

CHANGE

**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

**JO 7610.14
CHG 2**

Air Traffic Organization Policy

Effective Date:
September 5, 2024

SUBJ: Non-Sensitive Procedures and Requirements for Special Operations

- 1. Purpose of This Change.** This change transmits revised pages to Federal Aviation Administration Order JO 7610.14, Non-Sensitive Procedures and Requirements for Special Operations, and the Briefing Guide.
- 2. Audience.** This change applies to all ATO personnel and anyone using ATO directives.
- 3. Where Can I Find This Change?** This change is available on the FAA's Air Traffic Plans and Publications website at http://faa.gov/air_traffic/publications and Orders & Notices website at https://www.faa.gov/regulations_policies/orders_notices/.
- 4. Explanation of Policy Change.** See the Explanation of Changes attachment which has editorial corrections and changes submitted through normal procedures. The Briefing Guide lists only new or modified material, along with background statements.
- 5. Distribution.** This change is distributed electronically to all who subscribe to receive email notifications through the FAA's website. All organizations are responsible for viewing, downloading, and subscribing to receive email notifications when changes occur to this order. Subscriptions to air traffic directives can be made through the Air Traffic Plans and Publications website at https://www.faa.gov/air_traffic/publications/ or directly via the following link: https://public.govdelivery.com/accounts/USAFAA/subscriber/new?topic_id=USAFAA_39.
- 6. Disposition of Transmittal.** Retain this transmittal until superseded by a new basic order.
- 7. Page Control Chart.** See the page control chart attachment.

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Explanation of Changes

Change 2

Direct questions through appropriate facility/service center office staff to the Office of Primary Interest (OPI)

a. 7-1-6. SIMULATED FLAMEOUT (SFO) EMERGENCY LANDING PATTERN (ELP)

This change removes the requirement from FAA Order JO 7610.14, Non-Sensitive Procedures and Requirements for Special Operations, subparagraph 7-1-6d, which mandates via Letters of Agreement (LOAs) that practice Simulated Flameout (SFO)/Emergency Landing Pattern (ELP) must only be conducted between sunrise and sunset.

b. 9-1-1. PURPOSE

9-1-2. TERMS

9-1-3. POLICY

9-2-1. ATCAA REQUEST COORDINATION

9-2-2. ATCAA INFORMATION

9-2-3. ATCAA SCHEDULING

9-3-1. ENVIRONMENTAL REVIEW PROCESS FOR ATCAA REQUESTS

This change defines the procedures for requesting Air Traffic Control Assigned Airspace (ATCAA) and the necessary environmental review actions that the requester (proponent) will be required to perform. Existing ATCAAs that are in effect prior to this update are not affected by these changes. New and amended ATCAA actions must follow the newly published procedures.

c. Editorial Changes

Editorial changes include universalizing the references to CFR formatting; correcting headers in the appendices and deletion of extraneous pages in Appendix 4, Document 4; and a restoration of correct language in subparagraph 7-2-1a that was erroneously transitioned during the relocation from JO 7610.4.

d. Entire Publication

Additional editorial/format changes were made where necessary. Revision bars were not used because of the insignificant nature of these changes.

FAA Order 7610.14
Change 2
Page Control Chart
September 5, 2024

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Section 4. IR Route Definition

6-4-1. ROUTE WIDTH

Widths of route segments are determined by the military. The route width will be sufficient to contain all planned activities.

6-4-2. ROUTE ALIGNMENT

Route alignment criteria must be as follows:

a. All IRs to be flown at or below 1,500 feet AGL should be designed to permit aircraft flying the route to avoid charted, uncontrolled airports by 3 NM or 1,500 feet. Where it is impractical to comply with this criteria, procedures must be established by the scheduling/originating activity to minimize conflict with airport traffic; i.e., identify volume and type traffic, highlight need for increased vigilance commensurate with situation, maintain liaison with airport owner/operator, include appropriate cautionary note in route description: "Avoid flight within 1,500 feet or 3 NM of airport when practicable," etc.

b. Subsequent charting of airports within 3 NM of an MTR may require route realignment to conform to the criteria established in subparagraph a.

c. Routes should be aligned to avoid Class B, C, and D airspace.

d. During development of routes, consideration should be given to potential conflict with published and unpublished instrument procedures/routes.

e. Routes should be aligned so that disturbance to persons or property on the ground is minimized.

6-4-3. ALTITUDES

a. Altitudes must be established for each route segment. Routes must contain the minimum number of altitudes commensurate with mission requirements and may be specified singly, in blocks, or a range from which ATC assignment may be made. Minimum altitudes for each route segment must be established by the military. Altitude information must be reflected on FAA Form 7110-4 as follows:

1. IRs should depict the highest altitude in MSL terms. The lowest altitude may be depicted in either MSL or AGL terms.

2. An altitude block must be depicted as the lowest altitude followed by a "B" followed by the highest altitude.

EXAMPLE-

5 AGL B 20 MSL

40 MSL B 60 MSL

SFC B 50 MSL

3. A range of altitudes from which ATC may assign a single altitude must be depicted as the lowest altitude, in MSL terms, followed by a "-" followed by the highest altitude in MSL terms (when acceptable to the mission).

EXAMPLE-

20 MSL-50 MSL

b. Unless the route segment is clearly annotated, "for use in VMC conditions only," each route segment must contain an altitude that is suitable for flight in IMC and can be used in the event of an aircraft systems failure. This altitude must be referred to as the IFR altitude and may be contrary to 14 CFR section 91.177 (Minimum Altitude for IFR Operations) when specifically authorized by appropriate military authority. The IFR altitude must always be depicted in MSL terms. In no case will flight operations be conducted at altitudes less than those

specified in 14 CFR section 91.119 (Minimum Safe Altitude, General). In the absence of an established IFR altitude, the IFR altitude is the highest altitude designated for the route segment as depicted in the route description.

c. All altitudes must be established by the military. The military may use other than FAA standards for establishing IFR altitudes for route segments.

d. When practical, the designated exit fix altitude must be within an area of ATC radio coverage. When it is determined that ATC impact or other constraints preclude the exit fix altitude from being established within radio coverage, an altitude below radio coverage may be utilized provided procedures for routinely exiting the route (i.e., pre-coordinated clearances, stereo routes, and actions to be taken by the pilot in the event two-way communications are lost) are covered in a letter of agreement.

6-4-4. RE-ENTRY SEGMENTS

Consistent with ATC capabilities, routes may have re-entry segments. To the extent practicable, re-entry segments should avoid ARTCC/CERAP/HCF boundaries.

6-4-5. ALTERNATE ENTRY, EXIT, AND END POINTS

a. Any point on the route may be identified as an alternate entry/exit/end point. Entry points must precede exit points on the routes/alternate routes with which they are associated.

b. Whenever a route is modified by designating alternate entry/exit/end points, the route segments associated with the alternate points must be considered modifications to the basic/principal route and may be described and designated as alternate routes.

c. Any alternate route segments must meet all of the requirements pertinent to the establishment of new routes.

6-4-6. ROUTE REPORTING POINTS

a. Unless otherwise specified in the letter of agreement, the National Flight Data Digest (NFDD), and the DoD FLIP AP/1B route description, exit points must be mandatory reporting points.

b. Other mandatory reporting points may be established for ATC purposes. These must be kept to those absolutely essential in providing approved separation between the route user and other IFR traffic. These points must be specified in the letter of agreement, as appropriate, and the route description.

6-4-7. SPECIAL OPERATING PROCEDURES

Special operating procedures may be imposed, but must be held to the minimum required. These procedures may be applied on a route segment basis and need not apply to the entire route. Such restrictions must be a part of the narrative route description as published in the NFDD and DoD FLIP AP/1B (or AP/3). If ATC procedures are involved, they must be included in the letter of agreement governing the use of the route.

6-4-8. LOW ALTITUDE AIR-TO-AIR TRAINING (LOWAT)

a. LOWAT must be accomplished only on IRs specifically designated for this purpose.

b. The provisions for an equivalent level of safety for LOWAT training must be contained in a letter of agreement between the ARTCC/CERAP/HCF and the military unit.

c. LOWAT maneuvers are not “classical intercepts,” but allow for observation and analysis of an aerial attack, initiation of the appropriate defensive response, and continuation of the primary mission with minimal interruption. LOWAT training maneuvers conducted on IRs must be limited to:

1. No more than a 90-degree turn will be performed on the IR.

(b) Group One remarks must be formatted in consecutive sequence without blank spaces in accordance with the following:

(1) Flight plans where the entire route of flight remains within the ARTCC's area in which the flight departed:

- [a] Clear weather symbol ().
- [b] IR designator.
- [c] Group One remarks.
- [d] Group Two remarks if appropriate.

EXAMPLE–

○ IR101E1617X1815
MARSA . . . (etc.)

(2) Flight plans where the route of flight enters more than one ARTCC's area and an IR is completed before the aircraft exits the ARTCC's area in which the flight departed:

- [a] Overcast weather symbol ().
- [b] IR designator.
- [c] Group One remarks.
- [d] Clear weather symbol ().
- [e] Group Two remarks if appropriate.

EXAMPLE–

○ IR101E1802X18450AR20
HFAKR1233 . . . (etc.)

(3) Flight plans where the route of flight enters more than one ARTCC's area and an IR is completed after the aircraft has exited the ARTCC's area where the aircraft departed:

- [a] Clear weather symbol ().
- [b] IR designator.
- [c] Group One remarks.
- [d] Group Two remarks if appropriate.

EXAMPLE–

○ IR101E1802X1845
MARSA . . . (etc.)

(4) Flight plans where the route of flight enters more than one ARTCC's area and an IR is completed after the aircraft has exited the ARTCC's area where the aircraft departed, and the Group Two remarks are concluded before exiting the ARTCC's area in which the flight departed.

- [a] Overcast weather symbol ().
- [b] Group Two remarks.
- [c] Clear weather symbol ().
- [d] IR designator.
- [e] Group One remarks.

EXAMPLE–

⊕ AR20HFAKR1233 ○ IR101E
1802X1845

6-6-6. IR USE DENIAL

ATC facilities should not deny the use of IRs. ATC delays may be imposed when conditions preclude route usage as scheduled. When delays are anticipated, ATC facilities must advise the pilot/scheduling unit of the expected delay and the reasons for the delay.

6-6-7. ROUTE ADHERENCE

Pilots must be responsible for:

- a. Remaining within the confines of the published route width and altitude.
- b. Obtaining a specific ATC entry clearance from the appropriate ATC facility prior to entering the IR.
- c. Unless otherwise agreed to in a letter of agreement, obtaining an IFR ATC exit clearance prior to exiting the IR.
- d. Adhering to the provisions of 14 CFR section 91.119 (Minimum Safe Altitude, General). Routes may be flown IFR contrary to 14 CFR section 91.177 (Minimum Altitude for IFR Operations) when specifically authorized by the appropriate military authority.

6-6-8. SPEED AUTHORIZATION

Flight must be conducted at the minimum speed compatible with mission requirements. When exiting an MTR below 10,000 feet MSL, the flight must comply with 14 CFR section 91.117 (aircraft speed) or the current authorization granted to DoD. (See Appendix 4, Speed Authorization Granted to DoD).

6-6-9. ENTRY/EXIT PROCEDURES

All IR entries and exits must be accomplished at published entry and exit points, or published alternate entry and exit points, unless the pilot amends/cancels their IFR flight plan.

6-6-10. COMMUNICATION FAILURE

Unless otherwise covered in a letter of agreement, each pilot who has a two-way radio communications failure when operating on an IR (between the entry and exit point) must comply as follows:

- a. VFR Conditions. If the failure occurs in VFR conditions, or if VFR conditions are encountered after the failure, each pilot must continue the flight VFR and land as soon as practical. (14 CFR section 91.185b/DoD IFR Supplement.)
- b. IFR Conditions. If the failure occurs in IFR conditions, or if subparagraph a above cannot be complied with, each pilot must:
 1. Maintain to the exit/alternate exit point, the higher of the following:
 - (a) The minimum IFR altitude for each of the remaining route segment(s).
 - (b) The highest altitude assigned in the last ATC clearance.
 2. Depart the exit/alternate exit point at the altitude determined in subparagraph 1 above; then climb/descend to the altitude filed in the flight plan for the remainder of the flight.

6-6-11. LOST COMMUNICATIONS TRANSPONDER OPERATIONS

Refer to transponder procedures in the DoD FLIP, the DoD IFR Supplement, and the AIM.

6-6-12. SEPARATION OF PARTICIPATING AIRCRAFT

- a. To the extent practicable, IRs should be established for standard ATC services and approved separation applied between individual aircraft.

Section 9. VR Route Use

6-9-1. SCHEDULING

a. Each VR route must have a designated military unit responsible for scheduling all military flights intending to use the VR route. If the designated military unit does not have a continuous point of contact; i.e., a unit subject to deployment or a unit not available during normal work days (ANG unit working Wednesday–Sunday), then an alternate scheduling agency must be designated. All flights on the VR route will be scheduled through the primary or alternate scheduling agency.

b. The scheduling activity must confirm on a daily basis (to the extent practicable, prior to 2400 hours) with the tie-in FSS of the planned utilization of the route. Unless otherwise agreed, such scheduling must be accomplished at least 2 hours prior to use. Scheduling agencies must provide an hourly schedule for each route which includes route number, aircraft type and number, proposed entry/exit time, and altitude. Scheduling agencies should make every effort to pass changes as soon as possible to the tie-in FSS when a particular route is closed or a scheduled aircraft cancels.

EXAMPLE–

VR101 0900–1000 2/F-14
 0915–1000
 SFC B-50 MSL
 1000–1100 None
 1100–1200 4/F-14
 1105–1150
 20 MSL–40 MSL
 VR102 0900–1000 1/T-38
 0902–0944
 30 MSL–40 MSL
 1000–1100 1/F-14
 1000–1015
 SFC B-50 MSL
 1100–1200 None

6-9-2. COMPLIANCE

It is the responsibility of the scheduling activity to ensure that all VR users are knowledgeable of the respective route procedures. Individual users are responsible for compliance.

6-9-3. TIE – IN FLIGHT SERVICE STATION

The FSS handling the flight planning function for the military base where the scheduling unit is located is normally the tie-in FSS in accordance with FAA Order JO 7110.10, Flight Services. Tie-in FSSs must be on the center distribution list to receive copies of, and changes to, all letters of agreement concerning VRs for which they have been designated as the tie-in FSS.

6-9-4. MONITOR 255.4 MHZ

Pilots should monitor 255.4 MHz while on VRs when it is not detrimental to the mission accomplishment. This does not preclude the use of tactical or discrete frequencies.

6-9-5. FLIGHT PLAN REQUIREMENTS

a. Pilots departing on IFR clearances to fly VRs are required to file to the fix/radial/distance of their entry/alternate entry point of the route.

b. Pilots transitioning to IFR upon exiting the VR are required to have on file a previously filed IFR flight plan from the appropriate fix/radial/ distance of their exit point.

NOTE–

Composite IFR–VFR–IFR flight plans may be filed with the appropriate FSS. Stereotype flight plans could be an advantage to flight planning.

6–9–6. ROUTE ADHERENCE

Pilots of flights on VRs must be responsible for remaining within the lateral and vertical confines of the route.

6–9–7. SPEED AUTHORIZATION

Flights must be conducted at the minimum speed compatible with mission requirements. When exiting an MTR below 10,000 feet MSL, the flight must comply with 14 CFR section 91.117 (aircraft speed) or current authorization issued to DoD. (See Appendix 4, Speed Authorization Granted to DOD).

6–9–8. WEATHER MINIMUMS

Operations on the route must be conducted only when the weather is at or above VFR minima, except that:

- a. Flight visibility must be 5 miles or more; and
- b. Flights must not be conducted below a ceiling of less than 3,000 feet AGL.

6–9–9. TRANSPONDER PROCEDURES

Pilots of aircraft operating on a VR route will adjust their transponder to code 4000 unless otherwise assigned by ATC.

b. The weather conditions that must exist before issuance of approval by the tower. (Ceiling must be at least 1,000 feet above the approved high-key altitude, and flight and ground visibility must be reported to be at least 5 miles.)

c. A statement to the effect that a practice SFO/ELP may be disapproved because of traffic or other reasons either before or after the start of the maneuver.

d. A statement indicating the provision of this service by the tower does not in any way absolve the pilot from their responsibility to comply with 14 CFR sections 91.111 and 91.113, other appropriate subparts of 14 CFR Part 91, and/or applicable military regulations.

e. Pilots utilizing SFO/ELP procedures in T-6, T-41, T-51, U-2, and TR-1 aircraft are authorized to deviate from the weather conditions prescribed in subparagraph b as follows:

- 1.** Ceiling must be at least 500 feet above the approved high-key altitude; and
- 2.** Flight and ground visibility must be reported to be at least 3 miles.

NOTE—

SFO/ELP procedures conducted above 10,000 feet MSL must be in accordance with 14 CFR section 91.155.

7-1-7. CELESTIAL NAVIGATION (CELNAV) TRAINING

a. Within conterminous U.S., CELNAV training is restricted to transponder-equipped aircraft within areas of ARTCC radar coverage.

b. Because CELNAV training procedures require a pilot to deviate from the course requirements of title 14, CFR, part 91, section 91.181, pilots must obtain ATC approval before discontinuing conventional navigation to begin CELNAV training.

c. Pilots are also required to advise ATC when discontinuing CELNAV training and resuming conventional navigation.

d. Pilots engaged in CELNAV training must advise ATC before initiating any heading change of more than 20 degrees.

e. Pilots must remain within 30 NM of the assigned course unless otherwise authorized by ATC.

f. ATC approves flight plans specifying CELNAV only when requested for USAF or USN aircraft.

Section 2. USAF Undergraduate Flying Training (UFT)/Pilot Instructor Training (PIT)/Introduction to Fighter Fundamentals

7-2-1. DEFINITIONS

The term UFT includes:

- a. Flight Screening Program (FSP).
- b. Undergraduate Pilot Training/Specialized Undergraduate Pilot Training (UPT/SUPT).
- c. Euro-NATO Joint Jet Pilot Training (ENJJPT).
- d. Specialized Undergraduate Navigator Training (SUNT).

7-2-2. KEY OPERATIONAL CONSTRAINTS

a. Sortie Duration: T-38 sorties normally average 1 hour and 20 minutes. T-6 sorties normally average 1 hour and 30 minutes. T-1 sorties normally average 3 hours.

b. Student Pilot Solo Operations.

1. Instrument flight: Certified solo students may penetrate cloud layers in climb and descent only. In level flight, expect requests for revised clearances to avoid clouds. Solo students may request an amended clearance to permit deviation from assigned course as necessary to remain in visual meteorological conditions (see FAA Order JO 7110.65, Air Traffic Control). Solo student requests for deviations are time-critical and air traffic control must approve these requests as soon as possible. If a student pilot refuses to accept a radar vector or clearance, make a record of the occurrence (including the pilot's reasons for refusal, if known), and retain it at the facility for 6 months.

2. Diverts: Unplanned diversions may require solos to land at other than military installations. UFT instructor pilots may require access to FAA air traffic control facilities to act as safety observers in support of these solo missions. Instructor pilot access authorization and activity limitations must be defined in appropriate documents by affected facilities.

c. T-38 Icing Restrictions: T-38s cannot operate at altitudes where icing is forecast. When encountering ice (not forecast), expeditious assignment of an altitude above or below the icing level is critical because engine failure is probable.

7-2-3. RADAR SERVICE REQUIREMENTS

a. Air traffic control facilities must provide IFR radar surveillance and separation service from points on or near Air Education and Training Command (AETC) bases or auxiliaries to defined training areas and from training area return points where approach control service can be discontinued via hand-off to ground controlled approach (GCA), tower, or runway supervisory unit (RSU). IFR service is also required to and from the local auxiliary fields and boondock instrument practice sites.

b. AETC training flights operating in the en route system to and from airports outside local training areas must be provided IFR separation service.

c. A minimum number of sorties must be flown VFR in accordance with the syllabus training requirements. VFR advisory service must be provided to these flights to the extent practicable.

