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OF THE AIR FORCE**

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***Nuclear, Space, Missile, Command and
Control***

AIRSPACE MANAGEMENT

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This Manual implements Department of the Air Force Policy Directive (DAFPD) 13-2, *Air Traffic Control, Airfield, Airspace and Range Management*. It provides guidance and procedures for developing and processing Special Use Airspace (SUA) and other airspace for military use. It covers aeronautical matters governing the efficient planning, acquisition, use, and management of airspace required to support United States Air Force (USAF) and United States Space Force (USSF) operations. Major Commands (MAJCOMs) may provide additional Area of Responsibility (AOR) specific guidance in MAJCOM supplements. It applies to activities that have operational or administrative responsibility for using airspace. It establishes practices to decrease disturbances from flight operations that might cause adverse public reaction and provides flying unit commanders with general guidance for working with stakeholders and dealing with local issues. This publication applies to the Department of the Air Force services (USAF and USSF), Air Force Reserve (AFR), and the Air National Guard (ANG) component of the National Guard Bureau (NGB). This manual requires the collection and/or maintenance of information protected by the Privacy Act of 1974 authorized by Department of Defense Directive (DoDD) 5400.11, *DoD Privacy Program*. The applicable System of Records Notice (SORN) F011 AF XO A, Aviation Resource Management Systems (ARMS), is available at: <http://dpclo.defense.gov/Privacy/SORNs.aspx>. Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and disposed of in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. Refer recommended changes and questions about this publication to the office of primary responsibility (OPR) using AF Form 847,

Recommendation for Change of Publication; route the AF Form 847 from the field through the appropriate functional chain of command. Major commands (MAJCOMs), Field Operating Agencies, Headquarters Air Force (HAF) Direct Reporting Units (DRUs), and subordinate organizations may supplement this publication. MAJCOMs, Field Operating Agencies, and DRUs will coordinate their supplements to this publication with AF/A3TI before publishing; subordinate organizations will coordinate their supplements with parent organizations. The authorities to waive wing/unit level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. See DAFI 33-360, *Publications and Forms Management*, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, as detailed at [paragraph 1.5](#) for non-tiered compliance items. Compliance with the attachments in this publication is mandatory.

SUMMARY OF CHANGES

This document has been substantially revised and must be completely reviewed. Major changes include: Updated paragraph on Airspace Regional Councils, formerly known as Regional Airspace Councils. Significant changes were made to [Chapter 3](#), Processing Airspace Actions as well as [paragraph 4.4](#) remotely piloted aircraft (RPA)/small unmanned aircraft systems (sUAS) Certificate of Waiver and Authorization. [Chapter 5](#), Airspace Scheduling and Reporting, is added which includes annual Restricted Area and Military Operations Area utilization reporting.

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Chapter 1

INTRODUCTION

1.1. Purpose. This document provides airspace management instructions on creating and maintaining airspace that allows the USAF to meet operational needs for military readiness. This manual provides guidance for airspace planning compliance with Federal Aviation Administration (FAA) regulations, National Environmental Policy Act (NEPA) 42 U.S.C. Section (§) 4321, et. seq., and other environmental guidance to include the Air Force's Planning Requirements in the Environmental Impact Analysis Process (PREIAP). Additionally, this document outlines the Director of Training and Readiness (AF/A3T) airspace review process as required by Title 32, Code of Federal Regulations (CFR), Section (§) 989.28, *Airspace and Range Proposals*, current edition.

1.2. Scope. This manual applies to the Department of the Air Force services (USAF and USSF), each Major Command (MAJCOM), and Direct Reporting Unit (DRU) functioning as the USAF/USSF component of a unified command, the NGB, AFR, and subordinate units.

1.2.1. USSF has responsibility over Space Force installations and activity. The services will work cooperatively under Headquarters Air Force (HAF) direction to meet the requirements contained in this manual. USSF has a close relationship with USAF activity and support responsibilities. USAF and USSF relationships and lines of responsibility are still being determined and will be updated in this manual as they become known. To the maximum extent possible USSF intends to leverage USAF expertise and requirements.

1.2.2. For the purposes of this AFMAN, NGB refers to the ANG component and shall be treated as a MAJCOM. Due to the distinctive structure of the NGB, some functions described in this AFMAN are delegated to the NGB in accordance with 32 CFR § 989.3, *Responsibilities*, current edition to serve as lead staff organization (see NGB supplement to AFMAN 13-201 for additional details). In each case, close coordination with the HAF counterpart is required.

1.2.3. DRUs are units that report directly to HAF without benefit of MAJCOM assistance. DRUs may require airspace and range management on a case-by-case basis, but are most often tenant units whose airspace actions are processed through host unit and MAJCOM channels. If DRUs have airspace and range responsibilities, they will comply with all requirements of a MAJCOM as outlined in this manual. (T-2).

1.3. Military Airspace: Generally, military airspace is established for National Defense, National Security, and/or National Welfare under the authority of the FAA. The USAF categorizes military airspace into two types of airspace: Special Use Airspace (SUA) and other airspace for military use.

1.3.1. SUA is airspace of defined dimensions identified by an area on the surface of the earth wherein activities must be confined because of their nature and/or wherein limitations may be imposed upon aircraft operations that are not part of those activities. SUA includes the following types of charted airspace: Military Operations Area (MOA), Restricted Area (RA), Warning Area, Alert Area, Prohibited Area, and National Security Area (NSA). Controlled Firing Areas are the seventh type of SUA but are not published on aeronautical charts.

1.3.2. The following are additional types of non-SUA airspaces used for military activities: Aerial Refueling (AR) Tracks/Anchors, Air Traffic Control Assigned Area (ATCAA), Low Altitude Tactical Navigation (LATN) areas, Temporary Flight Restriction (TFR), Orbit Areas, Military Training Route (MTR) (Instrument Route (IR) and Visual Route (VR)), and Slow Route (SR). LATNs and SRs do not require coordination with the FAA for establishment. These airspaces are contained solely in military documents, either locally at the unit or within Department of Defense (DoD) Flight Information Publications (FLIPs).

1.3.2.1. Low-Altitude Tactical Navigation (LATN) Area: MAJCOMs will determine establishment criteria. There is no required coordination with the FAA. LATN areas are not published on aeronautical charts. Environmental documentation in accordance with Title 32, Code of Federal Regulations, Part 989, *Environmental Impact Analysis Process (EIAP)*, current edition, is required.

1.3.2.2. Send copies of LATN areas to the appropriate Air Force Representatives (AFREP).

1.3.2.3. A full description of the LATN area(s) and any restrictions will be maintained in the Operations Support Tactics office.

1.3.3. Special Activity Airspace is established by the FAA for scheduling purposes and shall be scheduled by Center Scheduling Enterprise (CSE) system. (T-1). These include some SUA and other airspace for military use including the following airspace types: RAs, Prohibited Areas, MOAs, ATCAAs, Warning Areas, TFRs, AR Tracks, stationary Altitude Reservations (ALTRVs), orbit areas, temporary SUAs, IRs and VRs, and the Special Flight Rules Area in the Washington, D.C. metropolitan area.

1.4. Joint Use Airspace Policy (Military/Civilian): Military users shall schedule only that airspace required for mission accomplishment (to include weather back-up if conditions dictate) and release the airspace to the FAA or host nation (HN) in a timely manner when not in use or no longer required. (T-0).

1.5. Waivers and Exemptions: Waivers to this manual are authorized and are processed in accordance with DAFI 33-360. For compliance items not identified with a Tier number, waiver authority is delegated to the Headquarters Air Force Operational Training Infrastructure Division (AF/A3TI). Non-Tiered and Tier 0 compliance items must be coordinated through the MAJCOM before they are submitted to AF/A3TI for action. For Tier 1 compliance items, publication approval authority concurrence coordination for this manual is delegated to AF/A3TI. At the unit level, the Airspace Manager should monitor implementation of this manual and review authorized waivers anytime the circumstances that prompted the waiver or the impacts of the excepted activity change substantially. **NOTE: Attachment 2 and Attachment 3** contain waiver request formats; waivers to 14 CFR are addressed in **Chapter 4**. Exemptions are permanent exceptions to a specific requirement and will be granted when the conditions cannot be alleviated and increased risk is acceptable.

1.5.1. Waiver requests. Waiver requests must include the information specified in DAFI 33-360, para 1.9.4.2. (T-1). Additional content is at the discretion of the waiver authority.

1.5.2. Supersonic waiver information is located in **Chapter 3**.

1.6. Supplements: This publication may be supplemented at any level. Supplements may change, or add procedures, as applicable, to this manual, but changes can be no less restrictive than this manual. All supplements are published in accordance with DAFI 33-360 on www.e-Publishing.af.mil.

1.6.1. For MAJCOM supplements, MAJCOMs must submit a copy to AF/A3TI for review and coordination prior to publication.

1.6.2. For wing or unit supplements, units must submit a copy to the MAJCOM for review and coordination prior to publication. (T-1). When wing or unit supplements require update due to a significant change in airspace operations, submit an updated supplement to the MAJCOM within 120 days of signature. (T-1).

Chapter 2

ROLES AND RESPONSIBILITIES

2.1. Secretary of the Air Force (SECAF): The SECAF approves broad policy for Air Force use of National Airspace System (NAS) resources to ensure Force Readiness, and reviews all proposed airspace actions prior to entering the Environmental Impact Analysis Process.

2.2. Office of the Assistant Secretary of the Air Force for Installations, Environmental & Logistics (SAF/IE): SAF/IE develops planning policy and oversight of the Environmental Impact Analysis Process. Consistent with 32 CFR Part 989 and HAF Mission Directive (HAFMD) 1-18 *Assistant Secretary Of The Air Force (Installations, Environment And Energy)*, SAF/IE approves and signs (or designates signatory for) all Records of Decision for airspace actions.

2.3. Deputy Chief of Staff for Operations (AF/A3): HAF Mission Directive 1-54, *Deputy Chief of Staff, Operations*, and ACPD 13-2 designate the AF/A3 as the office of primary responsibility for airspace issues.

2.4. Director of Training and Readiness (AF/A3T): HAFMD 1-54 further designates the AF/A3T responsible for matters pertaining to airspace and ranges.

2.5. Operational Training Infrastructure Division (AF/A3TI) Responsibilities: AF/A3TI is designated the focal point for USAF airspace and range policy and management. AF/A3TI shall:

2.5.1. Develop and provide guidance for airspace and range policy, programming, and requirements.

2.5.2. Conduct the Airspace Request Review Panel (ARRP). The ARRP is an O-6 level forum from across the HAF by which the AF/A3T reviews airspace and range actions in accordance with 32 CFR § 989.28 prior to public release. The ARRP reviews airspace action requirements and reasonable alternatives to apply a DoD-wide review to ensure defensible requirements are met while minimizing or mitigating adverse impacts to the NAS and the environment. The ARRP provides a forum for the proponent MAJCOM to present airspace concepts, prior to A3T adjudication. This allows linking of mission and Combatant Commander's requirements to volume, proximity, time, and attributes of airspace to support any given mission. For non-SUA airspace and temporary airspace actions an electronic ARRP will be conducted and feedback will be provided back to the proponent following review of documents provided. Temporary airspaces will be approved by the ARRP for the initial proposal; subsequent requests for the same temporary airspace will be briefed at the ARRP for situational awareness only. Proponent MAJCOM/A3 will provide memorandum to the AF/A3T stating that the attributes of the temporary airspace are identical to previous submissions. The ARRP uses the Strategic Airspace Action Process (SAAP) as described in **Chapter 3** to accomplish this review process.

2.5.2.1. The ARRP is chaired by the Deputy Chief, Operational Training Infrastructure Division (AF/A3TI).

2.5.2.2. After completing A3T adjudication, the ARRP chair will schedule a briefing by the proponent MAJCOM to brief SAF/IEI on Environmental Assessments (EA) or Environmental Impact Statements (EIS), and controversial actions prior to public release of the airspace proposal.

2.5.3. Support and implement policies, recommendations, and/or decisions of the DoD Policy Board on Federal Aviation (PBFA) in accordance with DoD Directive 5030.19.

2.5.3.1. Provide USAF representation to the PBFA Airspace and Procedures Subgroup.

2.5.3.2. Interface, through the PBFA, with the FAA concerning service-specific policy matters.

2.5.4. Through coordination with Secretary of the Air Force Legislative Liaison Office (SAF/LL) and the Office of the Assistant Secretary of the Air Force, Deputy Assistant Secretary for Budget (SAF/FMB), serve as the principal USAF conduit for congressional engagement for issues involving military airspace. in accordance with [paragraph 1.2.2](#), when the NGB is acting as the lead MAJCOM, NGB Legislative Liaison (NGB/LL) will serve as the lead legislative liaison.

2.5.5. Develop policy, establish guidance and oversight, and advocate for resources and solutions to encroachment issues for USAF ranges and airspace.

2.5.6. Interface with functional counterparts of the other military departments.

2.5.7. Coordinate with other public and private interest groups and agencies as required to support USAF airspace requirements.

2.5.8. Ensure all airspace actions are coordinated with The Adjutant General (or Adjutant General of Air) (TAG) of affected state or states. Communication with the TAG will be done through coordination between the proponent and the appropriate NGB directorate.

2.6. Military & Civilian Aviation Integration Division (AF/A3OJ) Responsibilities: Develops policy and establishes guidance, oversight and advocate resource and solutions to Next Generation Air Transportation System and integration of RPA/sUAS into national and international airspace. Leads the DoD Policy Board on Federal Aviation (PBFA) Secretariat. Provides Air Force Representatives (AFREPs) at HQ FAA and each of the three regional FAA Service Centers.

2.6.1. USAF Senior Liaison to the FAA (AF/A3OJ) Responsibilities. The USAF Senior Liaison to the FAA shall:

2.6.1.1. Represent USAF to the FAA for NAS air traffic control (ATC) and airspace issues.

2.6.1.2. Oversee operations of AFREPs to the FAA, assigned to serve as liaisons to regional FAA headquarters.

2.6.1.3. Provide administrative support for the AF portion of the DoD/Department of Transportation reimbursable program within the FAA. Coordinates with Air Force Administrative Assistant (SAF/AA) to implement oversight of reimbursable program in accordance with DODI 1000.17 Air Force Instruction (AFI) 36-2119, *Detail of Air Force Personnel to Duty Outside the Department of Defense*.

2.6.1.4. Represent USAF interests to FAA during crises, disasters, and contingencies by augmenting the FAA Continuity of Operations/Continuity of Government/Washington Operations Center Complex.

2.6.1.5. Maintain/update the USAF portion of, and serve as USAF POC for review of, FAA publications concerning airspace.

2.6.1.6. Provide functional oversight of the Military Airspace Management Course.

2.6.2. AFREP Responsibilities: Each service has military representatives (MILREPs) at FAA Headquarters and within the FAA Service Areas to facilitate airspace and air traffic coordination with the FAA. AFREPs support/report to AF/A3OJ and are authorized to coordinate directly with their FAA counterparts to assist USAF units with airspace and ATC projects and requirements. AFREPs have insight into the FAA position on airspace and ATC issues affecting the USAF and can assist units in resolution of myriad issues. See [Attachment 4](#) for FAA Service Area and Region boundaries and contact information for each of the AFREP offices. A sample AFREP appointment letter is provided at [Attachment 5](#). AFREPs shall:

2.6.2.1. Coordinate, negotiate, and communicate USAF positions on airspace and ATC matters within established policies and guidelines.

2.6.2.2. Represent the USAF in negotiations with competing aviation and land use agencies, guide development of ATC requirements, and assist with airspace proposals and environmental documents.

2.6.2.3. Provide guidance and coordination to units within their respective service area boundaries in the creation of, and changes to, airspace. For NGB actions include NGB/A2/3/6/10TA on all correspondence.

2.6.2.4. Act as liaison officers to the FAA on matters at the headquarters and service area levels.

2.6.2.5. Coordinate with state and local governments as required to assist in resolution of civil/general aviation and USAF issues as required.

2.6.2.6. Forward copies of FAA circulars announcing informal airspace meetings to appropriate organizations. The letter of transmittal may include additional details internal to the USAF. Direct contact between the AFREP and units is encouraged, to include preparatory review prior to the informal meeting. For NGB actions include NGB/A2/3/6/10TA on all correspondence.

2.6.2.7. Participate and assist as able in convening ANG Airspace Regional Councils.

2.6.2.8. Keep AF/A3TI informed of FAA initiatives that may impact SUA or other airspaces listed in [paragraph 1.3](#)

2.6.2.9. Process, through appropriate channels, all alleged USAF pilot deviations and ATC facility deviations.

- 2.6.2.9.1. When provided with an FAA Form 8020-17 *Preliminary Pilot Deviation Report* (electronic or hard copy notification), or an electronic copy of an Air Traffic Mandatory Occurrence Report, the AFREP will notify the appropriate MAJCOM/A3 division who will in-turn notify the flying unit. The unit is to gather information on this sortie from the crew and provide feedback to the MAJCOM/A3 in order to preserve data to answer, if required, an official pilot deviation notification.
- 2.6.2.9.2. When provided with an FAA Form 8020-18 *Investigation of Pilot Deviation Report* (electronic or hard copy official notification), the AFREP will coordinate with the appropriate MAJCOM/A3 division to provide an official response to the FAA. The MAJCOM will provide a formal response to the FAA, through the AFREP, no later than 90 days from the day the AFREP receives the FAA Form 8020-18 in accordance with Title 49 United States Code (USC) Section 46101(b).
- 2.6.2.9.3. The names of the crew will not be released to non-USAF agencies without the permission of HQ USAF/A3O in coordination with MAJCOM/A3s.
- 2.6.2.9.3.1. If the FAA determines there is a need for aircrew names, a separate request must be provided to AF/A3OJ through the AFREPs.
- 2.6.2.9.3.2. At a minimum, the approval authority for the release of aircrew names will be the AF/A3O.
- 2.6.2.9.4. Maintain a log or tracking mechanism for all USAF pilot deviations for the last five years, as a minimum, to determine trend information and forward that data to MAJCOMs for their action and situational awareness.
- 2.6.2.10. Maintain liaison, as required, with appropriate headquarters and regional federal offices of the Department of Homeland Security, Department of the Interior, Department of Agriculture, etc.
- 2.6.2.11. Act as liaison officer as needed between USAF units and FAA facilities.
- 2.6.2.12. Inform commanders at all levels of actions and inquiries that may affect their operations or public affairs (PA) initiatives.
- 2.6.2.13. Coordinate and deconflict concepts and proposals with other military services at the earliest opportunity. Conflicts can often be resolved by the AFREP coordinating with the other MILREPs, affected units, MAJCOMs, and/or higher headquarters.
- 2.6.2.14. Assist MAJCOM and unit safety offices in processing Hazardous Air Traffic Reports (HATRs) and other safety issues, as required.
- 2.6.2.15. Advise FAA and FAA Service Areas of USAF capabilities and requirements during crisis management situations. Participate in FAA crisis management teams, as appropriate.
- 2.6.2.16. Assist USAF units and the FAA with Base Realignment and Closure (BRAC) and Quadrennial Defense Review issues.

