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SECRETARY OF THE AIR FORCE**

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Space, Missile, Command and Control

AIRSPACE MANAGEMENT

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This instruction implements AFPD 13-2, *Air Traffic, Airfield, Airspace and Range Management*. It also implements Department of Defense (DoD) Directive 5030.19, *DoD Responsibilities on Federal Aviation and National Airspace System Matters*. It provides guidance and procedures for developing and processing Special Use Airspace and Airspace for Special Use. It covers aeronautical matters governing the efficient planning, acquisition, use, and management of airspace required to support USAF flight operations. 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 Instruction applies to all Air Force (AF), Air Force Reserve Command (AFRC), and Air National Guard (ANG) component of the National Guard Bureau (NGB). 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 AF 847s from the field through the appropriate chain of command. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, *Management of Records*, and disposed of in accordance with *Air Force Records Disposition Schedule* located at <https://www.my.af.mil/afrims/afrims/afrims/rims.cfm>.

SUMMARY OF CHANGES

This document is substantially revised and must be completely reviewed. This version incorporates significant changes to Chapter 3, Processing Airspace Actions and Chapter 6, Development and Obstruction Evaluation.

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Chapter 1

INTRODUCTION

1.1. Purpose. This document provides airspace management instructions on creating and maintaining airspace that allows the United States Air Force (USAF) to meet operational needs for Military Readiness. This instruction provides guidance for compliance with all the Federal Aviation Administration (FAA) regulations, National Environmental Policy Act (NEPA) and other environmental guidance to include the Air Force's *Planning Requirements in the Environmental Impact Analysis Process (PREIAP)*. Additionally, this document creates AF/A3O's airspace review process as required by Title 32, Code of Federal Regulations, Part 989.28.

1.2. Scope. This instruction applies to each Major Command (MAJCOM) and Direct Reporting Units (DRUs) functioning as the USAF component of a unified command, the National Guard Bureau (NGB), the Air Force Reserve Command (AFRC), and subordinate units. DRUs are units that report directly to Headquarters Air Force (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 instruction.

1.2.1. For the purposes of this AFI, NGB refers to the ANG component and shall be treated as a MAJCOM.

1.2.2. Due to the distinctive structure of the NGB, some functions described in this AFI are delegated to the NGB IAW Title 32, CFR, Part 989.3 to serve as lead staff organization. In each case, close coordination with the HAF counterpart is required.

1.3. Special Activity Airspace. Military Airspace is generally established for National Defense, National Security and National Welfare. Special Activity Airspace (SAA) is the term often used to describe Military Airspace. For the purpose of this instruction, SAA is any airspace with defined dimensions within the National Airspace System (NAS) wherein limitations may be imposed upon aircraft operations, such as Restricted Areas, Prohibited Areas, Military Operations Areas (MOA), Air Traffic Control Assigned Airspace (ATCAA), and any other designated airspace areas. SAA consists of two common types of airspace: Special Use Airspace (SUA) and Airspace for Special Use (ASU).

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 Areas, Restricted Areas, Warning Areas, Alert Areas, Prohibited Areas, and National Security Areas (NSA). Controlled Firing Areas (CFA) are uncharted. With the exception of CFA, SUA is depicted on aeronautical charts. Attachment 1 contains more specific SUA definitions. Additional information on SUA may be found in the following publications: Title 14, Code of Federal Regulations (CFR) Part 73, *Special Use Airspace*; Federal Aviation Administration (FAA) Joint Order (JO) 7400.2, *Procedures for Handling Airspace Matters*; FAA JO 7400.8, *Special Use*

Airspace; FAA JO 7610.4, *Special Operations*; Flight Information Publications (FLIP): General Planning (Chapter 2), AP/1A, AP/2A, AP/3A, and AP/4A.