7-2-4. MERGING TARGET VS APPROVED SEPARATION

Application of merging target procedures must be outlined in a letter of agreement between the controlling agency and the using agency. UFT/PIT/Introduction to Fighter Fundamentals aircraft must be provided approved

separation until established in the MOA/ATCAA. Once established within the MOA/ATCAA, these flights may be provided merging target procedures.

7-2-5. AIRSPACE REQUIREMENTS

Below 18,000 feet MSL, training areas must be contained within MOAs. In Class A Airspace, training areas must be contained within ATCAA. The goal is to warn other IFR and VFR traffic of the high volume and nature of traffic operating therein. Under SUPT, the T-38 and T-1 will use the same geographical working areas, and operations must be segregated by sterilized block times.

a. NAVAID definition: Individual T-1, T-6, and T-38 training areas must be defined by VORTAC/TACAN arcs and radials. Conspicuous ground features also identify each area.

b. Training area size: Training area sizes are varied to accommodate the type of flying (contact, formation, instrument, etc.). Area configuration must be adjusted only when necessary and letters of agreement are revised. T-6 training areas must provide a minimum of 100 square nautical miles of usable airspace. T-38 and T-1 training areas must provide a minimum of 200 square nautical miles of usable airspace.

c. Altitude blocks. As a minimum:

1. T-6 training areas must extend downward from FL 240 at least 11,000 feet and be subdivided into two blocks of 5,000 feet.

2. T-38 high altitude training areas must extend above FL 240 at least 4,000 feet and low areas must extend at least 12,000 feet below FL 240.

3. T-1 high altitude training areas must extend above FL 240 at least 4,000 feet and low areas must extend 4,000 feet below FL 240.

d. Number of areas: Coupled with smooth flow scheduling, the following minimum numbers of local training areas guarantee successful completion of AETC mission without saturating airspace. As a minimum:

1. T-6: 18 training areas (9 high/9 low).

2. T-38/T-1: 16 training areas (5 high/11 low).

3. PIT airspace requirements: PIT requires less training area than SUPT. As a minimum:

(a) T-6: (7 high/6 low).

(b) T-38/T-1: (5 high/10 low).

e. Area distance: Fuel capacities and syllabus constraints require fuel-efficient training areas. T-6 training areas must be within 60 NM of the main base. T-38 and T-1 training areas must be within 100 NM of the main base.

f. Segregation: T-6 and T-38 low areas are not intermixed but may be separated with buffers. Do not arbitrarily establish buffers as a prerequisite for the provision of IFR separation in MOA subareas. However, buffers may be established for valid operational reasons. T-38/T-1 operations may operate in adjacent training areas contained in the same MOA.

g. ARTCC/CERAP/HCFs and FSSs in and around the training areas are aware of the activity in the local area and must give the appropriate advisories to civil pilots when contacted.

7-2-6. MTR REQUIREMENTS

UPT/SUPT operations require access to at least six MTRs. Each UPT/SUPT wing must have at least four of these routes.

7-2-7. COMMUNICATION REQUIREMENTS

UPT/SUPT operations require adequate air/ground communications. Flight training requires extensive instructor/student interphone communication. Prudence dictates that ground initiated instructions or advice must be streamlined to limit interruptions and avoid derogation of the training mission.

7-2-8. SCHEDULING

At some bases, a longer scheduling interval may occasionally be necessary, but in the interest of maintaining present safety and flexibility, the minimum scheduling interval must be 3 minutes.

7-2-9. STEREOTYPE ROUTING/FLIGHT PLANS

While radar vectoring provides flexibility, it decreases a controller's capacity to provide service. Monitoring of stereotype routes is preferred because it provides more effective use of controller as well as instructor/student time and talent. To cope with the high volume of traffic, the following must be provided:

- a. Stereotyped departure routes from pickup points on or near the airport to training areas and other en route points.
- b. Stereotyped turboprop/turbojet en route descents from training areas or en route points to GCA, tower, or RSU hand-off for each runway and direction of operation.
- c. Flight plan filing and processing must be streamlined to the extent that the flight identification and two or three words are sufficient to tell the controller where an aircrew wants to go and what the aircrew wants to do.

7-2-10. LETTERS OF AGREEMENT (LOAs)

Emergency, lost communications and all local procedures must be documented in LOAs. Because of the volume of traffic and the complexity of operation, letters of agreement must be carefully prepared and updated frequently to ensure timely improvements in service and safety.

7-2-11. AUTHORIZATIONS

The procedures used in UFT/PIT/Introduction to Fighter Fundamentals conform with 14 CFR part 91 (except where waived/exempted) and FAA Order JO 7110.65, Air Traffic Control, as supplemented by appropriate LOA processed in accordance with FAA Order JO 7210.3, Facility Operation and Administration. Authorized deviations are as follows:

- a. Solo student pilot flying IFR as indicated in paragraph 7-2-2b.
- b. Exemption 49D to 14 CFR sections 91.153 and 91.169, Alternate Airport Requirements.
- c. T-38/T-1 airspeeds in excess of 250 KIAS below 10,000 feet MSL are authorized by competent military authority in accordance with FAA JO Order 7110.65 and the Speed Authorization Granted to DOD. (See Appendix 4).
- d. Merging target procedures: When UFT/PIT/Introduction to Fighter Fundamentals aircraft are established in MOA/ATCAA and airspace limitations would derogate mission requirements if IFR separation were applied, the following radar procedures may be used during VFR weather conditions provided procedures have been established in a LOA.
 1. Issue radar traffic information to aircraft whose targets are likely to merge unless the aircraft are known to be separated vertically.
 2. Issue directions using "work [direction]" control techniques to ensure the radar targets of aircraft previously issued as traffic do not touch.
 - (a) Work [direction] – an air traffic control instruction whereby the pilot will continue a maneuver to completion then turn toward the specified direction.
 - (b) Work [direction] Immediately – an air traffic control instruction whereby the pilot will break off a maneuver and immediately turn toward the specified direction.

NOTE–

Air Education Training Command assumes responsibility for the consequences of application of merging target procedures.

e. Exemption No. 2861A to 14 CFR section 91.121, Single Altimeter Setting For Frequent Transit of FL 180. (See Appendix 4, Grant of Exemption No. 2861A).

REFERENCE-

FAA Order JO 7110.65, Paragraph 2-7-2, Altimeter Setting Issuance Below Lowest Usable FL

Section 4. Special Interest Flights

7-4-1. GENERAL

a. State Department designated special interest flights (SIF) are defined as flight operations in U.S. territorial airspace by any of the following:

1. Aircraft registered in a U.S. State Department designated special interest country;
2. Aircraft designated as a state aircraft by a State Department designated special interest country;

3. Aircraft operating with the ICAO three-letter designator (call sign) assigned to a company or entity in a State Department designated special interest country. SIF operators certified for U.S. commercial operations under 14 CFR part 129 do not require authorized flight routings. Non-Part 129 SIFs require FAA route authorization prior to flight and route monitoring during flight in U.S. territorial airspace.

4. Any foreign aircraft to which SIF procedures are applied following 14 CFR section 99.7, Special Security Instructions.

NOTE-

Current special interest countries and Part 129 operators are listed under the Countries section of the General Information posted on the FAA SIF website. Access to the FAA SIF website (<http://aspm.faa.gov/sif>) is for United States and Canadian Government agencies only. Contact the FAA System Operations Support Center (SOSC) (commercial 202-267-8115, fax 202-267-9208, or email 9-ATOR-HQ-RT-REQ@faa.gov) for website access information and authorization or for any comments or questions regarding the General Information available through the link at the bottom of the FAA SIF website Planned Flights page.

b. Prior to proposed non-Part 129 SIF takeoff time, the SOSC must post the routing authorization on the FAA SIF website. If the FAA SIF website is inaccessible, or when the routing is approved less than 6 hours before the proposed takeoff time, the SOSC must pass the routing information to the System Operations Security Domestic Events Network (DEN) Air Traffic Security Coordinators (ATSC), and the concerned ARTCC/CERAP/HCF/ATCTs via fax, email, or electronic message; and verbal notification (if less than 6 hours before the proposed takeoff time).

1. For planning purposes, the SOSC routes non-Part 129 SIF aircraft on ARTCC/CERAP/HCF-preferred routing to the maximum extent possible. Otherwise, non-Part 129 SIF aircraft are routed on published airways when practicable.

NOTE-

Deviations from non-Part 129 SIF routings are allowed when approved by System Operations Security and the procedures are contained in Standard Operating Procedures or a Letter of Agreement.

2. The SOSC must email or fax approved non-Part 129 SIF routing authorizations to the flight operators. ARTCC/CERAP/HCF/ATCTs may contact the SOSC if courtesy copies of routing authorizations are desired.

c. For resolution of non-Part 129 SIF routing or procedural issues prior to flight, ARTCC/CERAP/HCF/ATCTs must contact the SOSC directly at 202-267-8115. The SOSC must resolve routing issues and reissue routing authorizations as required. ATC facilities must not issue a clearance to aircraft until all routing issues have been resolved. SIF procedural issues regarding this order must be referred to Strategic Operations Security.

d. The Washington Operations Center Complex (WOCC), DEN, and National Capital Region Coordination Center (NCRCC) must relay all calls regarding the status or processing of non-Part 129 SIF routing authorizations to the SOSC directly at 202-267-8115.

e. For resolution of issues concerning any SIF operation in progress, ARTCC/CERAP/HCF/ATCTs must contact the DEN ATSC at (540) 422-4423/4424/4425.

7-4-2. APPLICATION

a. The air traffic manager must ensure controllers are aware of expected non-Part 129 SIF authorized flight routings. Approved routings for non-Part 129 SIF aircraft must be confirmed on the FAA SIF website. If there

is no routing for a non-Part 129 SIF flight on the website, do not issue a clearance to the aircraft, and contact the SOSC in accordance with paragraph 7-4-1.

b. Controller-initiated deviations to non-Part 129 SIF authorized flight routings through United States territorial airspace are permissible for safety of flight reasons only. Facilities must report controller-initiated routing deviations as soon as possible to the DEN ATSC. Weather-related deviations that are requested by non-Part 129 SIF pilots must be coordinated through the DEN as soon as possible.

NOTE-

Vectoring non-Part 129 SIF arrivals and departures for preferred routings is authorized and is not a DEN reporting event.

c. Pilot-initiated deviations from non-Part 129 SIF authorized flight routings (except for weather) are not permissible. Controllers will request that non-Part 129 SIF aircraft return to approved route/reroute of flight whenever deviations are noted and immediately report deviations to the DEN ATSC.

d. The DEN ATSC must ensure the appropriate NORAD Air Defense Sector, U.S. Customs and Border Protection (CBP)/Air Marine Operations Center (AMOC), and WOCC are alerted and that procedures in chapter 7 of FAA Order JO 7610.4 (Sensitive Procedures and Requirements for Special Operations) are followed when any of these conditions occur involving any SIF aircraft:

REFERENCE-

FAA Order JO 7610.4, Chapter 7, Procedures for Handling Suspicious Flight Situations and Hijacked Aircraft

- 1.** The aircraft refuses to comply with any authorized message.
- 2.** Communication with the aircraft is established, but the aircraft identification cannot be immediately correlated with a known flight plan. (Attempt flight plan correlation when time permits.)
- 3.** The aircraft deviates from its approved route of flight and refuses to return to it when so requested.
- 4.** The aircraft refuses a reroute when so cleared or deviates from its reroute and refuses to return to it when requested.
- 5.** The aircraft makes an emergency or unscheduled landing in the United States.

Section 2. Intercept Training Activities

8-2-1. AREA OF OPERATION

Intercept training activities, except for NORAD/USINDOPACOM air defense exercises/evaluations, must be conducted under the following conditions:

- a.** Within Restricted Areas, Warning Areas, Military Operations Areas, and at FL 180 and above in ATCAAs within the United States and its territorial waters.
- b.** Participating aircraft must display transponder codes as assigned by ATC at all times unless otherwise coordinated.
- c.** Transponder-off operations must not be conducted except as authorized in an FAA Headquarters approved exemption to 14 CFR section 91.215.

8-2-2. RADAR SURVEILLANCE

- a.** Intercept training activities must be conducted under the surveillance of an MRU including AWACS aircraft to the extent such coverage or capability is available.
- b.** When MRU capability does not exist, ATC radar facilities should provide radar surveillance when staffing and workload permits. The details of radar coverage areas and the services to be provided will be included in a letter of agreement between the appropriate ATC facilities and military operational units.

Chapter 9. Air Traffic Control Assigned Airspace (ATCAA) Procedures

Section 1. General

9-1-1. PURPOSE

This chapter establishes policy and prescribes uniform procedures to request an Air Traffic Control Assigned Airspace (ATCAA) within the National Airspace System (NAS). ATCAAs can be requested by either military or non-military users. Non-military activities which may require the creation of an ATCAA include, but are not limited to, operations such as high-performance aircraft testing, glider operations, or space launch and reentry operations.

9-1-2. TERMS

The following terms will be used throughout this chapter:

a. ATCAA with Special Use Airspace (SUA). An ATCAA that is established and used in conjunction with SUA. These ATCAAs are normally established above the SUA, beginning at Flight Level (FL) 180. These ATCAAs with SUA are also referred to as a SUA/ATCAA complex.

b. Stand-alone ATCAA. An ATCAA that is established independently for a separate purpose and not associated with SUA. These ATCAAs can extend anywhere from the surface to FL600, although their floor is normally FL180.

c. Controlling Agency. The controlling agency is the ATC facility, normally an FAA ARTCC, that exercises control of the airspace when the ATCAA is not active. For ATCAAs that cross ATC facility boundaries, the controlling agency should be the ATC facility which controls the preponderance of airspace within which the ATCAA is established. However, a military ATC facility may be assigned as the controlling agency, subject to the concurrence of the Service Center OSG and the concerned ARTCC.

NOTE-

A military ATC facility controlling agency must coordinate ATCAA approval recommendations with the Service Center OSG for their concurrence prior to establishing or amending an ATCAA.

d. Using Agency. The using agency is the military unit or other organization whose activity established the requirement for the ATCAA and is responsible for ensuring:

1. The airspace is used only for its designated purpose.
2. Proper scheduling procedures are established and utilized.
3. The controlling agency is informed of changes in scheduled activity, to include the completion of activities for the day.
4. A point of contact is made available to enable the controlling agency to verify schedules, coordinate access for emergencies, weather diversions, etc., and recall the airspace when required.

9-1-3. POLICY

a. If an ATCAA with SUA is being established or modified at the same time as the SUA, the impact of the use of the ATCAA should be evaluated jointly with proposals for the SUA. Proponents should follow the process laid out in FAA Order JO 7400.2, Chapter 21, Section 3, SUA Proposals.

b. All requests to establish or modify an ATCAA will be processed by the controlling agency and coordinated with any other affected ATC facilities. The controlling agency is the approving agency for the use of an ATCAA.

c. DoD ATCAAs in the NAS will have a floor at or above FL180.

1. Any DoD activities below FL180 in NAS airspace, which require dedicated airspace, must be conducted in the appropriate type of SUA and not within an ATCAA. Follow the procedures defined in FAA Order JO 7400.2 for SUA proposal actions.

2. DoD ATCAAs may extend below FL180 in international airspace where the U.S. provides ATC services and where a warning area is not appropriate.

d. For any ATCAA proposals—civil or military—it is the proponent’s responsibility to ensure the proposal content is complete in accordance with this Order before the ATCAA proposal is submitted to the controlling agency. The controlling agency is responsible to ensure all required actions are completed before the ATCAA can be established or modified.

e. The ATCAA proposal request should include an informal preliminary environmental feasibility assessment for the proposed use of the ATCAA. Prior to the airspace proposal being approved by the FAA, all ATCAA proponents are required to conduct a formal NEPA environmental review of potential impacts of proposed actions that will take place in the ATCAA. National Environmental Policy Act (NEPA) reviews will be processed by the responsible Service Center Environmental Protection Specialist (EPS). See paragraph 9–3–1 for required NEPA actions.

f. ATCAAs will be effective once the FAA NEPA adoption, controlling agency decision, and a Letter of Agreement are signed by all responsible parties.

Section 2. Procedures

9-2-1. ATCAA PROPOSAL COORDINATION

a. The ATCAA proponent will submit their ATCAA proposal to the controlling agency, pre-coordinating with any other affected ATC facilities. The ATCAA proposal, coordination, and approval actions will be based on the type of ATCAA requested:

1. ATCAA with SUA. For an ATCAA to be established or modified at the same time as an associated SUA, the proponent must submit the ATCAA information with the SUA proposal in accordance with FAA order JO 7400.2, Chapter 21, Section 3, SUA Proposals. The FAA's Service Center EPS requires both the ATCAA and the SUA information to complete a thorough environmental review per paragraph 9-3-1 below. As part of this process, the controlling agency will continue to serve as the approval authority for the ATCAA portion of the proposal.

2. Stand-alone ATCAA. For a stand-alone ATCAA to be established or modified, the proponent must submit the proposal directly to the controlling agency responsible for the airspace the ATCAA falls within. Proponents should use paragraph 9-2-2 of this order when preparing the proposal and must clearly justify why an ATCAA is needed.

b. The controlling agency, in coordination with any other affected ATC facilities, must evaluate all ATCAA proposals for potential aeronautical impacts on non-participating air traffic and facility operations.

c. As the ATCAA aeronautical proposal is being developed, the using and controlling agencies are encouraged to pre-coordinate the draft proposal with the Service Center Operations Support Group (OSG) to address subsequent environmental review requirements.

d. ATCAAs should be designed to limit the amount of airspace to the minimum required to meet the need of the proponent. ATCAAs should be designed with subdivisions, laterally and/or vertically, to maximize the ATCAA utilization and minimize the impact to the NAS and other airspace users.

e. After accomplishing an aeronautical review, the controlling agency must submit ATCAA proposals they support to the Service Center EPS for environmental review in accordance with the process outlined in paragraph 9-3-1 of this order.

f. The controlling agency will ensure an approved ATCAA is entered into the Military Airspace Data Entry/Special Use Airspace Management System (MADE/SAMS) and is available for scheduling prior to use of the ATCAA.

g. In the event a proponent's ATCAA proposal concept has failed to receive ATC facility(ies) concurrence, constructive feedback or operationally feasible alternatives/mitigations, the proponent should coordinate with the Service Center MILREP and FAA ATREP to resolve the concern.

9-2-2. ATCAA PROPOSAL CONTENT

For all ATCAA requests, the proponent must provide the following data to the controlling agency:

a. Proponent's Transmittal Letter. Summarize the proposal and provide a point of contact for further information. Military proposals must include a military representative endorsement.

b. Area Description. Using the guidelines in FAA Order JO 7400.2, Chapter 21, Section 1 and Section 2, describe the proposed area as follows:

1. Title. State name of proposed ATCAA area(s).

2. Boundaries. A description of the proposed ATCAA boundary and any subdivisions.

NOTE-

All geographic coordinates must be based on North American Datum 83 (NAD 83).

3. Altitudes. State the floor and ceiling of the proposed ATCAA. List altitudes 18,000 feet mean sea level (MSL) and above as flight levels. List altitudes below 18,000 feet MSL as feet above MSL. Where terrain considerations or other factors would make the use of an MSL altitude impractical, the floor of the area may be described in feet above ground level (AGL).

4. Times of use. State the times of use to be published for the area(s). Include an estimate of the expected ATCAA usage in number of hours per day and days per year. In cases where the unit plans to use the airspace during different blocks of time each day, describe those planned operations to provide as accurate a picture as possible of the projected daily use of the airspace.

5. Controlling agency. State the FAA or military ATC facility to be designated as the controlling agency for the proposed ATCAA.

6. Using agency. State the organization to be designated as the using agency for the proposed ATCAA. Specify the military service, unit or organization, and location. For non-military using agencies, specify the organization name and location.

c. Airspace Statement of Need and Justification.

