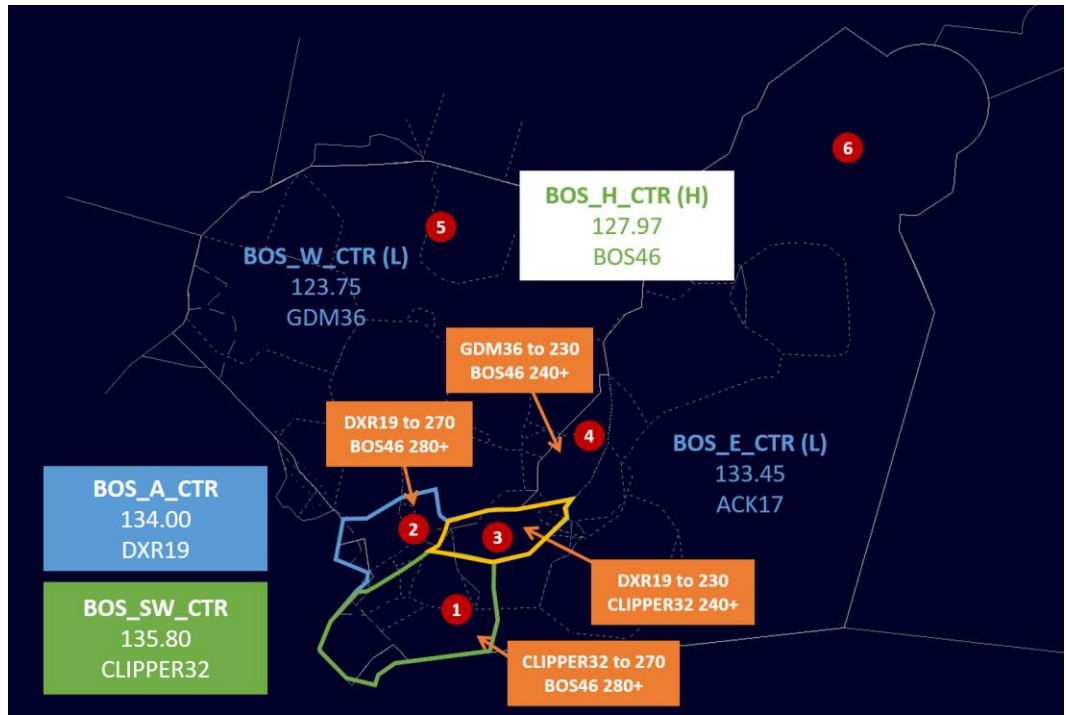
- (1) Three-Way Geographical Split with a High Sector (Heavy JFK Arrival Traffic):



- (2) Four-Way Geographical Split:



(1) Four-Way Geographical Split with a High Sector:



**j. ATTACHMENT #1: ZBW PROCEDURES FOR ZDC ARRIVALS**

<b>Airport</b>	<b>A/C Type</b>	<b>Route Segment</b>	<b>ALT/FL</b>	<b>Remarks</b>
DCA	Jet – Non-RNAV	J174 ZIZZI ATR085 ATR V308 BILIT	None	
	RNAV	J75 MXE CLIPR#	None	
	Jet – RNAV	J174 ZIZZI ATR085 ATR V308 LAFLN DEALE#	None	Overload RNAV
BWI	Non-RNAV	J174 ZIZZI ATR085 ATR V308 BILIT or J75 MXE V378 BAL	None	
	Jet – RNAV	J75 MXE NUGGY TRISH#	None	
	Jet – RNAV	J174 ZIZZI ATR085 ATR V308 LAFLN MIIDY#	None	Overload RNAV
DCA/ ADW	Non-Jet	J174 ZIZZI ATR085 ATR V308 OTT	FL240 – FL280	
ADW	Jet – RNAV	J174 ZIZZI ATR085 ATR V308 LAFLN SPISY#	None	In-Trail with DCA/BWI
	Jet – Non-RNAV	J174 ZIZZI ATR085 ATR V308 OTT	None	

**ATTACHMENT #2: ZDC PROCEDURES FOR ZBW ARRIVALS**

Aircraft listed in each of the groups (Cape Airports and PVD and Satellites) shall enter ZBW in-trail with each respective group. Aircraft in the PVD and Satellites group shall be below the Cape Airports group. In-trail sequencing applies between aircraft of similar performance characteristics.

MVY arrivals may be above other airports listed in PVD and PVD Satellites. ACK arrivals may be above other airports listed in Cape Airports.

<b>Airport</b>	<b>A/C Type</b>	<b>Route Segment</b>	<b>ALT/FL</b>
<b>Cape Airports Group</b>			
ACK	RNAV	RIFLE DEEPO DEPPO# or RIFLE DEEPO CLAMY DCT	None
	Non-RNAV	J121/J174 J62 ACK	None
FMH, HYA, CQX, PVC	RNAV	RIFLE LIBBE FLAPE MVY DCT	None
	Non-RNAV	J121/J174 RIFLE J62 MVY241 MVY DCT	None
<b>PVD and PVD Satellites Group</b>			
MVY	RNAV	RIFLE LIBBE FLAPE DCT	AOB FL370
	Non-RNAV	J121/J174 RIFLE J62 MVY241 MVY	
EWB, OQU, PYM, SFZ, UUU, GHG	RNAV	J121/J174 HTO JORDN MINNK DCT	AOB FL370
	Non-RNAV	HTO HTO070 PVD195 PVD	
PVD	RNAV	J121/J174 JORDN# or HTO JORDN MINNK DCT	AOB FL370
	Non-RNAV	HTO HTO070 PVD195 PVD	
BOS	RNAV Jets	J42 RBV J222 JFK ROBUC#	N/A
	Non-RNAV Jets	J42 RBV J222 JFK ORW#	
	Non-Jets	WOONS or WOONS# Non-jet aircraft are not permitted on the ORW or ROBUC arrivals	