1.3.2. ASU is used to collectively identify non-SUA assets. Establishing certain types of ASU may not require coordination with the FAA or require the completion of a Test/Training Space Needs Statement (T/TSNS). ASU includes the following types of airspace: Aerial Refueling (AR) Tracks/Anchors, ATCAA, Low Altitude Tactical Navigation (LATN) areas, Temporary Flight Restrictions (TFR), Cruise Missile Routes, Orbit Areas, Local Flying Areas, Military Training Routes (MTR) (Instrument Routes [IR] and Visual Routes [VR]), and Slow Routes (SR). None are rulemaking actions and some (contained solely in military documents) do not require coordination with the FAA for establishment. Attachment 1 contains more specific ASU definitions. Additional information on ASU may be found in the FAA JO 7610.4, *Special Operations*, command or local military publications, and FLIP: General Planning, and AP/1B, *North and South America – Military Training Routes*.

1.4. Joint Use Airspace Policy (Military/Civilian). Military users should 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 when no longer required.

1.5. Waivers and Exemptions. A waiver is a temporary exception that normally includes a plan to alleviate the condition. The type of waiver determines the approval process, which may include coordination with MAJCOM/A3, the FAA and Civil Engineers Planning Division (AF/A7CI). Supersonic waiver information is located in Chapter 3 (Attachments 2 and 3 contain formats for waiver requests); 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.

1.6. MAJCOM Supplements. MAJCOMs may develop their own supplemental procedures to this instruction; however, they must ensure supplemented procedures are not less restrictive than those contained in the basic instruction. If supplemented, MAJCOMs must send a copy to Air Force Bases, Ranges and Airspace Division (AF/A3O-BA) for review and coordination prior to publication. **NOTE:** Unit level supplements are also authorized with MAJCOM approval.

Chapter 2

RESPONSIBILITIES

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

2.2. Office of the Assistant Secretary for Installations, Environmental & Logistics (SAF/IE). SAF/IE approves and signs (or designates signatory for) all Records of Decision (RoD) for Airspace actions. SAF/IEI also serves as the chair for the Strategic Basing-Executive Steering Group (SB-ESG) in accordance with (IAW) AFI 10-503, *Strategic Basing*.

2.3. Deputy Chief of Staff, Operations, Plans and Requirements (AF/A3/5). IAW HAF Mission Directive (MD) 1-54, *Deputy Chief of Staff, Operations, Plans, & Requirements*, AF/A3/5 is responsible for matters concerning ranges and airspace. The Bases, Ranges and Airspace Directorate (AF/A3O-B) is designated as the office of primary responsibility (OPR) for ranges and airspace. The Bases, Ranges and Airspace Division (AF/A3O-BA) is the focal point for USAF airspace and range policy and management.

2.4. Director of Operations (AF/A3O). IAW HAFMD 1-54, the AF/A3O is responsible for matters pertaining to ranges and airspace. The AF/A3O also serves as the co-chair for the Strategic Basing-Executive Steering Group (SB-ESG) on airspace matters.

2.5. SB-ESG. The SB-ESG uses the Air Force Strategic Basing Process (SBP) to provide guidance to ensure a deliberate, repeatable, defensible, standardized and transparent basing process is applied using criteria-based analysis and sound military judgment. This allows linking of mission and Combatant Commander's requirements to installation attributes to identify locations best suited to support any given mission. Any creation or modification to existing airspace is an attribute to the installation to support the mission and therefore, will be adjudicated by the SB-ESG. **NOTE:** The Strategic Airspace Action Process (SAAP) as described in Chapter 3 of this AFI is designed to complement the SBP.

2.5.1. SAAP uses the same format and membership of the SB-ESG as described in AFI 10-503, *Strategic Basing*, except the AF/A3O, Director of Operations, is added as a second vice-chair.

2.5.2. Subordinate to the SB-ESG is the O-6 level Airspace Request Review Panel (ARRP) which 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 the A3O adjudication, and airspace proposals prior to the SB-ESG briefing to the SecAF.

