

**CLEVELAND ARTCC/BOSTON ARTCC/BUFFALO TOWER/NIAGARA TOWER/
NORTHEAST AIR DEFENSE SECTOR /174TH FIGHTER WING**

LETTER OF AGREEMENT

EFFECTIVE: JUN 21 1995

**SUBJECT: INTER-FACILITY COORDINATION AND CONTROL OF MILITARY
AIRCRAFT.**

1. PURPOSE. The purpose of this letter of agreement (LOA) is to establish responsibilities and procedures for the use of special use airspace (SUA). These procedures are supplementary to those contained in the current issues of:

- a. FAA Handbook 7110.65, Air Traffic Control
- b. FAA Handbook 7610.4, Special Military Operations.
- c. FAA Handbook 7210.3, Facility Operations & Administration.

2. CANCELLATION. Cleveland ARTCC/Northeast Air Defense Sector (NEADS)/Buffalo Tower/107TH FIG/113TH TCS and 108th TCS Letter of Agreement dated March 15, 1990.

3. SCOPE. The procedures outlined in this agreement shall be adhered to by Cleveland Center, Boston Center, Buffalo Tower, NEADS (radio telephone "HUNTRESS"), 174TH Fighter Wing (174FW) and other participating units.

4. RESPONSIBILITIES.

a. Military assumes responsibility for separation of aircraft (MARSA) shall apply between aircraft operating under the terms of this agreement in special use airspace (SUA), and during the departure and recovery phase, until standard air traffic control (ATC) separation is established and acknowledged by ATC.

b. In this agreement SUA shall include:

- (1) Air Traffic Control Assigned Airspace (ATCAA).
- (2) Military Operating Area (MOA).
- (3) Restricted Area.

c. In this agreement NEADS is identified as the primary Military Radar Unit (MRU). During large scale military exercise other MRUs can operate under the terms of this LOA provided:

- (1) They have coordinated with the 174FW.
- (2) The 174FW has briefed the visiting MRU on this LOA and provided a copy to them.

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- (3) The Commander of each visiting MRU returns a completed copy of Appendix B to Cleveland Center.
- d. Cleveland Center shall forward a completed copy of Appendix B to all affected ATC facilities.
- e. The controlling MRU shall notify Cleveland Center of SUA entry delays, shall release the airspace when it will be unused for more than thirty (30) minutes and/or cancel the airspace when no longer required.
- f. Flight plans shall be filed at least thirty (30) minutes prior to the proposed departure time.
- g. The MRU shall request only that airspace necessary for the performance of the scheduled mission.
- h. Aircraft operating in SUA, at altitudes both above and below FL180, shall use the current Niagara Falls Airport altimeter setting. Cleveland Center shall apply altitude adjustment factors in identifying the lowest useable altitude above the SUA.
- Example: If Niagara Falls altimeter was 29.80 the GI message would state:
"Block 1 Misty 1-2-3 1900Z-2130Z 110B270
4/F16...SYR Unit issued 110B260 due to altimeters."

5. FIGHTER CONTROL.

- a. In this agreement Fighter Control and Autonomous Operations are synonymous and defined as a daily training, peacetime term, which describes missions when aircrews are responsible for airspace integrity.
- b. Aircrews are responsible for ARTCC coordination unless otherwise stated in this agreement.
- (1) Aircrews shall notify Cleveland Center of SUA entry delays of more than fifteen (15) minutes.
- (2) SUA is subject to cancellation whenever entry delays exceed thirty (30) minutes from the approved/amended activation time.
- c. Aircraft operating in SUA shall monitor guard frequency 243.0.

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6. SCHEDULING.

a. The 174FW, or its alternate, shall be the scheduling agency for MISTY MOA/ATCAA & R5203 and shall resolve all scheduling conflicts between users before the request is submitted to Cleveland Center.

b. The scheduling agency shall be responsible for ensuring that all units using the airspace are properly briefed on the procedures contained in this LOA.

c. The 174FW, or their alternate, shall request airspace depicted on Attachment #1, for MRU or Fighter Control Operations, from Cleveland Center.

(1) Requests and/or extensions for R5203 shall be made at least twenty-four (24) hours in advance. The flying unit shall be responsible for notifying the Coast Guard when live firing is planned.

(2) MISTY MOA(s) will be requested thirty (30) minutes in advance, during published hours. Other requests shall be made a minimum of two hours and fifteen minutes (2 hrs + 15 mins) prior to intended use.

(3) MISTY MOAs will normally be approved with a base altitude of 11,000 feet or higher. Lower altitudes may be requested.

