



I. Purpose:

- A. In lieu of an otherwise coordinated situation, this Letter of Agreement defines the inter-facility procedures and delegation of airspace between the Cleveland (vZOB) and Chicago (vZAU) vARTCCs as they exist upon the VATSIM network.**
- B. The procedures in this document shall NOT replace general common sense or the need to assist your fellow controllers within the VATSIM environment. Under no circumstances shall you “bury your neighbor!”**
- C. It is to be understood that this document cannot account for every scenario, and that controllers are encouraged to work out individual situations amongst themselves.**
- D. To provide a reference defining boundaries as, over time, these boundaries have proven to have moved, and vary between each facility’s sector files.**

II. Effective Date:

- A. 31 January 2010, 0001Z**

III. Cancellation:

- A. This document supersedes the Letter of Agreement between our facilities, which was effective on 09 January 2009.**

IV. Scope:

- A. These procedures apply to vZOB/vZAU and supplement VATSIM, VATNA, and VATUSA policies and/or procedures.**

V. Definitions:

- A. A.O.A. (AOA) – At or Above**
- B. A.O.B. (AOB) – At or Below**



- C. L.O.A. (LOA) – Letter of Agreement
- D. SFC – Surface
- E. T.C.P. (TCP) – Transfer of Control Point
- F. TRACON – Terminal RADar Approach CONTROL
- G. UNL – Unlimited
- H. vARTCC – virtual Air Route Traffic Control Center
- I. VATNA – VATSIM’s North American Region
- J. VATSIM – Virtual Air Traffic SIMulation network
- K. VATUSA – VATSIM’s United States of America Division
- L. vZAU – the virtual Chicago vARTCC
- M. vZOB – the virtual Cleveland vARTCC

VI. Airspace:

- A. The common vARTCC or TRACON boundaries SHALL be considered the Transfer of Control Point (TCP)
- B. The boundary line described in Appendix “A” shall be considered as the TCP between the Cleveland and Chicago vARTCCs.
- C. When the Kalamazoo (AZO) TRACON is not operational, vZOB delegates the airspace bounded as described in Appendix “B”, from the surface, to and including, 10,000 feet MSL to vZAU.
- D. When the Lansing (LAN) TRACON is not operational, vZAU delegates the airspace bounded as described in Appendix “C”, from the surface, to and including, 10,000 feet MSL to vZOB.
- E. When the Fort Wayne (FWA) TRACON is not operational, vZOB delegates the airspace bounded as described in Appendix “D”, from the surface, to and including, 10,000 feet MSL to vZAU.

VII. General Procedures:



- A. All aircraft, bound for the same airport, shall be sequenced at least 15 Miles in Trail (“MIT”), steady or increasing.
- B. Departures from airports within 5 minutes flying time from the vZAU/vZOB boundary, that will enter the neighboring vARTCC, shall “APPREQ” that departure with the appropriate neighboring controller PRIOR to the aircraft’s departure.
- C. ANY flight plan amendment, or altitude change, occurring LESS than 5 minutes prior to the TCP, shall be “APPREQ”ed with the appropriate neighboring controller PRIOR to approving the change.
- D. Aircraft data blocks and flight plans SHALL be current and correct PRIOR to initiating a handoff.
- E. NOT withstanding the information in paragraphs 6 and 7 below, aircraft SHALL be descended as appropriate, so as to remain BELOW a 3-degree descent angle into an airport in close proximity to the center boundaries.
 - 1. 40 miles from destination = 12,000 feet MSL
 - 2. 20 miles from destination = 6,000 feet MSL

VIII. vZAU’s Procedures:

- A. Cleveland Terminal Area Arrivals
 - 1. Aircraft NORTH of J70 SHALL
 - a) *Be routed via HIMEZ STAR on the GRR transition*
 - b) *Cross the TCP AOB FL290*
 - 2. Aircraft SOUTH of J70 SHALL
 - a) *Be routed via the HIMEZ STAR on the*
 - (1) ELX Transition
 - (2) CRL Transition
 - b) *Cross the TCP AOB FL270*
- B. Detroit Terminal Area Arrivals