2.6.2.17. Review MTR proposals for compliance with criteria, coordinate with other military service representatives, and then submit to the FAA service area office as applicable. **NOTE:** Slow Speed Low Altitude Training Routes (SR) and Air Refueling Tracks must be submitted to for publication in FLIP via the National Flight Data Center portal in accordance with FAA Order Job Order (FAA Order JO) 7610.4, *Special Operations* (This publication is For Official Use Only. For access to a copy contact the USAF Senior FAA MILREP).

2.6.2.18. Coordinate requests for voice recordings and transcripts between the USAF and FAA.

2.6.2.19. Collect and assimilate data on airspace denials to identify trends that have potential adverse impact upon USAF mission readiness and training requirements in accordance with **Chapter 5**.

2.6.2.20. Suspend, collect, consolidate, review, and distribute SUA utilization reports per FAA Order JO 7400.2, *Procedures for Handling Airspace Matters*, in accordance with **Chapter 5**.

2.6.2.21. Advise units on USAF and FAA RPA and UAS policies and procedures.

2.6.2.22. Represent the USAF at FAA local, regional, and Service Area meetings and forums dealing with airspace design, and other FAA projects with potential impact to USAF operations.

2.6.2.23. Coordinate as necessary with MAJCOMs for Air Traffic Representatives (ATREPs) visits and evaluations of USAF ATC facilities in accordance with FAA Order JO 7610.4.

2.7. MAJCOM Airspace Manager Responsibilities: Each MAJCOM that manages, utilizes, or has a potential requirement for military airspace shall appoint an Airspace Manager to perform the following:

2.7.1. Ensure airspace is used in accordance with FAA regulations and publications, USAF and DoD directives as listed in **Attachment 1** of this publication. Also, in accordance with host nation (HN) Aeronautical Information Publications (AIPs), International Civil Aviation Organization (ICAO) rules and practices, unified and specified command directives, and letters of agreement for conducting operational activities.

2.7.2. Serve as the focal point for coordinating and processing command airspace requirements. The MAJCOM Airspace Manager interacts with other MAJCOMs, AF/A3TI, unified combatant or specified commands, other military department airspace related activities, HN teams (United States (US) Embassy Defense Attaché Office, or liaison office, where established, and with the AFREP for FAA matters.

2.7.3. Certify annual airspace utilization reports for completeness and accuracy.

2.7.4. Review and validate all airspace proposals to ensure a valid requirement prior to submission of new or modified airspace and ranges to AF/A3TI (ARRP) and/or formal FAA consideration. Airspace Managers will track the status of all concepts and formal proposals, and schedule and provide briefings to HAF organizations as required. MAJCOM airspace managers shall send HAF a graphical representation of their LATNs.

2.7.5. Assist units in the preparation of airspace Test/Training Space Need Statement (T/TSNS). **NOTE:** See [Chapter 3](#) (Continental United States (CONUS), Hawaii, Alaska, and all US territories only).

2.7.6. Ensure units have coordinated with other DoD agencies (HN for outside of the Continental United States (OCONUS) units) for use of existing SUA before attempting to establish new or modify airspace.

2.7.7. Ensure airspace managers at appropriate levels of command actively participate in all planning initiatives requiring requisition or alteration of military airspace. Notify AFREPs of such initiatives at the earliest opportunity and include them in planning meetings as appropriate (CONUS, Hawaii, Guam, Puerto Rico, and Alaska only).

2.7.8. Proceed as the proponent for airspace initiatives and ensure the Environmental Impact Analysis Process is initiated at the earliest possible time to avoid unnecessary delays, consistent with 32 CFR Part 989 for airspace initiatives (CONUS, Hawaii, Guam, Puerto Rico, and Alaska only).

2.7.8.1. The proponent of the airspace proposal is responsible for complying with the Environmental Impact Analysis Process (EIAP) and shall ensure integration of the EIAP during the initial planning stages of proposed action so that planning and decisions reflect environmental values, delays are avoided later in the process, and potential conflicts are precluded (32 CFR § 989.3(d)).

2.7.8.2. The proponent is supported by the Environmental Planning Function (EPF) (32 CFR § 989.3(e)). Proponents should consult with the EPF and apply the fundamentals of PREIAP.

2.7.8.3. The proponent's Test/Training Space Needs Statement (T/TSNS) is the foundational document that will evolve into the NEPA Description of Proposed Action and Alternatives (DOPAA). Before preparation of the DOPAA, airspace proposals require HAF/A3T review in accordance with 32 CFR § 989.28. The preparation of the T/TSNS and HAF/A3T review are integral to SAAP as described in [paragraph 3.1](#) of this manual.

2.7.9. Ensure aeronautical proposals are complete prior to forwarding to the AFREPs. Environmental documentation should accompany all proposals to join the airspace proposal at the FAA Service Area (CONUS, Hawaii, Alaska, and all US territories only).

2.7.10. Coordinate matters affecting airspace management with the service area AFREP. Solicit AFREP assistance in negotiating and coordinating military airspace proposals.

2.7.11. Provide the AFREP details of any substantial change in the use of a military or joint use airfield, landing area, or missile/rocket site including any substantial change in the type of air vehicle, concept of operation, traffic pattern flow, volume of activity, and activation or deactivation. At overseas locations, excluding Alaska, Guam, Puerto Rico, and Hawaii, coordinate through host nation, (Sub) Unified Command, and country team channels.

2.7.12. Ensure military airspace documentation required by this AFMAN is accomplished by the subordinate units that have scheduling responsibility for SUA.

2.7.13. Ensure units file SUA utilization reports according to this AFMAN ([Chapter 5](#)) and FAA Order JO 7400.2 (does not apply in areas outside FAA jurisdiction).

2.7.14. Include an airspace management overview in MAJCOM, DRU, or Numbered Air Force orientation courses or programs for newly assigned wing, operations group, and flying squadron commanders as needed.

2.7.15. Send information to the theater commander, AF/A3TI, and other component commanders when theater/host nation airspace policy differs from USAF policy. **NOTE:** USAF airspace policy does not override theater or host nation airspace policy.

2.7.16. Coordinate with the US Embassy Defense Attaché Office or theater commander's airspace control representatives when establishing an ATC and airspace liaison activity with host-nation agencies or facilities affecting USAF operations.

2.7.17. Ensure airspace managers assist unit Training and Standardization/Evaluation offices in educating aircrew about operating in accordance with the DoD speed exemption to Title 14, Code of Federal Regulations, Section 91.117, *Aircraft Speed*, current edition, (CONUS, Hawaii, Guam, Puerto Rico, and Alaska only). **NOTE:** FAA speed exemption can be found in Appendix 4 of FAA Order JO 7610.4.

2.7.18. Ensure alleged pilot deviation packages are completed by the unit in a timely manner and forwarded to the AFREP. Include details of corrective actions if the alleged violation is substantiated (CONUS, Hawaii, Guam, Puerto Rico, and Alaska only). Procedures for addressing alleged pilot deviation packages for the ANG wings will be spelled out in the AFMAN 13-201 NGB Supplement.

2.7.19. Encourage unit airspace managers to participate in Midair Collision Avoidance (MACA) programs in accordance with AFI 91-202, *The US Air Force Mishap Prevention Program*.

2.7.20. Assist base-level EPFs with determining the potential NEPA ramifications of a proposed airspace action.

2.7.21. Ensure Airspace Manager Special Experience Identifier (SEI) "OUL" is awarded to officers and "350" is awarded to enlisted personnel in accordance with AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*. Accurate awarding of SEIs ensures experienced airspace managers are identified for airspace management assignments (N/A for NGB and AFR). **NOTE:** Airspace managers require 6 months of consecutive experience in airspace management and completion of the USAF Military Airspace Management course.

2.7.22. Ensure on-the-job training programs for newly assigned unit airspace managers are established for all MAJCOM units with emphasis on unit specific airspace policies, plans, and procedures. (T-3). Wing airspace managers should complete the training program within the first 6 months of being assigned airspace manager duties and ensure the proper SEI (if applicable) is assigned in the individual's personnel records. (T-3). See [Attachment 7](#) for recommended training program content (Not applicable to NGB and AFR).

2.7.23. Ensure airspace managers advise operations personnel to assist the Base Civil Engineer Squadron in establishing and maintaining (where applicable) an active Air Installation Compatible Use Zone (AICUZ) program by providing flying operations data required for developing noise contours. Support development of maximum feasible land use compatibility between air installations and neighboring communities according to policy and guidance issued by AF/A4CI. For specific information on the AICUZ program, see AFI 32-1015, *Integrated Installation Planning* and AFH 32-7084, *AICUZ Program Manager's Guide*.

2.7.24. May serve as a member of the MAJCOM Mission Sustainment Team and coordinate as necessary with AF/A3 in supporting the AF Mission Sustainment Working Group in accordance with AFI 90-2001 *Mission Sustainment* and 32 CFR Part 211 *Clearinghouse Implementing Regulation*. May also serve as the MAJCOM focal point to coordinate informal and formal review of projects/filings required for submission through the FAA Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) and participate on Mitigation Response Teams authorized by the DoD Military Aviation and Installation Assurance Siting Clearinghouse. This function may be accomplished by another office (e.g., mission sustainment, encroachment) within the MAJCOM in which case coordination with that office is important.

2.8. AF NEPA Center (AFCEC/CZN) / NGB/A4 Responsibilities: (NGB/A4 assists the ANG proponent in meeting EIAP requirements and has the EPF responsibility for NGB airspace actions, see ANG supplement to AFMAN 13-201 for more details).

2.8.1. AFCEC/CZN acts as the MAJCOM EPF and assists the proponent in meeting requisite EIAP requirements.

2.8.2. Proponents identify EIAP requirements to EPFs at installation level and/or AFCEC/CZN in advance of required execution in accordance with the Program Objective Memorandum cycle. Requirements that are not identified and budgeted through the Program Objective Memorandum process are, by default, funded by the proponent organization.

2.8.3. Proponents will coordinate with AF/A3TI, AF/A4CIB, and AFCEC/CZN to determine modifications of the normal EIAP to protect classified information and define procedures for specific classified actions, in furtherance of Title 32, Code of Federal Regulations, Section 989.26, *Classified Actions* (40 CFR § 1507.3(c)), current edition.

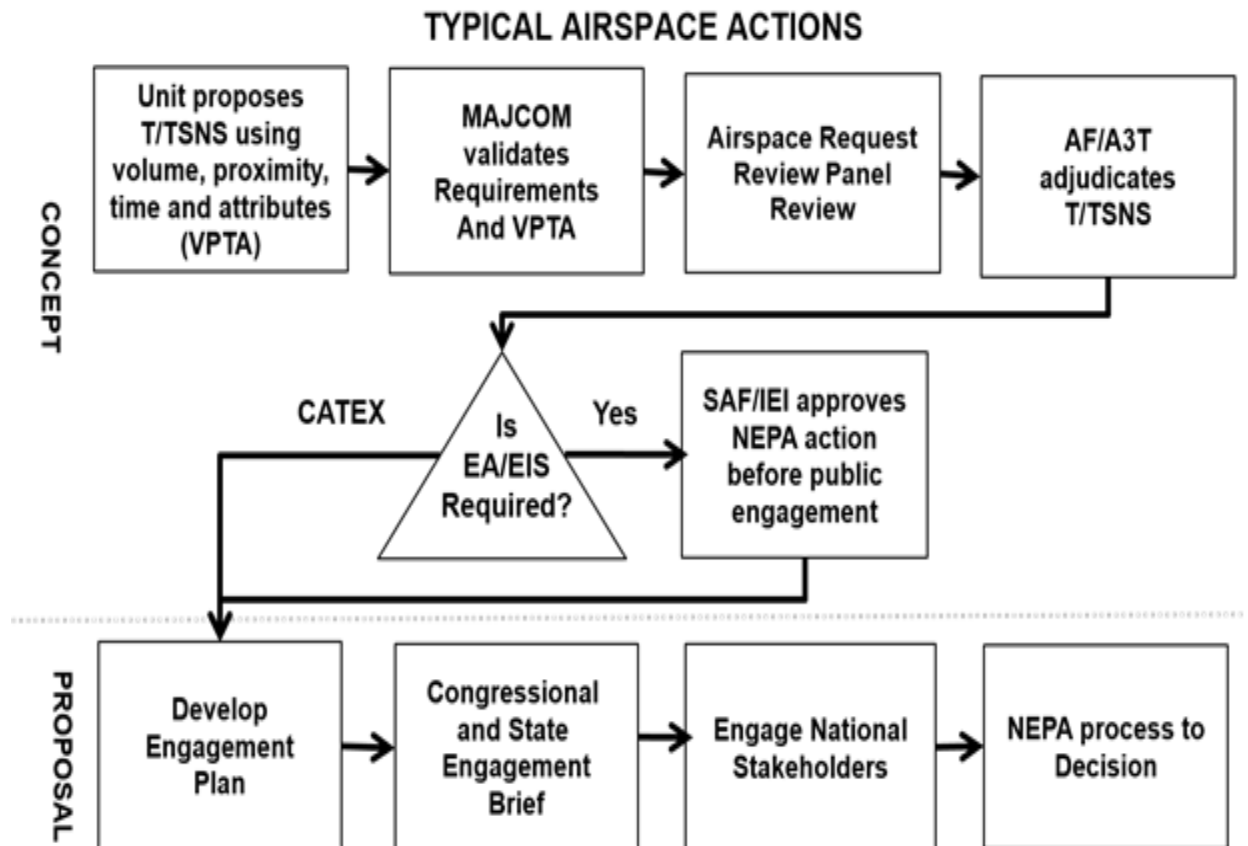
2.9. Airspace Regional Councils (ARC): NGB sponsors one national and three regional ARCs per year. The ANG will describe the ARC charter in a Supplement to AFMAN 13-201. The ARCs are forums for ANG leadership and airspace managers to meet with sister services, FAA, and industry partners to discuss best practices, challenges, and other relevant issues affecting new and proposed airspace modifications as well as all aspects of military airspace. Participation by SAF, HAF, MAJCOM, wing leadership, wing airspace managers is encouraged.

Chapter 3

PROCESSING AIRSPACE ACTIONS

3.1. Strategic Airspace Action Process (SAAP): The SAAP is the process through which the AF/A3T reviews airspace actions in accordance with 32 CFR § 989.28. In order to build public awareness and ensure the accuracy of information disseminated, the USAF encourages public access to an unprecedented amount of information on airspace actions. SAAP is conducted in two phases. First is the Concept Phase, in which the T/TSNS is proposed, developed and adjudicated by the AF/A3T. Second is the Proposal Phase, in which the T/TSNS is developed into the Description of Proposed Action and Alternatives (DOPAA) as described in the Planning Requirements in the Environmental Impact Analysis Process (PREIAP). The DOPAA (normally expressed as [chapters 1 and 2](#) of an environmental document) is developed and internal scoping activity managed by the proponent and the EPF. Once the DOPAA is stabilized, an engagement plan is created and executed followed by the NEPA process as outlined in 32 CFR Part 989.

Figure 3.1. Strategic Airspace Action Process.



3.1.1. Concept Phase. Airspace actions in this phase of development should be referred to as “concepts,” since there is no assurance that the initiative will be developed into a formal action. At a minimum, concepts should include a problem statement (what is not being accomplished and why) and how to fulfill this need based on volume, proximity, time, and attributes. General public release should not occur during this phase, as concepts may change frequently and proliferation of misinformation can be damaging to the overall effort. During informal liaison with stakeholders (e.g., federal agencies, state agencies, civic groups, aviation businesses, Aircraft Owners and Pilots Association, ballooning clubs, hang gliding clubs, skydiving companies, renewable energy developers, offshore oil and gas developers), use of the term “concept” ensures all parties understand the initiative is flexible in nature and will not be confused with a formal aeronautical proposal.

3.1.1.1. Test/Training Space is defined as air, land, or sea that is used to conduct military test, training, or operational activities. Using a T/TSNS, proponents describe the operational requirements, initial concept, potential alternatives, and a review of other known potential interests. Actions to establish or modify military airspace, as defined in [paragraph 1.3](#), except those purely administrative in nature, will be developed by the unit, validated by the MAJCOM, evaluated by the Airspace Request Review Panel (ARRP) (including the AFREPs), and adjudicated by AF/A3T (CONUS, Hawaii, Guam, Puerto Rico, and Alaska only). **(T-1)**. Coordination should include the MAJCOM offices responsible for Environment Analysis, Legal, and PA offices.

3.1.1.2. All modifications to military airspace (except Aerial Refueling (AR) Tracks/Anchors and Orbit Areas) will be reviewed by the ARRP. Changes to military airspace that do not expand the physical dimensions, altitudes, times of use, or reverse the direction of an MTR (e.g., changing the designation of the controlling or using agency, correction of typographical errors in the published description, Letter of Agreement (LOA) procedural changes, etc.) will be reviewed by the MAJCOM, but do not require a T/TSNS. **(T-2)**.

3.1.1.2.1. Temporary airspace actions jointly determined by the proponent MAJCOM and A3TI to be non-controversial or to which a CATEX can reasonably be applied, will be referred to an electronic ARRP.

3.1.1.2.2. AF/A3TI will provide an initial response to the proponent within 30 days of submission.

3.1.1.3. The T/TSNS shall provide clarity, depth, and scope sufficient to enable a reasonable review and assessment. Development of the T/TSNS should be an “in-house” effort. The general format for a T/TSNS is as follows:

3.1.1.3.1. Title. The title of the T/TSNS should consist of a concise description of the airspace proposal. Include the T/TSNS proponent’s name and phone number on the title page.

3.1.1.3.2. Operational Requirement/Justification. Describe specific requirement(s) driving the action. Explain the unit’s mission, operational requirements not currently being met, other units affected, weapon system characteristics, and coordination accomplished to date.

3.1.1.3.3. Concept. Briefly describe the concept. Include maps illustrating current and future airspace/range configuration to include altitudes, legend, and a scale. The concept should detail who wants to do what, where, and why, including objectives of the action. Include boundary dimensions and description (nautical miles (NM) x NM), the volume (e.g., 10,000 feet mean sea level (MSL) to flight level (FL) 600), proximity to the installation, time (frequency and periods of use, e.g., 0800-2200 Monday-Friday), and attributes (e.g., use of chaff and flares, supersonic, threats, targets, frequency spectrum, mountainous terrain, etc.). This concept should not be so detailed as to prematurely eliminate potentially reasonable alternatives.

3.1.1.3.4. Alternatives. Briefly list the alternatives to the concept including a “No Action” alternative. Reasonable alternatives include those that are practical or feasible from a common sense, technical, and economic standpoint. In developing alternatives, consider alternatives that may be procedural or non-material in nature (e.g., renegotiation of LOAs with sister services or the FAA or implementation of seasonally-based deconfliction procedures during peak use periods). “No Action” means the continuation of present management activities without implementing the concept. Impacts may include quantifiable degradation to training, inability to meet mission objectives or higher headquarters direction, inefficiencies, costs, etc. If applicable, include a section that addresses “Actions Considered but Not Carried Forward” with the rationale as to why these options do not meet requirements.

3.1.1.3.5. Air Traffic Control Coordination. Coordinate with DoD/FAA ATC facilities prior to forwarding the T/TSNS. Informal discussions with ATC facilities may provide guidance on how the T/TSNS will impact air traffic flow for the affected area. List any concerns voiced by the ATC facilities in this section.