2.6. AF/A3O-B Responsibilities. AF/A3O-B shall:

2.6.1. Develop policy and establish guidance, oversight and advocate resource and solutions to encroachment issues for USAF ranges and airspace, AF Aviation Operations Energy, Next Generation Air Transportation System (NextGen), and integration of remotely piloted aircraft (RPA)/small unmanned aircraft systems (sUAS) into national and international airspace.

2.6.2. Serve as OPR for AFPD 13-2, *Air Traffic, Airfield, Airspace and Range Management*.

2.6.3. The Director, Bases, Ranges and Airspace Directorate is the Air Force co-chair of the National Airspace/Range Executive Council (NAREC) and Chairman of the ARRP.

2.7. AF/A3O-BA Responsibilities. AF/A3O-BA is the focal point for USAF airspace and range policy and management. The USAF manages airspace through several organizations, including MAJCOM airspace management offices, FAA/AJR-01 and FAA Air Traffic Organization (ATO) Service Area Air Force Representatives (AFREPs). AF/A3O-BA shall:

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

2.7.2. Co-chair Airspace and Range Councils (ARCs) with the NGB.

2.7.3. Support and implement policies, recommendations, and/or decisions of the Policy Board on Federal Aviation (PBFA) IAW DoD Directive 5030.19.

2.7.4. Provide USAF representation to the PBFA Airspace Subgroup.

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

2.7.6. Through coordination with Legislative Liaison, Office of the Secretary of the Air Force (SAF/LL) and the Deputy Assistant Secretary for Budget, Office of the Assistant Secretary of the Air Force (SAF/FMB), serve as the principal USAF conduit for Congressional engagement for issues involving military airspace and ranges. IAW paragraph 1.2.2, when the NGB is acting as the lead MAJCOM, National Guard Bureau Legislative Liaison (NGB/LL) will serve as the lead legislative liaison.

2.7.7. Provide updated progress of airspace actions to MAJCOMs each quarter.

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

2.7.9. Provide airspace policy representation to the SB-ESG or ARRP for airspace actions.

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

2.7.11. Provide functional oversight of the Airspace Management Course.

2.7.12. Ensure all airspace and range actions are coordinated with The Adjutants General (TAG) or Adjutant General of Air of affected states.

2.8. Air Force Representative (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/A3O-BA and are authorized to coordinate directly with their FAA counterparts to assist USAF units with airspace and air traffic control (ATC) projects and requirements. AFREPs have insight into the FAA position on airspace and air traffic control issues affecting the USAF and can assist units in resolution of a myriad of issues. See Attachment 4 for FAA service area boundaries and contact information for each of the AFREP offices. A sample AFREP appointment letter is provided at Attachment 5. AFREPs shall:

- 2.8.1. Coordinate, negotiate, and communicate USAF positions on airspace and ATC matters within established policy and guidelines.
- 2.8.2. 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.
- 2.8.3. Provide guidance and coordination to units within their respective service area boundaries in the creation of, and changes to, airspace.
- 2.8.4. Assist and advise during the development of ATC requirements and airspace proposals to satisfy MAJCOM mission needs.
- 2.8.5. Act as liaison officers to the FAA on matters at the headquarters and service area levels.
- 2.8.6. Coordinate with state and local governments as required to assist in resolution of civil/general aviation and USAF issues as required.
- 2.8.7. Assist and advise MAJCOMs with proposed or planned SUA and ASU actions.
- 2.8.8. Assist and advise commanders in developing, presenting, and coordinating airspace concepts and proposals for all SAA issues.
- 2.8.9. 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 unit is encouraged, to include preparatory review prior to the informal meeting.
- 2.8.10. Assist commanders, as necessary, in coordinating actions with the FAA regional frequency manager.
- 2.8.11. Assist in convening ARCs (see paragraph 2.12.).
- 2.8.12. Attend wing quarterly Airfield Operations Board (AOB) meetings when funding and operations tempo permit.
- 2.8.13. Keep AF/A3O-BA informed of FAA initiatives that may impact SUA or ASU.
- 2.8.14. Process, through appropriate channels, all alleged USAF pilot deviations and ATC facility deviations to include alleged spill outs, which do not qualify as a pilot deviation.
 - 2.8.14.1. When provided with a FAA form 8020-17 (preliminary notification of a pilot deviation), the AFREP will notify the flying unit and courtesy copy the appropriate MAJCOM A3 division (e.g. AETC/A3A).
 - 2.8.14.2. When provided with a FAA form 8020-18 (official notification of a pilot deviation), the AFREP will coordinate with the appropriate MAJCOM A3 division to investigate and provide an official response to the FAA. The MAJCOM will provide a formal response to the FAA, through the AFREP, NLT 90 days from the day the AFREP receives the FAA form 8020-18.
 - 2.8.14.3. 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.

