

Letter of Agreement

New York ARTCC (ZNY) & Washington ARTCC (ZDC)

Rev. 2 — April 23, 2015

Purpose

This agreement prescribes transfer of control procedures, radar handoff procedures, route/altitude assignments, and delegation of airspace between New York ARTCC (ZNY) and Washington ARTCC (ZDC).

Cancellation

ZNY and ZDC Letter of Agreement, dated June 10, 2012, is hereby cancelled.

Scope

The procedures contained herein shall apply unless prior coordination is effected.

General Procedures

- a. Position Combining/Decombining
 - i. Prior to combining/decombining pertinent positions within facilities, it shall be coordinated with any affected controllers in the neighboring ARTCC.
- b. Point Outs
 - i. When using an automated point out, verbal or textual approval must be obtained before an aircraft may enter another controller's airspace. An automated point out not accompanied by a verbal or textual description does **not** constitute a valid point out.
- c. Handoffs and Transfer of Communications
 - i. Separation Minima:
 1. Minimum lateral separation between aircraft shall be at least 5 nm constant or increasing when transfer of control is accomplished. Minimum vertical separation shall be at least 1,000' when transfer of control is accomplished. Other factors such as wake turbulence separation and miles-in-trail requirements may increase this minimum (see below).
 - ii. Altitudes:
 1. Unless otherwise stated in this document or coordinated via verbal or textual means, aircraft must be climbing to, descending to, or level at the correct altitude for direction of flight prior to any handoff.

iii. Miles In-trail (MIT) Restrictions:

1. ZDC to ZNY/N90 (via the same general route)
 - a. Kennedy Area Arrivals: 20 MIT minimum.
 - b. LaGuardia Area Arrivals: 10 MIT minimum.
 - c. Newark Area Arrivals: 10 MIT minimum.
 - d. Philadelphia Area Arrivals: 10 MIT minimum.
2. ZNY to ZDC/PCT (via the same general route)
 - a. Shenandoah Area (IAD) Arrivals: 10 MIT minimum.
 - b. Mount Vernon Area (DCA) Arrivals: 10 MIT minimum.
 - c. Chesapeake Area (BWI) Arrivals: 10 MIT minimum.
3. Center-to-Center Handoffs:
 - a. Not including the restrictions above, aircraft bound to the same destination airport within ZDC or ZNY shall be separated by no less than 10 miles (constant or increasing) unless coordinated otherwise.
 - b. Aircraft on the same route segment and at the same altitude (not going to the same airport), shall be separated by no less than 10 miles (constant or increasing) unless coordinated otherwise.
 - c. Not including the restrictions above, aircraft on the same route segment to the same destination airport, regardless of altitude, shall be separated by no less than 10 miles (constant or increasing) unless coordinated otherwise.

iv. Initiating Handoffs:

1. An automated handoff shall be initiated prior to 5 nm, but no greater than fifty (50) nm from the lateral boundary, or as otherwise coordinated.
 - a. Transfer of radio communications can be delayed no later than the lateral boundary.
2. All portions of a flight plan must be accurate prior to initiating a handoff.
 - a. If an aircraft was cleared direct to a waypoint along the route of flight, then delete the route segment up to, but not including, the waypoint.
3. Indicated airspeed assignments shall be entered into the scratchpad in tens of knots (e.g. S27 for 270 kias). Hard headings shall be entered into the scratchpad in tens of degrees (e.g. H12 for heading 120).
4. If an aircraft has been assigned a new altitude, only HARD altitude (F5) data shall be transferred. Temporary altitude data shall NOT be transferred.

d. Holding

- i. When holding is required at arrival fixes, ZDC or ZNY shall retain communications and control of the holding patterns within their delegated airspace.
- ii. During periods of airborne holding, ZDC and ZNY will hold at published holding fixes at all times unless coordinated otherwise.

Full Routes

- a. By signing this agreement, the New York ARTCC and Washington ARTCC agree to keep a preferred route database (PRD) up-to-date with mandatory routes. The following database shall be used for ALL aircraft originating and terminating in ZNY and ZDC.
- b. Instructions on deviations from the mandatory routes are located on the first page of the PRD.

Assumptions

Washington and New York Centers shall assume control of TRACON airspace within their respective ARTCCs if the TRACON position is not manned. When this occurs, all airspace and altitude restrictions and crossing instructions agreed to below still apply.