3.1.1.3.6. Other Interest Potential. T/TSNS actions have the potential to raise controversial issues, reaching to the national level, very early in the planning process. Therefore, it is critical that USAF planning and review processes are as thorough as possible, with involvement of concerned parties, public and private, early in the decision phase. Public involvement and notification of airspace actions and proposals is not only a legal requirement, but an effective way to increase the probability of success. USAF proponents should develop a plan to involve groups with competing interests early in the process. Use all available resources (e.g., base environmental planning with Civil Engineers, PREIAP and AFCEC/CN staff, subject matter expertise, previous environmental actions, etc.) to identify potential competing interests from stakeholders that may be impacted by this action. Briefly state in bullet format whether the concept or any of the alternatives may impact recreational areas (e.g., federal, state, and local parks); Native American reservations, lands, or areas of special interest; grazing or farming; endangered species; wildlife refuges; consultation with other state/federal agencies; archaeological sites; hunting and fishing areas; population centers, communities, previously identified or potential noise sensitive areas; ongoing litigation; other training space actions; and regional actions by other MAJCOMs or military departments. Identify outside agencies that have requested or would support the concept (federal, state, local, and/or stakeholder groups) and if any coordination has been completed to date.

3.1.1.4. Airspace proposals are closely scrutinized by the public; as such, it is imperative that a T/TSNS is based upon valid and defensible operational/training requirements. The MAJCOM/A3 will evaluate each T/TSNS to validate the requirements. If a T/TSNS affects more than one MAJCOM, then one MAJCOM will be designated the proponent MAJCOM. Close coordination may be required at the unit, base, and MAJCOM levels to ensure a successful, coordinated action. Each action has its own characteristics and roles, and must be clearly defined in the original scoping. As an example, if “MAJCOM A” requires additional airspace to operate from “MAJCOM B’s” installation, normally MAJCOM A will be the proponent working closely with MAJCOM B’s unit and base organizations and coordinating with MAJCOM B’s A3 directorate.

3.1.1.5. Upon completion of the MAJCOM validation, the T/TSNS will be forwarded to A3TI to begin the A3T’s adjudication. This adjudication process has three steps; a review by the other MAJCOMs, TAGs, and AFREPs; followed by a review by the ARRP; and lastly a final adjudication by the A3T. This adjudication will primarily consider if the requirement is valid and defensible. However, airspace design, analysis of alternatives, practicality, and future force structure, etc., will be considered. This final adjudication allows the concept to proceed to the Proposal Phase.

3.1.1.5.1. The T/TSNS will be sent to the AFREPs, all MAJCOMs, and affected TAGs (via NGB/A3) for their coordination. **(T-1)**. AFREPs will review the T/TSNS with other service area MILREPs to determine impacts, if any, to other service airspace actions. Results will be referred to the ARRP.

3.1.1.5.2. The ARRP is chaired by the AF/A3TI and its members will include, at a minimum, Military & Civilian Aviation Integration Division (AF/A3OJ), Planning Division Office of the Air Force Civil Engineer (AF/A4CI), the AF NEPA Center (AFCEC/CZN), AF General Counsel Environment and Installations Law office (SAF/GCN), Air Force Environmental Law and Litigation Division (AF/JAOE), Deputy Assistant Secretary of the Air Force for Installations (SAF/IEI), Air Force Public Affairs Current Operations (SAF/PAO) (if applicable), and Air Force International Affairs (SAF/IA) (if applicable).

3.1.1.5.3. After a successful review by the MAJCOMs, TAGs, AFREPs, and ARRP, the T/TSNS will be forwarded to the AF/A3T for final adjudication.

3.1.1.6. Initial HAF review shall be completed within 60 calendar days of AF/A3TI receipt. Final T/TSNS adjudication from AF/A3T may exceed the 60 calendar days, in which case the MAJCOM will be notified by AF/A3TI. HAF will identify issues during the initial review. If either the validating MAJCOM or HAF determine the T/TSNS to be insufficiently supported by defensible requirements, it will be returned to the originator with specific issues identified for further examination.

3.1.1.7. The final step in the concept phase is the determination if an EA or EIS analysis is required. If a Categorical Exclusion (CATEX) is appropriate, then MAJCOMs have authority under current USAF policy to apply using the AF Form 813 *Request For Environmental Impact Analysis*. If an EA/EIS is required, then the concept will be briefed to the SAF/IEI for approval before public involvement.

3.1.2. Proposal Phase. With final adjudication from AF/A3T (or SAF/IEI if required), the proposed action described on the T/TSNS moves into the Proposal Phase to initiate PREIAP and produce and stabilize the Draft DOPAA. The Draft DOPAA covers the same subject matter as the T/TSNS; however, it expands upon the T/TSNS basic elements and is expected to address all items of the proposal in the level of detail required to begin the environmental phase.

3.1.2.1. The unit or MAJCOM acting as the proponent, completes AF Form 813 as per 32 CFR Part 989 to initiate the PREIAP with the EPF (installation, NGB, and/or AF NEPA Center) to produce the Draft DOPAA and other data. As part of the PREIAP, the proponent MAJCOM/A3 will evaluate and approve each Draft DOPAA to ensure it is in accordance with established, current requirements. In a case where multiple MAJCOMs are involved in an airspace action, additional MAJCOMs (non-proponent) will also coordinate on the DOPAA.

3.1.2.2. Restricted Area proposals requesting designation from the surface will indicate that the proponent owns, leases, or by agreement controls the underlying surface. **(T-0)**. Failure to do so prior to submission of the proposal may delay processing.

3.1.2.3. Engagement Planning. Units should begin the development of the engagement plan as early as possible to ensure that a final plan is ready for execution shortly after the proposal is briefed to the SAF/IEI. **(T-2)**. After SAF/IEI approval, first notification of the concept should be made to the affected area's congressional delegation(s), which will be coordinated through AF/A3TI to SAF/LL channels (NGB/LL for NGB airspace issues) (CONUS, Hawaii, Guam, Puerto Rico, and Alaska only). Notification to affected TAGs will be made following congressional notification. These notifications should take place prior to public notification. Public engagement will take place as directed in AFI 35-108, *Environmental Public Affairs*, and in accordance with the National Environmental Policy Act of 1969 as promulgated in 32 CFR Part 989.

3.1.2.4. NEPA Compliance. Airspace and range actions are subject to environmental analysis in order to comply with the National Environmental Policy Act of 1969. MAJCOMs develop concepts (including the aeronautical proposal) that concern airspace under FAA jurisdiction according to the procedures outlined in FAA Order JO 7400.2 and FAA Order JO 7610.4 (CONUS, Hawaii, Guam, Puerto Rico, and Alaska only). Overseas units will coordinate with host nation and/or liaison officers regarding proposed airspace actions. **(T-0)**. Once the concept is recommended by the SAF/IEI in accordance with [paragraph 3.1.1.7](#), MAJCOMs submit USAF airspace actions (both environmental analysis and aeronautical proposals) to the FAA through the AFREP.

3.2. Processing airspace action after SAAP: Upon competition of SAAP, the proposed airspace action must complete two parallel processes before the action will be finalized and published. **(T-0)** The first is the Air Force decision process under the NEPA which analyzes the actions for impacts and provides the decision maker with the facts to come to an informed conclusion. The second process concerns the aeronautical proposal which is the legal description used by the FAA as outlined in FAA Order JO 7400.2.

3.2.1. NEPA is the process by which federal agencies make major decisions. In accordance with the FAA Order JO 7400.2, normally AF initiated airspace action to support AF requirements designates the AF as the lead agency and asks the FAA to serve as a cooperating agency. Other federal agencies (e.g., the Bureau of Land Management, National Park Service, sister services) may also be asked to serve as cooperating agencies.

3.2.2. The Air Force NEPA policy is delineated in 32 CFR Part 989, *Environmental Impact Analysis Process* (EIAP). The AFCEC replaced the environmental planning function (EPF) at the MAJCOM level (except the ANG) and should be consulted on all airspace actions. The initial step of EIAP is to determine which of the three levels of analysis is required: Categorical Exclusion (CATEX), EA, or EIS.

3.2.2.1. A CATEX is the lowest form of analysis, should be considered first, and is listed in 32CFR Part 989, Appendix B. Once a potential CATEX is identified, the EPF will conduct an analysis to ensure there are no unique impacts that would preclude use of the CATEX. As an example (and not limited to these examples), items to consider for uniqueness are: greater scope or size than generally experienced in other actions; presence of threatened or endangered species, archaeological remains, historical sites, or other protected resources; adversely affecting areas of critical environmental concern, such as prime or unique agricultural lands, wetlands, coastal zones, wilderness areas, floodplains, or wild and scenic river areas; or disproportionately high and adverse human health or environmental effects on minority populations or low-income populations. If the EPF determines there is no unique circumstances that would prohibit the application of the CATEX, the EPF should coordinate with the cooperating agency to determine that agency has a CATEX that can be applied to the action. If the Air Force decides to rely on a CATEX for its action and the cooperating agency cannot rely on a CATEX for its action, the Air Force will provide information and analysis the cooperating agency identifies as necessary for the cooperating agency's NEPA review. The cooperating agency may request that the Air Force prepare an EA or fund the preparation of an EA or EIS.

3.2.2.2. Environmental Assessments are utilized for actions which do not require an EIS, cannot be categorically excluded, and end with a Finding of No Significant Impact (FONSI). Currently, the FAA (routinely a cooperating agency) normally requires an EA for SUA in accordance with FAA Order JO 1050.1, *Environmental Impacts: Policies and Procedures*.

3.2.2.3. If the airspace action creates a potential significant impact, cannot achieve a FONSI, or creates significant controversy, then an Environmental Impact Statement (EIS) is appropriate. The EIS will conclude with a Record of Decision (ROD). Normally, after a ROD is established, the proponent unit will create and submit a Mitigation Monitoring Plan in accordance with 32 CFR Part 989 to ensure compliance with the EIS and ROD. The Mitigation Monitoring Plan compliance should be reviewed quarterly and be available to the public upon request. As a technique, review of the Mitigation Monitoring Plan may be accomplished as part of the Airfield Operations Board.

3.2.3. In parallel with the decision process described in [paragraph 3.2.2](#) above, the FAA processes an aeronautical proposal (AP) in accordance with FAA Order JO 7400.2 to comply with the FAA's mandate of safe and efficient management of the NAS.

3.2.3.1. The progression of the EIAP and AP are not exclusive to each other and should be timed to conduct the aeronautical study and circularization required by the AP process during the public scoping/hearings required by EIAP.

3.2.3.2. in accordance with FAA Order JO 7400.2, an aeronautical proposal should be submitted to the FAA Service Center Airspace Specialist when the AF provides a draft environmental document to the FAA Service Center Environmental Specialist for their review. The FAA will conduct an aeronautical study and Circularization (if applicable). Ideally, this will take place simultaneously with the Air Force's development of the final environmental document. Both the Air Force and FAA process may alter the final environmental document and help to develop an informed decision. Once the environmental decision is made and adopted by the FAA, the aeronautical proposal is then final for the FAA to complete using either their rulemaking or non-rulemaking processes.

3.3. Processing a National Security Area Request: NSA proposals should clearly state the rationale for the NSA requirement and the proposed boundaries of the NSA (include a map). All NSA proposals should be coordinated through the installation airspace and ATC offices. Unit airspace management offices shall coordinate with respective ATC and security forces offices. **(T-1)** If local ATC service is not provided by the requesting unit or host installation, coordinate the initiative with the ATC facility providing this service before forwarding to the wing/installation commander for approval.

3.3.1. Following wing/installation commander approval, all NSA proposals will be forwarded to the MAJCOM airspace management office for coordination, with an information copy to the AFREP. **(T-1)**. AFREPs will not take action on NSA proposals until formal coordination has been requested by AF/A3TI.

3.3.2. Once approved by the MAJCOM, forward the NSA proposal to AF/A3TI.

3.3.3. AF/A3TI will coordinate the proposal with SAF/GCN, AF/JAOE, and other HAF agencies as appropriate. Once approved, AF/A3TI will forward the proposal to the AFREP for coordination with the FAA.

3.3.4. The USAF recognizes the potential vulnerability of certain facilities to threats from the air. However, concerns about the effect of flight-restricted airspace on the NAS have traditionally outweighed the potential security benefits provided by such a designation. Based upon historic FAA responses to restricted flight over USAF installations/activities, units should not plan to permanently establish flight avoidance areas over installations/activities to satisfy local security requirements. Should a specific and credible threat to an installation be identified, a TFR is the preferred alternative.

3.4. Letter of Agreement: Develop actions that concern airspace under FAA jurisdiction according to the procedures outlined in FAA Order JO 7400.2 and FAA Order JO 7610.4. Additional information on creating a LOA with the FAA can be found in FAA Order JO 7210.3, *Facility Operation and Administration* and AFMAN 13-204V3, *Airfield Operations Procedures and Programs*.

3.5. Supersonic Operations: CONUS, Hawaii, Guam, Puerto Rico, and Alaska only.

3.5.1. Military supersonic operations are conducted under the authority of DoD as FAA authority for supersonic operations are limited to civilian operations. Sonic booms from supersonic operations are considered noise and therefore may need both AF and FAA consideration during the NEPA process. When operationally necessary, units must conduct a NEPA analysis and obtain authorization from the AF/A3O (or delegated authority as outlined below). (T-0).

3.5.2. Supersonic consideration under NEPA for airspace should take place during initial analysis of new airspace or during analysis of beddown of new aircraft. If supersonic operations are considered for existing airspace, units should consider using an existing CATEX in 32 CFR Part 989, Appendix B.

3.5.3. When considering supersonic operations, units must consider “Avoidance Locations,” as well as HAF specified critical areas listed in DoD Flight Information Publication AP/1B (FLIP AP/1B), *Area Planning, Military Training Routes (North and South America)* and plan to avoid areas of population concentration. (T-3). If planned operations are over open water areas, above 10,000 feet MSL and more than 15 NM from any land area or over land areas, above 30,000 feet MSL, approval authority is delegated to unit commander.

3.5.4. If units require supersonic flight operations outside the parameters above, submit a waiver request through the MAJCOM/A3 (include coordination with the MAJCOM and unit level EIAP program managers). (T-1). Waiver requests shall include the appropriate level of environmental analysis and an airspace analysis documenting the requirement for existing and projected airspace utilization, availability, and deficiencies (see [Attachment 2](#)). (T-1). Provide the material and waiver request to AF/A3TI for HAF review, coordination (AF/A4CI at a minimum), and approval. Waivers will be valid for a period not to exceed three years.

3.5.4.1. Units will submit requests for supersonic tests/exercises of short duration (30 days or less) through MAJCOM/A3 channels to AF/A3TI for approval (with AF/A4CI concurrence) at least 60 days prior to mission requirement date. (T-1). Accompany waiver requests with the appropriate level of environmental analysis (Environmental Assessment, unsigned Finding of No Significant Impact, or draft Environmental Impact Statement).

3.5.4.2. For recurring tests/exercises or tests/exercises of duration greater than 30 days, submit requests not later than 60 days prior to the mission start date. (T-1).

3.5.5. The MAJCOM/A3, in coordination with the MAJCOM environmental office, will review and approve supersonic flying waivers for renewal every 3 years. The review will be conducted to ensure operations, affected environments, and resulting impacts are consistent with the environmentally assessed and approved actions. Evaluate all adopted mitigation measures and commitments made in initially approving the supersonic flying operations for compliance. Detail changes to land use underneath the area of supersonic flight that have occurred since the original approval and include any updated environmental analysis. MAJCOM airspace management offices, environmental office, and other offices, as necessary, shall develop and maintain a management system for ensuring compliance and periodic monitoring.

3.5.5.1. MAJCOM Airspace Managers will advise AF/A3TI of any environmental or operational condition warranting reconsideration of the decision approving supersonic flight operations (e.g., a different weapon system, environmental conditions, or a change in tactics). (T-1). See [Attachment 3](#).

3.5.5.2. If the waiver renewal is not completed prior to the 3 year expiration date, the controlling MAJCOM/A3 (with EPF coordination) is authorized to approve temporary continuation of existing supersonic operations below 30,000 feet MSL until the waiver is renewed. All requirements and restrictions imposed by the original approval remain in effect.

3.5.6. MAJCOM airspace management offices shall notify AF/A3TI of MAJCOM/A3 waiver renewals or temporary continuation of existing supersonic operations within 30 days and maintain supporting documents for a minimum of 6 years.

3.5.7. MAJCOM airspace managers will maintain a list of all airspace approved for supersonic operations to include waiver information. This list will be forwarded to AF/A3TI no later than 1 November for the previous fiscal year.

3.5.8. Sonic Boom Events. A sonic boom event is defined as an individual aircraft reaching the speed of sound (Mach 1.0) as recorded by the aircraft on board systems. The characteristics of sonic booms are such that they may result in damage to property and may create an audible nuisance impact.

3.5.8.1. The USAF adjudicates sonic boom claims caused by Air Force, AFR, and ANG aircraft. The Air Force staff judge advocate nearest the incident location normally investigates claims or complaints. Commanders of units operating aircraft capable of supersonic flight or units that manage airspace used by such aircraft will establish internal methods to document supersonic flight activities over land or within 15 NM from any land area. (T-1). The remarks section in the Aircrew Resource Management System may be used for this purpose. Training or scheduling/utilization tools are also acceptable. Minimum information to be retained includes callsign, type aircraft, unit, location of supersonic event, and route of flight in accordance with disposition schedule. This data is not required for supersonic activity that is part of combat or combat support missions.

3.5.8.2. Acknowledgment of unauthorized supersonic activity will be made to the originating or scheduling activity of the airspace. (T-1). Identification of involved DoD aircraft permits the investigating judge advocate to confirm USAF involvement and obtain aircraft and flight data that are useful for computing the approximate magnitude of sonic booms.

3.5.8.3. If flight data is classified, pilots should provide the minimum information needed to identify the flight and home base. Prompt acknowledgment of supersonic activity enables the judge advocate to conduct an immediate investigation, helps to promptly resolve pending claims, and enables PA officials to promptly respond to community and news media inquiries.

3.6. SUA Review Teams: The FAA SUA Review Program provides for a continuing review of all airspace allocations in accordance with FAA Order JO 7400.2. To supplement routine airspace programs and the annual review afforded by Restricted Area/Military Operations Area utilization reports, the FAA may use SUA review teams as required to examine selected areas. These teams coordinate their visits to USAF units with the MAJCOM through the AFREP.

3.6.1. SUA review teams review selected areas, determine required actions, and recommend a plan for efficient and safe use of airspace. They examine the current and planned use of SUA to minimize conflict with other airspace users. Based on each user's requirements and actual use of airspace, they evaluate the need to retain, change, revoke, or establish SUA. Consideration should be given to returning associated ATCAAs when returning MOAs to the NAS.

3.6.2. MAJCOMs should be prepared to consolidate and provide the teams detailed documentation regarding scheduling, utilization times, altitudes, geographical areas used, type of air activities conducted, and future use plans (for the ANG, units will provide this documentation through their respective Adjutant General (TAG)). **(T-2)**. Address national security requirements at an unclassified level unless team member security clearance authorizations are appropriately verified prior to the team visit. Military participation will be on a case-by-case basis.

3.6.3. Based upon the team's recommendations, the FAA, with military concurrence, may initiate procedural changes or airspace modifications.