(4) MISTY ATCAAs will normally be restricted to a ceiling altitude of FL270. Higher altitudes may be requested.

(5) Requests for MISTY 1 ATCAA above FL270 shall require coordination 24 hours in advance.

(6) Canadian alert area, CYA530, shall be requested through Cleveland Center when it is to be used in conjunction with MISTY MOA/ATCAA.

(a) Cleveland Center Military Operations shall coordinate CYA530 requests with Trenton Approach and Toronto Centre.

(b) When CYA530 is not approved in conjunction with Misty MOA/ATCAA, refueling will only be conducted under control of a MRU.

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7. DEPARTURE PROCEDURES.

a. MISTY Departure Route: Via right/left turn (as appropriate for the departure runway) to intercept the IAG059 radial; thence, via the IAG059 radial to PAPA (IAG059022). Maintain 10,000 feet, or as assigned by ATC, until PAPA.

b. Buffalo Tower shall adhere to the following procedures unless otherwise coordinated:

(1) When Misty 1 MOA is approved with base altitude at or above 11,000 feet:

(a) Utilize the Misty Departure Route.

(b) Handoff to Cleveland Center.

(2) When Misty 1 MOA is approved with a base altitude below 11,000 feet:

(a) Assign altitudes at or below 10,000 feet until point PAPA.

(b) Make an ARTS Data Block transfer to Cleveland Center.

(c) Prior to point PAPA, inform aircraft "radar service terminated, frequency change approved."

8. ARRIVAL PROCEDURES.

a. General.

(1) Radar vectors may be used to expedite recoveries from SUA.

(2) The MRU, or aircraft if Fighter Control, shall contact the appropriate ATC facility five (5) minutes prior to recovery and provide the following general arrival information.

(a) Aircraft identification.

(b) Number of aircraft.

(c) Any special handling requirements.

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(3) The ATC facility receiving a SUA cancellation shall coordinate it in a timely manner.

(4) ROMEO Arrival Route: (Attachment #2)

(a) Via point ROMEO (BUF063034) to WAPUM (IAG105029) via the IAG105 radial to IAG at 17,000 feet or as assigned by ATC.

(b) Cleveland Center will handoff all aircraft landing Niagara (IAG) to Buffalo Tower in relation to point WAPUM descending to 11,000 feet.

(5) Misty Arrival Route: Via VICTOR (IAG075032), inbound on the IAG075 radial for vectors to approach in use. Cross VICTOR at 10,000 feet or as assigned by ATC. Misty arrival route shall only be used when Misty 1 is approved with a base altitude below 11,000 feet. (Attachment #3)

b. MRU Control to Cleveland Center.

(1) The controlling MRU shall complete handoffs to Cleveland Center prior to an exit point and at the corresponding altitude depicted on Attachment #4, unless otherwise coordinated.

(2) Prior to transferring radio communications the MRU shall insure that aircraft are established on the coordinated heading/route and at the coordinated altitude.

(3) Cleveland Center shall not change the flight path or altitude until the aircraft leaves the SUA unless prior approval has been obtained.

(4) The MRU will cancel the SUA when the last aircraft has exited the airspace.

c. Fighter Control to Cleveland Center or Boston Center.

(1) Aircraft shall contact the appropriate ATC facility while in the SUA and request an exit clearance.

(a) Aircraft shall contact Boston Center if executing a NOVEMBER (SYR317033) recovery.

(b) Aircraft utilizing the Misty Arrival Route shall contact Buffalo Tower at point VICTOR.

(c) All other aircraft contact Cleveland Center.

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(2) The ATC facility shall radar identify the aircraft and issue an exit clearance.

(3) The last aircraft leaving the SUA shall cancel the airspace block.

9. AIRCRAFT ENTERING/EXITING SUA FROM BOSTON CENTER AIRSPACE.

a. Boston Center is authorized to clear participating aircraft into and out of Misty MOA/ATCAA, across the common Boston/Cleveland Center Boundary.

(1) When AKS-4 ATCAA is not active and participating aircraft are under the control of an MRU:

(a) Boston Center shall handoff aircraft entering Misty MOA/ATCAA directly to the MRU prior to point MIKE (SYR304027) at FL220 or as coordinated.

1. When aircraft will exit Misty MOA/ATCAA directly into Boston Center airspace, no point out or handoff to Cleveland Center is required.

2. When aircraft will exit Misty MOA/ATCAA into Cleveland Center airspace, Boston Center shall transfer control of the data block to Cleveland Center.

(b) The controlling MRU shall complete all handoffs to Boston Center west of and in relation to point NOVEMBER at FL230 or as coordinated.

