

**VATUSA CLEVELAND ARTCC AND MINNEAPOLIS ARTCC
LETTER OF AGREEMENT**

EFFECTIVE: MARCH 30, 2021

SUBJECT: INTERFACILITY COORDINATION

1. PURPOSE

This Letter of Agreement defines inter-facility responsibilities and communication procedures between VATUSA Cleveland ARTCC (ZOB) and VATUSA Minneapolis ARTCC (ZMP). This agreement is supplemental to procedures contained within FAA Order 7110.65. Controllers must 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. DISCLAIMER

Information contained herein is designed and specifically for use in a virtual air traffic control environment. It is not applicable, nor should it be referenced for live operations in the National Airspace System (NAS).

3. CANCELLATION

VATUSA Cleveland ARTCC and Minneapolis ARTCC Letter of Agreement dated June 18, 2020 is hereby cancelled.

4. RESPONSIBILITIES

- a. LAN Approach Control airspace, including those portions underlying ZMP, is delegated to ZOB, whenever LAN Approach Control is closed.

5. RESTRICTIONS

- a. Each ARTCC must route/restrict aircraft in accordance with Attachment 3 of this document.
- b. The receiving ARTCC has control for beacon code changes and turns, when aircraft are within 20 nautical miles of the common ZOB/ZMP boundary. The maximum turn must not exceed 20 degrees off course and must not affect another sector without proper coordination.

6. KDTW ARRIVALS THAT WILL ENTER ECK SECTOR. Unless otherwise coordinated:

- a. ZMP must:
 - i. Input a hard altitude of FL240. Issue a clearance to cross the boundary AOB FL280, pilot discretion to FL240.
 - ii. Initiate a handoff to ECK sector. ECK sector will redirect the handoff to FNT sector.
 - iii. Transfer communications to FNT sector upon acceptance of handoff by FNT

**VATUSA CLEVELAND ARTCC AND MINNEAPOLIS ARTCC
LETTER OF AGREEMENT**

sector. In the event that FNT sector has not accepted the handoff at the time the aircraft is crossing the ZOB/ZMP boundary, transfer communications to ECK sector.

- b. ZOB must:
 - i. If traffic is not a factor, re-direct handoff to FNT sector.
 - ii. If traffic is a factor requiring communications with the aircraft, verbally coordinate with ZMP.

7. KBAX PROCEDURES

- a. ZOB shall be the controlling authority for departure clearances off KBAX.
- b. All bases, tops, and visibility reports in the vicinity of KBAX must be coordinated between ZOB and ZMP for use in providing approach control services.

8. DATA BLOCK COORDINATION

- a. Acceptance of a handoff constitutes authorization for the aircraft to climb/descend to the displayed altitude.
- b. Interim Altitude (ITAL):
 - i. ITAL may be used for transitioning aircraft not assigned the final requested altitude as indicated in the flight plan.
 - ii. Handoffs shall be directed to the appropriate sector for the aircraft altitude assignment, including an assigned interim 'T' altitude when the ITAL is not in the same sector as the final requested "hard" altitude.
 - iii. The receiving controller approves an altitude by accepting the handoff. When unable to approve the altitude indicated in the data block, the receiving controller must verbally coordinate with the transferring controller, prior to accepting the handoff.

NOTE: These procedures shall not be authorized to override other altitude restrictions specifically spelled out in this Letter of Agreement, nor be authorized to coordinate inappropriate altitude for direction of flight (IAFDOF).



- c. Ensure the data block is formatted as follows:
 - i. Data blocks must reflect the aircraft's assigned altitude at the time of handoff.
 - ii. Handoffs must be directed to the appropriate sector for the aircraft's altitude assignment. Acceptance of a radar handoff constitutes approval coordination for that aircraft to climb or descend to the displayed altitude.
 - iii. Use of interim (temp) altitudes is authorized between Cleveland ARTCC and Minneapolis ARTCC and must represent valid altitude coordination. Use of interim altitudes must not be authorized to coordinate Inappropriate Altitude for Direction of Flight (IAFDOF), or to supersede altitude restrictions established within this Letter of Agreement.
 - iv. No scratchpad/ERAM 4th line data, 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:

**VATUSA CLEVELAND ARTCC AND MINNEAPOLIS ARTCC
LETTER OF AGREEMENT**

1. Indicated speed restrictions (e.g., "S210", "S270+"). Clients only capable of 4-characters remove the "S" if needed (e.g., "270+")
2. "M" for Mach speed restrictions (e.g., "M81", "M78+")
3. "H" for heading assignments (e.g., "H230")
4. "D" and direction for deviations (e.g., "D15L" for 15 degrees left of track)

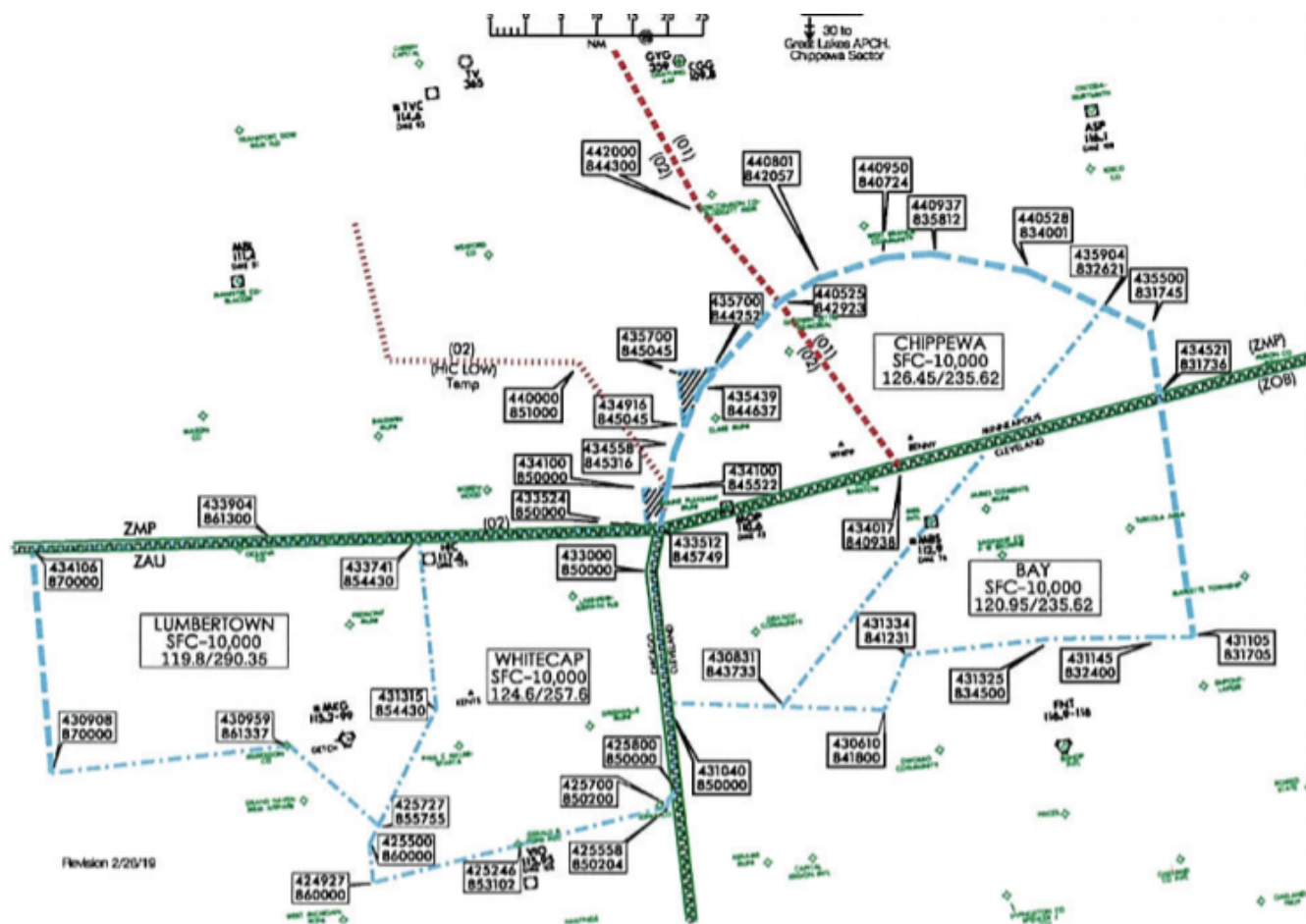
6. ATTACHMENTS

- a. Attachment 1 – AZO/LAN Approach Control Delegated Airspace
- b. Attachment 2 – Detroit Satellite & Cleveland Area Airport
- c. Attachment 3 – Routing, Restrictions, & Control Table
- d. Attachment 4 – Airspace