3.7. Airspace Disposition Process: Responsible stewardship of airspace resources involves identifying parcels of airspace no longer required by the USAF. However, such airspace may meet the requirements of another user. This process may be achieved through a Regional SUA Optimization Plan which involves coordination from all stakeholders. Take the following steps to return unneeded airspace to the NAS:

3.7.1. Originating activity notifies the MAJCOM of intent to return airspace. **(T-2)**.

3.7.2. MAJCOMs solicit input from other units within the MAJCOM to determine if there are other USAF units with a need for the airspace. If a requirement is identified, the MAJCOM will notify the AFREP of their intention to reassign the airspace. AFREPs will assist with the FAA process. **NOTE:** Changes in use of airspace, other than administrative in nature, require environmental consideration per the EIAP.

3.7.3. If no requirement is identified within the MAJCOM, the MAJCOM will notify AF/A3TI, who will solicit input from other MAJCOMs.

3.7.4. If AF/A3TI determines there is no USAF requirement, they will notify the Airspace and Policy Subgroup of the PBFA to determine if there is any other DoD requirement. If another Service has a need for the airspace, that Service assumes the lead for transferring the airspace. If there is no requirement, AF/A3TI will initiate action through FAA/AJR-01 to return the airspace to the NAS.

Chapter 4

AIRSPACE PLANNING AND OPERATION

4.1. Importance of Effective Community Relations: Effective community relations dictate mutual respect for, and recognition of, factors affecting or affected by USAF operations. Properly addressing community and stakeholder concerns or interest about current or proposed USAF operations can be greatly assisted through effective community relations. Additionally, for new proposed airspace actions, community involvement activities are a requirement of the Environmental Impact Analysis Process, as described in 32 CFR Part 989. Units must coordinate all community relations issues with the wing/installation or MAJCOM PA office, and the EPF office for new proposed airspace actions. (T-2).

4.1.1. Commanders should highlight in their PA programs the need for operational readiness and actions that contribute to the state of readiness. PA programs should fully explain all measures taken by the USAF to avoid or mitigate disturbances to civilian communities, especially those communities underlying or near military airspace. Present this information not only to those communities in the immediate vicinity of the facility, but when applicable, to other stakeholders such as Indian Tribes, FAA, National Park Service (NPS), Bureau of Land Management (BLM), US Forest Service (USFS), US Fish and Wildlife Service (USFWS), Bureau of Indian Affairs (BIA), state aviation officials, and other bodies/groups focused on national aviation issues.

4.1.2. The USAF has a responsibility to protect the public, to the maximum extent practicable, from the hazards and effects associated with flight operations.

4.1.2.1. Units must be sensitive to USAF environmental and safety responsibilities and to the concerns of affected communities and aviation groups. Evaluation of flight activities will be an agenda item for the airspace manager at the wing Airfield Operations Board at least annually and meeting minutes may serve as documentation of the annual evaluation (T-3).

4.1.2.2. Review the effects of mission changes. Changes to air operations are likely to cause public concern or comment regarding environmental impacts and require environmental analysis as prescribed in 32 CFR Part 989.

4.1.3. It is important for the USAF to recognize and communicate to the public the difference between an “operational impact” and a “readiness impact.” Although a particular public concern may have an impact on operations (routes, altitudes, turn points, etc.), the potential change to operations may not impact readiness. Conversely, a proposed restriction that would prohibit a bomber wing from dropping training ordnance could clearly affect the readiness of that unit. Recognizing the difference between these two concepts may create an opportunity for cooperation in negotiating or mitigating airspace issues.

4.1.4. Readily available public information can be helpful in gaining support for USAF air operations. Units will:

4.1.4.1. Establish a program to distribute information on military airspace and supersonic areas. (T-2). Ensure coordination with the appropriate FAA facility (CONUS, Hawaii, Guam, Puerto Rico and Alaska only). (T-2).

4.1.4.2. Develop an explanatory letter outlining the purpose, routes, areas, altitudes, intensity, day, and time of use of the areas or routes and location of existing operating areas or routes in the vicinity. (T-2). Use aids such as charts, photographs, and/or film footage for visual clarification. Send the letter and appropriate visual materials through PA for release to appropriate community news media. (T-2). Send this information to each interested stakeholder. (T-2).

4.1.4.3. Provide PA offices with information to be used in news releases for new areas and routes or major modifications to existing ones. (T-2). Provide additional information for follow-up news releases as required. (T-2).

4.1.4.4. Ensure community and news media inquiries on changes to operations areas or routes are answered promptly. (T-2).

4.1.5. Because of increased public and political sensitivities associated with military airspace, appropriate congressional offices should be informed of significant emerging mission requirements at the earliest opportunity. Furthermore, to promote a better understanding of the USAF's flying mission and to prepare congressional offices to address public comments, timely and accurate responses to congressional inquiries is paramount.

4.1.5.1. AF/A3TI will be the A3 focal point for inquiries received at the HAF and will coordinate through the MAJCOM airspace or range management function for inputs/responses to inquiries (congressional inquiries involving the ANG will be routed through NGB/LL).

4.1.5.2. Avoid referring callers to other military departments or government agencies without first attempting to answer questions concerning aircraft noise through all available means. **NOTE:** The intent of this paragraph is not to circumvent or supersede the MAJCOM or unit PA office role in these issues. PA should be provided the opportunity to coordinate on responses to all Congressional inquiries.

4.1.6. State Adjutants General are important resources for MAJCOMs as an entry point to state executive and legislative branches. Informing state governmental organizations early in the airspace proposal process is important in garnering public support.

4.1.7. Official visits to the FAA will be coordinated through the USAF Senior Liaison to the FAA. (T-1). Coordinate all official visits to FAA Service Area offices through the applicable AFREP. (T-1). Inform the AFREP of all issues other than routine operational coordination between the USAF and applicable FAA offices. MAJCOMs or HAF must approve comments, commitments (LOAs, Memorandums of Understanding, etc.), and opinions regarding airspace or other aeronautical matters covered by this manual prior to forwarding to outside agencies. This does not prevent routine coordination between operating elements of the USAF, the FAA, and host nation ATC agencies or officials.

4.2. Applicable Federal Aviation Requirements:

4.2.1. Public Law 85-726, *The Federal Aviation Act of 1958*, as amended, created the FAA and charged the FAA Administrator with managing all national airspace under US jurisdiction, including US Protectorates and designated Flight Information Regions. Because DoD airspace requirements often compete with those of commercial and general aviation and may impact freedom to transit certain airspace, DoD military services have a special interest in presenting credible requirements to the FAA and managing allocated airspace efficiently.

4.2.2. Title 5 United States Code §§ 551–559, *Administrative Procedure Act*, requires public notice before the FAA can carry out certain airspace management actions, including military actions. The FAA notifies the public of an airspace proposal through a Notice of Proposed Rulemaking (NPRM) published in the Federal Register, or by distributing a non-rulemaking circular that describes the proposal to known interested parties. Either of these methods sets forth the proposal and specifies a period of time in which the FAA will receive comments or suggestions. The FAA will publish its final decision, stating whether or not the proposal was modified as a result of the comments or suggestions received. If the FAA's final decision makes minor changes to the original proposal, a second NPRM or circular is not normally required. In all cases, the FAA makes the final decision on SUA proposals.

4.2.3. 14 CFR § 91.117 covers aircraft speed. Recognizing that some DoD aircraft performance requirements exceed 250 knots, the FAA issued an exemption to 14 CFR § 91.117. However, the exemption is not a blanket waiver. Conditions under which operations exceeding 250 knots are authorized below 10,000 feet MSL can be found in FAA Order JO 7610.4.

4.2.4. Title 14, Code of Federal Regulations, Section 91.119, *Minimum Safe Altitudes: General* current edition. Recognizing there is a requirement to train below these altitudes, the FAA issued an exemption to 14 CFR to permit DoD, to the extent necessary, to conduct all-weather low-altitude route operations.

4.2.5. Title 14, Code of Federal Regulations, Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace*, current edition and FAA Order JO 7400.2 allocates special use airspace for designated military activities. When the airspace is not being used for a military activity, the airspace shall be returned to the controlling agency in accordance with joint use provisions.

4.2.6. Additional waivers to 14 CFR are processed by forwarding four copies of FAA Form 7711-2, *Certificate of Waiver or Authorization Application*, (available from FAA Service Area Offices) through military command channels to Headquarters, Air Force Flight Standards Agency (AFFSA) Director, Operations Policy & Standards, AFFSA/A3O. AFFSA/A3O sends the original and two copies to the FAA. **NOTE:** Waivers for airshow issues (speed, minimum safe altitudes, parachute jumping, etc.) should be submitted directly to the local Flight Standards District Office.

4.2.7. Requests for civilian use of SUA will be evaluated in accordance with DoD policy and AF policy as listed in [Attachment 1](#) of this publication. (T-1).

4.2.8. MAJCOM Airspace Managers will inform A3TI of any civilian use of USAF controlled SUA, with the exception of Major Range and Test Facility Bases (MRTFB) and operations under Defense Support of Civilian Authorities. (T-1).

4.3. International, Foreign National Operations, Civil Use of SUA and Combat Airspace: USAF procedures governing operations in international or foreign national airspace must recognize the right of a foreign government to establish and enforce procedures for operations within its sovereign airspace. AF/A3TI oversees international and foreign operations and coordinates with MAJCOMs as applicable.

4.3.1. Host nation laws, regulations, and procedures are detailed in AIPs, ICAO Rules and Practices, or locally published directives. Non-conflicting USAF and DoD directives in [Attachment 1](#) apply in foreign national airspace.

4.3.2. A designated US military operational command may manage combat or contingency airspace during times of tension, contingencies, or war. AF/A3TI oversees combat airspace control and development of related policy and doctrine.

4.3.3. ICAO documents specify standards and recommend practices for international flight operations and ATC. ICAO governs USAF flight operations in international and foreign national airspace by these standards and practices, as supplemented by each ICAO member nation's AIPs, non-conflicting applications of USAF or DoD directives, and special LOAs for strategic, tactical readiness, or training operations. Review FLIPs and DoD Foreign Clearance Guide for specific foreign national airspace.

4.4. sUAS/RPA Certificate of Waiver and Authorization (COA): Unrestricted sUAS/RPA operations in the NAS are limited to Prohibited, Restricted, and Warning Areas. Operations outside of Prohibited, Restricted, or Warning Areas require an FAA COA or a lead MAJCOM airspace authorization in accordance with the Memorandum of Understanding Between the Department of Defense and the Federal Aviation Administration For Unmanned Aircraft Systems Operations in the National Airspace System (DoD/FAA MOU). The latest copy of this MOU is maintained by the PBFA and may be requested through AF/A3OJ. Both the FAA COA and DoD/FAA MOU ensure sufficient safety mitigations are in place to meet a "See and Avoid" capability as required by Title 14, Code of Federal Regulations, Section 91.113(b) *Right-of-way Rules: Except Water Operations*, current edition. FAA Order JO 7200.23A, *Processing of Unmanned Aircraft Systems (UAS)* describes the COA application process. The DoD/FAA MOU grants the DoD authority to approve sUAS/RPA operations within airspace delegated to DoD ATC facilities. For Air Force sUAS/RPA operations, airspace access authority is delegated to the lead MAJCOMs listed in [paragraph 4.4.1.1](#) or [paragraph 4.4.1.2](#). Air Force units may not implement the provisions of the DoD/FAA MOU without coordinating through the appropriate lead MAJCOM. (T-1).

4.4.1. Units requiring NAS access outside of Prohibited, Restricted, or Warning Areas (including transit requirements to get to those areas) must consult with the respective lead MAJCOM for access to the FAA's COA Application Processing System (CAPS) web site. (T-2). Units must coordinate all sUAS/RPA COA/airspace authorization requests through the appropriate lead MAJCOM. (T-2) While informal discussions with the FAA may be beneficial and lead to expedited COA processing, units will not formally contact the FAA directly. (T-1). The USAF designated lead MAJCOMs for sUAS/RPA COA/airspace authorizations submissions are as follows:

4.4.1.1. ACC is the lead MAJCOM for all Group 4 and 5 RPA operations per AFPD 10-9, *Lead Command Designation and Responsibilities for Weapon Systems*. ACC/A3AA (acc.a3aa@us.af.mil) is the primary POC for integration and COA/airspace issues. ACC will establish policy and procedures to support lead and user command responsibilities in their supplement to this publication.

4.4.1.2. AFSOC is the lead MAJCOM for all Group 1 through 3 sUAS operations per AFPD 10-9. AFSOC/A3OU (AFSOC.A3OU.WF@us.af.mil) is the primary POC for integration and COA/airspace authorization issues. sUAS Group 1 through 3 airspace policy and procedures are located in AFMAN 11-502, *Small Unmanned Aircraft Systems*.

4.4.2. Accident and Incident Reporting: Wing Safety will report accident/incident data through the standard USAF safety process. **(T-2)**. AF/A3TI and A3OJ, in conjunction with the USAF Safety Center, will review the data and share appropriate data with the FAA. **(T-1)**. Units will not report accident/incident data directly to the FAA. **(T-1)**.

4.5. Notices to Airmen (NOTAM) Responsibilities: Disseminate time critical information regarding changes impacting airspace (scheduling procedures, altitudes, etc.), either temporary or not sufficiently known in advance, via NOTAM. A NOTAM may serve as notification of an alteration until permanent publication on aeronautical charts or in other publications. It is the responsibility of the airspace scheduling agency to ensure that NOTAMs are revised and submitted in accordance with the FAA Aeronautical Information Manual (AIM).

Chapter 5

AIRSPACE SCHEDULING AND REPORTING

5.1. Center Scheduling Enterprise (CSE): CSE is the Air Force wide web-based tool for scheduling, managing, and recording the utilization of airspace and ranges. All Air Force units shall use CSE to manage, schedule, and report the utilization of Special Activity Airspace. (T-1). MAJCOM Airspace Managers can provide CSE user guidance. **NOTE:** Air Education and Training Command Specialized Undergraduate Pilot Training locations are exempt from the requirement to schedule airspace in CSE by individual sortie and are authorized to block schedule special use airspace.

5.2. Need for Reports. Report data is of ever-increasing value to airspace managers at all levels. Accurate reporting is critical in many decisions affecting military airspace (e.g., BRAC data collection, environmental impact analysis, legal actions, etc.). The CSE system will serve as a repository for the data associated with airspace scheduling, management, and utilization. This repository will provide a real-time report generation capability to unit, wing, MAJCOM, and HAF as necessary. CSE does not track supersonic events, therefore a supersonic log must be maintained at the unit level. (T-1).

5.3. Supersonic Log. All USAF units shall maintain a log of supersonic events. (T-1). Each event shall be recorded in CSE. (T-1).

5.4. Airspace Denial Report: Each USAF using agency shall maintain FAA denial information in CSE. (T-3). Until so equipped and trained, airspace denial reports will be submitted in accordance with [Attachment 9](#). (T-2). Include both denials of airspace and restrictions on availability of military airspace. MAJCOMs may stipulate other reporting requirements.

5.5. Annual Restricted Area and Military Operations Area (MOA) Utilization Reports:

5.5.1. Under Title 49 United States Code Section 40101, the FAA is charged with ensuring the safe and efficient use of the nation's airspace to include airspace that has been delegated to the DoD. In carrying out this responsibility, the FAA requires that DoD using agencies submit annual reports detailing the use of all assigned Restricted Areas and MOAs in accordance with FAA Order JO 7400.2. Actual utilization data of all assigned Restricted Areas and MOAs, captured either real-time or post-mission, will be entered into CSE to ensure accurate reporting. (T-0). All CSE sites will develop local Standard Operating Procedures designed to accurately and efficiently capture actual airspace utilization times. (T-2).

5.5.2. Prior to submission to the FAA, AF/A3TI will generate the annual report from CSE and submit to MAJCOMs for verification. MAJCOM airspace managers will review the data provided for accuracy and completeness. If actual utilization is less than 75 percent of the time activated then the MAJCOM airspace manager will determine the reason and provide a response to AF/A3TI via memorandum. If information is available, the impact of weather and/or ATC delays on the actual utilization of the area should be considered when evaluating this item. After the MAJCOM reviews and validates the data, AF/A3TI will submit the report to the AFREP for submission to the FAA.

5.6. Release of Airspace Utilization Data: Although the USAF does not release detailed information to the public, generic data (e.g., we flew 77 sorties on VR 123, MOA, etc., during the month of June 2020) is an acceptable response to inquiries requesting information on SUA utilization. More detailed data should be considered For Official Use Only.

5.7. Military Training Route (MTR) and SR Evaluations: MTR and SR evaluations consist of both a route review and annual flight evaluations. Units with scheduling authority for an MTR and SR will conduct and document route review for all MTRs and SRs with a floor at or below 1,500 feet Above Ground Level (AGL) by the last day of the anniversary month of publication, or month of the last route review. **(T-3)**. Annual Flight evaluation will be conducted by the last day of the anniversary month of publication, or month of the last flight evaluation **(T-3)**. All MTRs/SRs shall be surveyed across their entire route width and length and aircrew route briefing guides updated to reflect new areas of concern. **(T-3)**. The SUA/MTR Review, [Attachment 8](#), contains additional information required when reviewing MTRs/SRs.

5.7.1. Route reviews will be conducted by the unit airspace manager using the Chart Updating Manual (CHUM), FLIP AP/1B, Sectional Aeronautical Charts, Tactical Pilotage Charts, and other aeronautical charts. **(T-3)**. Route reviews should annotate the following:

5.7.1.1. Charted/uncharted obstacles or hazards within 100 feet of the MTR/SR floor and 2 NM of the lateral boundary.

5.7.1.2. Entry/exit/route segment within 5 NM of public-use airports.

5.7.1.3. Entry/exit/route segment within 5 NM of Class B, C, and D airspace. Also consider Class E airspace associated with non-towered airports and instrument approach procedures.

5.7.1.4. Entry/exit/route segment within 5 NM of airways and charted visual flight rules (VFR) flyways.

5.7.1.5. Potential bird attractant areas within 2 NM of a route where large concentrations of birds may be present.

5.7.1.6. Potential noise-sensitive areas within 3 NM of a route. Review areas where restrictions are identified to minimize the impact of noise.

5.7.1.7. TFRs established by FAA NOTAMs/Defense Internet NOTAM Service (DINS) (i.e., Department of the Interior environmentally sensitive animal breeding areas or parachute jumping areas).

5.7.1.8. Other potential flight safety hazards.

5.7.1.9. Verify the accuracy of aircrew route briefings and ensure MTR/SR Special Operating Procedures and Remarks published in FLIP AP/1B are accurate and complete. Review previous route evaluations to ensure any other previously identified findings have been appropriately addressed.

5.7.1.10. Wing/base civil engineering environmental office shall review the route for environmentally sensitive areas. **(T-2)**.

5.7.2. MTR Annual Flight Evaluation. The annual flight evaluation provides important data and complements the ongoing route evaluation program by continuing the operational check of the route, which ensures a comprehensive operational review of the MTR, as it is not completed under the same mission conditions (e.g., aircraft type, speed, required systems checks, etc.). Owing unit will conduct the evaluation during the anniversary month of publication or the last day of the month in which the previous flight evaluation was accomplished (MTR segments with a floor higher than 1,500 feet AGL need not be evaluated). **(T-3)**.

5.7.2.1. Failure to meet the annual suspense shall preclude the use of MTRs until evaluation requirements are met. **(T-3)**.