1. Describe the purpose and need for the proposed ATCAA. Sufficient justification must be provided to support approval of the proposal. Additionally, any known or anticipated aeronautical impact(s) on other airspace users must be considered and addressed in the proposal, including proposed mitigations, if any, to lessen the impact(s).

(a) For new ATCAA areas, explain why the requirement cannot be met by using or modifying an existing ATCAA. List ATCAAs that were considered and explain why each area is not acceptable.

(b) For proposals to increase the dimensions or times of use of an existing ATCAA, explain the need for the increase.

(c) Coordinate with the Service Center Environmental Specialist to ensure the Airspace Statement of Need and Justification is consistent with the Statement of Purpose and Need and alternatives in the applicable NEPA document.

d. Special Use Airspace (SUA). State whether the ATCAA is requested to support proposed or existing SUA, including the SUA dimensions and times of use.

NOTE—

1. SUA information is requested in the proposal solely to assist the FAA in evaluating the overall aeronautical impact of the ATCAA proposal.

2. ATCAAs below FL180 and ALTRVs must not be used as a substitute for SUA when conducting activities for which a SUA is designed to contain. Since ATCAAs and ALTRVs are not depicted on aeronautical charts, they do not inform the flying public of the location of the activity as is provided by charted SUA. Additionally, ATCAAs and ALTRVs are not to be used as an interim solution while a SUA proposal is pending.

e. Activities. List all activities to be conducted in the proposed ATCAA. Include the following information:

1. The number and types of aircraft that will normally use the area.

2. A listing of the specific activities and the maximum altitudes required for each type of activity planned.

3. State whether supersonic flight will be conducted.

f. Environmental and Land Use Information. In coordination with the Service Center OSG EPS, furnish the name, organization, and mailing address of the person to whom comments on environmental and land use aspects of the proposal may be sent.

g. Safety Considerations. Include an explanation of the following items, if applicable:

1. Measures taken to ensure containment of the activities within the proposed area.

2. Procedures for handling malfunctions.

2. Procedures for handling malfunctions.

h. Proposal Pre-Coordination. List the ATC facilities, military units, and/or other organizations contacted in developing the ATCAA proposal.

i. Environmental Documents. Submit applicable environmental documents in accordance with paragraph 9-3-1 of this order. If the environmental review is incomplete, indicate the status and estimated completion date.

j. Other. Include any additional information that should be considered by the FAA in making its determination of the proposal.

9-2-3. ATCAA PROPOSAL SCHEDULING

a. Specific procedures and conditions for scheduling and activating each ATCCA subdivision should be spelled out in a Letter of Agreement prior to the use of ATCAA.

b. Only the ATCAA subdivisions needed to meet mission requirements should be scheduled

c. ATCAA should be scheduled for the minimum time needed to complete the mission and returned to the controlling agency when the ATCAA is no longer required for its designated purpose.

Section 3. Environmental Impact Analysis Procedures for ATCAAs

9-3-1. ENVIRONMENTAL REVIEW PROCESS FOR ATCAA PROPOSALS

a. The establishment, modification, and use of ATCAAs are Federal Actions subject to NEPA review and documentation requirements. Compliance with FAA Order 1050.1, Environmental Impacts: Policies and Procedures and FAA Order JO 7400.2, Procedures for Handling Airspace Matters, Chapter 32, Environmental Matters, is required for a proponent to use FAA-regulated airspace. For the FAA to fulfill its NEPA documentation requirements, the proponent is responsible for providing the FAA with their NEPA documentation of their proposed ATCAA use, whether stand-alone or with SUA.

b. The proponent must conduct their own environmental impact review and documentation of their proposed actions to take place in the ATCAA in accordance with its agency's NEPA implementing regulations. Prior to the proponent's issuance of an environmental decision (i.e., Categorical Exclusion (CATEX), Environmental Assessment/Finding of No Significant Impact (EA/FONSI), Environmental Impact Statement/Record of Decision (EIS/ROD)), the proponent should involve the FAA's EPS as early as possible in the development of its NEPA documentation.

c. If the ATCAA is being created or modified along with associated SUA, the proponent's entire SUA-ATCAA use proposal will be evaluated by the Service Center EPS for environmental impacts according to the process described in FAA Order JO 7400.2, Chapter 21, Section 3, SUA Proposals; FAA Order 1050.1, Environmental Impacts: Policies and Procedures; and FAA Order JO 7400.2, Chapter 32, Environmental Matters.

d. All ATCAA proponents are required to include an environmental impact analysis of their proposed actions in the ATCAA proposal. When the proponent's use of an ATCAA is part of a broader proposed action, the proposed use of the ATCAA should be included in the proponent's Description of Proposed Action and Alternatives in their NEPA document. FAA's review of the proponent's NEPA documents will be conducted by the responsible Service Center EPS in accordance with the requirements of FAA Order 1050.1 and FAA Order JO 7400.2, Chapter 32, Environmental Matters.

e. Proposals to establish or modify ATCAA without changes to associated SUA are submitted directly to the controlling agency. To accomplish the required NEPA review, the controlling agency will provide the Service Center OSG with the ATCAA use request and controlling agency recommendation.

f. The Service Center EPS must support development of the proponent's NEPA documentation of their proposed actions that include the proponent's use of ATCAA(s) and prepare the FAA's NEPA adoption documentation in accordance with FAA Order 1050.1, paragraph 8-2, Adoption of Other Agencies NEPA Documents, and FAA Order JO 7400.2, Chapter 32, Environmental Matters.

g. The proponent must provide all relevant technical data (e.g., aeronautical information, aircraft noise data, noise modeling results, etc.) related to the proposed use of the ATCAA (and proposed use of other FAA-regulated airspace that may be part of the proponent's proposed action) as necessary to support the FAA's environmental impact review for adoption of the proponent's NEPA documents.

h. Approval authority for environmental decisions in the FAA's NEPA adoption document (i.e., CATEX, EA/FONSI, EIS/ROD) associated with the proponent's use of the ATCAA is in accordance with FAA Order JO 7400.2, Chapter 32, Appendices 4 and 8.

i. Once the FAA has adopted the proponent's NEPA document, the controlling agency may then make an approval determination.

Appendix 1. Abbreviations

As used in this order, the abbreviations set forth below must have the meanings indicated.

Abbreviation	Meaning
ACC	Air Combat Command
ADCF	Air Defense Control Facility
ADIZ	Air Defense Identification Zone
ADLO	Air Defense Liaison Officer
ADMIS (number)	Aircraft Departing at (number of minutes/seconds) Intervals
ADS	Air Defense Sector
ADS-B	Automatic Dependent Surveillance–Broadcast
AIM	Aeronautical Information Manual
AIP	Aeronautical Information Publication
AIRFL	Air Refuel or Aerial Refueling
ALTRV	Altitude Reservation
ALTRV APVL	Altitude Reservation Approval
AMC	Air Mobility Command
ANG	Air National Guard
ANR	Alaskan NORAD Region
AOC	Aircraft Operations Center (NOAA)
APREQ	Approval Request
APVL	Approval
ARCP	Air Refueling Control Point
ARCT	Air Refueling Control Time
ARIP	Air Refueling Initial Point
ARTCC	Air Route Traffic Control Center
ARU	Airborne Radar Unit
ASR	Airport Surveillance Radar
ATC	Air Traffic Control
ATCAA	ATC Assigned Airspace
ATCSCC	Air Traffic Control System Command Center
ATM	Air Traffic Management
ATM	Air Traffic Manager
ATREP	FAA Air Traffic Representative
ATSC	Air Traffic Security Coordinator
AVANA (UTC)	ALTRV Approval Void for Aircraft Not Airborne by (time)
AWACS	Airborne Warning and Control System
BNDD	Bounded

Abbreviation	Meaning
BR	Branch Route
C2	Command and Control
CARCAH	Chief, Aerial Reconnaissance Coordination, All Hurricanes
CARF	Central Altitude Reservation Function
CBP	Customs Border Protection
CEDAR	Comprehensive Electronic Data Analysis and Reporting Program
CELNAV	Celestial Navigation Training
CERAP	Combined Center/Approach Control
CFA	Controlled Firing Area
CFR	Code of Federal Regulations
CLMB	Climb
CMB	Climb
CMN	Common
CMPS	Compress
CONUS	Continental United States
CTA	Control Area
CTA/FIR	U.S. Control Airspace/Flight Information Region
DEN	Domestic Events Network
DHS	Department of Homeland Security
DoD	Department of Defense
DOD	Department of Defense
DPRT	Departure or Depart
DRCT	Direct
DSN	Defense Switched Network
DSND	Descend
DVFR	Defense Visual Flight Rules
EFTO	Encrypt For Transmission Only
ELP	Emergency Landing Pattern
ENCAN	Enter Canadian Airspace
ENJJPT	Euro–NATO Joint Jet Pilot Training
ESCAT	Emergency Security Control of Air Traffic
ESS	Electronic Scoring Site
ETD	Estimated Time of Departure

Abbreviation	Meaning
EUCARF	European Central Altitude Reservation Facility
EWO	Emergency War Order
EXCAN	Exit Canadian Airspace
FAA	Federal Aviation Administration
FACSFAC	Fleet Area Control and Surveillance Facility
FIR	Flight Information Region
FLIP	Flight Information Publication
FRD	Fix/radial/distance
FRMN	Formation
FSDO	Flight Standards District Office
GCA	Ground Controlled Approach
GCI	Ground Controlled Intercept
HCF	Honolulu Control Facility
IBASF (number)	Interval Between Aircraft in Stream Formation is (minutes)
ICAO	International Civil Aviation Organization
IFPFP	Individual Flight Plan From This Point
IFR	Instrument Flight Rules
IMC	Instrument Meteorological Conditions
IP	Initial Point
IR	IFR Military Training Route
JATOC	Joint Air Traffic Operations Command
JCAT	JATOC Crisis Action
JCS	Joint Chiefs of Staff
KIAS	Knots Indicated Air Speed
LOA	Letter of Agreement
LOP	Letter of Procedure
LOWAT	Low Altitude Air-to-Air Training
LVLOF	Level Off
MARSA	Military Authority Assumes Responsibility for Separation of Aircraft
MHz	Megahertz
MILREP	Military Representative
MITO	Minimum Interval Takeoff
MOA	Military Operations Area
MOR	Mandatory Occurrence Report
MRU	Military Radar Unit
MTR	Military Training Route
NAS	National Airspace System

Abbreviation	Meaning
NAVREP	Navy Representative to the FAA
NCR	National Capital Region
NCRCC	National Capital Region Coordination Center
NFDD	National Flight Data Digest
NGA	National Geospatial-Intelligence Agency
NHOP	National Hurricane Operations Plan
NOAA	National Oceanic and Atmospheric Administration
NOPAR	Do Not Pass to Air Defense Radar
NORAD	North American Aerospace Defense Command
NWSOP	National Winter Storm Operations Plan
ORI	Operational Readiness Inspection
PACAF	Pacific Air Forces
PACMARF	Pacific Military Altitude Reservation Facility
PADS	Pacific Air Defense Sector
PAR	Precision Approach Radar
PR	Partial Route
RAPCON	Radar Approach Control Facility (USAF, USN and USMC)
RATCF	Radar Air Traffic Control Facility (USN and USMC)
RAVEC	Radar Vector to a Geographical Point
RCVR	Receiver Aircraft for Air Refueling
RDT&E	Research, Development, Test, and Evaluation
REQ	Request
ROMES	Reference Our Message
RSU	Runway Supervisory Unit
RTE	Route
SAR	Search and Rescue
SFA	Single Frequency Approach
SFC	Surface
SFO	Simulated Flameout
SIDOR	Standard Instrument Departure from Optimum Runway
SIF	Special Interest Flight
SODAR	Simultaneous Opposite Direction Aerial Refueling
SOSC	System Operations Support Center

Abbreviation	Meaning
SPINS	Special Instructions
SUA	Special Use Airspace
TAS	True Airspeed
TOI	Track of Interest
TSA	Transportation Security Administration
UA	Unmanned Aircraft
UAS	Unmanned Aircraft System
UFT	Undergraduate Flying Training
UPT	Undergraduate Pilot Training
USA	United States Army
USAF	United States Air Force

Abbreviation	Meaning
USCG	United States Coast Guard
USINDOPACOM	U.S. Indo-Pacific Command
USMC	United States Marine Corps
USN	United States Navy
UTC	Coordinated Universal Time
VFR	Visual Flight Rules
VMC	Visual Meteorological Conditions
VR	VFR Military Training Route
WOCC	Washington Operations Center Complex
WRA	Weather Reconnaissance Area
WX RECON	Weather Reconnaissance

Appendix 2. Definitions

A-DEFINITIONS

Active Air Defense Mission. One or more aircraft, which in the interest of national security or flight safety, are employed to identify and determine the intentions of an airborne object and respond as necessary.

Air Defense Control Facility (ADCF). A military radar unit (ADS/AWACS) primarily used for air defense, including air sovereignty and counterdrug operations. ADCFs are the only MRUs authorized to direct interceptors. Specifically designated military units, when identified, may provide augmentation for NORAD and function as ADCFs.

Air Defense Identification Zone (ADIZ). An area of airspace over land or water in which the ready identification, location, and control of all aircraft (except for Department of Defense and law enforcement aircraft) is required in the interest of national security. (14 CFR section 99.3)(Refer to the AIM for ADIZ procedures.)

Air Defense Sector (ADS). A geographical subdivision of an air defense region. (32 CFR section 245.5).

Air Refueling Control Point (ARCP). The geographical point over which the receiver arrives in the observation/refueling position with respect to the assigned tanker.

Air Refueling Initial Point (ARIP). The geographical point at which the receiver aircraft enters the refueling track/anchor, initiates radio contact with the tanker, and begins maneuver to rendezvous.

Air Route Traffic Control Center (ARTCC). A facility established to provide air traffic control service to aircraft operating on IFR flight plans within controlled airspace and principally during the en route phase of flight. When equipment capabilities and work load permit, certain advisory/assistance services may be provided to VFR aircraft.

Air Traffic Clearance (Clearance). An authorization by air traffic control, for the purpose of preventing collision between known aircraft, for an aircraft to proceed under specified traffic conditions within controlled airspace. (14 CFR section 1.1)

NOTE-

For convenience, the term “air traffic clearance” is frequently abbreviated to “clearance” when used in appropriate contexts.

NOTE-

The abbreviated term “clearance” may be prefixed by the words taxi, takeoff, departure, en route, approach or landing to indicate the particular portion of flight to which the air traffic clearance relates.

Air Traffic Control (ATC). A service operated by appropriate authority to promote the safe, orderly, and expeditious flow of air traffic. (14 CFR section 1.1)

Air Traffic Control System Command Center (ATCSCC). An Air Traffic Tactical Operations facility responsible for monitoring and managing the flow of air traffic throughout the NAS, producing a safe, orderly, and expeditious flow of traffic while minimizing delays. The following functions are located at the ATCSCC:

a. Central Altitude Reservation Function (CARF). Responsible for coordinating, planning, and approving special user requirements under the Altitude Reservation (ALTRV) concept. (See Altitude Reservation.)

b. Airport Reservation Office (ARO). Monitors the operation and allocation of reservations for unscheduled operations at airports designated by the Administrator as High Density Airports. These airports are generally known as slot controlled airports. The ARO allocates reservations on a first come, first served basis determined by the time the request is received at the ARO. (Refer to 14 CFR part 93.)

c. U.S. Notice to Air Missions (NOTAM) Office. Responsible for collecting, maintaining, and distributing NOTAMs for the U.S. civilian and military, as well as international aviation communities. (See Notice to Air Missions.)

d. Weather Unit. Monitor all aspects of weather for the U.S. that might affect aviation including cloud cover, visibility, winds, precipitation, thunderstorms, icing, turbulence, and more. Provide forecasts based on observations and on discussions with meteorologists from various National Weather Service offices, FAA facilities, airlines, and private weather services.

e. Air Traffic Organization (ATO) Space Operations and Unmanned Aircraft System (UAS); the Office of Primary Responsibility (OPR) for all space and upper class E tactical operations in the National Airspace System (NAS). (Pilot/Controller Glossary.)

Airborne Radar Unit (ARU). An airborne radar unit used as an extension of a military radar unit during planned exercises and daily training missions.

Airborne Warning and Control System (AWACS). An airborne military radar unit engaged in radar surveillance and/or control of aircraft for the purpose of training, exercise, air defense, and counterdrug operations.

Airspace Reservation. The term used in oceanic ATC for airspace utilization under prescribed conditions normally employed for the mass movement of aircraft or other special user requirements which cannot otherwise be accomplished. Airspace reservations must be classified as either “moving” or “stationary.” (See Moving Airspace Reservation.) (See Stationary Airspace Reservation.) (See Altitude Reservation.)

Alert Area. Special use airspace established to inform pilots of a specific area wherein a high volume of pilot training activities or an unusual type of aerial activity is conducted. (14 CFR section 1.1)

Alternate Entry Track. A track along which en route descent is made to an intermediate point on an MTR.

Alternate Penetration Fix. The fix from which the MTR Alternate Entry Track begins. This fix must be described by reference to a ground based navigational aid.

Alternate Route (AR). A preplanned departure track designed to allow receivers to depart in one direction and tanker support to depart in another direction from the same airport with the intent to rendezvous for scheduled aerial refueling.

Altitude Reservation (ALTRV). Airspace utilization under prescribed conditions normally employed for the mass movement of aircraft or other special user requirements which cannot otherwise be accomplished. ALTRVs are approved by the appropriate air traffic facility. ALTRVs must be classified as either “moving” or “stationary.” (See Moving Altitude Reservation.) (See Stationary Altitude Reservation.) (See Air Traffic Control System Command Center)

Altitude Reservation East (ARE). A unit established by Transport Canada responsible for the processing of altitude reservation requests in Gander, Moncton, Montreal, and Toronto Area Control Centers (ACC).

Altitude Reservation West (ARW). A unit established by Transport Canada responsible for the processing of altitude reservation requests in Vancouver, Edmonton, and Winnipeg Area Control Centers (ACC).

Anchor Area. A defined area encompassing both a racetrack shape aerial refueling track and its protected airspace.

Anchor Point. A designed reference point upon which an anchor refueling track is oriented.

Associated Tracks. MTR Alternate Entry, Primary Entry, Climb-out, and Re-entry tracks.

ATC Assigned Airspace (ATCAA). Airspace of defined vertical/lateral limits, assigned by ATC, for the purpose of providing air traffic segregation between the specified activities being conducted within the assigned airspace and other IFR air traffic.

Automatic Dependent Surveillance–Broadcast (ADS–B). A surveillance system in which an aircraft or vehicle to be detected is fitted with cooperative equipment in the form of a data link transmitter. The aircraft or vehicle periodically broadcasts its GNSS–derived position and other required information such as identity and velocity, which is then received by a ground–based or space–based receiver for processing and display at an air traffic control facility, as well as by suitably equipped aircraft. (Pilot/Controller Glossary)

AVANA. (ALTRV APVL void for aircraft not airborne by (time)) used by ATC to advise an aircraft that the ALTRV is automatically canceled at a specified time.

B-DEFINITIONS

Branch Route (BR). A track of an ALTRV that is defined from the breakaway point from a common route to the next fix or the final destination.

Broad Front. This activity is used to occupy a frontal width (as measured perpendicular to the direction of the flight) greater than what is normally allowed.

C-DEFINITIONS

Canadian Altitude Reservation Unit (CARU). A unit established by the Ministry of Transport of Canada responsible for the processing of altitude reservation requests in Canadian airspace.

Canadian NORAD Region (CANR). (See NORAD Region).

Cell Formation. A nonstandard formation of two or more aircraft with the same intended route of flight, maintaining station keeping operations by visual/electronic means.

Central Altitude Reservation Function (CARF). A function at the Air Traffic Control System Command Center (ATCSCC), established to conduct the volume of coordination, planning, and approval of special user requirements under the ALTRV concept.

