

Cleveland ARTCC and Boston Virtual ARTCC  
Letter of Agreement

**Effective:** 4 August 2021

**1. PURPOSE:**

This agreement defines the necessary pre-defined air traffic control procedures and coordination responsibilities between the Cleveland ARTCC (ZOB) 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 ZOB 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 must never be used for actual flight or air traffic control operations. BVA and ZOB are not affiliated with the FAA in any manner.

**4. GENERAL PROCEDURES:**

**a. BVA/ZOB ATC must 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/ZOB.

**(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.

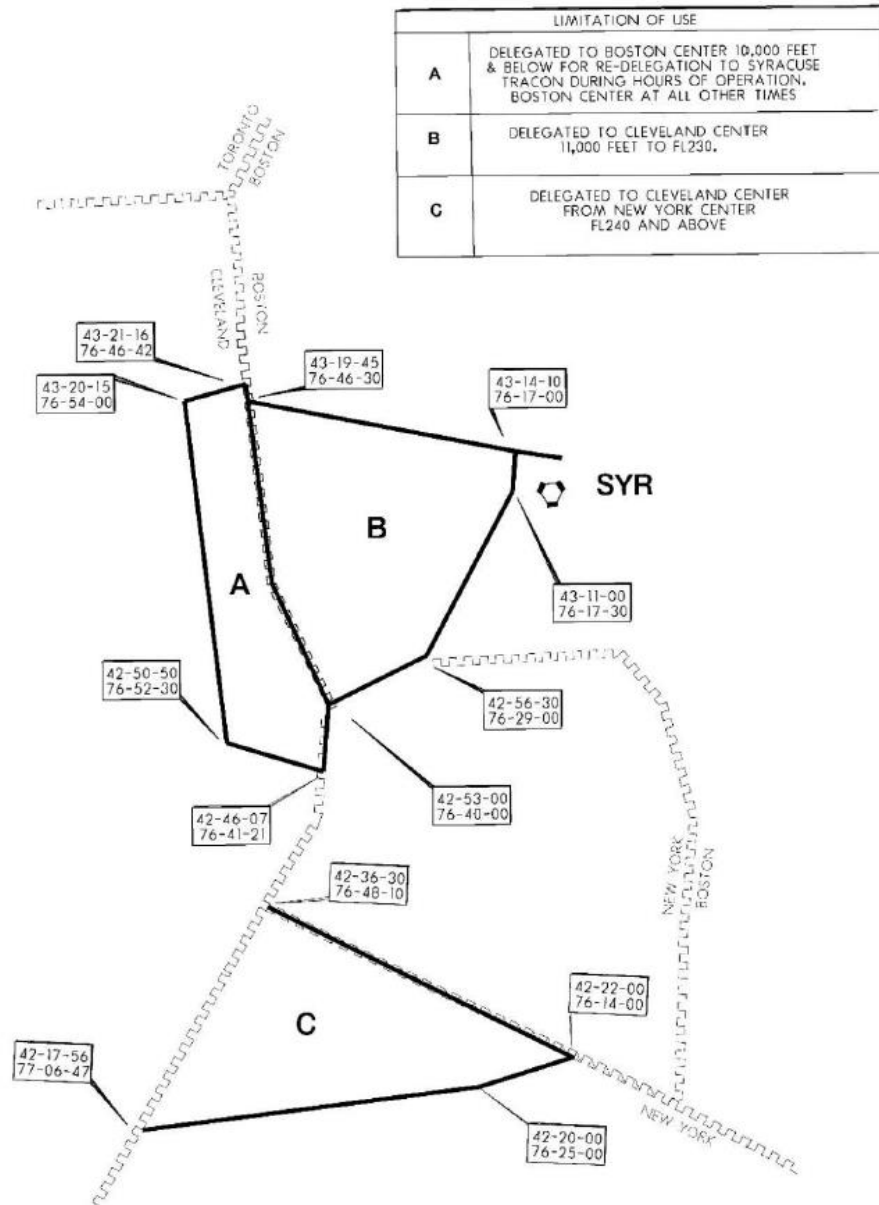
- (5)** Ensure that all conflicts, imminent situations, and MIT separation issues are resolved prior to handoff.
- (6)** Ensure that all scratchpad entries are cleared unless required to convey operational information (e.g. “M80” for assigned Mach number, “H####” for assigned heading) not coordinated 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 must 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.** Either facility may clear aircraft direct HOCKE/DERLO without coordination at or after SYR, contingent upon Misty ATCAA activity.
- c.** Traffic routed via Q935 to join Q29 will become ZOB control for turns toward JHW when 30 NM east of the common boundary.
- d.** ZBW may clear MSP arrivals via Q816 AHPAH (or any preceding fix).
- e.** ZOB may clear BOS arrivals via the JFUND# direct PONCT.
- f.** ZOB must transfer ROC departures climbing to FL270 or requested lower altitude.

**5. RESTRICTIONS:**

- a. Required routes and altitudes for aircraft transitioning the ZOB/ZBW boundary are contained in Attachments 1-3.

**6. AIRSPACE DELEGATION**

- a. ZBW delegates the airspace in the vicinity of west of the SYR VOR between 11,000' – FL230 to ZOB as shown below:



## 7. ZOB SECTOR SPLITS

### a. General

- (1) When Cleveland Center is combined, it will be operated as CLE\_04\_CTR (MFD04) on frequency 134.900.
- (2) Aside from events and/or special occasions, Cleveland Center splits will be coordinated with adjacent facilities through ATC chat or private messages. Standard sector splits are depicted below.