5.7.2.2. The route should be evaluated to ensure obstruction clearance at the minimum altitude usable for training. The evaluation aircrew should consider the route's minimum defined altitude when considering an obstacle's flight safety potential, as other units may train at lower altitudes. Commanders are authorized to use Non-Rated Airspace Managers as evaluators and provide unrestricted Mission Essential Ground Personnel status for them to accomplish this route evaluation program.

5.7.2.3. Flight evaluation crew members should be familiar with low-altitude flying and evaluation requirements. They should receive a pre-brief from the scheduling activity and provide a de-briefing to the scheduling activity.

5.7.2.4. The scheduling activity, in coordination with the airspace manager, must develop an MTR survey schedule. **(T-3)**. The airspace manager must ensure the necessary charts are available for the evaluation and inform the OE/AAA Program Manager of uncharted obstructions within 100 feet below the floor and within 2 NM of the lateral boundary of the MTR or any other hazards to air traffic affecting low-altitude navigation. **(T-3)**.

5.7.2.5. All users should be alert for new obstructions/hazards. Aircrews should be briefed to report any observed construction (i.e., temporary cranes, mines, temporary helipads, etc.) or uncharted obstructions/hazards to the scheduling agency/airspace manager. Information should include latitude and longitude coordinates, estimated height, and description of each obstruction/hazard. **NOTE:** Professional judgment is the key to effective evaluations. Visual acuity may vary greatly and the parameters above are provided as guidelines only. Evaluation aircrews should, at a minimum, consider the impact of foliage, haze, clouds, fog contrast (light), airspeed/ground speed, terrain, snow, and task saturation.

5.7.2.6. The evaluation aircrew should consider the following when conducting evaluations:

5.7.2.6.1. Accuracy, adequacy, and availability of mission planning materials for the route.

5.7.2.6.2. Accuracy and completeness of the aircrew route briefing.

5.7.2.6.3. Potential hazards during entry and exit procedures, to include possible ATC conflicts, ATC center/sector boundaries, communication problems, frequency congestion, and task saturation.

5.7.2.6.4. Identify obstacles not listed in the CHUM that pose a hazard. Instrument Routes must be evaluated for enroute obstacle clearance. **(T-1)**.

5.7.2.6.5. Possible ATC conflicts from public-use airports to include portions of the route within 5 NM of Class B, C, and D airspace. Also consider Class E airspace associated with non-towered airports and instrument approach procedures.

5.7.2.6.6. Possible ATC conflicts for airways, charted VFR flyways or practice areas, and other MTRs.

5.7.2.6.7. Potential for bird strikes from bird attractant areas to include known migratory routes.

5.7.2.6.8. Built-up areas showing new development (buildings) including evidence of mining activity.

5.7.2.6.9. Environmentally sensitive areas not previously identified.

5.7.2.6.10. Possible interference to night vision goggle operations.

5.7.2.6.11. Other potential flight safety hazards.

5.7.2.7. The evaluation aircrew should return the survey documentation to the scheduling agency/airspace manager. Aircrews should also debrief the scheduling agency/airspace manager on specific observations and their potential to create conflicts and/or task saturation.

5.7.3. Evaluation Results. Airspace managers must coordinate with schedulers and the senior operational commander on any route, or a segment of a route, found to contain potential flight safety hazards. **(T-3)**. An assessment of the hazard must be conducted prior to closing or reopening the route or route segment. **(T-3)**. Ensure corrective actions are documented.

5.7.3.1. Aircrews report uncharted obstacles on MTRs to the scheduling agency/airspace manager as soon as possible after landing. **(T-2)**. Airspace managers shall update uncharted obstacles within 100 feet of the floor and 2 NM of the lateral boundary of the MTR for inclusion in the Special Operating Procedures in FLIP AP/1B of the evaluated route. **(T-3)**.

5.7.3.2. Units shall remove all references to charted obstacles from the route Special Operating Procedures in FLIP AP/1B. **(T-3)**. Include uncharted obstacles in the aircrew route briefing guides.

5.7.4. Aircrew Route Briefing Guides. Units shall prepare and maintain aircrew route briefing guides for each MTR for which they are the scheduling activity. **(T-2)**. Briefing guides will include special operating procedures and constraints and may emphasize items already mentioned in FLIP AP/1B. **(T-2)**.

5.8. FLIP AP/1B. FLIP AP/1B provides information and operating instructions for all MTRs. It is critical that units ensure information listed in FLIP AP/1B is complete and accurate. Originating and scheduling agencies must ensure FLIP AP/1B identifies procedures for the safe and efficient operation of aircraft on their respective MTRs. **(T-2)**. Units shall include the following in Special Operating Procedures or FLIP Remarks.

- 5.8.1. Potential hazards during entry, exit, and flying of the route. Include listing all Class B, C, and D airspace within 5 NM of the route. Include reference to the applicable Sectional Aeronautical Chart. (T-2).
- 5.8.2. Unpublished/uncharted obstruction data pending publishing/charting. (T-2).
- 5.8.3. Route deconfliction procedures. (T-2).
- 5.8.4. Possible bird attractant areas and migratory routes. (T-2).
- 5.8.5. Noise and low-level flight sensitive areas. (T-2).
- 5.8.6. Uncharted airports. (T-2).
- 5.8.7. Other potential flight safety hazards. (T-2).

JOSEPH T. GUASTELLA, Jr.,
Lt General, USAF
Deputy Chief of Staff, Operations

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

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AFI 32-1015, *Integrated Installation Planning*, 30 July 2019

AFI 33-322, *Records Management and Information Governance Program*, 23 March 2020

AFI 35-108, *Environmental Public Affairs*

AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*, 25 June 2013

AFI 90-2001 *Mission Sustainment*

AFI 91-202, *The US Air Force Mishap Prevention Program*, 12 March 2020

AFMAN 11-202, Volume 3, *Flight Operations*, 10 June 2020

AFMAN 11-502, *Small Unmanned Aircraft Systems*, 29 July 2019

AFMAN 13-204 Volume 3, *Air Traffic Control*, 22 July 2020

AFPD 10-9, *Lead Command Designation and Responsibilities for Weapon Systems*, 8 March 2007

AFPD 13-2, *Air Traffic Control, Airfield, Airspace, and Range Management*, 3 January 2019

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DoD Flight Information Publication AP/1B (FLIP AP/1B), *Area Planning, Military Training Routes (North and South America)*, (dated 5 November 2020 or Current Version)

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FAA Order JO 7110.10AA, *Flight Services*, 5 July 2019

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FAA Order JO 7400.2M, *Procedures for Handling Airspace Matters*, 28 January 2019

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Memorandum of Understanding Between the Department of Defense and the Federal Aviation Administration For Unmanned Aircraft Systems Operations in the National Airspace System, 9 May 19

Planning Requirements in the Environmental Impact Analysis Process (PREIAP) Guidance, 26 July 2012

Public Law 85-726, *The Federal Aviation Act of 1958*

5U.S.C. §§ 551 – 559

42U.S.C. § 4321 *National Environmental Policy Act*

49U.S.C § 40101

49U.S.C § 46101(b)

14CFR Part 1, *Aeronautics and Space: Definitions and Abbreviations*

14CFR Part 11, *General Rulemaking Procedures*

14CFR Part 71, *Designation of Class A, B, C, D, and E Airspace*

14CFR Part 73, *Special Use Airspace*

14CFR Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace*

14CFR Part 91, *General Operating and Flight Rules*

14CFR § 91.113(b), *Right-of-way rules: Except Water Operations*

14CFR § 91.117, *Aircraft Speed*

14CFR § 91.119, *General Minimum Safe Altitudes*

14CFR § 91.137(a)(1-3), *Temporary Flight Restrictions in the Vicinity of Disaster/Hazard Areas*, current edition

14CFR § 91.141, *Flight Restrictions in the Proximity of the Presidential and Other Parties*, current edition

14CFR § 91.143, *Flight Limitation in the Proximity of Space Flight Operations*, current edition

14CFR § 91.145, *Management of Aircraft Operations in the Vicinity of Aerial Demonstrations and Major Sporting Events*, current edition

14CFR Part 93, *Special Air Traffic Rules*

14CFR Part 99, *Security Control of Air Traffic*

14CFR § 99.7, *Special Security Instructions*

14CFR Part 101, *Moored Balloons, Kites, Amateur Rockets, Unmanned Free Balloons, and Certain Model Aircraft*

14CFR Part 137(a), *Agricultural Aircraft Operations*

14CFR Part 141, *Pilot Schools*

14CFR Part 143, *Flight Limitation in the Proximity of Space Flight Operations*

14CFR Part 145, *Repair Stations*

14CFR Part 157, *Notice of Construction, Alteration, Activation, and Deactivation of Airports*

32CFR Part 211 *Clearinghouse Implementing Regulation*

32CFR Part 989, *Environmental Impact Analysis Process*

32CFR § 989.3, *Responsibilities*

32CFR § 989.12, *AF Form 813, Request for Environmental Impact Analysis*

32CFR § 989.15, *Finding of No Significant Impact*

32CFR § 989.17, *Notice of Intent*

32CFR § 989.18, *Scoping*

32CFR § 989.19, *Draft EIS*

32CFR § 989.20, *Final EIS*

32CFR § 989.21, *Record of Decision (ROD)*

32CFR § 989.24, *Public Notification*

32CFR § 989.26, *Classified Actions*

32CFR § 989.28, *Airspace and Range Proposals*

40CFR § 1501.4, *Categorical exclusions*

40CFR § 1501.7, *Lead Agencies*

40CFR § 1506.6, *Public Involvement*

40CFR § 1502, *Environmental Impact Statement*

Prescribed Forms

None

Adopted Forms

AF Form 813, *Request for Environmental Impact Analysis*

AF Form 847, *Recommendation for Change of Publication*

FAA Form 7711-2, *Certificate of Waiver or Authorization Application*

FAA Form 8020-17, *Preliminary Pilot Deviation Report*

FAA Form 8020-18, *Investigation of Pilot Deviation Report*

Abbreviations and Acronyms

AF—Air Force

AFFSA—Air Force Flight Standards Agency

AFI—Air Force Instruction
AFMAN—Air Force Manual
AFPD—Air Force Policy Directive
AFREP—Air Force Representative to the FAA
AFR—Air Force Reserve
AGL—Above Ground Level
AICUZ—Air Installation Compatible Use Zone
AIM—Air Intercept Missile
AIP—Aeronautical Information Publications
ALTRV—Altitude Reservations
AMRAAM—Advanced Medium-Range Air-to-Air Missile
ANG—Air National Guard
AP—Aeronautical Proposal
AR—Aerial Refueling
ARC—Airspace Regional Council
ARRP—Airspace Request Review Panel
ARTCC—Air Route Traffic Control Centers
ATC—Air Traffic Control
ATCAA—Air Traffic Control Assigned Airspace
ATREP—(FAA) Air Traffic Representative
BIA—Bureau of Indian Affairs
BLM—Bureau of Land Management
CAPS—COA Application Processing System
CATEX—Categorical Exclusion
CHUM—Chart Updating Manual
CFA—Controlled Firing Area
CFR—Code of Federal Regulations
COA—Certificate of Waiver and Authorization
CONUS—Continental United States
CSE—Central Schedule Enterprise
DHS—Department of Homeland Security
DINS—Defense Internet NOTAM Service

DoD—Department of Defense
DoDD—Department of Defense Directive
DOPAA—Description of Proposed Action and Alternatives
DRU—Direct Reporting Unit
EA—Environmental Assessment
EIAP—Environmental Impact Analysis Process
EIS—Environmental Impact Statement
EPF—Environmental Planning Function
FAA—Federal Aviation Administration
FAA Order JO—Federal Aviation Administration Order/Job Order
FAR—Federal Aviation Regulation
FL—Flight Level
FLIP—Flight Information Publication
FONPA—Finding Of No Practicable Alternative
FONSI—Finding of No Significant Impact
HAF—Headquarters Air Force
HATR—Hazardous Air Traffic Report
HN—Host Nation
ICAO—International Civil Aviation Organization
IFR—Instrument Flight Rules
IR—Instrument Routes
JO—Job Order
KIAS—Knots Indicated Air Speed
LATN—Low Altitude Tactical Navigation
LOA—Letter of Agreement
LOWAT—Low Altitude Air-to-Air Training
MACA—Midair Collision Avoidance
MAJCOM—Major Command
MILREP—Military Representative
MOA—Military Operations Area
MOU—Memorandum of Understanding
MSL—Mean Sea Level

MTR—Military Training Route
NAS—National Airspace System
NAVAID—Navigational Aid
NEPA—National Environmental Policy Act
NGB—National Guard Bureau
NM—Nautical Mile
NOTAM—Notice to Airman
NPRM—Notice of Proposed Rulemaking
NPS—National Park Service
NSA—National Security Area
OCONUS—Outside the Continental United States
OE/AAA—Obstruction Evaluation/Airport Airspace Analysis
OPR—Office of Primary Responsibility
PA—Public Affairs
PBFA—Policy Board on Federal Aviation
PREIAP—Planning Requirements in the Environmental Impact Analysis Process
RA—Restricted Area
RAP—Rated Aircrew Program
ROD—Record of Decision
RPA—Remotely Piloted Aircraft
SAA—Special Activity Airspace
SAAP—Strategic Airspace Action Process
SAF—Secretary of the Air Force
SEI—Special Experience Identifier
SR—Slow Route (Slow Speed Low Altitude Training)
SUA—Special Use Airspace
sUAS—Small Unmanned Aircraft System
TAG—The Adjutant General
TFR—Temporary Flight Restriction
T/TSNS—Test/Training Space Needs Statement
US—United States
USAF—United States Air Force

USFS—US Forest Service

USFWS—US Fish and Wildlife Service

USSF—United States Space Force

VFR—Visual Flight Rules

VR—Visual Routes

Terms

Aeronautical Proposal—A written proposal of (but not limited to) construction of any new airport, any manmade obstruction that would extend into navigable airspace, establishment or change of SUA (including any special or unusual ATC procedures) or establishment of or change to any new or existing NAVAID. This proposal is accomplished via the preliminary review process (T/TSNS) in accordance with **Chapter 3** prior to initiating any aeronautical proposal action associated with establishment or change of SUA.

Aerial Refueling (AR) Airspace—Airspace developed to conduct air refueling. Permanent air refueling airspace is designated as either a track or an anchor or established via a letter of agreement (LOA) with the appropriate ATC facility responsible for the airspace. After coordination with ATC, refueling routes or anchors are processed through the appropriate AFREP for publication in FLIP. Temporary or special AR airspace may also be established by coordination/agreement with the ATC facility having purview over the airspace (FAA Order JO 7610.4).

Air Traffic Control 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 Instrument Flight Rules (IFR) traffic. (FAA Order JO 7610.4)

Airspace Action—The procedural act of designation, redesignation, modification, or revocation of a parcel of airspace.

Airspace Concept—For identification purposes, an informal initial requests for additional military airspace is referred to as a “concept” and is part of the T/TSNS process.

Airspace Proposal—Having been through the T/TSNS process, an airspace proposal is the formal portion of requests for airspace through the FAA. There must be a clearly defined need and justification for obtaining or revising airspace.

Alert Area—Airspace which may contain a high volume of pilot training activities or an unusual type of aerial activity neither of which is hazardous to aircraft. (FAA Order JO 7400.10)

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 FAA facility, Central Altitude Reservation Function, Pacific Military Altitude Reservation Function, or European Central Altitude Reservation Function. They can be either Moving or Stationary. (FAA Order JO 7610.4)

Controlled Firing Area (CFA)—A controlled firing area (CFA) is airspace designated to contain activities that if not conducted in a controlled environment would be hazardous to nonparticipating aircraft. CFAs provide a means to accommodate, without impact to aviation, certain hazardous activities that can be immediately suspended if a nonparticipating aircraft approaches the area. (CFAs are not charted and their volume is only defined locally). (FAA Order JO 7400.2)

Environmental Impact Analysis Process (EIAP)—The process, as outlined in 32 CFR Part 989, used to assess environmental impacts resulting from a proposed action.

Instrument Routes (IR)—Routes used by the DoD and associated Reserve and Air National 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 knots-indicated air space (KIAS) below 10,000 ft MSL. (FAA Order JO 7610.4)

Joint Use—Under the “joint use” concept, SUA is released to the controlling agency and becomes available for access by non-participating aircraft during periods when the airspace is not needed by the using agency for its designated purpose. Such use enhances safety and benefits the NAS. The USAF encourages the use of military radar units and the provisions of military air traffic services for SUA complexes when such services are available to enhance safety and utility.

Low-Altitude Tactical Navigation (LATN) Area—Usually large geographic areas established for random VFR, low altitude navigation training to preclude flying over the same point more than once per day. Activities are in accordance with all applicable FARs and flown at an airspeed of 250 knots or less. MAJCOMs will determine establishment criteria. There is no required coordination with the FAA. LATN areas are not published on aeronautical charts.

Military Airspace—Also known as SAA, a collective term used to indicate SUA and/or other airspace for military use.

Military Airspace Data Entry (MADE)—A web based tool used to deliver special use airspace schedules to the overlying FAA ATC facility with SUA responsibility. This tool replaces older phone, fax and email methods.

Military Operations Area (MOA)—Airspace designated outside of Class A airspace to separate or segregate certain nonhazardous military activities from IFR Traffic and to identify for Visual Flight Rules (VFR) traffic where these activities are conducted. MOAs are designated to contain nonhazardous, military flight activities including, but not limited to, air combat maneuvers, air intercepts, low altitude tactics, etc. (FAA Order JO 7400.2)

Military Training Routes (MTR)—The MTR program is established by the FAA and the DoD for the purpose of conducting low-altitude and/or high-speed training. Generally, MTRs are established below 10,000 feet MSL for operations at speeds in excess of 250 knots. Each segment of an MTR route is allocated a floor and ceiling altitude and lateral boundaries, described in NM left and right of centerline. MTRs are established according to the criteria in FAA Order JO 7610.4. Routes are established as either IR or VR. The DoD has a speed exemption to 14 CFR § 91.117 (see FAA Order JO 7610.4). The FAA has approval authority over IR establishment and the appropriate MAJCOM approves establishment of VRs. Environmental documentation in accordance with 32 CFR Part 989, is required to establish MTRs. VRs are processed through the FAA via the AFREP. AFREPs assign all route numbers.

Ultimately, MTRs are published in FLIP AP/1B and charted on FLIP AP/1B Area Planning Chart, and FAA sectional charts. Some MTRs are on DoD Low IFR enroute charts.

National Security Area (NSA)—A national security area (NSA) consists of airspace of defined vertical and lateral dimensions established at locations where there is a requirement for increased security of ground facilities. The purpose of such national security areas is to request pilot cooperation by voluntarily avoiding flight through the NSA. When circumstances dictate a need for a greater level of security, flight may be temporarily prohibited by regulation under the provisions of 14 CFR § 99.7, *Special Security Instructions*. Such prohibitions will be issued by FAA Headquarters and disseminated via the US NOTAM System. (FAA Order JO 7400.10)

Non-rulemaking Actions—Cases relating to FAA decisions or activities affecting airspace for which FAA does not generally issue a rule, regulation, or order. These actions include establishing (or eliminating) FAA or military NAVAIDs as well as designating controlled firing areas, alert areas, MOAs, warning areas, and airports provided the action of one of these items does not impact on a mandatory rulemaking action.