Inter-Facility Coordination Procedures

- a. New York Center/TRACON:
 - i. Area/sector coverage shall be announced on the ATC channel after initial sign-on, shift changes, or after position combination/decombination. The controller assuming control of any particular area/sector is responsible for making the ATC channel broadcast.
 - ii. Controllers shall indicate what areas they are covering within their controller ATIS. If a controller is covering all areas for a particular facility, then that shall be stated in the controller ATIS.
 - iii. N90 TRACON:
 1. For the purposes of this section, "all N90 Areas" includes the following area airports: LGA, LGAN, JFK, EWR, EWRN, EWRS, ISP, ISPE, and ISPN.
 - iv. ZNY ARTCC:
 1. ZNY Mainland shall include North, South, East, and West. ZNY Oceanic shall include the remaining sectors.
- b. Washington Center/TRACON
 - i. Area/sector coverage shall be announced on the ATC channel after initial sign-on, shift changes, or after position combination/decombination. The controller assuming control of any particular area/sector is responsible for making the ATC channel broadcast.
 - ii. Controllers shall indicate what areas they are covering within their controller ATIS.

Transfer of Control Procedures

- a. Radar handoffs must be made in relation to the center proscribed boundary. Boundaries defining lateral/vertical control jurisdiction between centers is defined as the transfer point (TP).
- b. Aircraft enroute between centers must be transferred at specified altitude/flight levels as per Attachment 1 unless otherwise coordinated.

- c. One center must not require the other to change or issue routing to aircraft if the routing is satisfactory to the first route fix in the receiving center's area.
EXCEPTION: If any aircraft originates within either the ZDC or ZNY area, it will be the transferring center's responsibility to ensure that the aircraft has the correct route in its entirety prior to transfer of control to the receiving center.
- d. ZNY shall have control for turns 20 degrees or less, north of V268, for traffic routed J220/J227 or Hagerstown VOR.
- e. ZNY shall have control for turns 20 degrees left or right of course north of Woodstown VORTAC for traffic routed J42.
- f. ZNY may clear traffic routed via J209 direct VILLS without prior coordination.
- g. ZDC may clear traffic routed J79 direct JFK without prior coordination.
- h. ZDC may turn aircraft up to 15 degrees left or right of course within 10 nautical miles of the boundary for MDT/MDT satellites departures routed via HGR.

Overflights

- a. Turbojet traffic northeast bound on J42 shall be at or above FL230.
- b. Traffic landing SYR via J220/J227 shall be at or below FL310.
- c. Aircraft landing PVD shall be at or below FL330.
- d. Aircraft landing BOS shall be at or below FL370.
- e. Aircraft landing SWF and SWF Area airports via J220 shall be at FL290.
- f. ZDC shall not route aircraft destined SWF and SWF Area airports departing the Washington metropolitan area via J220.

ZNY Sectors 82, 83 and 86

- a. ZNY Sectors 82 and 83 (depicted in Attachment 2), including those parts of Warning Areas W-72A, W72-B, W110 and W122 that are within the confines of ZNY sector 82 and 83, are delegated to ZDC. If ZDC is offline, New York Oceanic (ZWY) can provide radar services in these areas for those traffic whose filed route transits through the ZWY airspace.
- b. ZNY Sector 86 (depicted in Attachment 2), including those parts of Warning Areas W-107, W-386 and W-387 that are within the confines of sector 86, are controlled by ZNY. If ZNY is not online, ZWY can provide radar services in these areas. ZDC has no authority in those parts of the aforementioned Warning Areas which are inside the lateral boundaries of ZNY Area 86. ZNY has no authority in those parts of the aforementioned Warning Areas which are outside the lateral boundaries of ZNY Area 86.

Attachment 1 - Transfer of Altitude/Routes

Departures: ZNY to ZDC

Airport	Route Segment	Altitude	Remarks
JFK	J174	Climbing to FL230	Aircraft requesting FL240 or above
		FL220 or lower	DCA/ADW arrivals only
	J121	Climbing to FL220 or lower	
Other N90s	J37/J209	Climbing to FL240 or requested lower	
MDT + Sats	J6/J48	FL180 or above climbing to FL230 or lower	Aircraft requesting FL180 or above
	EMI GVE J75	FL180 or above climbing to FL230 or lower	Aircraft requesting FL180 or above
	HGR	Climbing to FL210 or lower	ZNY may clear aircraft direct HGR without coordination
PHL	J48/J6	FL240 or above	

Arrivals: ZNY to ZDC

Airport	Route Segment	Altitude	Remarks
ACY	DQO V29 ENO SIE	Descending to 15,000'	Cross boundary at or below FL190
ADW	CYN V1 ATR V308 OTT	16,000' or below	Props only
	J174 ZIZZI ATR V308 OTT	FL200 through FL220	Jets only
	V139 SIE V308 BILIT	16,000' or below	JFK & satellite jet departures requesting 17,000' or below
	B24 SIE	FL220	Arrivals from New York Oceanic (ZWY)
	CYN V1 LEEAH V268	16,000' or	Props only