1. KDTW Arrivals

a) Aircraft NORTH of J70 SHALL

- (1) Be routed via the POLAR STAR
- (2) Cross the TCP AOB FL230

b) Aircraft SOUTH of J70

- (1) SHALL be routed via the MIZAR STAR
- (2) LFD Transitions SHALL cross the TCP AOB FL230
- (3) FWA Transitions SHALL cross the TCP AOB FL210

c) KORD Departures SHALL

- (1) Be routed via the POLAR STAR
- (2) Cross the TCP AOB FL230

d) KMDW Departures SHALL

- (1) Be routed via the MIZAR STAR, LFD Transition
- (2) Cross the TCP AOB FL230

2. Detroit Satellite Airports

a) Aircraft NORTH of J70 SHALL

- (1) Be routed via the SPRTN STAR
- (2) Cross the TCP AOB 15,000 feet MSL

b) Aircraft SOUTH of J70 SHALL

- (1) Be routed via the CRUXX STAR
- (2) Cross the TCP AOB 15,000 feet MSL

C. KFNT Arrivals SHALL

- 1. Be routed via the FNT VOR**
- 2. Cross the TCP AOB 15,000 feet MSL**

D. KLAN Arrivals SHALL

- 1. Be routed via the LAN VOR**



2. **Cross the TCP AOB 8,000 feet MSL**

E. KMBS Arrivals SHALL

1. **Be routed via the MBS VOR**
2. **Cross the TCP AOB 11,000**

F. Toledo Terminal Area Arrivals SHALL

1. **Be routed via the VWV VOR**
2. **Cross the TCP at, or below 11,000 feet MSL**

IX. vZOB's Procedures:

A. Chicago Terminal Area Arrivals

1. KORD Arrivals

a) Aircraft NORTH of J554 SHALL

- (1) Be routed

(a) *Via the PAITN STAR*

(b) *Via FNT..GRR..OBK..KORD (ONLY for aircraft NOT capable of using the PAITN STAR)*

- (2) Cross the TCP AOB FL320

b) Aircraft SOUTH of J554 SHALL

- (1) Be routed via the

(a) *KNOX₄ STAR*

(b) *ROYKO₃ STAR*

(c) *WATSN₁ STAR*

- (2) Aircraft NOT capable of the above STARs

(a) *SHALL be routed via VWV..OXI..ORD..KORD*

(b) *vZOB SHALL ensure route is amended AT LEAST 5 minutes PRIOR to the TCP*

- (3) Cross the TCP AOB FL300



2. KMDW Arrivals

- a) *ALL capable aircraft SHALL be routed via the GSH₄ STAR using the most appropriate transition for the desired route of flight.*
- b) *Aircraft NORTH of J146, NOT capable of flying the GSH₄ STAR SHALL*
 - (1) Be routed via LFD..GSH..CGT..KMDW
 - (2) Cross the TCP AOB FL240
- c) *Aircraft SOUTH of J146, NOT capable of flying the GSH₄ STAR SHALL*
 - (1) Be routed via ..GSH..CGT..KMDW
 - (2) Cross the TCP AOB FL240

3. Chicago Satellite Arrivals

- a) *Aircraft NORTH of J146 SHALL*
 - (1) Be routed via ...GRR..OBK..Destination
 - (2) Cross the TCP AOB FL240
- b) *Aircraft SOUTH of J146 SHALL*
 - (1) ..GSH..CGT..Destination
 - (2) Cross the TCP AOB FL240

X. Exceptions:

- A. **Exceptions to this Letter of Agreement MAY be made at ANY time, provided ALL appropriate controllers have coordinated the individual situation with each other.**

XI. Appendixes:

A. vZOB / vZAU Boundary

N043.35.12.000 W084.57.49.000 N043.30.00.000 W085.00.00.000
N043.30.00.000 W085.00.00.000 N043.10.40.000 W085.00.00.000
N043.10.40.000 W085.00.00.000 N043.02.10.000 W085.00.00.000



N043.02.10.000 W085.00.00.000 N042.58.00.000 W085.00.00.000
N042.58.00.000 W085.00.00.000 N042.44.36.000 W085.00.00.000
N042.44.36.000 W085.00.00.000 N042.31.25.000 W085.00.00.000
N042.31.25.000 W085.00.00.000 N042.22.26.000 W085.00.00.000
N042.22.26.000 W085.00.00.000 N042.10.00.000 W085.00.00.000
N042.10.00.000 W085.00.00.000 N042.02.30.000 W085.00.00.000
N042.02.30.000 W085.00.00.000 N042.00.00.000 W085.00.00.000
N042.00.00.000 W085.00.00.000 N041.51.30.000 W084.46.00.000
N041.51.30.000 W084.46.00.000 N041.48.00.000 W084.46.00.000
N041.48.00.000 W084.46.00.000 N041.35.00.000 W084.45.00.000
N041.35.00.000 W084.45.00.000 N041.17.00.000 W084.43.00.000
N041.17.00.000 W084.43.00.000 N040.54.30.000 W084.42.00.000