Chief, Aerial Reconnaissance Coordination, All Hurricanes (CARCAH) Unit. CARCAH is a remote operating unit of the 53rd Weather Reconnaissance Squadron. CARCAH's mission is to coordinate all tropical cyclone operational reconnaissance requirements at the National Hurricane Center (NHC) and the Central Pacific Hurricane Center for the North Atlantic, Caribbean, Gulf of Mexico, and the North Pacific east of the International Date Line in accordance with the National Hurricane Operations Plan (NHOP). In addition, during the winter, CARCAH coordinates the Atlantic and Pacific winter storm requirements in support of the National Winter Season Operations Plan (NWSOP).

Climb-out Fix. The point in space where en route operation is resumed after climb-out from an MTR. This fix must be described by reference to a ground-based navigational aid.

Climb-out Track. An MTR Associated Track beginning at the route Exit Point and permitting a climbing departure from the Exit Point to the Climb-out Fix.

Command and Control (C2). The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission. [JP1-A]

Common Route (CR). The receivers planned common route in an ALTRV from point of departure to destination excluding branch route or other join-up tracks.

Continental United States (CONUS). All United States territory of the 48 contiguous states (does not include Alaska and Hawaii), including the adjacent territorial waters within 12 miles of the coast of the 48 contiguous states. (32 CFR section 245.5)

Continental United States NORAD Region (CONR). (See NORAD Region).

Controlled Airspace. An airspace of defined dimensions within which air traffic control service is provided to IFR flights and to VFR flights in accordance with the airspace classification.

NOTE-

Controlled airspace is a generic term that covers Class A, Class B, Class C, Class D, and Class E airspace.

Controlled Firing Area (CFA). Special use airspace established to contain activities, which if not conducted in a controlled environment, would be hazardous to nonparticipating aircraft. (14 CFR section 1.1)

Controlling Agency. The controlling agency is the FAA ATC facility that exercises control of the airspace when a SUA area is not activated. A military ATC facility may be assigned as the controlling agency, subject to the concurrence of the Service Center OSG and the concerned ARTCC. A controlling agency must be designated for each joint-use SUA area. (Refer to FAA Order JO 7400.2, Procedures for Handling Airspace Matters.)

D-DEFINITIONS

DD-175/DD-1801. A domestic/international military flight plan.

Defense Area. Any airspace of the contiguous United States that is not an ADIZ in which the control of aircraft is required for reasons of national security.

Defense Emergency. An emergency condition that exists when:

- a. A major attack is made upon U.S. forces overseas or on allied forces in any theater and is confirmed by either the commander of a command established by the Secretary of Defense or higher authority; or
- b. An overt attack of any type is made upon the United States and is confirmed either by the commander of a command established by the Secretary of Defense or higher authority.

Defense Visual Flight Rules (DVFR). A flight within an ADIZ conducted by any aircraft (except for Department of Defense and law enforcement aircraft) in accordance with visual flight rules in part 91 of this title. (14 CFR section 99.3) (See Air Defense Identification Zone.) (Refer to the AIM for ADIZ procedures.)

Domestic Event Network (DEN). FAA-sponsored 24/7 interagency telephonic conference dedicated to real-time coordination of air traffic management (ATM) security-related incidents in the NAS. The purpose of the DEN is to provide timely notification to the appropriate authority that there is an ATM security-related problem, suspicious situation, or incident.

E-DEFINITIONS

Egress Point. The geographical point at which the refueling track terminates.

Entry Point. A point which denotes the beginning of a particular route of flight; i.e., MTR.

European Central Altitude Reservation Facility (EUCARF). A USAF facility established for the purpose of processing altitude reservations within its area of responsibility.

Exit Point. A point which denotes the end of a particular route of flight; i.e., MTR, air refueling track, etc.

F-DEFINITIONS

Fleet Area Control and Surveillance Facility (FACSFAC). A U.S. Navy fixed ground facility which manages offshore and inland operating areas including warning areas, restricted areas, and other assigned airspace.

Flight Level (FL). A level of constant atmospheric pressure related to a reference datum of 29.92 inches of mercury. Each is stated in three digits that represent hundreds of feet. For example, flight level 250 represents a barometric altimeter indication of 25,000 feet; flight level 255, an indication of 25,500 feet. (14 CFR section 1.1)

Flight Plan. Specified information, relating to the intended flight of an aircraft, that is filed electronically, orally or in writing with an FSS, third-party vendor, or an ATC facility. (Pilot/controller Glossary) (Refer to the AIM.)

Flush. A term that launches military aircraft in a minimum time.

Formation Flight. More than one aircraft which, by prior arrangement between the pilots, operate as a single aircraft with regard to navigation and position reporting. Separation between aircraft within the formation is the responsibility of the flight leader and the pilots of the other aircraft in the flight. This includes transition periods when aircraft within the formation are maneuvering to attain separation from each other to effect individual control and during join up and breakaway.

- a. A standard formation is one in which a proximity of no more than 1 mile laterally or longitudinally and within 100 feet vertically from the flight leader is maintained by each aircraft.

b. Nonstandard formations are those operating under any of the following conditions:

1. When the flight leader has requested and ATC has approved other than standard formation dimensions.
2. When operating within an authorized ALTRV or under the provisions of a letter of agreement.
3. When the operations are conducted in airspace specifically designated for a special activity.

H-DEFINITIONS

HAWK. A no-notice exercise in which an aircraft on a NOPAR flight plan or ALTRV tests the detection, identification, and reporting functions of the air defense forces (ADCFs and interceptor/flight units).

I-DEFINITIONS

IFR Military Training Routes (IR). Routes used by the Department of Defense and associated Reserve and Air Guard units for the purpose of conducting low-altitude navigation and tactical training in both IFR and VFR weather conditions at airspeeds in excess of 250 KIAS below 10,000 feet MSL.

Intercept. The encounter with or tracking of an airborne object, normally as a result of a flight path preplanned to effect such encounter in the shortest practicable time.

Interceptor. An airplane engaged for the sole purpose of performing an intercept.

Interceptor Training Flight. The flight of one or more aircraft for the development and maintenance of proficiency for both air and ground components related to the intercept mission.

J-DEFINITIONS

JATOC Crisis Action Team (JCAT). A surged element of the JATOC responsible for serving as ATO's primary national level communications and coordination hub for significant incidents, such as hurricanes and other natural disasters. (Refer to FAA Order JO 7200.25, Joint Air Traffic Operations Command (JATOC).)

Joint Air Traffic Operations Command (JATOC). The JATOC integrates Service Units at all levels enabling a unified FAA Air Traffic Organization (ATO) response effort to significant incidents and other major events or natural disasters that adversely impact the NAS or national security. The JATOC will address constraints, risks, and threats to the NAS and communicate this information to ATO leadership and appropriate stakeholders. (Refer to FAA Order JO 7200.25, Joint Air Traffic Operations Command (JATOC).)

M-DEFINITIONS

Maneuver Area. A designated area within an MTR where aircraft may deviate within the corridor to perform operational requirements.

Military Authority Assumes Responsibility for Separation of Aircraft (MARSA). A condition whereby the military services involved assume responsibility for separation between participating military aircraft in the ATC system. It is used only for required IFR operations which are specified in letters of agreement or other appropriate FAA or military documents.

Military Operations Area (MOA). Special use airspace of defined vertical and lateral dimensions established outside Class A airspace to separate or segregate certain nonhazardous military activities from IFR traffic and to identify for VFR traffic where these activities are conducted. (14 CFR section 1.1)

Military Radar Unit (MRU). Any fixed or mobile ground based unit under the operational jurisdiction of the military services excluding commissioned ATC facilities. This includes AWACS aircraft that meet the requirements of this order. MRUs will provide services in accordance with letters of agreement with the appropriate ATC facilities; however, MRUs must not provide ATC services.

Military Representative (MILREP). DoD Military Representatives (MILREPs) are FAA's principal points of contact for DoD aviation, airspace, and air traffic control matters; and are instrumental in providing effective liaison and agency interoperability. MILREP positions are embedded with various FAA lines of business at both FAA Headquarters and FAA Service Center offices.

Military Training Route (MTR). Routes developed for use by the military for the purpose of conducting low-altitude, high-speed training.

Mode. The letter or number assigned to a specific pulse spacing of radio signals transmitted or received by ground interrogator or airborne transponder components of the Air Traffic Control Radar Beacon System (ATCRBS). Mode A (military Mode 3) and Mode C (altitude reporting) are used in air traffic control. (Refer to the AIM.)

Mode S code. The unique ICAO aircraft address code used in ADS-B systems associated with the registration of an aircraft.

Moving Airspace Reservation. The term used in oceanic ATC for airspace that encompasses oceanic activities and advances with the mission progress; i.e., the reservation moves with the aircraft or flight. (See Moving Altitude Reservation.)

Moving Altitude Reservation. An altitude reservation which encompasses en route activities and advances with the mission progress; i.e., the reservation moves with the aircraft or flight.

N-DEFINITIONS

National Airspace System (NAS). The common network of U.S. airspace; air navigation facilities, equipment and services, airports or landing areas; aeronautical charts, information and services; rules, regulations and procedures, technical information, and manpower and material. Included are system components shared jointly with the military. (Pilot/Controller Glossary)

National Flight Data Digest (NFDD). A daily (except weekends and Federal holidays) publication of flight information appropriate to aeronautical charts, aeronautical publications, Notices to Air Missions, or other media serving the purpose of providing operational flight data essential to safe and efficient aircraft operations.

National Hurricane Operations Plan (NHOP). The Office of the Federal Coordinator for Meteorological Services and Supporting Research (OFCM) works with Federal agency stakeholders to plan hurricane observing and reconnaissance in preparation for each hurricane season. The NHOP focuses heavily on the planning, execution, and use of aerial reconnaissance conducted by the Air Force Reserve Command's 53rd Weather Reconnaissance Squadron (WRS) and NOAA's Aircraft Operations Center (AOC); addresses meteorological satellite, weather radar, and ocean observing; and a number of other, related topics.

National Winter Season Operations Plan (NWSOP). The purpose of the NWSOP is to coordinate the efforts of the Federal meteorological community to provide enhanced weather observations of severe winter storms that impact the coastal regions of the United States. This plan focuses on the coordination of requirements for winter storm reconnaissance observations provided by the Air Force Reserve Command's 53rd Weather Reconnaissance Squadron and NOAA's Aircraft Operations Center.

NORAD Region. A geographical subdivision of the area for which NORAD is responsible.

NORAD Sector. A geographical subdivision of a NORAD region.

North American Aerospace Defense Command (NORAD). A United States and Canada bi-national organization charged with the missions of aerospace warning, aerospace control and maritime warning for North America. Aerospace warning includes the detection, validation, and warning of attack against North America whether by aircraft, missiles, or space vehicles, through mutual support arrangements with other commands.

Notice to Air Missions (NOTAM). A notice containing information (not known sufficiently in advance to publicize by other means) concerning the establishment, condition, or change in any component (facility, service, or procedure, or hazard in the National Airspace System) the timely knowledge of which is essential to personnel concerned with flight operations.

a. NOTAM (D). The classification of NOTAMs containing information concerning the establishment, condition, or change in any aeronautical facility, en route navigational aids, services, procedures, hazards and civil public-use airports listed in the Chart Supplement.

b. Flight Data Center (FDC) NOTAM. The classification of NOTAMs containing flight information that is normally regulatory in nature including, but not limited to, changes to IFR charts, procedures, and airspace usage. For example, FDC NOTAMs with the keyword SECURITY are used for Department of State advisories, Special Federal Aviation Regulations (SFARs), advisories of national emergency, national security actions, special security instructions, and Air Defense Identification Zone (ADIZ) procedures.

c. CARF NOTAM. A NOTAM issued by CARF associated with a CARF approved ALTRV for a Stationary ALTRV or for a moving ALTRV in which AIRFL occurs below FL 180 or when the activity covers a broad frontal width. Also a NOTAM issued by ARTCCs for weather reconnaissance/research flights in Weather Reconnaissance Areas (WRA).

d. International NOTAM. The classification of NOTAMs received from other countries and stored in the U.S. NOTAM System.

e. Military NOTAM. The classification of NOTAMs issued by the U.S. Air Force, Army, Marine Corps, Navy, and Coast Guard against navigational aids and airports. Military units issue NOTAMs pertaining to their bases and airspace based on the guidelines set forth in Air Force Instruction Interservice Publication 11-208/AR 95-10/OPNAVINST 3721.20, DoD Notice to Airmen (NOTAM) System.

O-DEFINITIONS

Oceanic Airspace. Airspace over the oceans of the world, considered international airspace, where oceanic separation and procedures per the International Civil Aviation Organization are applied. Responsibility for the provisions of air traffic control service in this airspace is delegated to various countries, based generally upon geographic proximity and the availability of the required resources. (Pilot/Controller Glossary)

Offshore/Control Airspace Area. Designated international airspace between the U.S. territorial 12 mile limit and the oceanic CTA/FIR boundary, within signal coverage of domestic radio navigational aid or ATC radar coverage, in which domestic (U.S.) ATC procedures are applied. Offshore/Control Airspace Areas may be classified as either Class A airspace or Class E airspace. (80 FR 37710, Designation of Oceanic Airspace)

Orbit Area. This activity is used to occupy an expanded area used for holding or maneuvering of aircraft.

P-DEFINITIONS

PACAF Region. A geographical subdivision of the area for which PACAF is responsible.

Pacific Air Forces (PACAF). Both a USAF Major Command and the Air Component of the Unified U.S. Indo-Pacific Command (USINDOPACOM).

Pacific Island Air Defense Region (PIADR). A geographical subdivision of the USINDOPACOM area for which the Air Component Commander is responsible for air defense.

Pacific Military Altitude Reservation Facility (PACMARF). A USAF facility established for the purpose of coordinating altitude reservations within its area of responsibility.

Partial Route (PR). A track of an ALTRV that begins at the international boundary for aircraft inbound from an international airport to the CONUS or a track that is connected to a DD-175/DD-1801 (domestic flight plan).

Participating Aircraft. Only those aircraft engaged in, and a part of, the activity being conducted.

Penetrating Traffic. Traffic whose protected airspace, as defined in pertinent regulations, infringes upon another authority's area of jurisdiction or responsibility when measured from the center line of the route of flight or the edge of a stationary ALTRV boundary

Primary Entry Track. A track along which en route descent is made to the entry point of an MTR.

Primary Penetration Fix. The fix from which the Primary Entry Track of an MTR begins. This fix must be described by reference to a ground-based navigational aid.

Prohibited Area. Airspace designated under 14 CFR part 73 within which no person may operate an aircraft without the permission of the using agency.

R-DEFINITIONS

Radar Advisory. The provision of advice and information based on radar observations.

Radar Contact.

a. Used by ATC to inform an aircraft that it is identified on the radar display and radar flight following will be provided until radar identification is terminated. Radar service may also be provided within the limits of necessity and capability. When a pilot is informed of radar contact by ATC, the pilot automatically discontinues reporting over compulsory reporting points.

b. The term an air traffic controller uses to inform the transferring controller that the target being transferred is identified on the radar display. (See Radar Service.) (Refer to the AIM.)

Radar Service. A term which encompasses one or more of the following services based on the use of radar which can be provided by a controller to a radar identified aircraft.

a. Radar Separation. Radar spacing of aircraft in accordance with established minima.

b. Radar Navigational Guidance. Vectoring aircraft to provide course guidance.

c. Radar Monitoring. The radar flight following of aircraft, whose primary navigation is being performed by the pilot, to observe and note deviations from its authorized flight path, airway, or route. When being applied specifically to radar monitoring of instrument approaches; i.e., with precision approach radar (PAR) or radar monitoring of simultaneous ILS approaches, it includes advice and instructions whenever an aircraft nears or exceeds the prescribed PAR safety limit or simultaneous ILS no transgression zone.

Re-entry Track. An associated track commencing from a defined point on an MTR from which low-level re-entry can be achieved for the purpose of executing additional runs through segments of an MTR.

Refueling Level. A block of consecutive altitudes/ flight levels from ARIP to exit point within which entry into the refueling track, maneuvering to rendezvous, and transfer of fuel will be accomplished.

Rendezvous. A planned arrival of two or more aircraft over a predetermined point terminating in a visual contact prior to effecting a refueling hookup or conducting other activities requiring proximate operations.

Reporting Point. A geographical location in relation to which the position of an aircraft is reported. (Refer to the AIM.)

Restricted Area. Special use airspace designated under 14 CFR part 73 within which the flight of aircraft, while not wholly prohibited, is subject to restriction.

S-DEFINITIONS

Scramble. Departure of an aircraft training for or for the purpose of participating in an air defense mission.

Scramble Order. A command and authorization for flight requiring immediate takeoff.

Search and Rescue (SAR). A service which seeks missing aircraft and assists those found to be in need of assistance. It is a cooperative effort using the facilities and services of available federal, state, and local agencies. The U.S. Coast Guard is responsible for coordination of search and rescue for the Maritime Region, and the U.S. Air Force is responsible for search and rescue for the Inland Region. Information pertinent to search and rescue should be passed through an air traffic facility or be transmitted directly to the Rescue Coordination Center by telephone.

Separation Minima. The minimum longitudinal, lateral, or vertical distances by which aircraft are spaced through the application of air traffic control procedures.

Special Activity Airspace (SAA). Airspace with defined dimensions within the National Airspace System wherein limitations may be imposed upon operations for national defense, homeland security, public interest, or public safety. Special activity airspace includes but is not limited to the following; Air Traffic Control Assigned Airspace (ATCAA), Altitude Reservations (ALTRV), Military Training Routes (MTR), Air Refueling

Tracks and Anchors, Temporary Flight Restrictions (TFR), Special Security Instructions (SSI), etc. Special Use Airspace (SUA) is a subset of Special Activity Airspace.

Special Instructions (SPINS). For purposes of this order, SPINS provide amplifying instructions for execution of military exercises and other training activities, such as the application of MARSA, type of aircraft involved, etc.

Special Use Airspace. Airspace of defined dimensions identified by an area on the surface of the earth wherein activities must be confined because of their nature, or wherein limitations may be imposed upon aircraft operations that are not a part of those activities, or both. (14 C.F.R. Section 73.3) Types of special use airspace:

- a. Alert Area.
- b. Controlled Firing Area.
- c. Military Operations Area.
- d. National Security Area.
- e. Prohibited Area.
- f. Restricted Area.
- g. Warning Area.

Spill-Out. An excursion of an IFR or VFR military aircraft, or a civil aircraft contracted to the military, including remotely operated aircraft, from the exterior boundary of SAA allocated to military using agencies into other controlled airspace without coordination or prior approval.

Stationary Airspace Reservation. The term used in oceanic ATC for airspace that encompasses activities in a fixed volume of airspace to be occupied for a specified time period. Stationary Airspace Reservations may include activities such as special tests of weapons systems or equipment; certain U.S. Navy carrier, fleet, and anti-submarine operations; rocket, missile, and drone operations; and certain aerial refueling or similar operations. (See Stationary Altitude Reservation.)

Stationary Altitude Reservation (Stationary ALTRV). An altitude reservation which encompasses activities in a fixed volume of airspace to be occupied for a specified time period. Stationary ALTRVs may include activities such as special tests of weapons systems or equipment; certain U.S. Navy carrier, fleet, and anti-submarine operations; rocket, missile, and drone operations; and certain aerial refueling or similar operations.

Stereo-route. Pre-coordinated route of flight which may be stored in the ARTCC/CERAP computer.

Stream Formation. Two or more aircraft or cells of aircraft operating on the same route with more than one (1) minute but not more than 15 minutes longitudinal spacing between aircraft (or cells), laterally contained within the route width to be protected, and utilizing normally 3,000 consecutive feet of altitude.

T-DEFINITIONS

Tactical Monitor (TM). A term used to identify a military unit that provides tactical information/guidance to aircraft flying autonomously within SUA. A Tactical Monitor is not responsible for containing aircraft within SUA.