	
Nicholas Lascko Air Traffic Manager VATSIM Cleveland ARTCC	Dhruv Kalra Air Traffic Manager VATSIM Minneapolis ARTCC

VATUSA CLEVELAND ARTCC AND MINNEAPOLIS ARTCC
LETTER OF AGREEMENT

ATTACHMENT 1 - AZO/LAN APPROACH CONTROL DELEGATED AIRSPACE



**VATUSA CLEVELAND ARTCC AND MINNEAPOLIS ARTCC
LETTER OF AGREEMENT**

ATTACHMENT 2 - DETROIT SATELLITE & CLEVELAND AREA AIRPORTS

Area	Satellite Airport Codes
Detroit Satellite (D21)	DET, PTK, ARB, YIP, TTF, MTC, CYQG, ONZ, OZW, D98, VLL
Cleveland Area (CLE)	CLE, BKL, CGF, LNN, 2G1, 1G1, LPR, 7G8, 1G5

**VATUSA CLEVELAND ARTCC AND MINNEAPOLIS ARTCC
LETTER OF AGREEMENT**

ATTACHMENT 3 - PERMANENT ROUTE/ALTITUDE RESTRICTIONS FROM ZMP TO ZOB

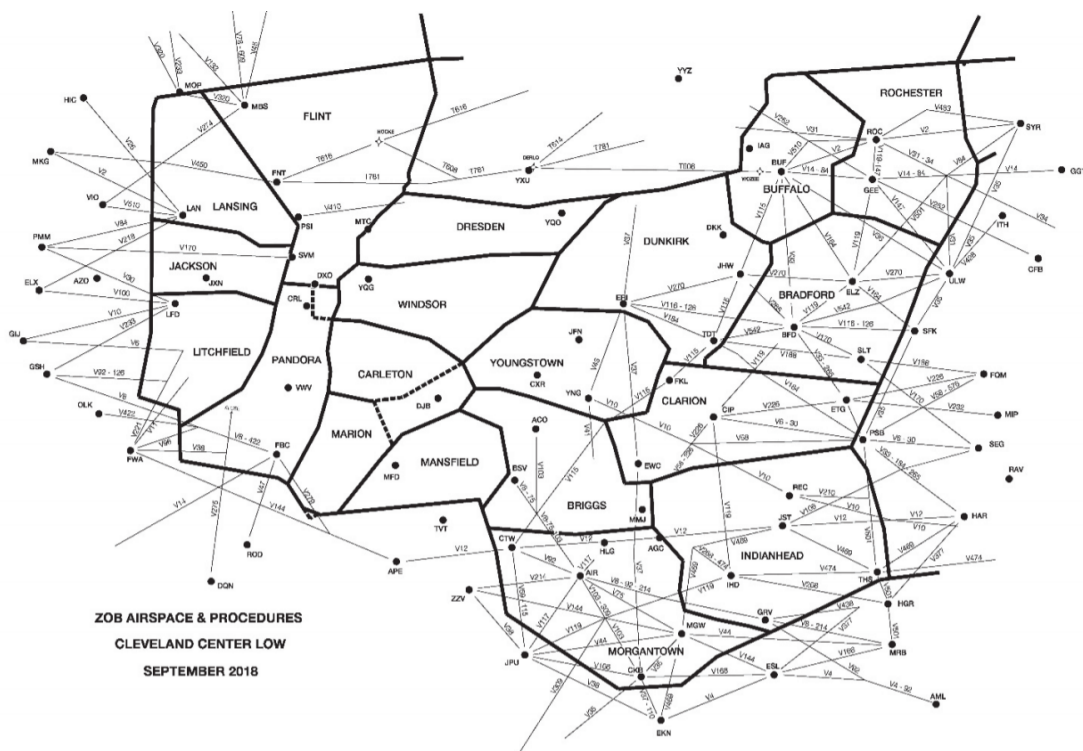
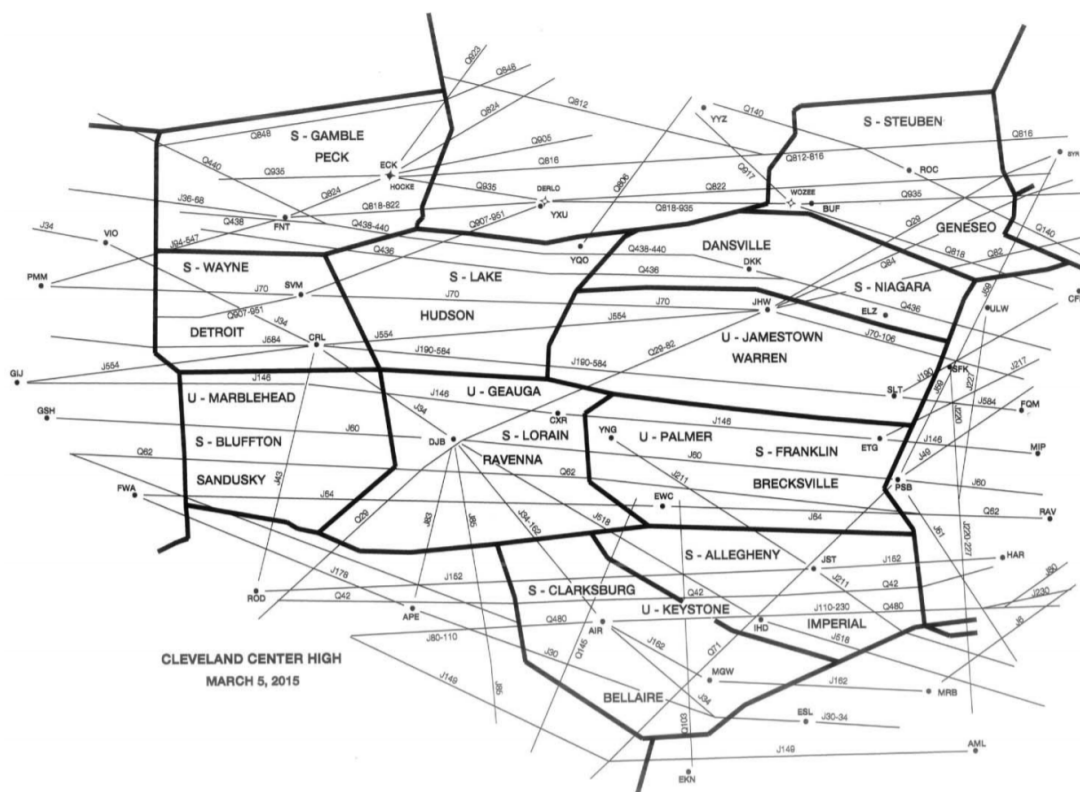
ZMP Provides for ZOB						
#	Arrival Airport	If Via	Aircraft Type	Route	Altitude <small>Unless otherwise specified, altitude restriction is at the boundary</small>	Notes
1	KCLE	FRYYE		BRWNZ STAR	AOB FL310	
		OLYEE			.	
2	KDTW	Airports departing from Michigan and Overseas flights	RNAV	PNNT0 GRAYT STAR or PNNT0 LAYKS STAR	AOB FL280 with pilot discretion to FL240	ZOB has control to issue the appropriate OPD. The receiving controller approves IAFDOF altitudes by accepting the handoff. When unable to approve the altitude indicated in the data block, the receiving controller must verbally coordinate with the transferring controller prior to accepting the handoff.
			Non-RNAV	MBS FNT DXO		
		All Others		HOOTA KKISS STAR or PORZL KKISS STAR		
				HOOTA RKCTY STAR or PORZL RKCTY STAR		
3	KDTW Satellites		RNAV	OREYO RRALF STAR	AOB FL200	
			Non-RNAV	MBS FNT SVM		
4	KTOL	Recovering Military Aircraft		GNZOE HHRNT WASPP BURDZ RPTER or COMDR HHRNT WASPP BURDZ RPTER		
5	CYYZ			YZEMN NUBER STAR		
6	CYXU				AOB FL270	
		When Steelhead ATCAA is active		HOCKE		
7	CYZR				AOB FL270	