- 2.8.14.3.1. If the FAA determines there is a need for aircrew names, a separate request must be provided to HQ AF through the AFREPS. At a minimum, the approval authority for the release of aircrew names will be the HQ USAF/A3O.
- 2.8.14.4. Maintain a log or tracking mechanism for all USAF pilot deviations and airspace spill outs for the last five years or more to determine trend information and forward that data to MAJCOMS for their action and situational awareness.
- 2.8.15. Advise units, through the appropriate MAJCOM, of SUA reviews to include local unit requirements. Assist FAA and local units as a required member of the SUA Review Team IAW FAA JO 7400.2.
- 2.8.16. Maintain liaison, as required, with appropriate headquarters and regional federal offices of the Department of Homeland Security (DHS), Department of the Interior (DoI), Department of Agriculture (DoA), etc.
- 2.8.17. Assist and advise commanders on terminal area ATC issues with adjacent and overlying FAA facilities.
- 2.8.18. Act as liaison officer between USAF units and FAA facilities.
- 2.8.19. Inform commanders at all levels of actions and inquiries that may affect their operations or public affairs (PA) initiatives.
- 2.8.20. 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.
- 2.8.21. Assist MAJCOM and unit safety offices in processing Hazardous Air Traffic Reports (HATR) and other safety issues, as required.
- 2.8.22. Advise FAA and FAA Service Areas of military capabilities and requirements during crisis management situations. Participate in FAA crisis management teams, as appropriate.
- 2.8.23. Assist USAF units and the FAA with Base Realignment and Closure (BRAC) and Quadrennial Defense Review issues.
- 2.8.24. Attend joint DoD/FAA review conferences IAW FAA JO 7610.4.
- 2.8.25. Coordinate requests for voice recordings and transcripts between the USAF and FAA.
- 2.8.26. Collect and assimilate data on airspace denials to identify trends that have potential adverse impact upon USAF mission readiness and training requirements IAW Chapter 5.
- 2.8.27. Suspend, collect, consolidate, review, and distribute SUA utilization reports per FAA JO 7400.2 and IAW Chapter 5.
- 2.8.28. Advise units on USAF and FAA remotely piloted aircraft (RPA) policies and procedures.
- 2.8.29. Review the Federal Register, National Flight Data Digest (NFDD) and FAA Administrator's Daily Bulletin at least weekly to track the status of USAF airspace actions and identify issues with potential to impact USAF operations.

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

2.8.31. Assist units, MAJCOMs, DRUs and higher headquarters with FAA coordination regarding changes to USAF aerodrome operations to include changes to operating hours, return of airspace to the FAA, permanent closure of runways, and/or activation of a permanently closed runway IAW AFI 13-204 Volume 3, *Airfield Operations Procedures and Programs*.

2.8.32. Assist units, MAJCOMs and DRUs with FAA coordination regarding entering or withdrawing Air Traffic Control and Landing Systems (ATCALs) from the NAS IAW AFI 13-204 Volume 3.