Orbit Area—This activity is used to occupy an expanded area used for holding or maneuvering aircraft. Orbit areas are used by DoD surveillance aircraft (e.g., E-2, E-3, E-8) and are normally contained within ATCAAs. (FAA Order JO 7610.4)

Other Airspace for Military Use Designations—Used to collectively identify non-SUA assets. These designations are in FAA Order JO 7610.4 or military documents. None are rulemaking actions and some (contained solely in military documents) do not require coordination with the FAA for establishment.

Planning Requirements in the Environmental Impact Analysis Process (PREIAP)—PREIAP ensures the early identification of appropriate requirements, collection of pertinent baseline data and agreement among key stakeholders on the proponent's Draft Description of Proposed Action and Alternatives (DOPAA). Air Force installations or major commands (MAJCOMs) will follow the PREIAP process for all EISs and EAs of special concern. **(T-1)** To the extent possible, accomplishment of these procedures will occur prior to initiation of the formal NEPA analysis process. PREIAP does not change the requirements of 32 CFR Part 989 and will not provide any authority for challenging Air Force decisions or actions. PREIAP highlights the importance of existing, ongoing proponent responsibilities.

Prohibited Area—A prohibited area is airspace established under Title 14, Code of Federal Regulations, Part 73, *Special Use Airspace*, current edition, provisions, within which no person may operate an aircraft without permission of the using agency. Prohibited areas are established when necessary to prohibit flight over an area on the surface in the interest of national security and welfare. (FAA Order JO 7400.2)

Restricted Area—A restricted area is airspace established under 14 CFR § 73 provisions, within which the flight of aircraft, while not wholly prohibited, is subject to restriction. Restricted Areas are established when determined necessary to confine or segregate activities considered hazardous to nonparticipating aircraft. (FAA Order JO 7400.2)

Rulemaking Actions—Procedures where FAA assigns, changes, or rescinds airspace and manages its use by rule, regulation, or order. These actions include establishing (or eliminating) jet routes, airways, restricted areas, prohibited areas, and various classes of airspace.

Slow Routes (SR) —Used for Slow Speed Low-level training routes used for military air operations conducted at or below 1,500 feet AGL at airspeed of 250 knots or less. Unlike IR and VR MTRs, SRs are not technically part of the MTR system and therefore have no directive guidance in the Aeronautical Information Manual (AIM) or FAA Order JO 7610.4. MAJCOMs will determine establishment criteria. There is no requirement for coordination with the FAA. SRs are published in FLIP AP/1B; however, they are not published on aeronautical charts. Environmental documentation in accordance with 32 CFR Part 989 is required. There is no overall mechanism to inform military or civilian aviators that an SR is active, as Automated Flight Services Stations are not notified. (FAA Order JO 7610.4)

Special Activity Airspace (SAA)—Any airspace with defined dimensions within the National Airspace System wherein limitations may be imposed upon aircraft operations. This airspace may be restricted areas, prohibited areas, military operations areas, ATC assigned airspace, and any other designated airspace areas.

Special Use Airspace (SUA)—Airspace that is of a defined vertical and lateral dimension that alerts users to areas of unusual flight hazards and separates those activities from other airspace users to enhance safety. Certain limitations or restrictions may be placed on non-participating aircraft.

Temporary Airspace—There are multiple types of temporary airspace that can be utilized to meet temporary requirements or for exercise planning. A temporary MOA, temporary restricted area or stationary Altitude Reservation (ALTRV) can meet these temporary requirements, but are not designed to circumvent the process of establishing permanent SUA. Existing SUA must be used to the maximum extent possible to meet temporary airspace requirements. FAA guidance on temporary MOAs and Restricted Areas is contained in FAA Order JO 7400.2. Stationary ALTRV guidance is listed in FAA Order JO 7610.4.

Temporary Flight Restriction (TFR)—TFR is a type of Notice to Airmen (NOTAM). A TFR defines an area restricted to air travel due to a geographically-limited, short-term, airspace restriction. Temporary flight restrictions often encompass hazard/natural disaster areas (Title 14, Code of Federal Regulations, Section 91.137(a)(1-3), *Temporary Flight Restrictions in the Vicinity of Disaster/Hazard Areas*, current edition) TFRs are used for: Air shows (Title 14, Code of Federal Regulations, Section 91.145, *Management of Aircraft Operations in the Vicinity of Aerial Demonstrations and Major Sporting Events*, current edition); Space launches (Title 14, Code of Federal Regulations, Section 91.143, *Flight Limitation in the Proximity of Space Flight Operations*, current edition); Presidential/VIP movements (Title 14, Code of Federal Regulations, Section 91.141, *Flight Restrictions in the Proximity of the Presidential and Other Parties*, current edition); or Special Security Instructions/National Special Security Events (14 CFR § 99.7)

Temporary Special Use Airspace (TSUA)—The military and the FAA have the ability to create Temporary Military Operations Areas or Temporary Restricted Areas to accommodate the specific needs of a particular military exercise. This information is available via either the NOTAM system or by direct contact with the FAA Regional Headquarters. TSUAs are usually established to accommodate the military's need for additional airspace to periodically conduct exercises that supplement routine training, when existing airspace is inadequate to accommodate these short-term military exercises, TSUA actions are coordinated through the cognizant FAA Regional/Service Area Office. (FAA Order JO 7400.2)

Test/Training Space (T/TS)—Any air, land, or sea area that is used to conduct military training or operational activities.

Tier—AF effort to reduce MAJCOM and HAF oversight on wings, where it makes sense. As part of the effort, all AFIs are being rewritten to include a Tiering breakdown identifying the appropriate level of waiver authority and annotate the Tier following any AFI directive at Wing level. Tier definition breakdown is as follows:

Tier 1 (T-1)— Non-compliance puts Airmen, commanders or the USAF Air and Space Professionals, commanders, or the DAF strongly at risk of mission or program failure, death, injury, legal jeopardy or unacceptable fraud, waste or abuse. The waiver authority is the MAJCOM/CC, delegable no lower than MAJCOM Director, with the concurrence of the AFI Certifying Official coordination of the publication's Approving Official.

Tier 2 (T-2)— Non-compliance may degrade mission or program effectiveness or efficiency and has potential to create moderate risk of mission or program failure, injury, legal jeopardy or unacceptable fraud, waste or abuse. The waiver authority is the MAJCOM/CC (delegable no lower than MAJCOM Director).

Tier 3 (T-3)— Non-compliance may limit mission or program effectiveness or efficiency and has a relatively remote potential to create risk of mission or program failure, injury, legal jeopardy or unacceptable fraud, waste, or abuse. The waiver authority is the Wing/DRU/ Field Operating Agencies /CC (delegable no lower than Group/CC or equivalent).

Tier 0 (T-0)— Determined by respective non-AF authority (e.g., Congress, White House, Office of the Secretary of Defense, JS). The waiver authority is non-applicable, or external to AF.

Unmanned Aircraft System (UAS)—Are further defined as:

Group 1 (sUAS):—Typically weighs up to 20 pounds and normally operates below 1,200 feet AGL at speeds less than 100 knots.

Group 2 (sUAS)— Typically weighs 21–55 pounds and normally operates below 3,500 feet AGL at speeds less than 250 knots.

Group 3 (sUAS):—Typically weighs more than 55 pounds but less than 1,320 pounds and normally operates below 18,000 feet MSL at speeds less than 250 knots.

Group 4 (RPA):—Typically weighs more than 1,320 pounds and normally operates below 18,000 feet MSL at any speed.

Group 5 (RPA):—Typically weighs more than 1,320 pounds and normally operates higher than 18,000 feet MSL at any speed.

Visual Routes (VR)—Routes used by the DoD and associated Reserve and Air National Guard units for the purpose of conducting low-altitude navigation and tactical training under VFR conditions at airspeeds in excess of 250 KIAS below 10,000 ft MSL. (FAA Order JO 7610.4)

Warning Area—A non-regulatory warning area is airspace of defined dimensions designated over international waters (3 or 12 nautical miles (NM) outward from the coast of the United States) that contains activity which may be hazardous to nonparticipating aircraft. The purpose of such warning areas is to warn nonparticipating pilots of the potential danger. (FAA JO 7400.10)

Attachment 2**SUPERSONIC WAIVER REQUEST**

- A2.1. The following items are required for a waiver request submission: (T-2).**
- A2.2. Describe all current and projected supersonic mission requirements.**
- A2.3. Describe how the projected supersonic operations will be conducted.**
- A2.4. Describe how and where current supersonic needs are being satisfied.**
- A2.5. Describe the proposed airspace that could:** Be used for supersonic operations (volume, proximity, time, & attributes).
- A2.6. Describe the available alternatives for conducting supersonic training.**
- A2.7. Describe the land uses:** That could be exposed to sonic booms. In particular, detail the impact of noise/vibration on sensitive land uses (see list below). What is the distance of the proposed supersonic area/corridor from these sensitive land uses?
- A2.7.1. List Native American traditional use areas or sacred sites.
 - A2.7.2. List National Parks, wilderness areas, wildlife refuges or wildlife management areas.
 - A2.7.3. List Ratite (ostrich/emu) operations.
 - A2.7.4. List Urban Areas (towns, cities, etc.).
 - A2.7.5. List Prehistoric/Historical structures.
- A2.8. Summarize the mitigation measures identified in the EIS/ROD or EA/FONSI.**
- A2.9. Identify public concerns raised during the EIAP public comment period.**
- A2.10. If the waiver is not granted will there be:** Additional costs to implement one of the alternatives?
- A2.11. What level of training will units receive on:** How to minimize impacts of unintentional sonic booms?

Attachment 3

RENEWAL OF SUPERSONIC WAIVER REQUEST REQUIREMENTS

A3.1. The following items are required for a renewal waiver request submission:

A3.2. Include the date of original supersonic flight ops: Below 30,000 feet MSL and subsequent renewal dates. (T-2).

A3.3. Attach the justification and information used for: The original request or the most recent waiver renewal analysis. (T-2).

A3.4. Compare current and proposed future sortie rates, aircraft types, and: Minimum altitudes with those assessed in the most recent environmental analysis that assesses the impacts of the supersonic operations. This analysis can include information used to support the original waiver request. (T-2).

A3.5. List all mitigation measures and commitments made in initially approving the supersonic flying operations. Provide the same information for any updated environmental analysis done for any previous revisions. (T-2).

A3.6. Detail the changes in land use: That have occurred since the original establishment of supersonic operations in this area. Examine land use below 30,000 feet MSL within 15 miles of the area. (T-2).

A3.7. If there have been changes to: Environmental conditions or operations that necessitate any new environmental analysis include them with this waiver renewal analysis. Pay special attention to the following noise/vibration sensitive land uses: (T-2).

A3.7.1. Native American traditional use areas or sacred sites. (T-2).

A3.7.2. National parks, federally designated wilderness areas, wildlife refuge, or wildlife management areas. (T-2).

A3.7.3. Ratite (ostrich/emu) operations. (T-2).

A3.7.4. Urban areas (towns, cities, etc.). (T-2).

A3.7.5. Prehistoric/historical landmarks. (T-2).

A3.8. Describe the management system the MAJCOM has adopted for: Periodic monitoring to ensure compliance with mitigations, and to monitor changes to conditions under or near the area where supersonic operations are taking place. (T-2).

A3.9. Note any increased or unusual public controversy with these operations. (T-2).

Attachment 4
AFREP OFFICES

Figure A4.1. AFREP Regions.

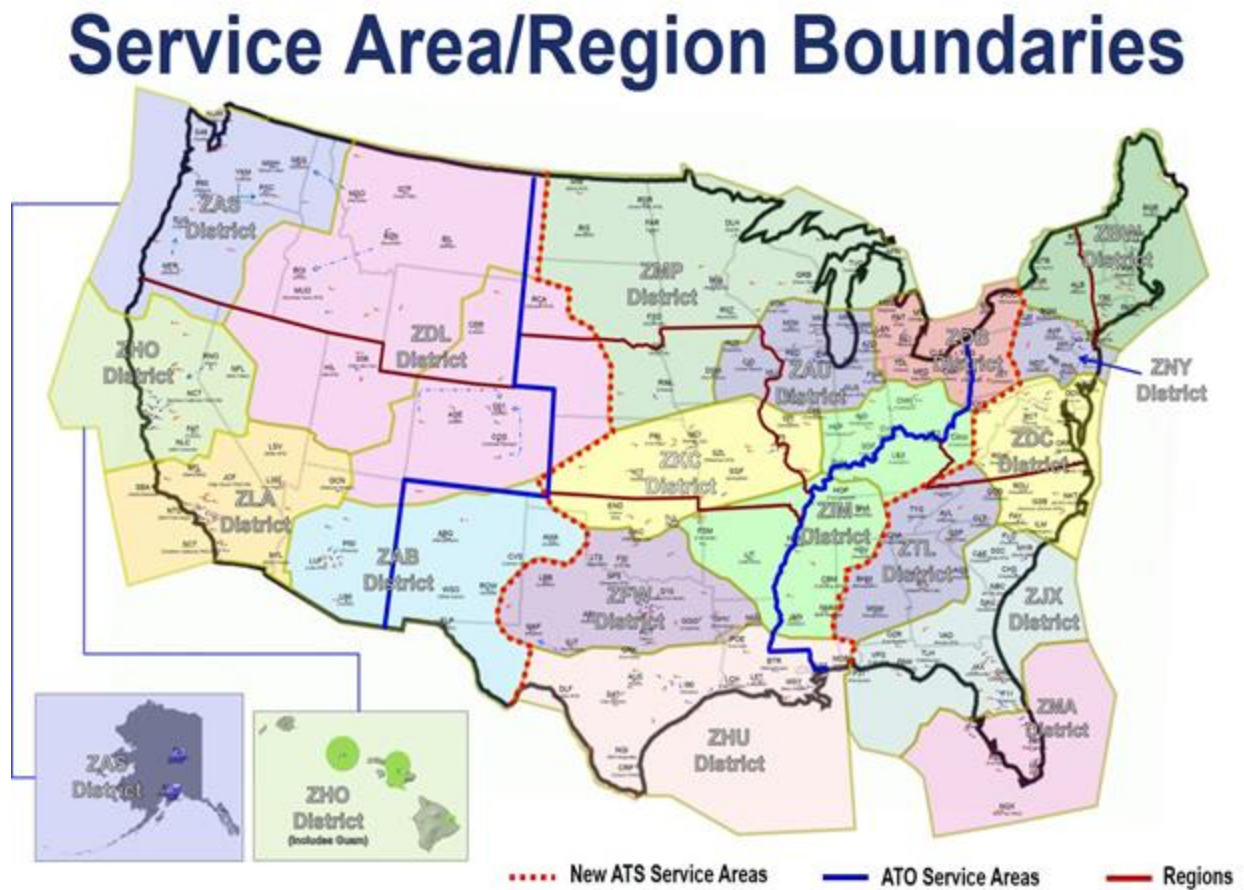


Table A4.1. AFREP Office Addresses.

FAA HEADQUARTERS	USAF Senior Liaison / AJV-0 HQ Federal Aviation Administration 800 Independence Ave., SW, Ste 420 Washington D.C. 20591	V (202) 267-9427 F (202) 267-5868
EASTERN SERVICE AREA	AFREP, Eastern Service Area / ASO-910 1701 Columbia Ave College Park, GA 30337 9-esa-afrep@faa.gov	V (404) 305-6901 V DSN 797-5481
CENTRAL SERVICE AREA	AFREP, Central Service Area / ASW-910 10101 Hillwood Parkway Fort Worth, TX 76177 9-csa-afrep@faa.gov	V (817) 222-5911 F (817) 222-5992
WESTERN SERVICE AREA	AFREP, Western Service Area 2200 South 216 Street Des Moines, WA 98198 9-wsa-afrep@faa.gov	V (206)231-2500/1

Attachment 5**LETTER OF AUTHORITY, USAF REPRESENTATIVE TO FAA****Figure A5.1. Sample Letter of Authority, USAF Representative to FAA.**

MEMORANDUM FOR (Grade and Name of AFREP)

FROM: (Grade and Name, as appropriate)

SUBJECT: Letter of Authority

1. This letter hereby designates you as the Air Force Representative, FAA (location) and constitutes authority for you to formulate, within established policy and guidance, the Department of the Air Force position on airspace and air traffic control matters that fall within the purview of the FAA (location) Service Area (or Headquarters).
2. In executing the duties of your office, you are also the representative of Headquarters, United States Air Force, and within established policy and guidance are authorized to coordinate and negotiate on all matters of mutual interest to the Air Force and the FAA (location) Service Area (or Headquarters).

NAME, RANK, USAF
Chief, Military and Civil Aviation
Integration Division

Attachment 6

T/TSNS INSTRUCTIONS AND SAMPLE T/TSNS

A6.1. The T/TSNS is the avenue which units can voice a requirement up to the MAJCOM and Air Staff. Keep in mind the audience that reviews this document: airspace managers, environmental planning specialists, legal professionals, and the AFREP. Some of these persons may not be familiar with your unit or the potential issues with your mission.

A6.2. The T/TSNS is the precursor to the DOPAA. If done properly, the T/TSNS is the initial scrub of the key issues that will be explored in great detail through the environmental and aeronautical processing of the formal proposal once submitted to the FAA. The T/TSNS is organized as outlined below.

A6.2.1. **Chapter 1: Title.** Explain what this proposal is trying to accomplish through this T/TSNS. Give a brief overview of the options being pursued in this T/TSNS (which will be explained further in **chapter 3**).

A6.2.2. **Chapter 2: Operational Requirement/Justification.** This should be based on factual data. Examples include Ready Aircrew Program (RAP) shortage/delta, flying hour delta, current airspace not of sufficient volume to meet requirements (as specified in an AFI or other regulatory guidance), or other deficiencies in the proximity, time, or attributes as defined in the Air Force Ranges Strategic Vision (Dec 06). If there are other specific units that support this initiative, list those units and why they require this airspace modification and provide similar factual justification as listed above.

A6.2.3. **Chapter 3: Concept/Proposed Actions.** It is preferred that units look at more than one possible modification to meet their requirements. It is better to analyze more than one action, if feasible, so as to prevent the appearance of being pre-decisional. This requires *equal* analysis of all proposed actions. Only actions that meet the stated operational requirements should be mentioned here. For those options considered but not meeting operational requirements, list those under **Chapter 4: Alternatives** as “Actions Considered But Not Carried Forward” with the rationale as to why these options could not meet the requirements.

A6.2.4. **Chapter 4: Alternatives.** A no-action alternative must be specified. (T-0). As stated earlier, Actions Considered But Not Carried Forward should be included here to demonstrate other options that could be suggested by other airspace stakeholders (civil aviation, Park Service, Bureau of Indian Affairs, etc) have been reviewed, but cannot meet the stated requirements.

A6.2.5. **Chapter 5: Air Traffic Control Coordination.** As specified in this AFMAN, the Air Route Traffic Control Center (ARTCC) must be coordinated with prior to forwarding this T/TSNS. (T-3). Without this coordination, this concept is a wish list. The ARTCC will provide guidance on how this will impact air traffic flow for that affected area. If the proposal will affect terminal airspace, the applicable approach controls should also be contacted to ensure all initial concerns are addressed and potentially resolved early. The more outreach conducted at this point will result in a smoother process later once the formal proposal is provided to the FAA. List any potential concerns that could be addressed later in the aeronautical or environmental processing of this proposal.