Tanker Orbit Point. A geographical location along the planned refueling track where the tanker may hold prior to effecting rendezvous with the receiver aircraft.

Territorial Airspace of the United States. (See U.S. Territorial Airspace)

Traffic Advisories. Advisories to alert pilots to other known or observed air traffic which may be in such proximity to the position or intended route of flight of their aircraft to warrant the pilot's attention. Such advisories may be based on:

- a. Visual observation;

- b. Observation of radar identified and nonidentified aircraft targets on an ATC radar display; or
- c. Verbal reports from pilots or other facilities.

NOTE–

The word “traffic” followed by additional information, if known, is used to provide such advisories; e.g., “Traffic, 2 o’clock, one zero miles, southbound, eight thousand.”

NOTE–

Traffic advisory service will be provided to the extent possible depending on higher priority duties of the controller or other limitations; e.g., radar limitations, volume of traffic, frequency congestion, or controller workload. Radar/nonradar traffic advisories do not relieve the pilot’s responsibility to see and avoid other aircraft. Pilots are cautioned that many times the controller is unable to give traffic advisories concerning all traffic in the aircraft’s proximity; in other words, when a pilot requests or is receiving traffic advisories, the pilot should not assume that all traffic will be issued. (Refer to the AIM.)

Trusted Agent. A designated point of contact used to limit distribution of close hold information. Trusted agents are most commonly used for NOPAR exercises/evaluations, No–Notice and ORI missions. The list of trusted agents must be kept to a minimum required to accomplish coordination.

U–DEFINITIONS

Uncontrolled Airspace. Airspace in which aircraft are not subject to controlled airspace (Class A, B, C, D, or E) separation criteria. (Pilot/Controller Glossary).

United States (U.S.). The States, the District of Columbia, Puerto Rico, and the possessions, including the territorial waters and the airspace of these areas. (14 C.F.R. Section 1.1)

U.S. Controlled Airspace. All airspace over the territory of the United States, extending 12 nautical miles from the coastline of U.S. territory; any airspace delegated to the United States for U.S. control by other countries or under a regional air navigation agreement; or any international airspace, or airspace of undetermined sovereignty, for which the United States has accepted responsibility for providing United States services. (14 CFR section 187.3)

U.S. Territorial Airspace. For purposes of this order, the airspace over the U.S., its territories, and possessions, and the airspace over the territorial sea of the U.S., which extends 12 nautical miles from the baselines of the U.S., determined in accordance with international law. (Refer to the AIM)

U.S. Indo–Pacific Command (USINDOPACOM). A unified command whose area of responsibility extends from the west coast of the Americas to the east coast of Africa and from the Arctic to the Antarctic.

Unmanned Aircraft System (UAS). An unmanned aircraft and its associated elements related to safe operations, which may include control stations (ground, ship, or air based), control links, support equipment, payloads, flight termination systems, and launch/recovery equipment. It consists of three elements: unmanned aircraft, control station, and data link. (Pilot/Controller Glossary)

Using Agency. The using agency is the military unit or other organization whose activity established the requirement for the SUA. Refer to FAA Order JO 7400.2, Procedures for Handling Airspace Matters, for using agency responsibilities.

V–DEFINITIONS

VFR Military Training Routes (VR). Routes used by the Department of Defense and associated Reserve and Air Guard units for the purpose of conducting low altitude navigation and tactical training under VFR at airspeeds in excess of 250 KIAS below 10,000 feet MSL.

W–DEFINITIONS

Warning Area. A warning area is airspace of defined dimensions extending from 3 nautical miles outward from the coast of the United States that contains activity that may be hazardous to nonparticipating aircraft. The purpose of such warning area is to warn nonparticipating pilots of the potential danger. A warning area may be located over domestic or international waters or both. (14 CFR section 1.1)

Weather Reconnaissance (WX RECON). Missions flown by the 53rd Weather Reconnaissance Squadron (WRS) under the TEAL call sign and National Oceanic and Atmospheric Administration (NOAA) Aircraft Operations Center (AOC) under the NOAA call sign for the purpose of gathering meteorological data from specific millibar levels in both tropical and winter weather systems.

Weather Reconnaissance Area (WRA). A WRA is airspace with defined dimensions and published by a NOTAM, which is established to support weather reconnaissance/research flights from the 53rd Weather Reconnaissance Squadron (WRS) and National Oceanic and Atmospheric Administration (NOAA) Aircraft Operations Center (AOC). A WRA may only be established in airspace within U.S. Flight Information Regions (FIRs) outside of U. S. territorial airspace. Air traffic control (ATC) services are not provided within WRAs.

Whiskey Alert. A term used over a voice–page hot line to alert a controlling agency that a spill out situation is imminent.

Appendix 3. Documents Pertinent to System Operations Security

Document No.	Document	Page
1	Memorandum of Agreement between the National Oceanic and Atmospheric Administration Aircraft Operations Center, U.S. Air Force Reserve Command 53rd Weather Reconnaissance Squadron, and the Federal Aviation Administration Air Traffic Organization in Support of the National Hurricane Operations Plan	Appendix 3-2
2	FAA/DoD Memorandums – Guidance for DoD Reimbursable Support to the FAA	Appendix 3-13

Appendix 3. Document 1

MEMORANDUM OF AGREEMENT BETWEEN THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION AIRCRAFT OPERATIONS CENTER, U.S. AIR FORCE RESERVE COMMAND 53RD WEATHER RECONNAISSANCE SQUADRON, AND THE FEDERAL AVIATION ADMINISTRATION AIR TRAFFIC ORGANIZATION IN SUPPORT OF THE NATIONAL HURRICANE OPERATIONS PLAN

- A. PURPOSE:** The purpose of this Memorandum of Agreement (MOA) is to establish responsibilities for the National Oceanic and Atmospheric Administration (NOAA) Aircraft Operations Center (AOC), U.S. Air Force Reserve Command (AFRC) 53rd Weather Reconnaissance Squadron (WRS), and the Federal Aviation Administration (FAA) Air Traffic Organization (ATO), which are hereinafter referred to as the “Parties”, to enable NOAA AOC and the 53rd WRS to conduct weather reconnaissance and research operations and to assume the responsibility for separating participating manned aircraft, and to use unmanned aircraft as weather instruments within a Weather Reconnaissance Area (WRA). The procedures and agreements contained herein, which apply to the Atlantic Ocean, Gulf of Mexico, Caribbean Sea, and the Pacific Ocean, are operationally executed through Letters of Agreement (LOA) between responsible Air Traffic Control (ATC) facilities and the NOAA AOC, 53rd WRS, and, as applicable, Special Use Airspace (SUA) Using Agencies.
- B. AUTHORITY:** The NOAA AOC enters into this MOA under the authority of the Weather Service Organic Act, 15 United States Code (USC) § 313 and 49 USC § 44720. The AFRC 53rd WRS enters into this MOA under the authority of the *National Hurricane Operations Plan (NHOP)*. The FAA enters into this MOA under the authority of 49 USC § 106(f) and §106(m).
- C. BACKGROUND:** The Department of Commerce, through NOAA, is charged with the overall responsibility to implement a responsive, effective national tropical cyclone warning service, including weather reconnaissance/research flights. The AFRC, through the 53rd WRS, and the U.S. Department of Transportation, through the FAA, also play roles in this NOAA led mission. The roles and responsibilities of these agencies are codified in the NHOP and in this MOA.
- D. DEFINITIONS:**
1. A Weather Reconnaissance Area (WRA) is airspace with defined dimensions and published by Notice to Airmen (NOTAM), which is established to support weather reconnaissance/research flights. ATC services are not provided within WRAs.¹ Only participating weather reconnaissance/research aircraft from NOAA AOC and 53rd WRS are permitted to operate within a WRA. A WRA may only be established in airspace within U. S. Flight Information Regions (FIRs) outside of U.S. territorial airspace.
 2. A “Participating Aircraft” is defined for the purposes of this MOA and related documents² as a NOAA AOC/53rd WRS manned aircraft listed in the Tropical Cyclone

¹ The FAA may provide ATC services to participating flights in transit to and from WRAs, but will not provide ATC services, specifically including separation, to these flights within a WRA.

² Including the NHOP’s Chapter 6 and any executing LOAs.

Plan of the Day (TCPOD) or tasked with an unscheduled operational mission that is conducted in a WRA.

E. ACTIVITIES:

1. Activities covered under this MOA are limited to NOAA AOC and AFRC 53rd WRS manned flight operations conducted in accordance with the NHOP, applicable LOAs, and as described in a published NOTAM for a WRA.
2. Unmanned Aircraft Systems (UAS) used for purposes of collecting weather data within a WRA must be operated in accordance with limitations described in the NHOP CHAPTER 6, AIRCRAFT OPERATIONS. No other UAS operations are permitted within a WRA.

F. RESPONSIBILITIES:

1. NOAA AOC must:

- (a) Enter into LOAs (using the template provided in attachment 1) with ATC facilities, the 53rd WRS, and, as applicable, the appropriate Special Use Airspace (SUA) using agencies.
- (b) Provide coordinated procedures and training for aircrews of NOAA AOC participating aircraft to operate in a WRA. These procedures must include, but not be limited to: minimum lateral and vertical separation; methods of determining such separation; and aircraft-to-aircraft communication phraseology when operating in a WRA.
- (c) Provide procedures and training for aircrews of NOAA AOC participating aircraft to use communication, navigation and surveillance (CNS) equipment that will support safe operations within a WRA.
- (d) Identify aircraft and define minimum functioning CNS equipment that must be used under this MOA.
- (e) Ensure the appropriate separation procedures, described in paragraph G of this MOA, for use within specific WRAs are briefed to aircrews of NOAA AOC participating aircraft.

2. AFRC 53rd WRS must:

- (a) Enter into LOAs (using the template provided in attachment 1) with ATC facilities, the NOAA AOC, and, as applicable, the appropriate SUA using agencies.
- (b) Provide coordinated procedures and training for 53rd WRS aircrews to operate in a WRA. These procedures must include, but not be limited to: minimum lateral and vertical separation; methods of determining such separation; and aircraft-to-aircraft communications phraseology when operating in a WRA.
- (c) Provide procedures and training for 53rd WRS aircrews to use communication, navigation and surveillance equipment that will support safe operations within a WRA.
- (d) Identify aircraft and define minimum functioning CNS equipment that must be used under this MOA.

- (e) Ensure the appropriate separation procedures, described in paragraph G of this MOA, for use within specific WRAs are briefed to aircrews of 53rd WRS participating aircraft.

3. FAA must:

- (a) Enter into LOAs (using the template provided in attachment 1) with NOAA AOC, the AFRC 53rd WRS, and, as applicable, the appropriate SUA using agencies. This action will be taken by ATC facilities that are responsible for airspace in which the participating aircraft will operate.
- (b) Receive and coordinate WRA NOTAM request.
- (c) Issue WRA NOTAMs in support of the NHOP (using the template provided in attachment 2).
- (d) Provide ATC services to participating aircraft in accordance with FAA Order 7110.65, *Air Traffic Control*, FAA Order 7610.4, *Special Operations*, and appropriate LOAs in support of NHOP as follows:
 - (1) Until participating aircraft report entering the NOTAM-defined WRA NOTAM airspace; and
 - (2) When participating aircraft report exiting the NOTAM-defined WRA airspace.
- (e) Prevent non-participating aircraft receiving ATC services from entering the WRA during the effective time of the WRA as published in the NOTAM.

3. PROCEDURES:

- 1. Chief Aerial Reconnaissance Coordination All Hurricanes (CARCAH):** The CARCAH must advise aircrews when participating aircraft will be in the WRA and brief call signs and mission information.
- 2. WRA NOTAM Request:**
 - (a) NOAA AOC or the 53rd WRS must submit, in accordance with the NHOP, a request for a WRA NOTAM to the en route ATC facility,³ which is responsible for the airspace in which the subject weather reconnaissance/research flights will be operated, and the Air Traffic Control System Command Center (ATCSCC) as soon as practical prior to the start of the mission. The request must contain detailed information regarding the geographic definition of the WRA and altitude information.
 - (b) NOAA AOC or the 53rd WRS must coordinate with the en route ATC facility, which received and agreed to support the aforementioned request, and the ATCSCC, to request FAA support of any proposed changes to the defined WRA.
- 3. Flight Plan Filing:** Participating aircraft must file a flight plan, as soon as practicable, that includes a delay time in the WRA. Failure to include a delay time will result in flight plan cancellation.
- 4. Participating Aircraft Arrival to a WRA:**

³Specifically includes FAA Air Route Traffic Control Centers (ARTCC), Center Radar Approach Controls (CERAP), and, in select cases, Combined Control Facilities (CCF) such as the Honolulu Control Facility (HCF).

- (a) Participating aircraft must use ATC services in transit to and from the WRA.
 - (b) Prior to entering the WRA, the arriving aircraft must obtain the position and altitude of each aircraft already in the WRA and verify the defined dimensions of the WRA, including center coordinates and maximum radius.
 - (c) Arriving aircraft will enter the WRA at FL150,⁴ unless otherwise coordinated with ATC and the other participating aircraft.
5. Participating Aircraft Operations within a WRA: The following actions will be taken by aircraft, in accordance with the NHOP, to de-conflict operations and enhance situational awareness with other aircraft while operating within a WRA:
- (a) Set 29.92 (inches Hg) in at least one pressure altimeter per aircraft.
 - (b) Contact (Primary: VHF 123.05 MHz; Secondary: UHF 304.8 MHz; Back-up: HF 4701 KHz) the other participating aircraft and confirm, at a minimum, the pressure altitude, location relative to the WRA center point position, true heading, and operating altitudes.
 - (c) Monitor the contact frequencies indicated above during the duration of the flight and maintain communication with all other participating aircraft at all times.
 - (d) The WRA center coordinates will be used for the duration of the flight. If a WRA is moved due to operational reasons, a different WRA center point will be coordinated between all participating aircraft and impacted ATC facilities as soon as possible.
 - (e) If any aircraft is unable to maintain assigned altitude(s), immediately notify all participating aircraft and take actions to ensure sufficient vertical and/or lateral separation is maintained or attained as soon as practical.
 - (f) Use “see and avoid” principles to the maximum extent possible within the WRA. Aircraft must periodically broadcast GPS position reports to other participating aircraft within the WRA and use air-to-air TACAN and cockpit displays/maps to maintain awareness of other aircraft locations.
6. Separation between participating aircraft within a WRA:
- (a) Aircraft 10 NM or more from other aircraft operating in the same WRA must maintain vertical separation within the WRA of at least 1,000 feet between their operating altitudes or block altitudes, or as specified in the applicable LOA.
 - (b) Aircraft less than 10 NM from other aircraft operating in the same WRA, must apply vertical separation of at least 2,000 feet between operating altitudes or block altitudes, or as specified in the applicable LOA. Aircraft may use air-to-air TACAN and TCAS to assist with visual acquisition. Reduced vertical separation may be applied with concurrence from other aircraft within the WRA.

NOTE- The 53rd WRS may apply Military Assumes Responsibility for Separation of Aircraft (MARSAs), in accordance with FAA Order 7110.65 and FAA Order 7610.4, between 53rd WRS aircraft within the WRA. MARSAs may not be applied between 53rd WRS aircraft and NOAA AOC aircraft.

⁴The upper limit of WRAs may be negotiated between NOAA AOC, 53rd WRS, and the responsible FAA en route ATC. While the template NOTAM indicates SFC-15,000 feet, the WRA ceiling may be lowered, especially when established closer to land where ATC services are provided at lower altitudes.

7. Altitude changes between participating aircraft within the WRA:

- (a) Aircraft must initiate communications with each other prior to altitude changes and maintain two-way aircraft-to-aircraft communications throughout the duration of the altitude change.
- (b) Aircraft must ensure positive lateral separation (in accordance with sub-paragraphs (d), (e), and (f) in this section) prior to descending or climbing through the altitude(s) of other aircraft by reference to the WRA center point using the appropriate aircraft navigation systems.
- (c) An altitude change is complete when the aircraft changing altitude advises the other aircraft, and receives an acknowledgement, that the altitude to which it was climbing or descending is reached and maintained.
- (d) Aircraft that are not in visual contact and separated by 30NM or more, as indicated by the appropriate aircraft navigation systems, may transition through the altitude of other participating aircraft.
- (e) Aircraft that are not in visual contact and separated by less than 30 NM, as indicated by the appropriate aircraft navigation systems, must confirm with each other that they are not on converging courses prior to an altitude change.
- (f) Aircraft that are in visual contact may apply visual separation in accordance with the following procedures:
 - (1) The aircraft that initiates visual separation must advise the other aircraft that the aircraft is in sight and will maintain visual separation from it.
 - (2) The observed aircraft must acknowledge the use of visual separation by the initiating aircraft prior to the altitude change.
 - (3) The aircraft changing altitude must advise the other aircraft upon reaching and maintaining the altitude to which it was climbing or descending.
 - (4) Visual separation may be discontinued when the altitude change is complete according to sub-paragraph (c) in this section.

8. Participating Aircraft Departure from a WRA:

- (a) Prior to departing the WRA, aircraft will establish communications with the appropriate ATC facility and request an IFR clearance.
- (b) Prior to departing the WRA, aircraft will verify and maintain vertical and lateral separation from other participating aircraft in the WRA.
- (c) Aircraft will depart the WRA at FL140, unless otherwise coordinated with ATC and other aircraft in the WRA.⁵
- (d) Departing aircraft will report, “leaving (tropical activity name) WRA,” to other aircraft in the WRA.

⁵ See footnote 4 for information on WRAs with lowered ceilings.

NOTE- The tropical activity name (as identified by the National Hurricane Center) provides identification of the WRA. Examples: Isabelle WRA, Sandy WRA, Tropical Storm Emily WRA, etc.

- (e) Should an aircraft lose communications with the other participating aircraft within a WRA, it will maintain the last altitude that was coordinated with the other aircraft until it departs the WRA.
- (f) If navigation systems become unreliable, the flight crew will terminate the mission and depart the WRA at the last coordinated altitude, or as coordinated with ATC if radio communications are available.

H. FUNDS AND OTHER RESOURCES: This MOA neither documents nor provides for the exchange of funds or other resources, including personnel, among the Parties, nor does it make any commitment of funds or other resources. Each Party makes appropriate resource and funding decisions under their own authorities in order to maximize the benefits of the partnership and cooperation under this MOA.

I. PERSONNEL: Each Party is responsible for all costs of its personnel engaged in activities covered by this MOA, including pay and benefits, support, and travel. Each Party is responsible for supervision and management of its personnel.

J. GENERAL PROVISIONS:

1. This MOA supersedes any existing MOAs, memorandums of agreement, or other agreements between the Parties, insofar as any such document is inconsistent with this MOA.
2. Nothing in this MOA is intended nor may be construed to limit or affect in any way the authority or legal responsibilities of the Parties.
3. Nothing in this MOA is intended nor may be construed to obligate the Parties to any current or future expenditure of resources in advance of the availability of appropriations from Congress. This MOA does not obligate the Parties to expend funds on any particular activity, even if funds are available.
4. Specific activities implemented pursuant to this MOA that involve the transfer of funds, services, or property between the Parties will require the execution of separate agreements.
5. **POINTS OF CONTACT:** The following points of contact will be used by the Parties to communicate in the implementation of this MOA. Each Party may change its point of contact upon reasonable notice to the other Party.
 - (a) FOR NOAA AOC: Commanding Officer, Aircraft Operations Center
 - (b) FOR AFRC 53rd WRS: Commander, 403rd Operations Group
 - (c) FOR FAA ATO: Manager, Strategic Operations Security
6. This MOA is not transferrable.

K. DURATION AND MODIFICATIONS: This MOA shall remain in effect unless cancelled by one of the Parties. This MOA may be jointly reviewed upon request by a signatory Party, and

may be modified by mutual written consent of the undersigned. Joint reviews should be completed prior to the annual Interdepartmental Hurricane Conference.