BWI	BAL	below	
	V139 AVALO V268 BAL	16,000' or below	Props only
	B24 SIE	FL220	Arrivals from New York Oceanic (ZWY)
	MXE	TROYZ at 12,000'	Jets only at 250 knots. Must be sequenced in trail with arrivals over LRP.
	LRP	25 S LRP or 40 NE BAL at 12,000'	Jets only at 250 knots. Must be sequenced in trail with arrivals over MXE.
		9,000'	Props only
	CHO	J75 GVE	FL230 or filed lower FL
DCA	CYN V1 LEEAH V229 V308 OTT	16,000' or below	Props only
	J174 ZIZZI ATR V308 BILIT	FL200 through FL220	Jets only
	V139 SIE V308 BILIT	16,000' or below	JFK & satellite jet departures requesting 17,000' or below
	B24 SIE	FL220	Arrivals from New York Oceanic (ZWY)
	MXE CLIPR- STAR	CLIPR at 12,000'	Jets only. Must be sequenced in trail with arrivals over PSB/LRP
	LRP/PSB SKILS-STAR	SKILS at 12,000'	Jets only. Must be sequenced in trail with arrivals over MXE
	MXE	TROYZ at 11,000'	Props only
	LRP	10,000'	Props only
DOV	J121/V139 SIE	16,000' or below	
	CYN V1 LEEAH V268 ENO	16,000' or below	
	B24 SIE	16,000' or below	Arrivals from New York Oceanic (ZWY)

HSP/LWB	J48 MOL	FL320 or filed lower FL	
IAD	LRP/DELRO	Descending to 15,000'	Jets only. PCT has control for turns up to 45 degrees right of course
	LRP/DELRO	Descending to 12,000'	Props only
	PSB/HAR	14,000' descending to 13,000'	Jets only. PCT has control for turns up to 30 degrees left of course
	PSB/HAR	Descending to 9,000'	Props only. PCT has control for turns 30 degrees left or right of course south of V474
	GRAVZ# STAR	RIKTR at 12,000'	Jets
		RIKTR at 9,000'	Props
ORF, PHF, LFI, NTU, NGU, ECG	AR8 ECG	FL300 or below	Arrivals from New York Oceanic (ZWY)
PHL	BRIGS VCN-STAR or JIIMS-STAR	14,000' or below	
	B24 SIE	16,000' or below	Arrivals from New York Oceanic (ZWY)
WRI	DQO ENO SIE WINKK CYN	17,000' or below	