A6.2.6. **Chapter 6: Other Interest Potential.** This is the critical portion for the environmental side of the concept. Conduct thorough research to determine what potential issues can come about should the concept be approved to go forward as a formal proposal. If more than one proposed action meets the requirement, equal consideration must be given under each category for each option. MAJCOM Environmental Planning Office or AFREP may provide additional assistance for specific category data.

A6.2.7. **Chapter 7: Engagement Planning Phase.** Units should develop an engagement plan as early as possible to ensure that a final plan is ready for execution shortly after the proposal is briefed to the SECAF. After the SECAF is briefed, first notification of the concept should be made to the affected area's Congressional delegation(s), which will be coordinated through AF/A3TI to SAF/LL channels (NGB/LL for NGB airspace issues) (CONUS, Hawaii, Guam, Puerto Rico and Alaska only). Notification to affected TAGs will be made following congressional notification. These notifications should take place no later than one day prior to public notification. Public engagement will take place as directed in AFI 35-108, *Environmental Public Affairs*, and in accordance with the National Environmental Policy Act of 1969 as promulgated in 32 CFR Part 989.

A6.2.8. Sample Test/Training Space Needs Statement (T/TSNS):

Figure A6.1. Sample Test/Training Space Needs Statement (T/TSNS).

ABC 06-001

999th FW, SPAATZ AFB, USA

Modification of the Milhouse MOA

Proponents' names:

Brig Gen John A. Smith, 999th Fighter Wing Commander

Col Jane Doe, 999th Operations Group Commander

999th Fighter Wing

742 SW Evergreen Terrace

SPAATZ AFB, NA 02542-1330

Comm (703) 588-2019

DSN 425-2019

Updated on: 15 October 2020

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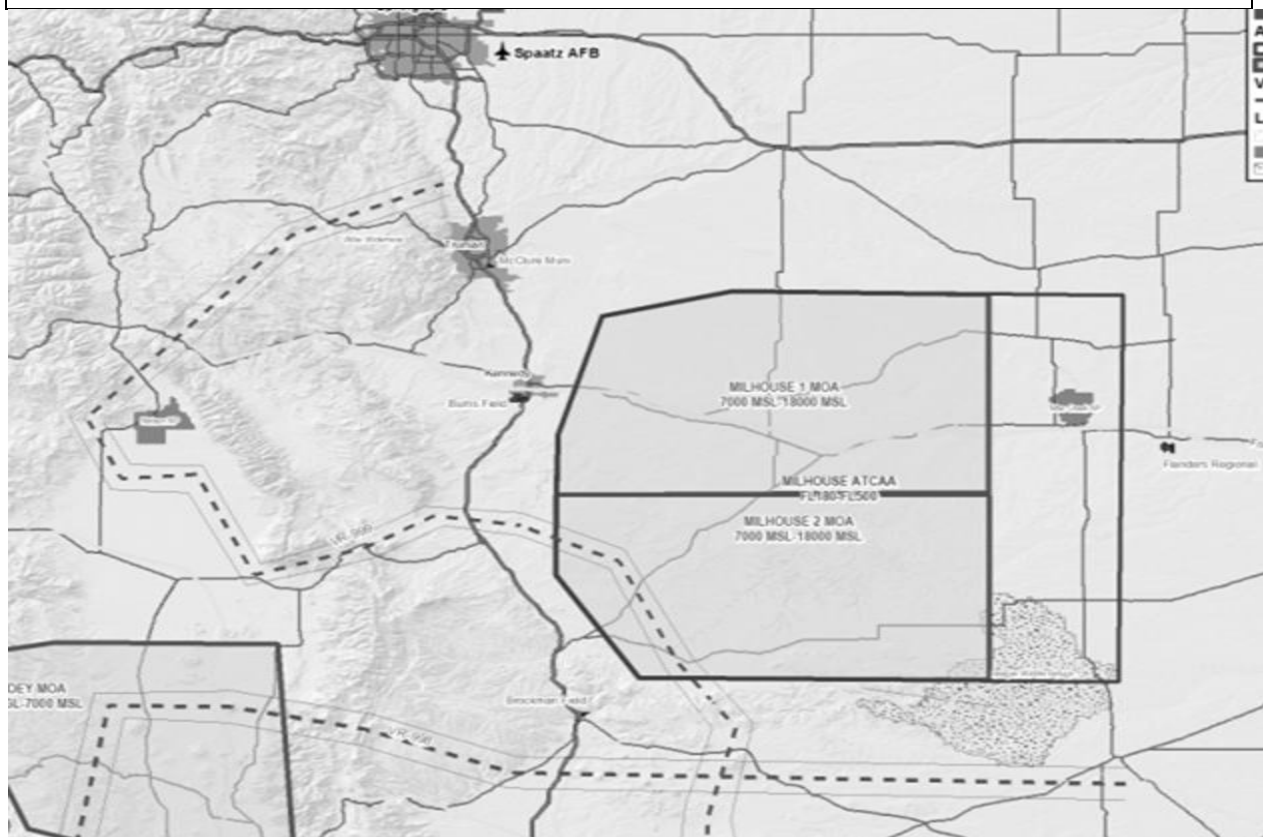
6. Other Interest Potential

7. Engagement Plan

1. Overview.

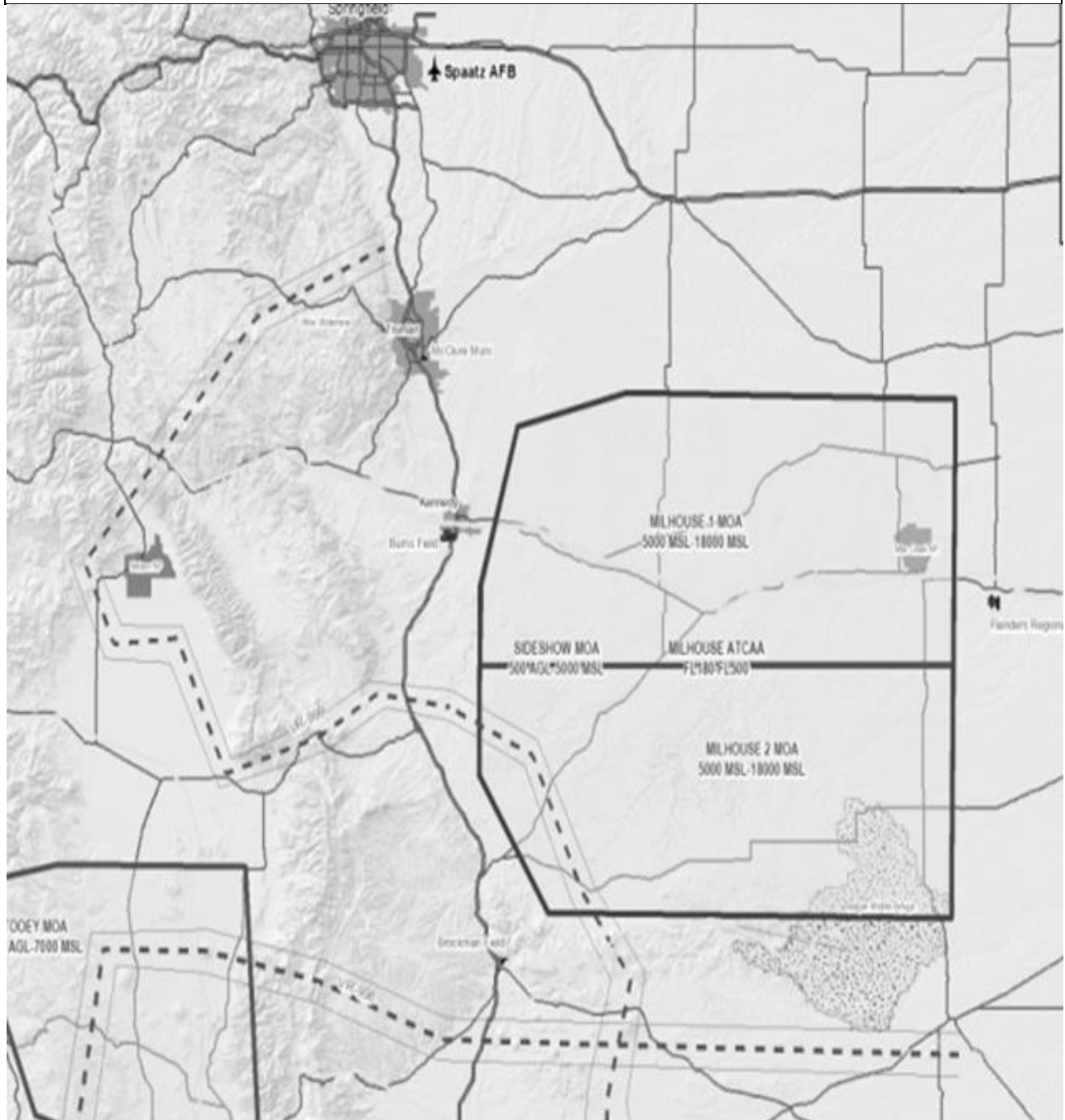
1.1. Concept/Purpose. This T/TSNS addresses the requirement to establish airspace sufficient to accommodate AIM-120 Advanced Medium-Range Air-to-Air Missile (AMRAAM) tactics and Low Altitude Air-to-Air Training (LOWAT) tactics. This T/TSNS looks at the modification of the Milhouse Military Operations Area (MOA) and the Crowe MOA to meet military training needs. The minimum altitudes of Milhouse 1 and Milhouse 2 MOAs would be lowered to support LOWAT. The current maximum altitudes for both Milhouse MOAs will remain unchanged, but will amend the boundaries to accommodate the new requirement for the AIM-120/AMRAAM. The new MOA would be divided into Milhouse 1 & 2 and Sideshow MOAs. The Crowe MOA would require the lowering of the current MOA floor and the establishment of an ATCAA that mirrors the existing Crowe MOA lateral boundaries. The 999th FW plans to analyze both MOA options in this T/TSNS and in the NEPA process.

1.2. Existing Structure (Current Map – Milhouse MOA).



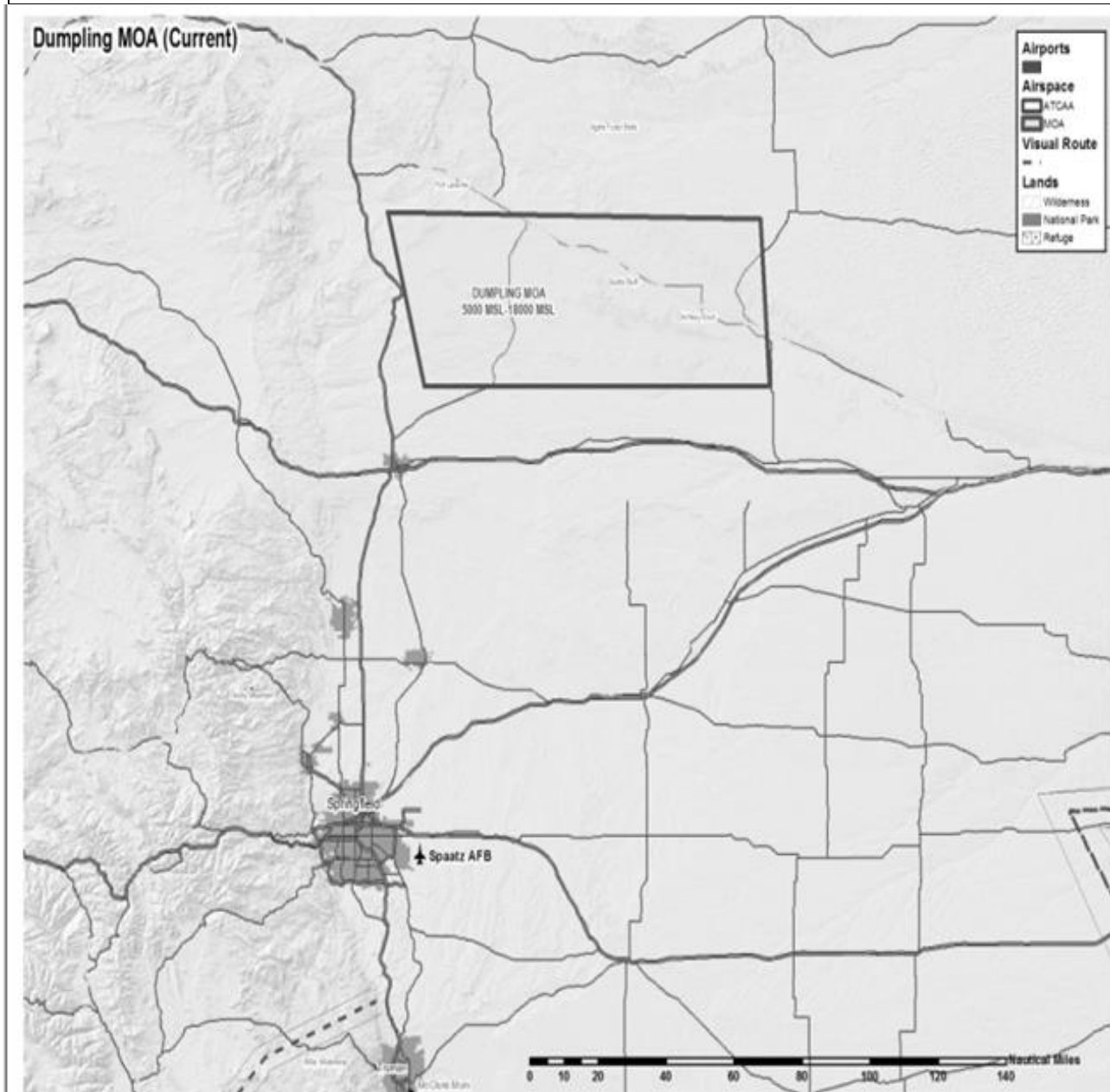
Type Boundary	Designation	Altitudes
Current Boundary line. (Blue – Solid)	Current airspace boundaries for Milhouse 1 and Milhouse 2 MOAs.	<u>Milhouse 1 & 2</u> : 7000' MSL up to but not including FL 180. The Milhouse ATCAA overlies the 1&2 MOAs from FL180- FL500 and extends an additional 20 NM to the east.

1.3. Proposed Structure (Future Design – Milhouse MOA).



Type Boundary	Designation	Altitudes
Current Boundary line. (Blue - Solid)	Current airspace boundaries for Milhouse 1 & 2 MOAs and the Proposed Sideshow MOA.	Proposed: <u>Sideshow:</u> 500' AGL up to but not including 5000' MSL <u>Milhouse 1 & 2:</u> 5000' MSL up to but not including FL 180

1.4. Existing Structure (Current Map – Crowe MOA).



Type Boundary	Designation	Altitudes
Current Boundary line. (Purple - Solid)	Current airspace boundaries for Crowe MOAs and the Proposed Crowe 1 & 2 MOA.	Proposed: <u>Crowe 1:</u> 5000' MSL up to but not including FL180 <u>Crowe 2:</u> 500' AGL up to but not including 5000' MSL <u>Big Brinley ATCAA:</u> FL180 – FL 290. Same boundary as existing Crowe MOA.

2. Operational Requirements/Justification

2.1. Unit and Mission. The 999th Fighter Wing flies the F-16 out of Spaatz Air Force Base in Springfield, NA. The F-16 is a multi-role fighter, with operations at all altitudes from surface to 50,000+ feet. Pilot operational and training requirements require missions to be accomplished in the low, medium, and high altitude regimes. During a real world intercept, pilots are cleared to descend down to LOWAT minimums or current pilot qualification, whichever is higher. If a pilot is not current in LOWAT requirements, then the pilot is technically not legal to descend down to lower altitudes where most real world intercepts take place. If a pilot does descend lower than they are currently qualified, they are placing themselves and others, both in the air and on the ground, at risk. Today, the alert tasking of the 999th Fighter Wing continues 24 hours a day, 7 days a week, and the real world tasking does not allow for any of the wing's pilots to lose their LOWAT currency. The concept to modify the Milhouse or Crowe MOA is the best answer to the unit's training requirements.

Two years ago, the 999th Fighter Wing was converted from an air defense mission to a general-purpose mission. It was originally conceived during the MAJCOM SATAF that the Tooey MOA could accommodate the LOWAT training requirements for this new mission. A review of the past two years RAP data shows this is not the case (see table below), primarily because three unit compete for this LOWAT airspace and it prevents all three units from meeting their RAP requirements. Additionally, Spaatz AFB F-16s will be equipped with the AIM-120 AMRAAM starting in six months. The minimum prescribed airspace for 65 NM AMRAAM set-ups is 85 miles. This allows the two forces to orbit without the other forces seeing the "picture" too early. As currently configured and at its longest length, the Milhouse MOA is only 60 NM in length, but allows for two 60 X 25 NM segments of airspace. The Crowe MOA does allow for the 85 X 25 NM airspace segments, but has a floor of 5,000' MSL.

LOWAT mission definition and requirements are described in Air Force Instruction 11-2F-16V1. LOWAT missions are defined as "an event performing realistic, mission oriented air-to-air operations while in a LOWAT certified low-altitude block (at or below 1,000 ft AGL)". A minimum altitude less than 1,000' AGL is required in allow pilots to update their LOWAT currency. RAP requirements for every qualified F-16 pilot include 16 LOWAT missions annually, requiring 768 for the wing per year for 48 assigned aircrew members. A review of wing RAP performance for the past two years shows that 20% or 153 missions were not completed. In addition, pilots are not meeting RAP requirements for Low Slow/Visual Identification intercepts and Slow Shadow intercepts, which are essential

training for both Air-Superiority and 24-hour Air Defense Alert role. Additionally, A-10s from Jones ANGB and Smith ARB also require low altitude training airspace (24 assigned aircrew at each unit). Due to high utilization of the Tooey MOA, these two units only complete 288 of 384 and 268 of 384 RAP requirements, respectively. Both Jones ANGB and Smith ARB support this initiative to aid in overcoming their respective RAP shortfalls.

	RAP Rqmts	Total Comp	Delta	Comp %
Spaatz	768	615	153	80%
Jones	384	288	96	75%
Smith	384	269	115	70%
			364	

2.2. Need for Low-Altitude Training Airspace. All three units currently use the Tooey MOA and VR-999 to accomplish LOWAT training. Tooey MOA's activation period is limited to 12 hrs per day and it currently cannot meet the LOWAT RAP demand for all three units (combined delta of 364 RAP missions). Jones ANGB attempted to expand Tooey MOA's effective times, but there was resistance from the FAA and Harrison International Airport. VR-999 is a narrow, one-way, low-level corridor, portions of which lie underneath the Milhouse MOA. This low-level route does not allow LOWAT annual training requirements to be accomplished due to its restrictive nature. Since VR-999 is a one-way route, it does not allow for reversing direction on the route (defensive reactions) or intercepts from a high to low altitude regime on maneuvering targets (LOWAT intercepts).