L. EFFECTIVE DATE: This MOA becomes effective beginning on the day after the last Party signs.

Attachments

1. WRA Letter of Agreement Template
2. WRA NOTAM Template

APPROVED



Robert H. Sweet
Manager, Strategic Operations Security,
Air Traffic Organization, System Operations Security
Federal Aviation Administration

14 March 2018

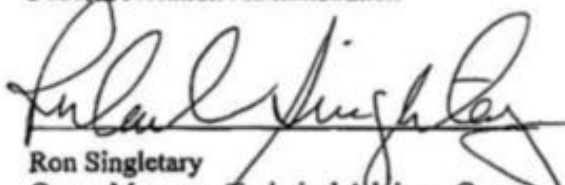
Date

Duane W. Freer

Virginia Boyle
Air Traffic Manager, Air Traffic Control System Command Center
Air Traffic Organization, System Operations Services
Federal Aviation Administration

March 16, 2018

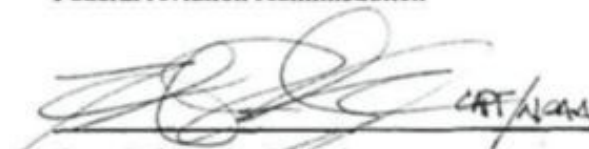
Date



Ron Singletary
Group Manager, Technical Advisory Group
Air Traffic Organization, Air Traffic Services
Federal Aviation Administration

March 19, 2018

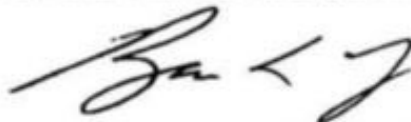
Date



Captain Timothy Gallagher
Commanding Officer, Aircraft Operations Center
National Oceanic and Atmospheric Administration

13 APR 18

Date



Colonel Brian A. May
Commander, 403rd Operations Group
U.S. Air Force Reserve Command

16 Apr 18

Date

ATTACHMENT 1

LETTER OF AGREEMENT TEMPLATE

BETWEEN

[INSERT NAME AND LOCATION ID OF FAA EN ROUTE ATC FACILITY OR FACILITIES]

AND THE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION AIRCRAFT OPERATIONS
CENTER AND

U.S. AIR FORCE RESERVE COMMAND 53RD WEATHER RECONNAISSANCE SQUADRON

SUBJECT: PARTICIPATING WEATHER RECONNAISSANCE / RESEARCH AIRCRAFT
OPERATIONS WITHIN WEATHER RECONNAISSANCE AREAS

1. PURPOSE: To define responsibilities and procedures for the National Oceanic and Atmospheric Administration (NOAA) Aircraft Operations Center (AOC) and the U.S. Air Force Reserve Command (AFRC) 53rd Weather Reconnaissance Squadron (53rd WRS) to conduct weather reconnaissance/research operations with participating manned aircraft in a Weather Reconnaissance Area (WRA) within the Flight Information Region (FIR) of the Federal Aviation Administration (FAA) Air Traffic Control (ATC) facility or facilities identified in paragraph two of this Letter of Agreement (LOA).
2. SCOPE: This LOA is applicable to [insert name and location ID of ATC facility or facilities], NOAA AOC, and the 53rd WRS. The provisions of this LOA are only applicable in United States controlled FIRs.
3. AUTHORITY: [insert location ID of ATC facility or facilities], NOAA AOC, and 53rd WRS enter into this agreement under the authority of the trilateral Memorandum of Agreement (MOA), *Memorandum of Agreement Between the National Oceanic and Atmospheric Administration Aircraft Operations Center, U.S. Air Force Reserve Command 53rd Weather Reconnaissance Squadron, and the Federal Aviation Administration Air Traffic Organization in Support of the National Hurricane Operations Plan.*
4. RESPONSIBILITIES:
 - a. The NOAA AOC and 53rd WRS must:
 - (1) Ensure that all operations personnel are briefed on the provisions of this LOA.
 - (2) Submit, when logistically possible, a pre-planning package to [insert location ID of ATC facility or facilities] and the Air Traffic Control System Command Center (ATCSCC) a minimum 2 hours prior to planned mission start. The package should contain information on aircraft call signs, beacon codes, geographic definition of proposed mission area, and other pertinent mission information.
 - (3) Submit a WRA Notice to Airmen (NOTAM) request to the en route ATC facility⁶, which is responsible for the airspace in which the weather reconnaissance/research flight will be

⁶ Specifically includes FAA Air Route Traffic Control Centers, Center Radar Approach Controls (CERAP), and, in select cases, Combined Control Facilities (CCF) such as the Honolulu Control Facility (HCF).

operated, and the Air Traffic Control System Command Center (ATCSCC) as soon as practical prior to the start of mission. The request must contain detailed information regarding the geographic definition and altitude information of the WRA.

- (4) Coordinate with the responsible en route ATC facility and the ATCSCC to request FAA support of any proposed changes to the defined WRA.
- (5) Ensure that pilots operating under the provisions of this LOA are responsible for remaining within the vertical and lateral confines of the airspace as defined in the published WRA NOTAM.
- (6) Ensure that pilots understand their responsibility for separation from Visual Flight Rules (VFR) and Instrument Flight Rules (IFR) aircraft operating in uncontrolled airspace.

NOTE: Operations within offshore and oceanic airspace include areas of uncontrolled airspace. Aircraft may encounter non-participating, untracked aircraft operating under VFR or IFR at and below 5,500 feet MSL.

b. [insert location ID of ATC facility or facilities] must:

- (1) Ensure that all ATC personnel are briefed on the provisions of this LOA.
- (2) Review the Tropical Cyclone Plan of the Day (TCPOD) at www.nhc.noaa.gov/reconlist.shtml by 1830 UTC.
- (3) Coordinate, as necessary, with other affected ATC facilities to ensure a complete understanding of each facility's responsibilities and procedures.
- (4) Coordinate requested WRAs with the NOAA AOC, 53rd WRS, and impacted Special Use Airspace (SUA) Using Agencies.

NOTE –SUA Using Agencies determine if Department of Defense (DOD) operational requirements are compatible with the establishment of a WRA and should define de-confliction procedures for SUA that may not be released.

- (5) Establish WRAs by published NOTAMs.
- (6) Prevent non-participating aircraft receiving ATC services from entering the WRA during the effective time of the WRA as published in the NOTAM.
- (7) Submit a signed copy of the LOA to ATO System Operations Security (9-ATOR-HQ-IFOS@faa.gov) for recordkeeping purposes.

c. PROCEDURES:

a. [insert location ID of ATC facility or facilities] Procedures:

- (1) Provide ATC services to and from the WRA in accordance with FAA Order 7110.65, *Air Traffic Control*, FAA Order 7610.4, *Special Operations*, the trilateral MOA cited in Section 3 of this LOA, and applicable ATC facility Standard Operating Procedures (SOP).
- (2) Provide NOAA AOC and 53rd WRS participating aircraft with a clearance into the WRA in accordance with the trilateral MOA cited in Section 3 of this LOA.
- (3) Provide an IFR clearance to participating aircraft requesting to depart the WRA.

b. Participating Aircraft Procedures: Pilots request entry to and departure from the WRA according to the trilateral MOA cited in Section 3 of this LOA.

6. DURATION AND MODIFICATIONS: This LOA shall remain in effect unless cancelled by one of the Parties. This LOA may be jointly reviewed upon request by either Party, and may be modified by mutual written consent of the undersigned.
7. EFFECTIVE DATE: This LOA becomes effective beginning on the day after the last Party signs.

APPROVED BY:

(Name)
Air Traffic Manager
(ATC Facility)

Date

(Name)
Commanding Officer, Aircraft Operations Center
National Oceanic and Atmospheric Administration

Date

(Name)
Commander, 403rd Operations Group,
U.S. Air Force Reserve Command

Date

(Name)
(Using Agency Title),
(DOD Component)

Date

Appendix 3. Document 1 (continued)

ATTACHMENT 2

WRA NOTAM TEMPLATE

!!CARF X/XXXX (APPLICABLE ARTCSS(s)) (AXXXX/XX)...AIRSPACE
(HURRICANE/TYPHOON/TROPICAL STORM) (NAME OF TROPICAL DISTURBANCE) WEATHER (WX)
RECONNAISSANCE FLIGHTS WI THE WX RECONNAISSANCE AREA (WRA) DEFINED AS XXX NM
RADIUS OF XXXXXXNXXXXXXXXXW (ARTCCS/CERAPS/HCF AND SUA USING AGENCIES MUST
COORDINATE TO PUBLISH ANY REQUIRED AIRSPACE CUT OUTS) SFC-XXX. VERTICAL
MANEUVERING AND RELEASE OF WEATHER INSTRUMENTS ARE EXPECTED. NONPARTICIPATING
AIRCRAFT SHOULD AVOID THE WRA. IFR AIRCRAFT CAN EXPECT REROUTES. FOR ANY
QUESTIONS REGARDING THIS WRA NOTAM PLEASE CONTACT XXX AT (XXX) XXX-XXXX (ARTCC
IDENTIFIER AND TELEPHONE NUMBER)

TIME-TIME

NOTES-

1. WRAs may only be established in airspace within U.S. FIRs outside of U.S. territorial airspace (12 NM).
2. Cut-outs should include Class B, Class C, Class D, and SUA, as applicable.
3. Distance (NM) for the WRA radius must be coordinated. It will be dependent on the WRA location and ATC operational requirements.
4. If more than one WRA is required, the WRA boundaries must be no closer than the lateral separation standards required for aircraft operations defined in FAA JO 7110.65 and Letters of Agreement.
5. WRA NOTAM must utilize CARF identifier for widest domestic and international dissemination.
6. The ARTCC responsible for originating the NOTAM should include their contact information.

Document 2**Appendix 3. Document 2****FAA/DoD Memorandums – Guidance for DoD Reimbursable Support to the FAA**

OFFICE OF THE SECRETARY OF DEFENSE
1000 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-1000

September 19, 2017

MEMORANDUM FOR DIRECTOR, SYSTEM OPERATIONS SECURITY, AIR TRAFFIC,
FEDERAL AVIATION ADMINISTRATION

SUBJECT: Cancellation of 2003 Memorandum of Understanding between Federal Aviation
Administration and Department of Defense for DOD Reimbursable Personnel
Support to DOT/FAA

This memorandum is in response to your notification cancelling the 2003 Memorandum of Understanding (MOU) between our Departments for DoD support to DOT/FAA (see attached). I concur with your assessment and the termination of the MOU effective September 11, 2017.

This termination does not preclude the Federal Aviation Administration (FAA) from requesting support on a case-by-case basis. FAA may continue to submit individual requests in accordance with Department of Defense Instruction 1000.17, "Detail of DoD Personnel to Duty Outside the Department of Defense," subject to availability of resources and personnel. Personnel currently detailed to FAA under the 2003 MOU will remain in place until the scheduled end date of their current detail at which time requests for their replacement or extension will be submitted on an individual basis. If you have any questions, please contact Sandra Simmons at (703) 692-7048.


Hallock N. Mohler, Jr.
CAPT, USN
Executive Secretary

Attachments:
As stated

cc:
OUSD(AT&L) (H. Knipes)
SAF/AAR (J. Williams)
USN (LCDR J. Chuma)



U.S. Department
of Transportation
**Federal Aviation
Administration**

September 8, 2017

MEMORANDUM FOR DEPARTMENT OF DEFENSE EXECUTIVE SECRETARY

SUBJECT: Cancellation of 2003 Memorandum of Understanding between Federal Aviation Administration and Department of Defense for DOD Reimbursable Personnel Support to DOT/FAA

Dear Captain Hallock Mohler:

On September 29, 2014, the DOD Executive Secretary sent a letter to the FAA Administrator requesting the FAA to update the 2003 Memorandum of Understanding (MOU) between FAA and DOD for Reimbursable Personnel Support.

The FAA has completed an analysis of this request, and has decided to exercise the termination process in section VI of the subject MOU. FAA hereby provides written notice to DOD of its intent to cancel the 2003 MOU between Federal Aviation Administration and Department of Defense for DOD Reimbursable Personnel Support to DOT/FAA. Per the provisions in section VI, the MOU is considered cancelled 30 days after receipt by the DOD Executive Secretary.

The FAA still considers it essential to national security and the DOD that military personnel continue to present DOD's perspective and provide their expertise as members of the FAA staff. FAA lines of business (LOBs)/staff offices which require DOD Reimbursable Support will now coordinate directly with your office for that support, in place of an overarching MOU, to proceed with individual MOUs on a case-by-case basis, pending availability of resources and personnel, and in accordance with the process outlined in Department of Defense Instruction (DODI) 1000.17, Detail of DoD Personnel to Duty Outside the Department of Defense.

Sincerely,

A handwritten signature in black ink, appearing to read "B. Throop".

Brian Throop

Director (Acting), System Operations Security
Air Traffic Organization

Enclosures: FAA-141002-011 IMOU pdf

Appendix 4. Documents Pertinent to Mission Support Services

Document No.	Document	Page
1	Memorandum of Agreement between Department of Transportation, Federal Aviation Administration, and the U.S. Army – the U.S. Navy – the U.S. Air Force	Appendix 4–2
2	Memorandum of Agreement (MOA) between the Federal Aviation Administration (FAA) and the Department of Defense (DoD) for Military Representatives to FAA	Appendix 4–5
3	Speed Authorization Granted to DoD	Appendix 4–10
4	Grant of Exemption No, 2861A – Single Altimeter Setting for Frequent Transit of FL180	Appendix 4–12

Appendix 4. Document 1

MEMORANDUM OF AGREEMENT BETWEEN DEPARTMENT OF TRANSPORTATION, FEDERAL AVIATION ADMINISTRATION, AND THE U.S. ARMY—THE U.S. NAVY—THE U.S. AIR FORCE

WHEREAS, by virtue of Section 307(b)(4) of the Federal Aviation Act of 1958 (49 U.S.C. 1348 (b)(4)), the Administrator of the Federal Aviation Administration (hereinafter referred to as the FAA) is authorized to provide necessary facilities and personnel for the regulation and protection of air traffic.

WHEREAS, by virtue of Section 303(d) of the Federal Aviation Act of 1958 (49 U.S.C. 1344 (d)), the Administrator of the FAA may make such provision as he shall deem appropriate authorizing, with its consent, the performance of any function under Section 307 (b) of the Act by any other Federal department; and

WHEREAS, there are three separate agreements now in effect between the FAA and the Army, Navy, and Air Force, respectively, relating to the operation of air traffic control facilities on military installations; and

WHEREAS, all parties to the three existing agreements wish to supersede such agreements with this separate agreement between the FAA and the three military services;

NOW, THEREFORE, all parties to this agreement mutually agree as follows:

Article I. Determination of Operational Responsibility

A. In keeping with requirements of national defense and with due regard for budgetary, manpower and all other pertinent considerations, the general allocation of responsibility for the operation of each military facility subject to this agreement shall be mutually determined at the national level between the FAA and the appropriate military service. To facilitate the determination of operational responsibility, recommendations concerning the operation of air traffic control facilities will be made at the local level by appropriate FAA and military personnel.

B. Unless agreement is reached to the contrary, the military services shall provide airport traffic control service (visual flight rules) at those military airports where the cognizant military authority deems that such service is required and said airports are not served by an FAA, State, municipal, or other non-Federal tower.

C. When it is mutually agreed to be more advantageous to establish independent military and FAA approach control facilities, the approach control authority for the military terminal area ordinarily will be delegated to the military. Prior to approval by FAA of this delegation of authority, the military facility must be equipped to transmit and receive on all frequencies necessary to control all categories of IFR traffic normally operating in the area. Additionally, a Letter of Agreement relating to the control of air traffic shall be consummated between the appropriate local military authority and the appropriate FAA air route traffic control center.

D. The FAA is authorized to assign an Air Traffic Representative (ATREP) to each military approach control facility covered in Article 1., Section C. The function of the ATREP is set out in detail in Article IV.

E. At all military locations not served by an ATREP, authorized FAA personnel may make evaluations of military approach control facilities and those military towers and military ASR/PAR units that exchange control of air traffic directly with FAA facilities. These evaluations are to be conducted at such times as are mutually agreeable to the FAA and the cognizant local military authority. The purpose of such evaluations is to determine whether equipment performance and staffing are adequate for the service being provided; whether personnel qualifications, Certification and performance meet acceptable standards; and whether procedures utilized are consistent with the agreements provided for in Article 1.C and Article V. All deficiencies which may affect flight safety shall be reported to cognizant military authority for timely corrective action.

F. Delegation of approach control authority may be temporarily suspended by a representative of the FAA area manager or the ATREP if such action is deemed necessary in the interest of flight safety. The commanding officer (or his designated representative) of the affected military installation shall be notified prior to the time suspension action is taken and informed of the reasons therefore.

G. Withdrawal of any delegation of authority covered by this agreement shall not be authorized prior to approval of FAA and the appropriate military service at the national level.

Appendix 4. Document 1 (continued)

Article II. FAA Operations on Military Installations

A. Where mutually agreed, the FAA will provide exclusive air traffic control services and staffing on military installations. Unless agreed to the contrary, where a military facility is located near an FAA approach control facility, the FAA will perform the approach control function from the FAA facility for both the military and non-military facilities.

B. At jointly-staffed air traffic control facilities located on military installations, unless agreed to the contrary, the FAA will staff the approach control (surveillance radar) function and the military service will staff and be responsible for the precision approach radar (PAR) function.

C. The FAA shall have full authority and responsibility for the operation of its authorized functions.

D. The basic radar system approved for use in the radar approach control function is of the airport surveillance radar (ASR) type. Proposals for use of radar systems other than the ASR shall be submitted to the Washington Office of the FAA for review. This clause shall not affect those terminal facilities currently utilizing other radar systems, nor is it intended to limit the use of ARSR or other slower RPM systems to supplement ASR equipment.

Article III. Cross-Training at Jointly-Staffed ATC Facilities

In the best interest of the FAA and military services, it is essential that organized cross-training be accomplished; accordingly cross-training programs shall be implemented and training shall be conducted to the maximum extent possible.

A. At the request of the responsible local military authority, the FAA will provide on-site approach control training to designated military personnel. Qualification and training shall be carried out in accordance with FAA regulations and procedures. Military personnel who successfully complete the training program and receive appropriate FAA certificates and ratings are not required to maintain currency on approach control positions. However, qualified military controllers, where current by FAA and military supervisors, may be assigned to approach control positions without direct supervision.

B. At the request of the FAA facility Air Traffic Manager the appropriate military authority will provide on-site precision approach radar (PAR) training to designated FAA personnel. Qualification and training shall be carried out in accordance with military regulations and procedures. FAA personnel are not required to maintain currency on PAR positions. However, qualified FAA controllers, when current

by military standards and when agreeable to both military and FAA supervisors, may be assigned to PAR control positions without direct supervision.

Article IV. FAA Air Traffic Representatives

A. The ATREP is responsible to the Area Air Traffic Branch. His function is described as follows:

1. To serve as liaison officer between the military and the FAA and between the military and civil users; to resolve local air traffic problems between military and civil users of the terminal area in order that both are afforded the maximum service possible; and, to conduct frequent liaison with FAA, civil and military personnel to determine the adequacy of ATC service is being rendered.

2. To serve as technical advisor to the military in all phases of air traffic control in order to improve ATC service.

3. To evaluate the amount of airspace required for air traffic control in terminal areas, and to coordinate approval of airport traffic patterns.

4. To continuously review existing air traffic control and communications procedures and practices, and to recommend action for their revision to improve efficiency.

5. To participate in appropriate intra-military meetings in which the FAA has an interest.

6. To encourage lecture and training programs for base pilots and civil air user groups, and to recommend changes, if necessary, to improve the air traffic control facility training program and to obtain maximum utilization of personnel.

7. To administer Control Tower Operator Exams and issue appropriate FAA certificates and ratings.

8. To participate frequently in flights of various types of unit-equipped military aircraft (in which flight as a passenger or crew member is permitted) for the purpose of evaluating, from the pilot's viewpoint, air traffic control services being rendered and the performance characteristics of aircraft employed at the base.