Departures: ZDC to ZNY

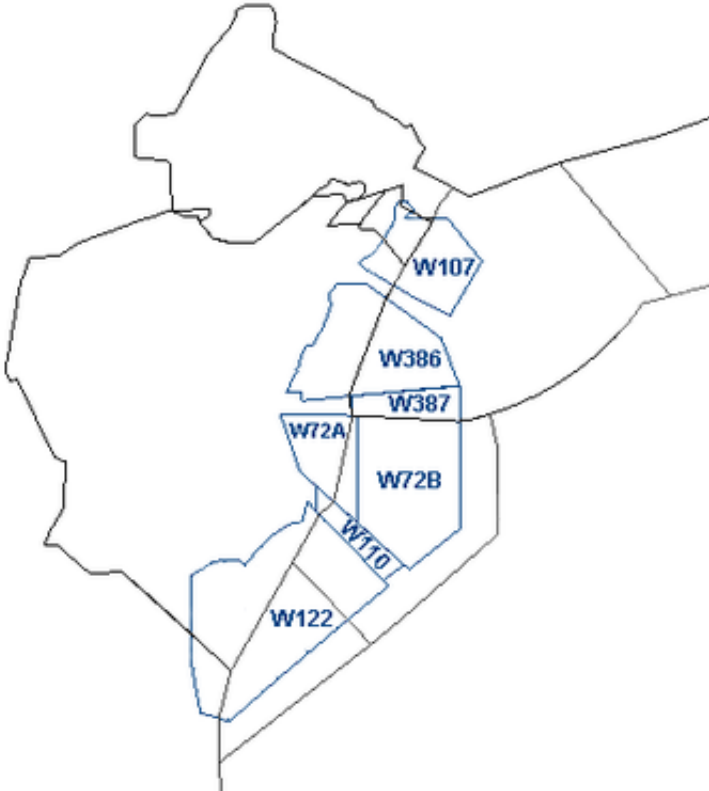
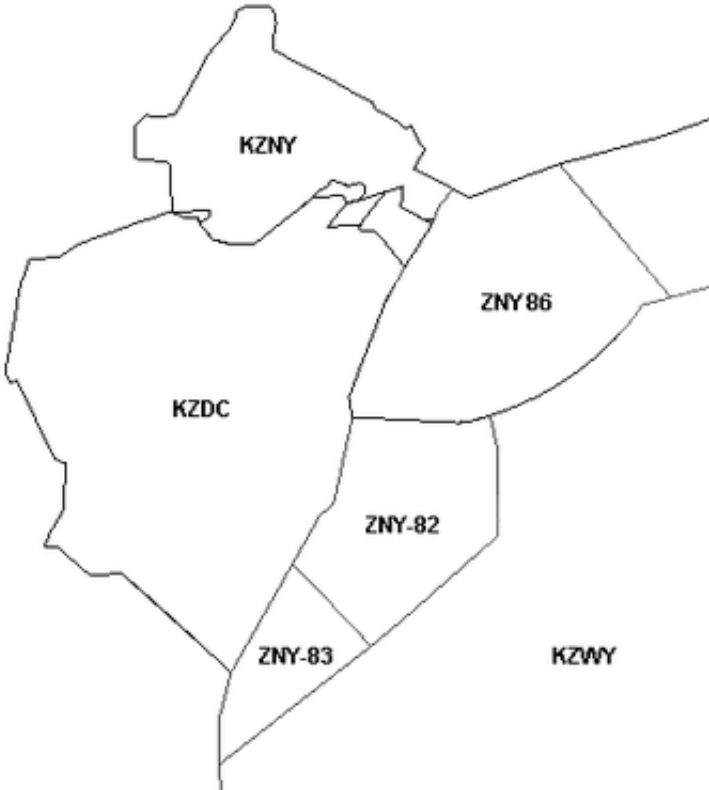
Airport	Route Segment	Altitude	Remarks
ACY	DQO	FL230 or below	
DCA, IAD, ADW, BWI	J220/J227	Climbing to FL270 or lower filed altitude	Jets only
		Climbing to FL210 or lower filed altitude	Props only
DOV	J121	Climbing to 17,000'	
WRI	DQO	Climbing to 14,000'	

Arrivals: ZDC to ZNY

Airport	Route Segment	Altitude	Remarks
ALB	J42/J79	FL350 or below	Jets only
BAF, POU, HFD, CEF, MSV, MGJ	J42	FL270	Cross RBV at
	J79	FL250	Cross 40 SW of JFK at
BDL	J42	FL270	Cross RBV at
	VILLS DPK	FL250	50 S DPK - ZNY shall have control for turns up to 20 degrees within 20 nm of boundary
CTO (3C8)	J121/V139 SARDI CCC	FL210 or below	Single engine props excluded
DXR	J121/V139 RICED RICED-STAR	FL210 or below	Single engine props excluded
EWR	See LOA PHL ZDC and LOA N90 ZDC		
EWR Sats	See LOA PHL ZDC		
	J227 J49 MAGIO J70 LVZ LVZ-STAR	FL370 or below	Non-RNAV Jets
JFK/FRG	SIE CAMRN-STAR	FL180 or lowest usable FL	Jets only
	V229 PANZE V184	15,000' or	