3. Concept/Proposed Airspace Actions

3.1. Modification of the Milhouse MOAs and Creation of the Sideshow MOA. The altitudes of the current Milhouse 1 & 2 MOA airspace would have to be amended as stated below and shown in Section 1.2 above: The Milhouse 1 and Milhouse 2 MOA's minimum altitude would be lowered from the current 7,000' MSL to 5,000' MSL and the current boundaries for both Milhouse MOA's will extend 20 NM east. The new AMRAAM requires 65-mile (minimum) set-ups (85 NM airspace), and Milhouse MOA is only 60 miles in length, so the extension to the east will allow the unit to train properly to their new RAP requirements. A new MOA, Sideshow MOA, would be from 500' AGL up to but not including 5,000' MSL below the revised Milhouse 1 & 2 MOA. This would allow more efficient scheduling of airspace, since Sideshow MOA would only be activated if F-16/A-10s were performing LOWAT missions. This MOA is anticipated to be activated no more than four hours per day, five days a week (Monday – Friday). The Milhouse 1 & 2 MOAs will continue to be activated at their current utilization rate.

3.2. Establishment of the Crowe 2 MOA and Big Brinley ATCAA. The Crowe MOA is of required volume to support the AMRAAM requirements except it has no associated ATCAA above the existing MOA to support either higher altitude operations or a floor sufficient for LOWAT tactics. ATCAA airspace from FL 180 up to at least FL 230 is required to support F-16 air-to-air tactics. A lower MOA, the Crowe 2 MOA, would provide the perfect volume of airspace for LOWAT training. The Crowe 2 MOA would meet the LOWAT mission requirements of Spaatz AFB, Jones ANGB and Smith ARB with the same anticipated activation of no more than four hours per day, five days a week (Monday – Friday).

4. Alternatives.

4.1. No Action Alternative. Twenty percent of the 999th FW pilots currently do not meet requirements for annual LOWAT training and would continue to be deficient in this area without appropriate low-level training airspace. The ability to perform real world Air Defense Missions/Homeland Security Missions would continue to suffer due to the current LOWAT training shortfall and could prevent us from successfully completing some Homeland Security Missions (i.e., any requiring an intercept on an airborne target below 1,000' AGL).

4.2. Use of Other Airspace. The wing airspace office conducted a search of all LOWAT-capable airspace within 125 miles of the home station. The Warning Areas that are use daily are entirely over water. Air Force Regulations restrict us from training below 1000' MSL over the ocean due to risk for spatial disorientation due to visual illusions that are common over the water at low altitudes.

4.3. Actions Considered But Not Carried Forward.

4.3.1. *Expansion of the Tooey MOA.* The Tooey MOA is available 12 hours per day, 265 days per year (Monday-Friday). The following shows the RAP deficiencies for LOWAT for the three mentioned units:

	Authorized	Scheduled	Utilized
Tooey MOA	12.0	11.5	10.8

The average daily utilization for Tooey MOA is contained in the following chart. Authorized is the maximum number of hours the MOA can be scheduled. Based on the current utilization rate, there is not adequate time remaining to accommodate the LOWAT RAP delta. The 1.2 delta between utilized and authorized is scattered throughout the day in between goes and does not allow for a continuous block of time that would be useful to any of the units. This option was considered, but not pursued as Jefferson ARTCC said they could not support any lateral or time extension of this MOA due to arrival and departure routes into numerous airports.

4.3.2. *Lowering of Airspace under Milhouse 1 & 2 MOAs without the Eastern Expansion.* This option would allow us to meet out LOWAT RAP requirements, but presents problems for AMRAAM training. AMRAAM requires 65-mile (minimum) set-ups (85 NM airspace), and Milhouse MOA is only 60 miles in length. Tooey MOA is less than 85-miles in length and its high utilization rate prevents the 999 FW from considering it for additional airspace usage.

4.3.3. *Eastern Expansion without the Development of Sideshow MOA.* This would allow us to effectively meet the AMRAAM RAP requirements; however, all three units would still be deficient due to inability to meet LOWAT RAP requirements.

4.3.4. *Not Establishing the Big Brinley ATCAA.* This option would be of limited value as AMRAAM tactics require a volume of 18,000' of airspace. With the floor established at 5,000', ATCAA airspace is required to effectively train using the AIM-120.

4.3.5. *Deployment for LOWAT Training.* This option would be prohibitively expensive to implement requiring multiple deployments by the unit in order to fulfill the 153 LOWAT RAP missions that are required by each pilot for Spaatz AFB. Estimates are that it would require three, three-week deployments to other locations to meet 153 RAP delta for LOWAT (364 for all three units). Given the cost estimate of the last two weapons deployment training TDYs (\$160K and \$210K), this option is not economically feasible.

4.3.6. *Use of the Adams MOA.* This option was considered, but not pursued as this MOA is 155 miles from Spaatz AFB and would not permit training times of significant duration to accomplish necessary training.

5. Air Traffic Control Coordination

On 1 Apr 07, an informal coordination meeting was held between Jefferson ARTCC and 999th Fighter Wing representatives, with attendance from other affected agencies. Jefferson ARTCC informed us that expansion of the Milhouse MOA to the north, west, or south would not be supportable due to existing jet route and victor airway structures and arrival procedures into Harrison International Airport. Feedback from this meeting is reflected throughout this T/TSNS, with all affected agencies giving positive responses to the lowering of Milhouse MOA. One airport, Monroe Regional Airport, voiced concerns over possible confliction with their ILS approach procedure. Madison Approach Control was contacted to develop procedures to release a portion of the proposed Sideshow MOA to Madison Approach when that airspace is needed to protect IFR aircraft on the ILS approach to runway 13. The exact volume of airspace has not been determined at this time; however, we will address this issue should this concept go forward as a formal airspace proposal. Initial discussion suggested a subdivision of the Sideshow MOA. Establishment of the Fat Brinley ATCAA above FL 210 would create traffic flow problems for Jefferson ARTCC and exact shaping of that ATCAA would have to allow for the expanding waypoint system currently in development for the Next Generation Air Transportation System.

6. Other Interest Potential

The conceptualized action and alternatives may impact the following:

6.1. Recreational Areas: (Parks – federal, state, and local). Milhouse MOA would overlie Roosevelt Creek National Park east of Carter County. The park offers picnicking, camping, hiking, fishing, and horseback trails. Wing leadership has briefed local park staff about the concept and informally assessed impacts to the natural soundscape. The unit has an excellent relationship with the Chief Ranger and the Superintendent and will work further together to refine local procedures to minimize impacts to specific areas of the park. There are no concerns for the airspace under the proposed Crowe 2 MOA.

6.2. Native American Reservations, Lands, or areas of special interest. After discussion with public affairs and informal contact with the Bureau of Indian Affairs, there have been none identified for either the Sideshow or Crowe MOAs.

6.3. Grazing and/or farming. The majority of the area under the conceptual airspace is rural; land used predominantly in forestry, and farming operations. With a significant lowering of the lower altitude of the airspace, an impact is expected for these land uses. The wing plans on balancing this impact by activating the Sideshow MOA no more than four hours per day. There are no grazing or farming operations under the Crowe 2 MOA.

6.4. Endangered species. The following endangered species are listed for the counties underlying the conceptual airspace: Indigo Bat, Running Buffalo Clover, and Emerald Dragonfly. The following species are listed as threatened in the vicinity of the Sideshow MOA: Niagara Darter and Springfield Sneezeweed. There are no associated species under Crowe 2 MOA.

6.5. Wildlife refuges. The Reagan Wildlife Refuge lies just under the southeast portion of the Sideshow MOA. After initial informal discussions with state and federal representatives, there appears to be little or no impact. There are no impacts with the Crowe 2 MOA.

6.6. Hunting and fishing. The majority of south central Johnson County offers excellent hunting and fishing opportunities, which is located under the current Milhouse MOA. No major impoundments are affected by the concept airspace; major waterways include the Ford River and Kennedy Creek. There are small ponds associated under the Crowe 2 MOA.

6.7. Archaeological sites. None identified for either concept.

6.8. Population centers, communities, previously identified or potential noise sensitive areas. The towns of Truman and Kennedy all border the conceptual Milhouse MOA to the west and should only experience minimal noise intrusion. There are minimal population centers under the Crowe 2 MOA.

6.9. Ongoing litigation that may be impacted. Ongoing litigation that may be impacted. Per coordination with the installation's servicing legal office, there have been none identified for either concept

6.10. Other training airspace actions that may be impacted by this initiative. After meeting with the AFREP, the wing is not aware of any other initiative in the area that will be impacted. As there is no other initiative to create additional LOWAT airspace this is the only course of action.

6.11. Regional Actions by other MAJCOM or Military Services. After briefing this concept at the Western Pacific Airspace and Range Council Meeting, there are no other duplicative actions ongoing, nor any other current airspace that will meet these requirements.

6.12. Consultation with other state/federal agencies. As mentioned previously, various components of this concept have been briefed to FAA Air Traffic Control Management personnel, union representatives, and the ATREP in Springfield, NA. Initial, informal feedback was very positive from each of these agencies.

6.13. Other Aviation interest groups and agencies such as: Aircraft Owners and Pilots Association (AOPA), National Business Aircraft Association (NBAA), Air Transport Association (ATA), State Department of Transportation and any local airport commission or Fixed Base Operators (FBO). After informal discussions with local transportation officials, there will be little impact to the general aviation community. The wing MACA program identified four FBOs whom could potentially be impacted and the wing has contacted two, with plans to meet with the other two in the next four months during normal MACA visits.

6.14. Other interested or affected parties. None identified.

7. Engagement Planning. To be created by unit.

Attachment 7**AIRSPACE MANAGER TRAINING PROGRAM**

A7.1. This attachment provides recommendations for content of unit airspace manager training programs.

A7.2. Review the following publications:

A7.2.1. AFMAN 13-201, *Airspace Management*, and appropriate MAJCOM supplements or regulations.

A7.2.2. AFMAN 11-202 Volume 3, *Flight Operations*, and supplements.

A7.2.3. AFI 13-204 Volume 3, *Airfield Operations Procedures and Programs*.

A7.2.4. 32 CFR Part 989, *Environmental Impact Analysis Process (EIAP)*, current edition. (32 CFR Part 989)

A7.2.5. FAA Order JO 7610.4, *Special Operations*.

A7.2.6. FAA Order JO 7400.2, *Procedures for Handling Airspace Matters*.

A7.2.7. AIM.

A7.2.8. FAA Order JO 7110.10, *Flight Services*.

A7.2.9. FAA Order JO 7110.65, *Air Traffic Control*.

A7.2.10. FAA Order JO 7210.3, *Facility Operations and Administration*

A7.3. Read: Letters of Procedure and Agreement and Memorandums of Understanding germane to the mission and airspace.

A7.4. Review all local operating procedures. (e.g., base airfield operations instruction/base flying regulation, etc.)

A7.5. Review Air Installation Compatible Use Zone (AICUZ).

A7.6. Review office history files.

A7.7. Review documentation/proposals for all ongoing airspace projects.

A7.8. Review environmental documentation for local airspace and procedures.

A7.9. Meet with local airspace management "team" and discuss issues:

A7.9.1. Airfield Operations Flight Commander or Operations Officer.

A7.9.2. Flight Safety Officer.

A7.9.3. Environmental Engineer.

A7.9.4. Airfield Manager.

A7.9.5. Current Operations, Scheduling, Range Management, and/or Standardization and Evaluation personnel, and/or other operations personnel.

A7.9.6. Public Affairs representative.

A7.9.7. Legal representative.

A7.9.8. AICUZ Program Manager.

A7.10. Meet/contact the applicable AFREP and ATREP.

A7.11. Visit FAA facilities providing: Service to local missions, meet key airspace management personnel, and discuss issues.

A7.12. Attend USAF Airspace Management Course: Within the first 6-months of assuming airspace manager duties, if possible, and update the proper SEI (if applicable) in individual's personnel records (N/A to ANG).

A7.13. Meet local Fixed Base Operators (FBOs): At airports where the USAF mission may conflict or cause concern. Attend MACA visits if applicable.

A7.14. Installation Airspace Manager Responsibilities. Within 90-days of taking over such duties and at least annually thereafter, the installation airspace manager will coordinate with his or her servicing installation civil engineering environmental compliance division and ensure that airspace operations are in compliance with and within the scope of all relevant environmental analyses, including any existing management actions or mitigations required. **(T-3).**

Attachment 8**PERIODIC AIRSPACE REVIEW CHECKLIST****A8.1. Land Ownership (Restricted Areas).**

A8.1.1. Are all lands inside the airspace boundary owned, leased, or controlled by agreement?

A8.1.2. Are the safety weapons danger zones of each weapon used within the airspace boundary?

A8.1.3. Are adequate safety measures taken with respect to public/private land?

A8.1.4. Is the land area within the restricted airspace congested, sparsely populated, or uninhabited?

A8.1.5. Does SUA allow for aerial access to private and public lands?

A8.2. Intended Use.

A8.2.1. Does the original intended use match the actual use?

A8.2.2. Is the airspace adequate for intended use?

A8.2.3. Is the SUA/MTR shared with other users?

A8.2.4. Does actual activities justify the type of airspace as designated?

A8.2.5. Is the activity (restricted areas):

A8.2.5.1. Air-to-air?

A8.2.5.2. Air-to-ground?

A8.2.5.3. Ground-to-ground?

A8.2.5.4. Ground-to-air?

A8.2.5.5. What mission profiles are utilized?

A8.3. Does the unit initiate return of airspace to: The NAS when no longer required for mission accomplishment?

A8.4. When available: Are Military Radar Units used to provide military command and control in SUA to enhance safety and utility?

A8.5. Activation Procedures.

A8.5.1. Is the SUA/MTR scheduled sufficiently in advance?

A8.5.2. Is the SUA/MTR coordinated with FAA in accordance with LOA/LOP?

A8.5.3. Is the controlling agency properly notified when the scheduled activity is canceled?

A8.5.4. What are the activation/deactivation procedures?

A8.5.5. Is there a point of contact (name/phone number) established between using and controlling agencies for coordinating changes?

A8.5.6. Are "real time use" concepts in daily activities efficiently used?

A8.5.7. Is the airspace efficiently subdivided so only the minimum required airspace for a particular mission is activated?

A8.5.8. Is SUA released to other users when not needed for military operations?

A8.6. Letters of Agreement/Letters of Procedure (LOA/LOP).

A8.6.1. Are LOA/LOPs current and accurate?

A8.6.2. Are "real time use" procedures incorporated into the LOA/LOPs?

A8.6.3. Do LOA/LOPs contain provisions for safe operations in case of radar/communication failure?

A8.6.4. Are joint-use restricted areas and their operating procedures outlined in a LOA/LOP?

A8.7. Records.

A8.7.1. Are utilization records available for the past 2-years?

A8.7.2. Are records kept of activation changes?

A8.7.3. Do records describe times and portions of airspace activated?

A8.7.4. Do records reflect scheduled versus activated times?

A8.8. Weather Observations (Restricted Areas).

A8.8.1. Is ceiling and visibility information available?

A8.8.2. What are the weather minima?

A8.9. Communications.

A8.9.1. What type of air-to-ground communications are available?

A8.9.2. What type of communications are available to FAA or other agencies?

A8.9.3. Is communication/radar coverage available with a military or FAA air traffic control agency when entering or exiting SUA/MTRs?

A8.10. Aircrew Briefings.

A8.10.1. Is the SUA/MTR briefing current and are there established procedures for updating the briefing?

A8.10.2. How are briefings and procedures made available to other users of the SUA/MTR?

A8.10.3. Are aircrews, especially non-unit aircrews, briefed on environmental hot spots and noise sensitive areas?

A8.11. Environmental.

A8.11.1. Do the current environmental documents accurately define your operations?

A8.11.2. Do you have a copy of the environmental document?

A8.11.3. Where are the basic environmental analysis and all additional supplementals filed?

A8.11.4. Do supplementals address cumulative effects?

A8.11.5. Do the environmental documents include all the shared users of the airspace?

A8.11.6. List the aircraft authorized by the environmental document to routinely fly in the airspace.

A8.11.7. List the flares and chaff, by type, authorized to be expended in the airspace.

A8.11.8. What is the date that the environmental office coordinated on your annual utilization review?

A8.11.9. Was a supplemental document required as a result of your annual utilization review?

A8.12. Miscellaneous.

A8.12.1. Does the airspace proposal describe the current requirement for the airspace?

A8.12.2. Is radar available/used for control?

A8.12.3. Are spill-ins/outs recorded and what follow-up action is taken?

A8.12.4. Are public-use airports avoided by 3 NM or 1500 feet AGL?

A8.12.5. Do aircraft operations within SUA/MTR conform to applicable FARs?

A8.12.6. Does the SUA/MTR create potential for air traffic conflicts with terminal VFR and IFR operations?

A8.12.7. Does the SUA/MTR create potential for air traffic conflicts with federal airways and regularly used VFR routes?

A8.12.8. Are there waivers for separation of non-participating aircraft from the boundaries of the airspace?

A8.12.9. Are waivers current?

A8.12.10. Have all MTRs been surveyed for obstacles at least annually?

A8.12.11. Are uncharted obstacles on MTRs reported to the scheduling agency as soon as possible after landing and included in aircrew briefings?

A8.12.12. Have MTR surveys considered potential bird attractant areas such as landfills, wildlife refuges, waste water treatment plants, stock yards or food processing plants that may attract large concentrations of birds that could be harmful to aircraft on the routes?

A8.12.13. Have MTR surveys been documented and maintained?

A8.12.14. Have potential flight safety hazards (e.g., obstacles, migratory bird routes, possible bird attractant areas, etc.) been identified and published in FLIP AP/1B?

A8.12.15. Have MTR Special Operating Procedures or Remarks published in FLIP AP/1B been reviewed annually for accuracy?

Attachment 9**AIRSPACE DENIAL REPORT**

A9.1. The flight lead shall: complete the denial report sheet from beginning to “Mission Impact”. Enter details on scheduled activity in the “SCHEDULED” column. If airspace was denied, enter “DENIED” in the “DENIED//LIMITED//N/A” column. If airspace was limited, enter the details on airspace obtained in the “DENIED//LIMITED//N/A” column, using N/A for each item not affected. When finished, select “File”, “Save As” and rename the file. Forward to supervisor via email, then route to the airspace manager or designated OG/CC representative. **(T-3).**

A9.2. The airspace manager or designated OG/CC Representative shall: File denial report and annotate details on Airspace Denial Log. Contact the ATC Controlling Agency to discuss event and complete the remainder of the denial report through the “comments” section. Fill out remainder of sheet. The airspace manager forwards a copy of the denial report to the AFREP and MAJCOM airspace office. **(T-3).**

A9.3. Example denial report sheet.**Figure A9.1. Example denial report sheet.**

Name of Airspace : Affected Wing/Squadron

Date of Incident:

Number/Type of Aircraft:

Callsign:

ATC Controlling Agency:

Mission Type:

Airspace was: ☐ Denied ☐ Time Limited ☐ Altitude Limited ☐ Boundary Limited

AREA INFORMATION	SCHEDULED	DENIED, LIMITED, or NA (If limited, enter what you were given or N/A)
TIME (ZULU)		
ALTITUDE (MSL/AGL)		
BOUNDARY		

Were Training Objectives Accomplished? ☐ Yes ☐ Degraded ☐ NoWill The Mission Have to be Reflown to Meet Mission Objectives? ☐ Yes ☐ No

Mission Impact:

Airspace Manager or Designated OG/CC Representative:

Airspace Scheduling Agency:

Did You Contact the ATC Controlling Agency? ☐ Yes ☐ No

Comments (include FAA reason for denial/limitation):

Action Taken (if applicable):