**VATUSA CLEVELAND ARTCC AND MINNEAPOLIS ARTCC
LETTER OF AGREEMENT**

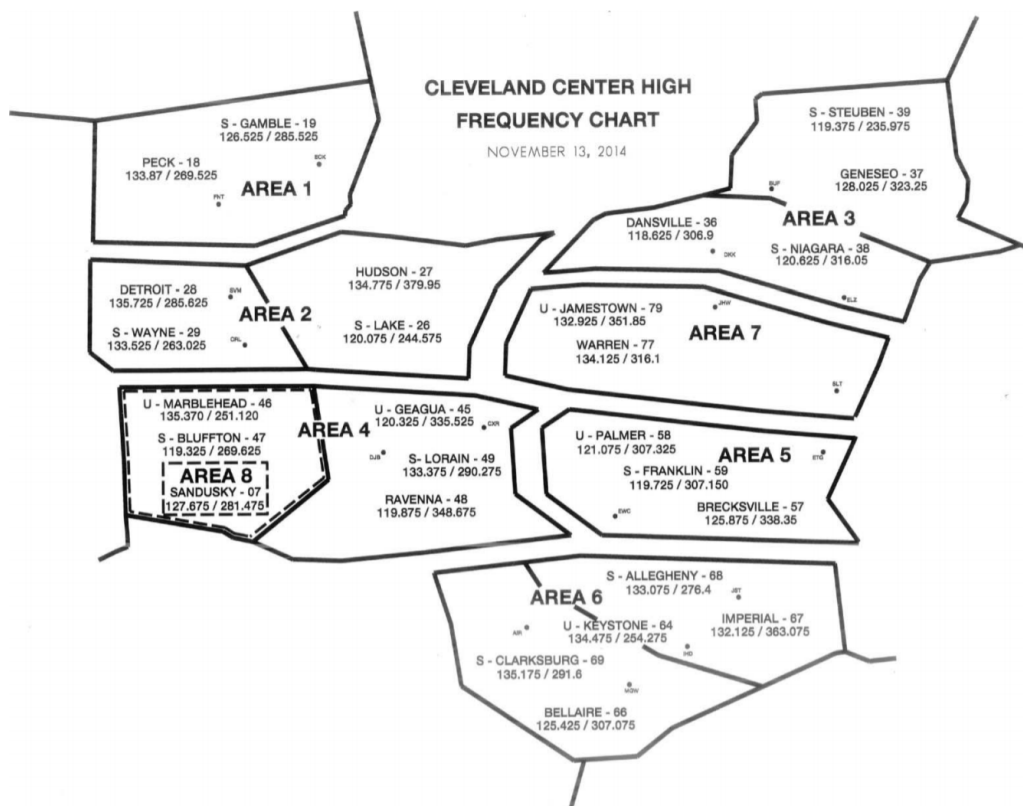
ZOB Provides for ZMP						
#	Arrival Airport	Via	Aircraft Type	Route	Altitude Unless otherwise specified, altitude restriction is at the boundary	Notes
8	KACB KGLR KTVC				AOB FL280 with pilot discretion to FL240	
9	KAPN KCAD KOSC				AOB FL230 with pilot discretion to 11,000'	

VATUSA CLEVELAND ARTCC AND MINNEAPOLIS ARTCC LETTER OF AGREEMENT

ATTACHMENT 4 – AIRSPACE



VATUSA CLEVELAND ARTCC AND MINNEAPOLIS ARTCC LETTER OF AGREEMENT



MINNEAPOLIS ARTCC FULL CENTER HIGH CHART

This chart provides comprehensive flight information for the Minneapolis area, including:

- Airports and Frequencies:** Detailed lists of airports such as MSP, MKE, ORD, SFO, and others, along with their associated frequencies.
- Navigational Aids:** Information on VORTAC stations and other navigation equipment.
- Terrain and Obstructions:** Elevation data for various locations across the region.
- Legend:** A key explaining the symbols used for different types of airspace, procedures, and other chart elements.