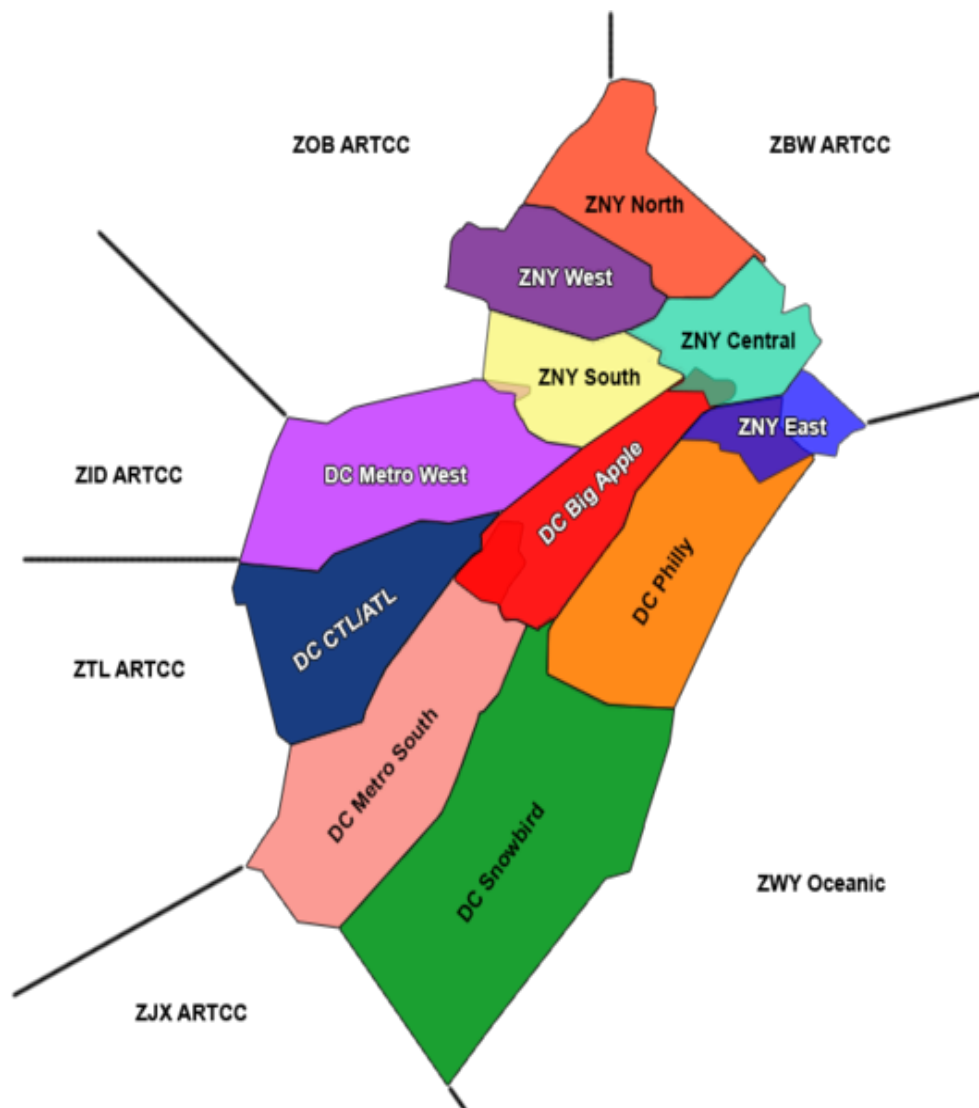
	ZIGGI	below	Props only (in-trail spaced)
	V229 PANZE V44 CAMRN	17,000' or below	Jets only at or below 17,000'
HPN	SIE BOUNO-STAR	FL240 or lower filed FL	
	J150 CYN BOUNO- STAR	FL230 or lower filed FL	
	V139 RICED RICED- STAR	17,000' or below	Aircraft filed at or below 17,000' only
ISP	SIE V44 CAMRN CCC	FL190	
	J121/V139 SARDI CCC	FL210 or below	Single engine props excluded
ISPE (FOK, HTO, MTP, 21N)	J121/V139 HTO	FL210 or below	Single engine props excluded
LGA	See LOA N90 ZDC		
MDT, CXY, LNS, RDG	HGR V377 HAR or GEERI V474	15,000' or below	
ISPN (OXC, BDR, HVN, 3B9)	J121/V139 RICED KEYED	FL210 or below	Single engine props excluded
PHL	See LOA PHL ZDC		
	HGR HAR LRP V210 BUNTS	17,000' or below	Props only
SWF + Sats	J79	FL250	Cross 40 SW of JFK at (Aircraft EAST of RDU-JFK line)
	VALLO J220 J49 HNK DNY V483 FILPS (DEST.)	FL290	Aircraft WEST of RDU-JFK line