B. Kalamazoo (AZO) TRACON Boundary

N042.37.30.000 W085.01.40.000 N042.29.39.000 W085.45.39.000
N042.29.39.000 W085.45.39.000 N042.30.00.000 W085.56.30.000
N042.30.00.000 W085.56.30.000 N042.23.20.000 W085.58.50.000
N042.23.20.000 W085.58.50.000 N042.16.00.000 W086.01.15.000
N042.16.00.000 W086.01.15.000 N042.09.45.000 W086.01.30.000
N042.09.45.000 W086.01.30.000 N041.56.00.000 W085.50.30.000
N041.56.00.000 W085.50.30.000 N041.58.00.000 W085.41.00.000
N041.58.00.000 W085.41.00.000 N041.44.30.000 W085.29.30.000
N041.44.30.000 W085.29.30.000 N041.40.15.000 W085.28.15.000
N041.40.15.000 W085.28.15.000 N041.38.25.000 W085.02.50.000
N041.38.25.000 W085.02.50.000 N041.37.30.000 W084.50.00.000
N041.37.30.000 W084.50.00.000 N041.48.00.000 W084.46.00.000
N041.48.00.000 W084.46.00.000 N042.03.45.000 W084.40.00.000
N042.03.45.000 W084.40.00.000 N042.14.00.000 W084.50.30.000
N042.14.00.000 W084.50.30.000 N042.26.10.000 W084.49.30.000
N042.26.10.000 W084.49.30.000 N042.37.30.000 W085.01.40.000

C. Lansing (LAN) TRACON Boundary

N043.06.10.000 W084.18.00.000 N043.10.00.000 W084.49.00.000
N043.10.00.000 W084.49.00.000 N043.10.40.000 W085.00.00.000
N043.10.40.000 W085.00.00.000 N042.58.00.000 W085.00.00.000
N042.58.00.000 W085.00.00.000 N042.57.00.000 W085.02.00.000
N042.57.00.000 W085.02.00.000 N042.41.00.000 W085.03.00.000
N042.41.00.000 W085.03.00.000 N042.37.30.000 W085.01.40.000
N042.37.30.000 W085.01.40.000 N042.26.10.000 W084.49.30.000
N042.26.10.000 W084.49.30.000 N042.14.00.000 W084.50.30.000
N042.14.00.000 W084.50.30.000 N042.03.45.000 W084.40.00.000
N042.03.45.000 W084.40.00.000 N042.03.30.000 W084.13.00.000
N042.03.30.000 W084.13.00.000 N042.08.07.000 W084.09.05.000
N042.08.07.000 W084.09.05.000 N042.31.41.000 W084.10.02.000
N042.31.41.000 W084.10.02.000 N042.47.52.000 W083.50.07.000
N042.47.52.000 W083.50.07.000 N042.48.30.000 W084.05.45.000



N042.48.30.000 W084.05.45.000 N042.51.42.000 W084.08.53.000
N042.51.42.000 W084.08.53.000 N043.02.40.000 W084.21.00.000
N043.02.40.000 W084.21.00.000 N043.06.10.000 W084.18.00.000

D. Fort Wayne (FWA) TRACON Boundary

N041.37.30.000 W084.50.00.000 N041.38.25.000 W085.02.50.000
N041.38.25.000 W085.02.50.000 N041.40.15.000 W085.28.15.000
N041.40.15.000 W085.28.15.000 N041.26.56.000 W085.28.15.000
N041.26.56.000 W085.28.15.000 N041.22.40.000 W085.56.00.000
N041.22.40.000 W085.56.00.000 N041.13.10.000 W086.07.04.000
N041.13.10.000 W086.07.04.000 N040.58.00.000 W086.07.01.000
N040.58.00.000 W086.07.01.000 N040.55.15.000 W085.56.30.000
N040.55.15.000 W085.56.30.000 N040.52.45.000 W085.45.45.000
N040.52.45.000 W085.45.45.000 N040.33.30.000 W085.30.15.000
N040.33.30.000 W085.30.15.000 N040.31.00.000 W085.28.30.000
N040.31.00.000 W085.28.30.000 N040.26.00.000 W085.19.00.000
N040.26.00.000 W085.19.00.000 N040.18.00.000 W085.05.30.000
N040.18.00.000 W085.05.30.000 N040.24.30.000 W084.49.30.000
N040.24.30.000 W084.49.30.000 N040.36.00.000 W084.23.15.000
N040.36.00.000 W084.23.15.000 N040.51.47.000 W084.20.50.000
N040.51.47.000 W084.20.50.000 N041.37.30.000 W084.50.00.000

Signed
Joe Clark, vZAU ATM
30 January 2010

Signed
Larry Huber, vZOB ATM
30 January 2010