B. The ATREP will be an FAA signatory to agreements made pursuant to Article I., Section C.

Article V. Local Agreements at FAA-Staffed Military Installations

At military installations where FAA staffing is provided in whole or in part, a local memorandum of agreement shall be signed between FAA and appropriate military authority. The purpose of the local agreement is to further implement this agreement. Such agreements should cover details such as oper-

ational concepts, staffing, training, maintenance of equipment, utilization of space, parking and janitorial service, and security.

Article VI. Financing

A. Salary, travel and training expenses of FAA Air Traffic Representatives, Air Traffic Controllers, and other personnel furnished by the FAA, pursuant to this Agreement, will be borne by the FAA.

B. Salary, travel and training expenses of military and civilian personnel furnished by the DOD, pursuant to this Agreement, will be borne by the appropriate DOD component.

C. The cost of providing normal support (utilities, office space furniture, parking space, janitorial services and supplies, etc.) to FAA personnel at jointly-staffed air traffic control facilities located on military installations, pursuant to this Agreement, will be borne by the host DOD component authority exercising jurisdiction over the military installation involved.

D. Except as otherwise specifically agreed between the parties concerned, the cost of procuring new equipment and joint facilities to accommodate primarily a military requirement, pursuant to this Agreement, will be borne by the host component of the DOD.

E. The cost of procuring new facilities and equipment to accommodate primarily an FAA requirement, pursuant to this Agreement, will be borne by the FAA.

F. Except as otherwise specifically agreed between the parties concerned, the cost of installing and maintaining equipment will be borne by the party to this Agreement which has the responsibility for the air traffic control function being performed.

G. Agreements which include financing arrangements, other than the three separate agreements referred to in the preamble to this agreement, are not superseded by this article.

Article VII. Miscellaneous Provisions

A. Local military authority will determine the security clearances required of FAA personnel. FAA personnel will be subject to military security requirements and base regulations.

B. The military services shall inform the FAA at the earliest practicable date of plans to deactivate military bases at which FAA personnel are assigned. The FAA shall inform the appropriate military service at the earliest practicable date of plans to reduce services at or to abandon ATC facilities on military installations.

C. Differences which may arise and remain unresolved at the local level will be resolved through appropriate channels of the signatories to this Memorandum of Agreement.

The FAA and the three military services agree to be bound by all provisions of this agreement as indicated by the signature of their duly authorized officials.

UNITED STATES ARMY

By(s) A.S. Collins, Jr.

Title Asst. Chief of Staff for Force Development

Date 10 June 1969

UNITED STATES NAVY

By(s) Thomas F. Connolly

Title Deputy Chief of Naval Operations (Air)

Date 2 June 1969

UNITED STATES AIR FORCE

By(s) John W. Vogt, Maj. Gen. USAF

Asst. Deputy Chief of Staff Plans and Operations

Date 26 June 1969

DEPARTMENT OF TRANSPORTATION, FEDERAL AVIATION ADMINISTRATION

By(s) D.D. Thomas

Title Deputy Administrator

Date 17 July 1969

Appendix 4. Document 2

MEMORANDUM OF AGREEMENT (MOA) BETWEEN THE FEDERAL AVIATION ADMINISTRATION (FAA) AND THE DEPARTMENT OF DEFENSE (DOD) FOR MILITARY REPRESENTATIVES TO FAA

This is a MOA between the DoD and the FAA. When referred to collectively, the DoD and the FAA are referred to as the "Parties."

1. **BACKGROUND:** As an air navigation service provider, the DoD shares responsibility with the FAA to manage the National Airspace System (NAS). In order to meet critical national security requirements, it is essential for the FAA to closely coordinate daily operational plans, procedures, policies, programs, and activities with the military. Also, under certain emergency conditions, Executive Order 11161, as amended by Executive Order 11382, may transfer specified FAA functions to the DoD. In the event of a transfer, interagency relationships must be understood in advance; therefore, embedded DoD Military Representatives (MILREPs) are instrumental to achieve effective liaison and agency interoperability. The MILREP positions are the FAA's principal points of contact for DoD aviation, airspace, and air traffic control matters.

2. **AUTHORITIES:** The FAA enters into this MOA pursuant to the authority of Title 49 U.S. Code (U.S.C.) Section 106(1) and (m). The DoD enters into this MOA pursuant to DoD Directive 5030.19 and DoD Instruction 4000.19.

3. **PURPOSE:** This MOA establishes and defines the roles, responsibilities, and relationships of the Parties regarding MILREPs at both Headquarters (HQ) FAA and FAA Regional Service Area offices that are co-located with FAA Service Centers. The MILREP responsibilities are accomplished with various FAA lines of business at both the HQ FAA and Regional office levels.

4. UNDERSTANDINGS OF THE PARTIES:

4.1. The FAA will—

4.1.1. Sponsor MILREPs for access and other requirements at HQ FAA and FAA Regional Offices. Sponsorship will be provided by the Vice President, Mission Support (AJV-0) for MILREPs assigned to HQ FAA, and by FAA Regional Administrators for MILREPs assigned at the Regional levels.

4.1.2. Provide all assigned MILREPs full facility security access credentials as required for building access and access to all other facilities (e.g., secured areas) for MILREPs to adequately conduct their duties.

4.1.3. Provide administrative office space to the MILREPs, commensurate with FAA equivalent standards, to include custodial services, utilities, and maintenance to allow the MILREPs to adequately conduct their duties.

Appendix 4. Document 2 (continued)

4.1.4. Provide communications and Information Technology (IT) support and maintenance to the MILREPs, commensurate with FAA equivalent standards, to include:

4.1.4.1. Provide computers/laptops (provision for two monitors as necessary), printers, associated peripherals, and use of licensed software, to include operating system and applications, on the FAA network. Select MILREPs will be considered Supervisors and will be afforded Supervisor status in their respective line of business for automation updates.

4.1.4.2. The ability for MILREPs to transfer files, e-mail archives, and other data as appropriate, from the FAA network to the DoD network when MILREPs are reassigned or otherwise cease performing in the MILREP capacity.

4.1.4.3. Provide commercial local and long distance telephone service, message handling, facsimile or facsimile scanner, secure telephone, IT equipment, and network access with appropriate rights and privileges for conducting interagency business in FAA facilities. To facilitate communications with MILREPs when on travel or during after-hours emergencies, the local FAA sponsor will consider providing FAA cellular support to their MILREPs, such as integrating FAA or compatible DoD-owned devices on the FAA network. Additionally, allow DoD access to install Defense Switched Network (DSN) telephone service in FAA facilities, as required.

4.1.4.4. Installation of unique DoD required software program(s) as required, with applicable FAA compliance and network security review.

4.1.4.5. Technical information support to MILREPs to provide ability to archive DoD-specific information, to include email, correspondence, and other types of data.

4.1.4.6. Provide access to existing FAA secure/classified network computer terminals and organizational email address as required, with applicable FAA compliance and network security review. NOTE: The majority of MILREP communications are on unclassified networks, but access to classified networks may be necessary for periodic communications.

4.1.5. Provide the MILREPs with logistics support to include office supplies, office furniture, and IT equipment.

4.1.6. Provide the MILREPs with access to classified storage, up to "TOP SECRET" level, as required.

4.1.7. Provide the MILREPs with access to General Services Administration (GSA) vehicles/motor pools, personal vehicle parking spaces, and FAA-sponsored transportation commensurate with FAA equivalent standards.

4.2. The DoD will—

4.2.1. Establish and provide appropriate personnel to staff MILREP offices at HQ FAA and Regional Service Area offices. Manpower authorizations may vary due to individual Military Service staff reorganizations, and will be updated during periodic reviews of this MOA.

Table 1. Current DoD MILREP Authorizations

Military Service MILREP	HQ	East	Central	West**
Air Force	1	2***	1	2***
Army	2	3	3	5
Navy	1	2	2	2
Marine Corps	1	1	-	1

*All Eastern Service Area MILREPs also cover Puerto Rico and U.S. Virgin Islands

** All Western Service Area MILREPs also cover Alaska, Hawaii, Guam and Kwajalein

*** USAF MILREPs include one full-time Active Duty and one part-time Reservist (two total)

4.2.1.1. MILREPs assigned to Regional Service Area HQs will represent associated districts.

4.2.2. Provide appropriate personnel support for MILREPs, to include Individual Service Support Agreements with the nearest military installation(s), as required.

4.2.3. Provide for MILREPs to have access to DSN telephone service, as required.

4.2.4. Ensure MILREPs are informed of DoD issues and coordinate with FAA staff on all matters of mutual interest. FAA MILREPs will keep their Military Service HQ elements, the DoD Policy Board on Federal Aviation (PBFA), and/or applicable FAA offices aware of operational, technical, and administrative aviation/airspace related matters that could mutually impact the FAA and the DoD.

5. PERSONNEL: Each Party is responsible for costs of its personnel, to include pay, benefits, and travel. Each Party is responsible for supervision and management of its personnel.

6. GENERAL PROVISIONS:

6.1. POINTS OF CONTACT: The following points of contact will be used by the Parties to communicate in the implementation of this MOA. Each Party may change its points of contact upon reasonable notice to the other Party.

6.1.1. For the FAA—

6.1.1.1. HQ FAA Mission Support Services; (202) 267-8261.

6.1.2. For the DoD—

Appendix 4. Document 2 (continued)

6.1.2.1. Air Force: HQ USAF/A3OJ; Chief, Military/Civil Aviation Integration Division, (703) 693-4427.

6.1.2.2. Army: Commander, U.S. Army Aeronautical Services Agency (USAASA); (703) 806-4862.

6.1.2.3. Navy: Director, OPNAV N98/Naval Airspace and Air Traffic Control Standards & Evaluation Agency (NAATSEA); (703) 695-8534.

6.1.2.4. Marine Corps: HQ Marine Corps Aviation, APX; (202) 267-8439.

6.2. CORRESPONDENCE: All correspondence to be sent and notices to be given pursuant to this MOA will be addressed to the following:

6.2.1. For the FAA: FAA Mission Support Services (AJV-0), FAA HQ, 800 Independence Ave., SW, Suite 400E, Washington DC 20591.

6.2.2. For the DoD: Attention DoD Policy Board on Federal Aviation (PBFA) Secretariat, 1480 Air Force Pentagon, Washington DC 20330; (202) 404-2955; osd.pentagon.ousd-atl.mbx.dod-pbfa-secretariat@mail.mil.

6.3. FUNDS AND MANPOWER: This MOA does not document nor provide for the exchange of funds or manpower between the Parties nor does it make any commitment of funds or resources.

6.4. MODIFICATION OF MOA: This MOA may only be modified by the written agreement of the Parties, duly signed by their authorized representatives. This MOA will be reviewed every five years, on or around the anniversary of its effective date.

6.5. DISPUTES: Any disputes relating to this MOA will, subject to any applicable law, Executive Order, directive, or instruction, be resolved by consultation between the Parties.

6.6. TERMINATION OF UNDERSTANDING: This MOA may be terminated by either Party upon 180 days advanced written notice to the other Party.

6.7. TRANSFERABILITY: This MOA is not transferable except with the written consent of the Parties.

6.8. ENTIRE UNDERSTANDING: It is expressly understood and agreed that this MOA embodies the entire understanding between the Parties regarding this MOA's subject matter.

6.9. EFFECTIVE DATE: This MOA takes effect beginning on the day after the last Party signs.

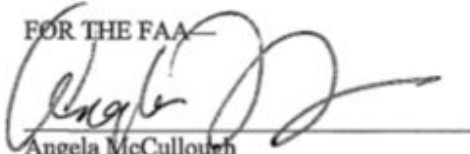
6.10. EXPIRATION DATE: This MOA will expire 10 years from the date the last Party signs.

Appendix 4. Document 2 (continued)

6.11. CANCELLATION OF PREVIOUS MOA: This MOA cancels and supersedes the previously signed MOA between the same Parties with the subject "MILITARY REPRESENTATIVES," and effective date of May 21, 2013.

APPROVED:

FOR THE FAA—


Angela McCullough
Vice President, Mission Support Services

7/11/19
(Date)

FOR THE DOD—


Rowayne A. Schatz, Jr., SES
DoD PBFA Executive Director

23 JUL 2019
(Date)

Document 3

SPEED AUTHORIZATION GRANTED TO DOD

U.S. Department
of Transportation
**Federal Aviation
Administration**

System Operations Services
800 Independence Avenue, SW.
Washington, DC 20591

DEC 05 2008

Mr. Gerald F. Pease Jr.
Department of Defense Policy Board
on Federal Aviation
1480 Air Force Pentagon 5D756
Washington, DC 20330-1480

Dear Mr. Pease:

Title 14, Code of Federal Regulations (CFR), part 91, section 91.117, requires that unless otherwise authorized by the Administrator, no person may operate an aircraft below 10,000 feet MSL at an indicated airspeed greater than 250 knots (288 m.p.h.).

The regulation grants an exception to aircraft having flight characteristics which preclude safe operation at speeds below 250 knots by providing that if the minimum safe airspeed for any particular operation is greater than the maximum speed prescribed, the aircraft may operate at that minimum safe airspeed.

In recognition of the fact that certain operational and training requirements cannot be met under the terms of the regulation, the Department of Defense (DOD), since May 18, 1978, has been authorized to operate aircraft below 10,000 feet mean sea level (MSL) at an indicated airspeed of more than 250 knots to the extent such high-speed operations were necessary to accomplish operational and training requirements.

Our authorization of May 18, 1978 is rescinded and reissued as follows:

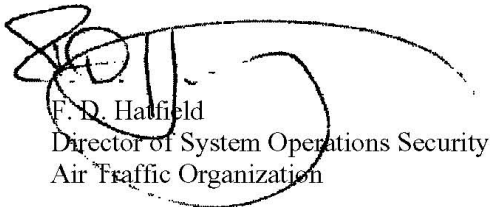
Operations below 10,000 feet MSL at an indicated airspeed in excess of 250 knots, in noncompliance with CFR, section 91.117, are authorized for the United States and foreign military aircraft, including Reserve and Air National Guard aircraft, under the following conditions:

- a. Within restricted areas.
- b. Within military operations areas.
- c. When operating within large-scale or on short-term special missions, coordination will be effected to ensure awareness on the part of the nonparticipating flying public.

- d. When operating on DOD/FAA mutually developed and published instruments routes (IR).
- e. When operating on DOD developed and published visual routes (VR).
- f. In the event provisions a through e cannot be complied with, the appropriate military headquarters may authorize flight operations within defined airspace in noncompliance with CFR, section 91.117, as it is considered necessary to accomplish the national defense mission. This provision is intended to accommodate speed requirements on an interim basis within a defined area for which an area/route proposal has been coordinated and concurred with by the appropriate military/FAA regional authority, but not yet published.
- g. If the airspeed required or recommended in the aircraft flight manual to maintain safe maneuverability is greater than the maximum speed described in CFR, section 91.117, the aircraft may be operated at that speed. Where the required or recommended speed is given as range, the lower part of the speed range should be used consistent with good operating practice. This provision is primarily to accommodate climbs/descents and terminal area operations.

This authorization is effective immediately.

Sincerely



F. D. Hatfield
Director of System Operations Security
Air Traffic Organization

Appendix 4. Document 4

Grant of Exemption No. 2861A – Single Altimeter Setting
for Frequent Transit of FL180

NOTE–
This exemption originally applied to 14 CFR 91.81, Altimeter Settings, but now applies to 14 CFR 91.121, Altimeter Settings. However, the wording in the current CFR is identical to the original and the exemption continues.

Exemption No. 2861A

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, D.C. 20591

* * * * *

In the matter of the petition of	*
	*
DEPARTMENT OF DEFENSE	* Regulatory Docket 18309
	*
to provide an amended Exemption from	*
Section 91.81 of the Federal Aviation	*
Regulations	*
	*
* * * * *	*

GRANT OF EXEMPTION

By letter dated January 17, 1980, the Department of Defense (DOD) petitioned the Federal Aviation Administration (FAA) to amend Exemption No. 2861 to enable DOD aircraft to use either the standard altimeter setting of 29.92 inches Hg. or a current station altimeter setting while conducting aerial training maneuvers in certain special use airspace.

On October 17, 1979, the FAA issued Exemption No. 2861 to the DOD to provide DOD aircraft relief from altimeter setting provisions of Federal Aviation Regulation (FAR) Section 91.81. Under the exemption, DOD aircraft are not required to change altimeter settings during high speed maneuvers which result in rapid transits of flight level (FL) 180 that occur while conducting serial training exercises within military operations areas (MOAs) or restricted areas. Condition 3 of the exemption imposes the use of a standard altimeter setting of 29.92 inches Hg. A summary of the DOD petition to amend the exemption was published in the Federal Register on February 28, 1980 (45 FR 13245). No comments were received.

FAR Section 91.81(a)(1) requires, in part, that each aircraft operated below 18,000 feet mean sea level (MSL) maintain cruising altitude by reference to an altimeter that is set to the current reported altimeter setting of a station along the route and within 100 nautical miles of the aircraft. When the aircraft is operated at or above 18,000 feet MSL, the altimeter must be set to 29.92 inches Hg., as required by FAR Section 91.81(a)(2).

Exemption No. 2861 permits DOD aircraft to transit FL 180 contrary to the altimeter setting provisions of FAR Section 91.81 while operating under the exemption in MOAs and restricted areas. An MOA is an airspace assignment of defined vertical and lateral dimensions established outside positive control airspace to separate/segregate certain military activities from instrument flight rule (IFR) traffic and to identify for visual flight rule (VFR) traffic where these activities are conducted. High speed tactical operations are conducted within these MOAs. Restricted areas, designated under FAR Part 73, are often joint use and IFR/VFR operations may be authorized by the controlling air traffic control (ATC) facility when utilized by the using agency.

In addition to MOAs and restricted areas referred to in Exemption 2861, this exemption covers DOD training maneuvers conducted in Air Traffic Control Assigned Airspace (ATCAA). ATCAAs are described in the Pilot/Controller Glossary of FAA Order 7110.65B, "Air Traffic Control," as airspace of defined vertical/lateral limits, assigned by ATC, for the purpose of providing air traffic segregation between the specified activities being conducted within the assigned airspace and other IFR air traffic. ATCAAs are given consideration herein in light of the fact that MOAs are generally established only up to but not including FL 180, which is below positive control area (PCA) where ATC controls all air traffic. Military operations conducted above FL 180 in accordance with the provisions of this exemption shall be contained within ATCAAs, wherein use of station pressure altimeter settings require prior relief from Section 91.81(a)(2).

While Exemption No. 2861 relieved DOD aircraft from making frequent altimeter setting changes, it did impose the condition that only the 29.92 inches Hg. setting be used by aircraft operating under the exemption. It was believed this condition would be especially advantageous to those operating under the exemption since their altitude calculation procedures would be the same wherever the operation occurred, resulting in safety benefits. It was believed this standardization would aid in preserving the integrity of charted boundaries and altitudes while placing full reliance and responsibility on user pilots to remain well within the geographical and altitude limits of the special use airspace areas. However, self-containment became more of a problem than anticipated. The DOD petitioned, contending that the condition was overly restrictive and resulted in numerous requests to use station altimeter settings for reasons of flight safety. The petitioner stated that many DOD flights conducted in MOAs require operations near the terrain in which case the altimeter setting of 29.92 inches Hg. could result in inadequate terrain clearance.

It should be noted that in an earlier exemption, Exemption No. 2082, the U.S. Air Force was provided general relief from altimeter setting requirements of Section 91.81. In absence of any other altimeter setting conditions, the earlier exemption permitted use of either the standard 29.92 or the current station altimeter setting. The DOD requests this same flexibility, as expressed by their operating units' preference to use station altimeter settings and the professed operational difficulty in maintaining adequate terrain clearance.