Attachment 2 - ZNY Sectors 82, 83 and 86 and associated Warning Areas



Attachment 3 – Common Airspace Splits Between Centers

Overview of Center Airspace

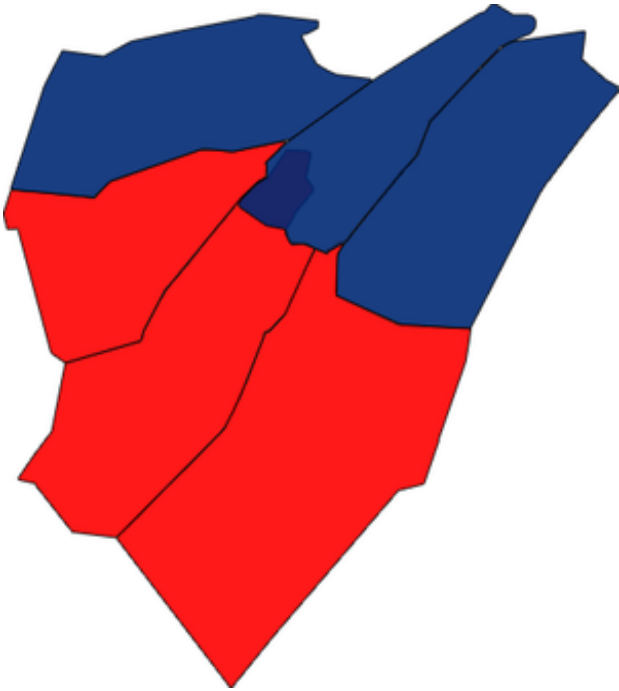
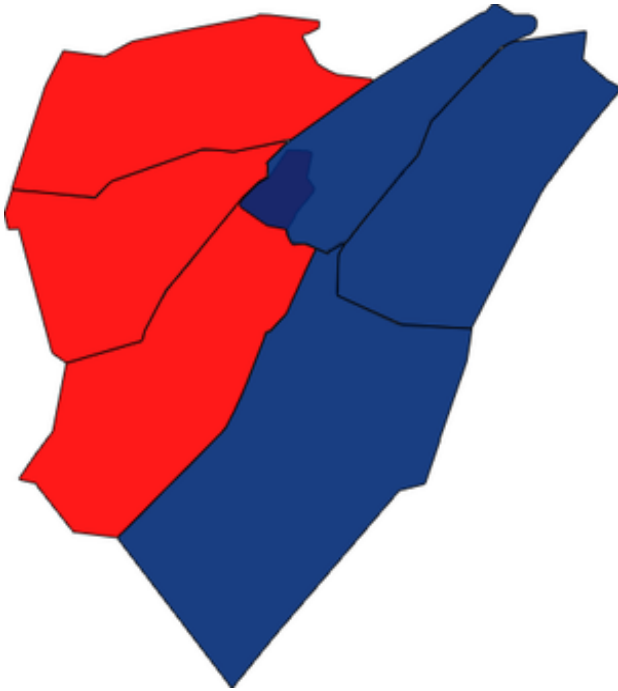
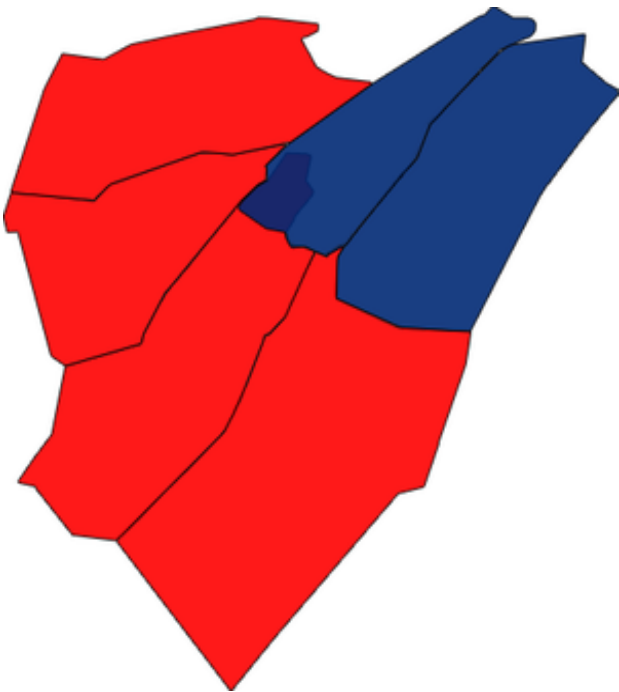
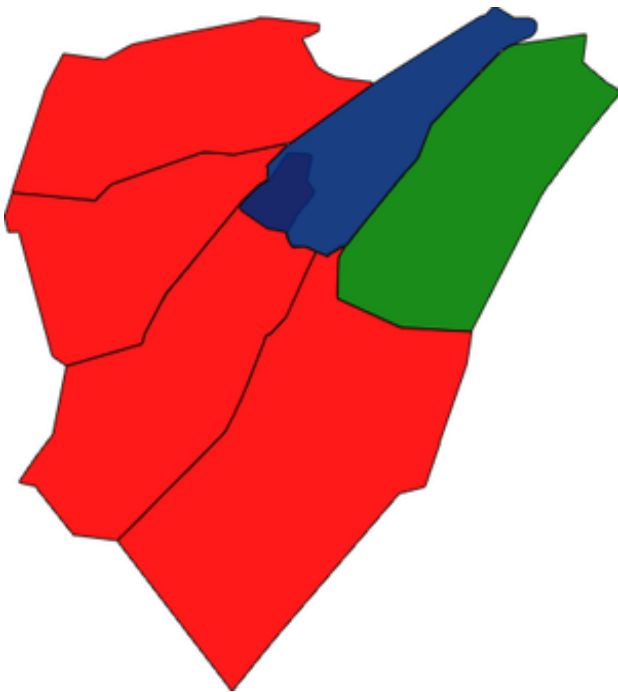