(2) When AKS-4 ATCAA is not active and Misty MOA/ATCAA is under Fighter Control:

(a) Boston Center shall clear participating aircraft into Misty MOA/ATCAA, across the common Boston/Cleveland Center boundary, over point MIKE at FL220 unless otherwise coordinated.

(b) Aircraft will file routing to exit Misty MOA/ATCAA via NOVEMBER direct SYR at FL230 or as assigned by ATC.

(3) When AKS-4 ATCAA is active the MRU(s) are authorized to clear aircraft across the common Cleveland Center/Boston Center boundary provided the aircraft remain within the confines of the approved SUA.

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10. TRAVERSAL.

a. Cleveland Center shall coordinate with the MRU for approval to traverse SUA at least five (5) minutes prior to the non-participating aircraft penetrating the SUA.

b. Cleveland Center shall provide separation between non-participating IFR aircraft cleared to transit SUA and participating aircraft. Separation shall be accomplished by coordinating with the MRU at least five (5) minutes prior to SUA boundary penetration for a release to ATC of altitudes and/or flight levels throughout the entire MOA or ATCAA.

c. Cleveland Center shall coordinate the traversal by calling the MRU and stating the name of the airspace(s) requested.

EXAMPLE: "HUNTRESS, Cleveland Center, Traversal Misty 1 and 3 ATCAAs, squawking (code), one zero miles southeast of Rochester, at FL310, direct Simcoe."

11. SPILLOUTS/SPILLINS.

a. If a spillout occurs or is imminent, the MRU shall immediately contact the sector where the spillout has/will occur and use the phrase "WHISKEY ALERT" followed by airspace name, location of the spillout and altitude.

EXAMPLE: "Rochester Low, HUNTRESS, "WHISKEY ALERT", MISTY 3 MOA, Seven Miles North of ROC at one seven thousand."

b. The MRU will have the aircraft remain at current altitude and return to the airspace in the most direct manner unless otherwise directed by ATC. The center controller will coordinate internally, as necessary.

c. Center controller personnel shall use the "WHISKEY ALERT" procedure to notify the MRU of an imminent spillin.

12. RADIO FAILURE PROCEDURES.

a. Aircraft shall squawk code 7600.

b. If VFR, continue flight under VFR and land as soon as practicable.

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c. If IFR and landing IAG, depart ROMEO at 15,000 feet, proceed direct to WAPUM and execute a HI-TACAN RWY 28R approach.

d. Aircraft not landing IAG shall exit SUA at an exit point and altitude as depicted on Attachment #4 and comply with radio failure procedures in FAR 91 and the FLIP.

13. LOSS OF MRU RADAR CONTROL CAPABILITY.

a. Aircraft under MRU control shall be vertically separated within the SUA.

b. The MRU shall inform Cleveland Center of the loss of radar capability and estimated time control may be resumed.

c. The MRU shall advise Cleveland Center of participating aircraft intentions (i.e. to continue the mission as an autonomous operations or return to base).

14. APPENDIX.

Appendix A - Alternate Radial/Distance (IAG TACAN OTS).
Departure Route (IAG TACAN OTS).

Appendix B - Visiting MRU Commander concurrence.

15. ATTACHMENTS.

a. Attachment #1 - Airspace Description.

b. Attachment #2 - Romeo Arrival Chart.

c. Attachment #3 - Misty Departure/Arrival Chart.

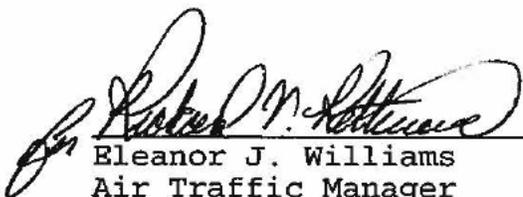
d. Attachment #4 - Composite chart of ZBW/ZOB SUA with entry/exit points.

e. Attachment #5 - Hand off and transfer points.

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APPENDIX A

1. Alternate Radial/Distance (IAG TACAN OTS).

NIAGARA TACAN	FIX	BUFFALO VORTAC
IAG059022	PAPA	BUF016025
IAG075027	QUEBEC	BUF036024
IAG075032	VICTOR	BUF043028
IAG089044	ROMEO	BUF063034
IAG105029	WAPUM	BUF069017

2. The MISTY departure route when IAG TACAN is out of service is defined as:

- Turn right/left, as appropriate for the departure runway, intercept the BUF016 radial thence, via the BUF016 radial to PAPA (BUF016025).