### b. Altitudes

- (1) Low-altitude sectors cover SFC-FL239. High-altitude sectors cover FL240-FL600.

### c. Splits

#### (1) HI/LO Split

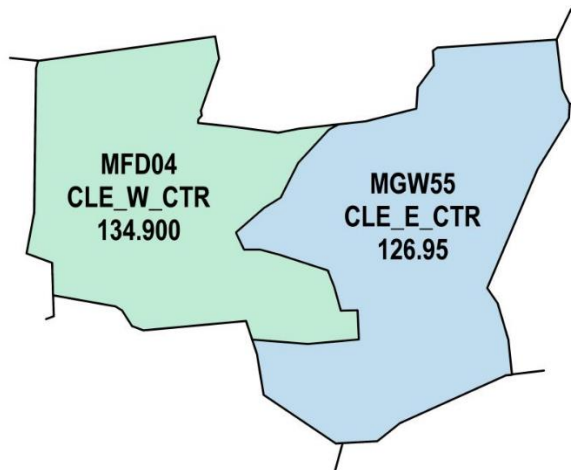
- (a) When Cleveland Center is split into a HI/LO split, ZBW will initiate handoffs to CLE\_04\_CTR on 134.900 for aircraft between SFC and FL230. ZBW will initiate hand-offs to CLE\_48\_CTR (RAV48) on 119.870 for aircraft between FL240 and FL600.

#### (2) East/West Split

- (a) When Cleveland Center is split in an east/west split, ZBW will initiate all hand-offs to CLE\_55\_CTR (MGW55) on 126.950, no matter the altitude.

#### (3) Diagrams

##### (a) East/west split



## **8. ZBW SECTOR SPLITS**

- a.** When Boston Center is combined, it will be operated as BOS\_CTR on frequency 134.700 (CON37).
- b.** Boston Center splits will be coordinated with adjacent facilities using the air traffic control channels. Current/in-use sector splits will be published at the following URL: [airspace.bvartcc.com](https://airspace.bvartcc.com).

**ATTACHMENT #1: AREA AIRPORT LISTINGS**

AREA	SATELLITE AIRPORT CODES
Detroit Area (D21)	ARB, DET, MTC, PTK, YIP, CYQG
Albany Area (ALB)	GFL, SCH, 5B2, NY0, DDH, AQW, PSF, 1B1, GBR, K23
Newark Area (N90/ARD)	12N, CDW, 39N, N51, SMQ, FWN, TEB, 1N7, N07, LDJ, MMU, 4N1, N05, 47N
Bradley Area (Y90)	BAF, CEF, HFD, ORH

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

AIRPORT	ROUTE SEGMENT	ALTITUDE	SPECIAL
KSYR	Direct SYR or KSYR between SYR-250 and SYR-270	30 DME from SYR at 11,000	SYR TRACON or ZBW has control on contact for turns
KALB		AOB FL290	
KBED	EEGUL ZELKA#		
KBDL	AUDIL STELA# MEMMS WILET STELA#	AOB FL350	
KBDR KHVN KOXC	RKA BDR#	AOB FL330	
KBOS	RNAV Jet: PONCT JFUND# Non-RNAV Jet: ALB GDM# Non-Jet: ALB GDM#		
KEWR	RNAV: FLOSI# Non-RNAV: SHAFF#	AOB FL270	Must be on or north of Q140
KEWR Satellites	WEARD V489 COATE	AOB FL270	
KGTB	SYR DCT	AOB FL190, descending to 11,000	
KHPN KDXR	ITH DNY VALRE#	AOB FL330	
KISP	NELIE#		
KJFK	IGN#		
KLGA	ALB HAARP# RKA HAARP#		
KMHT	RNAV Jet: PONCT ROZZE#		
KRME		Descending to 17,000 or below	Must be north of Q935
KSWF KPOU KMSV	ITH DNY V483 FILPS	AOB FL270	

Altitude restrictions apply crossing the ZOB/ZBW common boundary, unless otherwise noted. The “#” indicates the current STAR/SID procedure number.

**ATTACHMENT #3: ZBW PROCEDURES FOR ZOB ARRIVALS**

AIRPORT	ROUTE SEGMENT	ALTITUDE	SPECIAL
KBUF	EHMAN	AOB FL270, descending to FL240	ZOB has control for turns up to 20° left or right of course
KCLE	RNAV: JOSSY THOME TRYBE#		
	Non-RNAV Only: SYR JHW CXR		
KDTW	RNAV: GONZZ DONEO CUUGR# or GONZZ DONEO TPGUN#		ZOB has control on contact for route amendments, turns direct DONEO
	Non-RNAV Only: SYR JHW J70 SVM		
KDTW Satellites	COLTS GIGGY# or COLTS OKLND#		See Attachment #1
KIAD	J59 or direct PSB east of J59	AOB FL300	
KIAG		AOB FL270, descending to FL240	
KROC		Lowest usable flight level	
CYKZ CYTZ	WOZEE LINNG	AOB FL320	
CYYZ	WOZEE LINNG# (jets) WOZEE VERKO# (props)	AOB FL320	

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