NOTE: NY Center airspace consists of five sections: North, West, South, East and Central. When **all positions are combined**, New York Center will be controlled by **NY_CTR**

NOTE: DC Center airspace consists of four sections: Area A, Area B, Area C and Area D. When **all positions are combined**, Washington Center will be controlled by **DC_32_CTR**

NOTE: All areas are SFC to FL600 unless specifically stated otherwise.

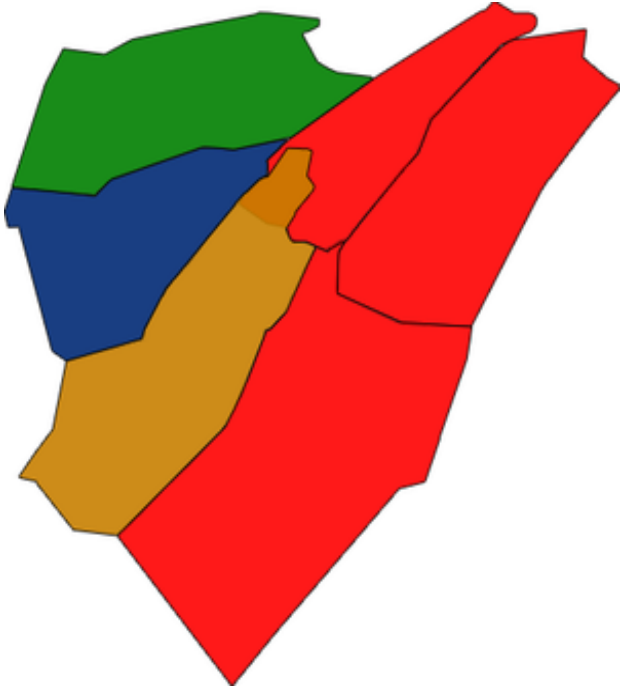
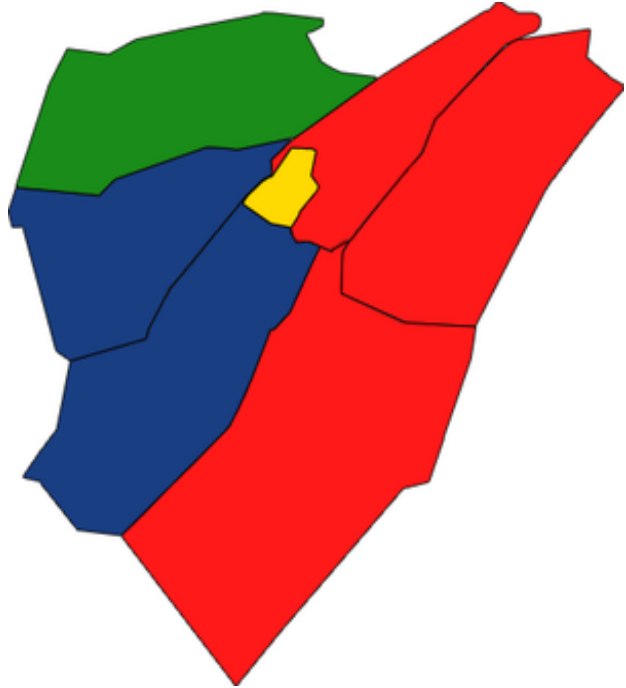
Washington Center Splits

Two Center Operation (N/S split)	Two Center Operation (E/W split)
 A map of the Washington Center (ZDC) area divided into six regions. The northern regions (1, 4, and 6) are colored blue, and the southern regions (3, 2, and 5) are colored red.	 A map of the Washington Center (ZDC) area divided into six regions. The western regions (5, 2, and 6) are colored blue, and the eastern regions (1, 4, and 3) are colored red.
<p>ZDC is split in this configuration between areas 1, 4 and 6 in the North and 3, 2 and 5 in the South.</p>	<p>ZDC is split in this configuration between areas 5, 2, 6 in the west and 1, 4, 3 in the east.</p>
Two Center Operation (ZNY heavy)	Three Center Operation (ZNY heavy)
 A map of the Washington Center (ZDC) area divided into six regions. The northern regions (1 and 4) are colored blue, and the southern regions (3, 2, 5, and 6) are colored red.	 A map of the Washington Center (ZDC) area divided into six regions. The northern regions (1 and 4) are colored blue, the southern regions (3, 2, 5, and 6) are colored red, and an additional region on the far right is colored green.
<p>The split is between areas 1 and 4; and areas 3, 2, 5 and 6.</p>	<p>ZDC can be split for events that feature JFK and other adjacent N90 airports or also inclusive of Boston via the New York heavy</p>

three-way split.