In addition to DOD preference, FAA regions reported the controlled use of station altimeter settings by Air Force aircraft operating under the previous exemption was successful and the regions have asked that the provision be reinstated. In light of the past success of operations under Exemption No. 2082 and the reluctance of DOD aircraft to use the standard 29.92 setting, the mandatory requirement to use 29.92 inches Hg. is considered unnecessary. Therefore, the option to select a station altimeter setting, subject to appropriate altitude and boundary safety provisions in a letter of agreement with the controlling ATC facility, should be extended to DOD.

In consideration of the foregoing, I find that an exemption, subject to certain conditions and limitations, is in the public interest. Therefore, pursuant to the authority contained in Section 307(e) of the Federal Aviation Act of 1958, as amended, which has been delegated to me under Section 11.53 of the Federal Aviation Regulations, the Department of Defense is hereby granted an exemption from provisions of Section 91.81 of the Federal Aviation Regulations to the extent necessary to conduct those high speed tactical maneuvers that include rapid transits of FL 180 as follows:

1. For the purposes of this exemption, Air Traffic Control Assigned Airspace (ATCAA) is defined as that airspace of defined vertical/lateral limits, assigned by ATC, for the purpose of providing air traffic segregation between the specified activities being conducted within the assigned airspace and other controlled air traffic.

2. This exemption applies only to aircraft conducting DOD approved training involving high speed tactical maneuvers in established MOAs, restricted areas, and ATCAAs.

3. All operations under this exemption must be conducted within the boundaries and altitudes of established MOAs, restricted areas, and ATCAAs. In addition, they must be conducted under a letter of agreement with the ATC facility having jurisdiction over the airspace areas to include provision for safe altitude clearance between DOD aircraft and other aircraft operating within, above, and below MOAs, restricted areas, and ATCAAs.

4. The DOD is responsible for assuring all operations conducted under this exemption are accomplished within the boundaries and altitudes of the MOAs, restricted areas, and ATCAAs with appropriate clearance of terrain, obstacles, other aircraft and persons and property on the ground.

5. This exemption supersedes Exemption No. 2861 issued to the Department of Defense dated October 17, 1979.

This exemption is effective immediately and shall continue in effect until superseded or rescinded by the Federal Aviation Administration.

/s/ Ramon A. Alvarez
Acting Director,
Air Traffic Service

Issued in Washington, D.C., on
June 30, 1980.

BRIEFING GUIDE



**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

FOR OFFICIAL USE ONLY

**Initiated By: AJR-0
Vice President, System Operations Services**

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1. PARAGRAPH NUMBER AND TITLE:

7-1-6. SIMULATED FLAMEOUT (SFO) EMERGENCY LANDING PATTERN (ELP)

2. BACKGROUND: The Department of Defense (DoD) has requested the removal of the requirement from FAA Order JO 7610.14, Non-Sensitive Procedures and Requirements for Special Operations, subparagraph 7-1-6d, that Letters of Agreement (LOAs) state that practice Simulated Flameout (SFO)/Emergency Landing Pattern (ELP) must only be conducted between sunrise and sunset. The request is to remove that requirement as drones, F22s, and F35s conduct practice SFOs/ELPs at night and pilots should be able to make an individual request to the controller at any time.

3. CHANGE:**OLD****7-1-6. SIMULATED FLAMEOUT(SFO)/EMERGENCY LANDING PATTERN (ELP) OPERATIONS****Title through c**

d. A statement that a practice SFO/ELP will be approved only between sunrise and sunset.

e. A statement indicating that provision of this service by the tower does not in any way absolve the pilot from their responsibility to comply with 14 CFR Parts 91.111 and Part 91.113 other appropriate subparts of 14 CFR Part 91, and /or applicable military regulations.

f. Pilots utilizing SFO/ELP procedures in T-6, T-41, T-51, U-2, and TR-1 aircraft are authorized to deviate from the weather conditions prescribed in subparagraph b as follows:

NEW**7-1-6. SIMULATED FLAMEOUT(SFO)/EMERGENCY LANDING PATTERN (ELP) OPERATIONS****No Change****Delete**

d. A statement indicating **the** provision of this service by the tower does not in any way absolve the pilot from their responsibility to comply with 14 CFR **sections** 91.111 and 91.113, other appropriate subparts of 14 CFR Part 91, and/or applicable military regulations.

e. Pilots utilizing SFO/ELP procedures in T-6, T-41, T-51, U-2, and TR-1 aircraft are authorized to deviate from the weather conditions prescribed in subparagraph b as follows:

1. PARAGRAPH NUMBER AND TITLE:

9-1-1. PURPOSE

9-1-2. TERMS

9-1-3. POLICY

9-2-1. ATCAA REQUEST COORDINATION

9-2-2. ATCAA INFORMATION

9-2-3. ATCAA SCHEDULING

9-3-1. ENVIRONMENTAL REVIEW PROCESS FOR ATCAA REQUESTS

2. BACKGROUND: The FAA Department of Defense (DoD) Tiger Team, Aeronautical Airspace Proposal Process sub-working group, is processing a change to FAA Order JO 7610.14, Non-Sensitive Procedures and Requirements for Special Operations. This change establishes a process for proposing or modifying Air Traffic Control Assigned Airspace (ATCAA), including guidance on conducting environmental reviews under the National Environmental Policy Act (NEPA). This process is included here as a new chapter (Chapter 9) in the order.

3. CHANGE:**OLD**

Add

Add

Add

Add

NEW**Chapter 9. Air Traffic Control Assigned Airspace (ATCAA) Procedures****Section 1. General****9-1-1. PURPOSE**

This chapter establishes policy and prescribes uniform procedures to request an Air Traffic Control Assigned Airspace (ATCAA) within the National Airspace System (NAS). ATCAAs can be requested by either military or non-military users. Non-military activities which may require the creation of an ATCAA include, but are not limited to, operations such as high-performance aircraft testing, glider operations, or space launch and reentry operations.

OLD

Add

Add

Add

Add

NEW**9-1-2. TERMS**

The following terms will be used throughout this chapter:

a. ATCAA with Special Use Airspace (SUA). An ATCAA that is established and used in conjunction with SUA. These ATCAAs are normally established above the SUA, beginning at Flight Level (FL) 180. These ATCAAs with SUA are also referred to as a SUA/ATCAA complex.

b. Stand-alone ATCAA. An ATCAA that is established independently for a separate purpose and not associated with SUA. These ATCAAs can extend anywhere from the surface to FL600, although their floor is normally FL180.

Add **c. Controlling Agency. The controlling agency is the ATC facility, normally an FAA ARTCC, that exercises control of the airspace when the ATCAA is not active. For ATCAAs that cross ATC facility boundaries, the controlling agency should be the ATC facility which controls the preponderance of airspace within which the ATCAA is established. However, a military ATC facility may be assigned as the controlling agency, subject to the concurrence of the Service Center OSG and the concerned ARTCC.**

Add **NOTE–
A military ATC facility controlling agency must coordinate ATCAA approval recommendations with the Service Center OSG for their concurrence prior to establishing or amending an ATCAA.**

Add **d. Using Agency. The using agency is the military unit or other organization whose activity established the requirement for the ATCAA and is responsible for ensuring:**

Add **1. The airspace is used only for its designated purpose.**

Add **2. Proper scheduling procedures are established and utilized.**

Add **3. The controlling agency is informed of changes in scheduled activity, to include the completion of activities for the day.**

Add **4. A point of contact is made available to enable the controlling agency to verify schedules, coordinate access for emergencies, weather diversions, etc., and recall the airspace when required.**

OLD

NEW

Add

9-1-3. POLICY

Add

a. If an ATCAA with SUA is being established or modified at the same time as the SUA, the impact of the use of the ATCAA should be evaluated jointly with proposals for the SUA. Proponents should follow the process laid out in FAA Order JO 7400.2, Chapter 21, Section 3, SUA Proposals.

Add

b. All requests to establish or modify an ATCAA will be processed by the controlling agency and coordinated with any other affected ATC facilities. The controlling agency is the approving agency for the use of an ATCAA.

Add

c. DoD ATCAAs in the NAS will have a floor at or above FL180.

- Add 1. Any DoD activities below FL180 in NAS airspace, which require dedicated airspace, must be conducted in the appropriate type of SUA and not within an ATCAA. Follow the procedures defined in FAA Order JO 7400.2 for SUA proposal actions.
- Add 2. DoD ATCAAs may extend below FL180 in international airspace where the U.S. provides ATC services and where a warning area is not appropriate.
- Add d. For any ATCAA proposals—civil or military—it is the proponent’s responsibility to ensure the proposal content is complete in accordance with this Order before the ATCAA proposal is submitted to the controlling agency. The controlling agency is responsible to ensure all required actions are completed before the ATCAA can be established or modified.
- Add e. The ATCAA proposal request should include an informal preliminary environmental feasibility assessment for the proposed use of the ATCAA. Prior to the airspace proposal being approved by the FAA, all ATCAA proponents are required to conduct a formal NEPA environmental review of potential impacts of proposed actions that will take place in the ATCAA. National Environmental Policy Act (NEPA) reviews will be processed by the responsible Service Center Environmental Protection Specialist (EPS). See paragraph 9-3-1 for required NEPA actions.
- Add f. ATCAAs will be effective once the FAA NEPA adoption, controlling agency decision, and a Letter of Agreement are signed by all responsible parties.

OLD**NEW**

Add

Section 2. Procedures

Add

9-2-1. ATCAA PROPOSAL COORDINATION

Add

a. The ATCAA proponent will submit their ATCAA proposal to the controlling agency, pre-coordinating with any other affected ATC facilities. The ATCAA proposal, coordination, and approval actions will be based on the type of ATCAA requested:

- Add **1. ATCAA with SUA. For an ATCAA to be established or modified at the same time as an associated SUA, the proponent must submit the ATCAA information with the SUA proposal in accordance with FAA Order JO 7400.2, Chapter 21, Section 3, SUA Proposals. The FAA's Service Center EPS requires both the ATCAA and the SUA information to complete a thorough environmental review per paragraph 9-3-1 below. As part of this process, the controlling agency will continue to serve as the approval authority for the ATCAA portion of the proposal.**
- Add **2. Stand-alone ATCAA. For a stand-alone ATCAA to be established or modified, the proponent must submit the proposal directly to the controlling agency responsible for the airspace the ATCAA falls within. Proponents should use paragraph 9-2-2 of this Order when preparing the proposal and must clearly justify why an ATCAA is needed.**
- Add **b. The controlling agency, in coordination with any other affected ATC facilities, must evaluate all ATCAA proposals for potential aeronautical impacts on non-participating air traffic and facility operations.**
- Add **c. As the ATCAA aeronautical proposal is being developed, the using and controlling agencies are encouraged to pre-coordinate the draft proposal with the Service Center Operations Support Group (OSG) to address subsequent environmental review requirements.**
- Add **d. ATCAAs should be designed to limit the amount of airspace to the minimum required to meet the need of the proponent. ATCAAs should be designed with subdivisions, laterally and/or vertically, to maximize the ATCAA utilization and minimize the impact to the NAS and other airspace users.**
- Add **e. After accomplishing an aeronautical review, the controlling agency must submit ATCAA proposals they support to the Service Center EPS for environmental review in accordance with the process outlined in paragraph 9-3-1 of this order.**

Add	<u>f. The controlling agency will ensure an approved ATCAA is entered into the Military Airspace Data Entry/Special Use Airspace Management System (MADE/SAMS) and is available for scheduling prior to use of the ATCAA.</u>
Add	<u>g. In the event a proponent's ATCAA proposal concept has failed to receive ATC facility(ies) concurrence, constructive feedback or operationally feasible alternatives/mitigations, the proponent should coordinate with the Service Center MILREP and FAA ATREP to resolve the concern.</u>
<u>OLD</u>	<u>NEW</u>
Add	<u>9-2-2. ATCAA PROPOSAL CONTENT</u>
Add	<u>For all ATCAA requests, the proponent must provide the following data to the controlling agency:</u>
Add	<u>a. Proponent's Transmittal Letter. Summarize the proposal and provide a point of contact for further information. Military proposals must include a military representative endorsement.</u>
Add	<u>b. Area Description. Using the guidelines in FAA Order JO 7400.2, Chapter 21, Section 1 and Section 2, describe the proposed area as follows:</u>
Add	<u>1. Title. State name of proposed ATCAA area(s).</u>
Add	<u>2. Boundaries. A description of the proposed ATCAA boundary and any subdivisions.</u>
Add	<u>NOTE-</u> <u>All geographic coordinates must be based on North American Datum 83 (NAD 83).</u>
Add	<u>3. Altitudes. State the floor and ceiling of the proposed ATCAA. List altitudes 18,000 feet mean sea level (MSL) and above as flight levels. List altitudes below 18,000 feet MSL as feet above MSL. Where terrain considerations or other factors would make the use of an MSL altitude impractical, the floor of the area may be described in feet above ground level (AGL).</u>
Add	<u>4. Times of use. State the times of use to be published for the area(s). Include an estimate of the expected ATCAA usage in number of hours per day and days per year. In cases where the unit plans to use the airspace during different blocks of time each day, describe those planned operations to provide as accurate a picture as possible of the projected daily use of the airspace.</u>

Add	<u>5. Controlling agency. State the FAA or military ATC facility to be designated as the controlling agency for the proposed ATCAA.</u>
Add	<u>6. Using agency. State the organization to be designated as the using agency for the proposed ATCAA. Specify the military service, unit or organization, and location. For non-military using agencies, specify the organization name and location.</u>
Add	<u>c. Airspace Statement of Need and Justification.</u>
Add	<u>1. Describe the purpose and need for the proposed ATCAA. Sufficient justification must be provided to support approval of the proposal. Additionally, any known or anticipated aeronautical impact(s) on other airspace users must be considered and addressed in the proposal, including proposed mitigations, if any, to lessen the impact(s).</u>
Add	<u>(a) For new ATCAA areas, explain why the requirement cannot be met by using or modifying an existing ATCAA. List ATCAAs that were considered and explain why each area is not acceptable.</u>
Add	<u>(b) For proposals to increase the dimensions or times of use of an existing ATCAA, explain the need for the increase.</u>
Add	<u>(c) Coordinate with the Service Center Environmental Specialist to ensure the Airspace Statement of Need and Justification is consistent with the Statement of Purpose and Need and alternatives in the applicable NEPA document.</u>
Add	<u>d. Special Use Airspace (SUA). State whether the ATCAA is requested to support proposed or existing SUA, including the SUA dimensions and times of use.</u>
Add	<u>NOTE–</u> <u>1. SUA information is requested in the proposal solely to assist the FAA in evaluating the overall aeronautical impact of the ATCAA proposal.</u>
Add	<u>NOTE–</u> <u>2. ATCAAs below FL180 and ALTRVs must not be used as a substitute for SUA when conducting activities for which a SUA is designed to contain. Since ATCAAs and ALTRVs are not depicted on aeronautical charts, they do not inform the flying public of the location of the activity as is provided by charted SUA. Additionally, ATCAAs and ALTRVs are not to be used as an interim solution while a SUA proposal is pending.</u>

- Add **e. Activities. List all activities to be conducted in the proposed ATCAA. Include the following information:**
- Add **1. The number and types of aircraft that will normally use the area.**
- Add **2. A listing of the specific activities and the maximum altitudes required for each type of activity planned.**
- Add **3. State whether supersonic flight will be conducted.**
- Add **f. Environmental and Land Use Information. In coordination with the Service Center OSG EPS, furnish the name, organization, and mailing address of the person to whom comments on environmental and land use aspects of the proposal may be sent.**
- Add **g. Safety Considerations. Include an explanation of the following items, if applicable:**
- Add **1. Measures taken to ensure containment of the activities within the proposed area.**
- Add **2. Procedures for handling malfunctions.**
- Add **h. Proposal Pre-Coordination. List the ATC facilities, military units, and/or other organizations contacted in developing the ATCAA proposal.**
- Add **i. Environmental Documents. Submit applicable environmental documents in accordance with paragraph 9-3-1 of this order. If the environmental review is incomplete, indicate the status and estimated completion date.**
- Add **j. Other. Include any additional information that should be considered by the FAA in making its determination of the proposal.**

OLD**NEW****9-2-3 ATCAA SCHEDULING**

- Add **a. Specific procedures and conditions for scheduling and activating each ATCAA subdivision should be spelled out in a Letter of Agreement prior to the use of the ATCAA.**
- Add **b. Only the ATCAA subdivisions needed to meet mission requirements should be scheduled.**
- Add **c. ATCAAs should be scheduled for the minimum time needed to complete the mission need and then returned to the controlling agency when the ATCAA is no longer required for its designated purpose.**

OLD**NEW**

Add

**Section 3. Environmental Impact Analysis
Procedures for ATCAAs**

Add

**9-3-1. ENVIRONMENTAL REVIEW
PROCESS FOR ATCAA PROPOSALS**

Add

a. The establishment, modification, and use of ATCAAs are Federal Actions subject to NEPA review and documentation requirements. Compliance with FAA Order 1050.1, Environmental Impacts: Policies and Procedures and FAA Order JO 7400.2, Procedures for Handling Airspace Matters, Chapter 32, Environmental Matters, is required for a proponent to use FAA-regulated airspace. For the FAA to fulfill its NEPA documentation requirements, the proponent is responsible for providing the FAA with their NEPA documentation of their proposed ATCAA use, whether stand-alone or with SUA.

Add

b. The proponent must conduct their own environmental impact review and documentation of their proposed actions to take place in the ATCAA in accordance with its agency's NEPA implementing regulations. Prior to the proponent's issuance of an environmental decision (i.e., Categorical Exclusion (CATEX), Environmental Assessment/Finding of No Significant Impact (EA/FONSI), Environmental Impact Statement/Record of Decision (EIS/ROD)), the proponent should involve the FAA's EPS as early as possible in the development of its NEPA documentation.

Add

c. If the ATCAA is being created or modified along with associated SUA, the proponent's entire SUA-ATCAA use proposal will be evaluated by the Service Center EPS for environmental impacts according to the process described in FAA Order JO 7400.2, Chapter 21, Section 3, SUA Proposals; FAA Order 1050.1, Environmental Impacts: Policies and Procedures; and FAA Order JO 7400.2, Chapter 32, Environmental Matters.

- Add **d. All ATCAA proponents are required to include an environmental impact analysis of their proposed actions in the ATCAA proposal. When the proponent's use of an ATCAA is part of a broader proposed action, the proposed use of the ATCAA should be included in the proponent's Description of Proposed Action and Alternatives in their NEPA document. FAA's review of the proponent's NEPA documents will be conducted by the responsible Service Center EPS in accordance with the requirements of FAA Order 1050.1 and FAA Order JO 7400.2, Chapter 32, Environmental Matters.**
- Add **e. Proposals to establish or modify ATCAA without changes to associated SUA are submitted directly to the controlling agency. To accomplish the required NEPA review, the controlling agency will provide the Service Center OSG with the ATCAA use request and controlling agency recommendation.**
- Add **f. The Service Center EPS must support development of the proponent's NEPA documentation of their proposed actions that include the proponent's use of ATCAA(s) and prepare the FAA's NEPA adoption documentation in accordance with FAA Order 1050.1, paragraph 82, Adoption of Other Agencies' NEPA Documents, and FAA Order JO 7400.2, Chapter 32, Environmental Matters.**
- Add **g. The proponent must provide all relevant technical data (e.g., aeronautical information, aircraft noise data, noise modeling results, etc.) related to the proposed use of the ATCAA (and proposed use of other FAA-regulated airspace that may be part of the proponent's proposed action) as necessary to support the FAA's environmental impact review for adoption of the proponent's NEPA documents.**
- Add **h. Approval authority for environmental decisions in the FAA's NEPA adoption document (i.e., CATEX, EA/FONSI, EIS/ROD) associated with the proponent's use of the ATCAA is in accordance with FAA Order JO 7400.2, Chapter 32, Appendices 4 and 8.**
- Add **i. Once the FAA has adopted the proponent's NEPA document, the controlling agency may then make an approval determination.**