Three Center Operation (Potomac heavy)

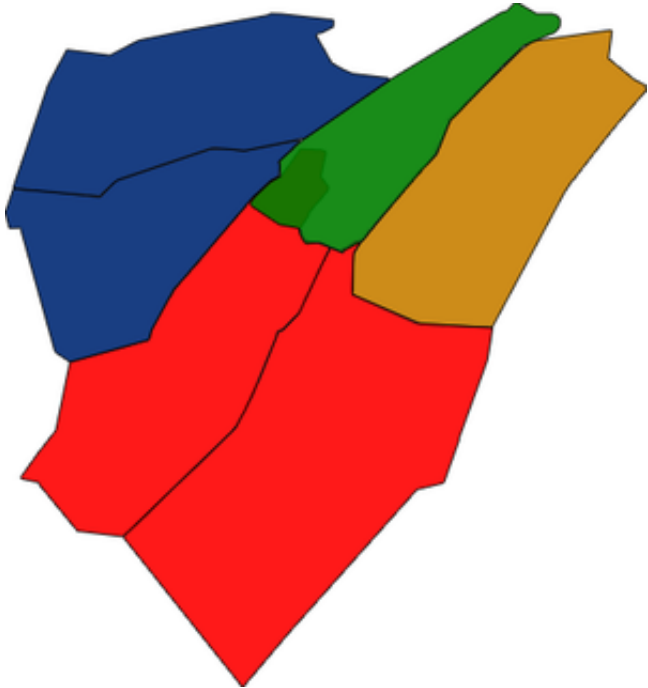
Four Center Operation (Potomac heavy)



ZDC can be split into a three-way split to accommodate heavy traffic into PCT. (Note IRONS can be split off on its own for a four-way split (not covered)). Area 16 is by itself, area 5 by itself, and areas 1-4 are covered combined.

ZDC can be split such that areas 1, 4 and 3 are combined with 2, 5 and 6 separate. This is utilized for PCT heavy events and little overflights over the east side


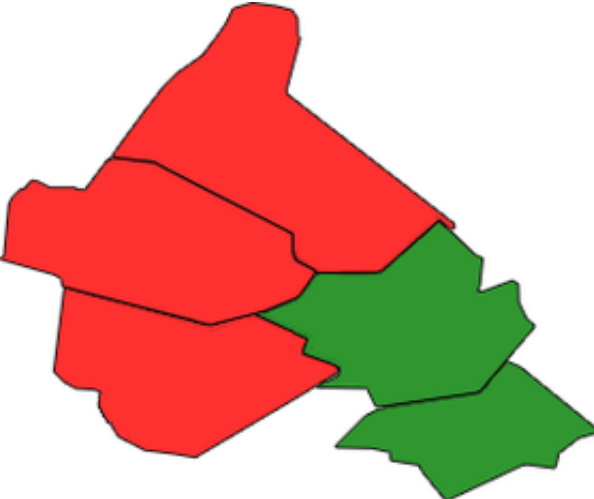


Four Center Operation (ZNY heavy)



ZDC can be split in a way similar to the three-way ZNY heavy split with areas 1 and 4

separate; areas 2 & 3 combined and areas 5 & 6 separate. This would be for a combined PCT and N90/BOS event.

New York Center Splits

Two Center Operation (SW/NE split)	Two Center Operation (E/W split)
	
<p>NY_SW_CTR (South and West): Controls PHL TRACON when offline</p> <p>NY_NE_CTR (North, Central, and East): Controls N90 TRACON when offline</p>	<p>NY_W_CTR (South, West, and North): Controls PHL TRACON when offline</p> <p>NY_E_CTR (East and Central): Controls N90 TRACON when offline</p>
Three Center Operation	Four Center Operation
	
<p>NY_SW_CTR (South and West): Controls PHL TRACON when offline</p> <p>NY_E_CTR (East and Central): Controls N90 TRACON when offline</p> <p>NY_N_CTR</p>	<p>NY_W_CTR</p> <p>NY_S_CTR: Controls PHL TRACON when offline</p> <p>NY_N_CTR</p> <p>NY_E_CTR (Central and East): Controls N90 TRACON when offline</p>