2.8.33. When notified by a MAJCOM that a unit has a change in ATC mission, assist coordinating the change with the FAA IAW AFI 13-204 Volume 3.

2.9. FAA USAF Liaison (AF/A3O-B) Responsibilities. The FAA USAF Liaison shall:

2.9.1. Represent USAF to the FAA for NAS ATC and airspace issues.

2.9.2. Oversee operations of AFREPs and the Air Force Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) Program Manager.

2.9.3. Provide administrative support for the Air Force portion of the DoD/Department of Transportation reimbursable program within the FAA.

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

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

2.10. MAJCOM Airspace Manager Responsibilities. The Airspace Manager for each MAJCOM that manages and utilizes military airspace shall:

2.10.1. Ensure airspace is used IAW policy and procedures outlined in Title 14, Code of Federal Regulations, Aeronautics and Space, (Federal Aviation Regulations (FARs)), FAA publications, pertinent USAF and DoD directives, host nation (HN) Aeronautical Information Publications (AIP), International Civil Aviation Organization (ICAO) rules and practices, unified and specified command directives, and letters of agreement for conducting operational activities.

2.10.2. Serve as the focal point for coordinating and processing command airspace requirements. This POC interacts with other MAJCOMs, AF/A3O-BA, unified or specified commands, other military department airspace related activities, HN teams (US Embassy Defense Attaché Office (USDAO)) or liaison office, where established, and with the AFREP for FAA matters.

2.10.3. Track the status of all concepts and formal proposals and provide briefings as required.

- 2.10.4. Assist units in the preparation of airspace T/TSNS. **NOTE:** See Chapters 3 and 6 (Continental United States (CONUS), Hawaii, Guam, Puerto Rico and Alaska only).
- 2.10.5. Validate subordinate unit justifications for new or modified airspace and ranges. Ensure these 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.
- 2.10.6. 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).
- 2.10.7. 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).
- 2.10.8. Ensure aeronautical proposals are complete prior to forwarding to the AFREPs. Environmental documentation should accompany all proposals or be mailed separately to join the airspace proposal at the FAA Service Area (CONUS, Hawaii, Guam, Puerto Rico and Alaska only).
- 2.10.9. Update the AF/A3O-BA Airspace Tracking spreadsheet with information on the progress of airspace actions.
- 2.10.10. Coordinate matters affecting airspace management with the service area AFREP. Solicit AFREP assistance in negotiating and coordinating military airspace proposals.
- 2.10.11. 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.
- 2.10.12. Ensure military airspace documentation required by AFI is accomplished by the subordinate units that have scheduling responsibility for SAA.
- 2.10.13. Ensure units file SUA utilization reports according to this AFI (Chapter 5) and FAA JO 7400.2 (does not apply in areas outside FAA jurisdiction).
- 2.10.14. Include an airspace management overview in MAJCOM, DRU or Numbered Air Force (NAF) orientation courses or programs for newly assigned wing, operations group, and flying squadron commanders.
- 2.10.15. Send information to the theater commander, AF/A3O-BA, and other component commanders when theater/host nation airspace policy differs from USAF policy. **NOTE:** HAF airspace policy does not override theater or host nation airspace policy.
- 2.10.16. Coordinate with the US 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.

2.10.17. Ensure airspace managers assist unit Training and Standardization/Evaluation offices in educating aircrew about operating IAW the DoD speed exemption to Title 14, Code of Federal Regulations, Part 91, section 91.117, Aircraft Speed (CONUS, Hawaii, Guam, Puerto Rico and Alaska only).

2.10.18. 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). Alleged pilot deviation packages for the ANG wings are handled by NGB/A3O.

2.10.19. Encourage unit airspace managers participate in Mid-Air Collision Avoidance (MACA) programs IAW AFI 91-202, *USAF Mishap Prevention Program*.

2.10.20. Review the Federal Register for airspace and air traffic actions that impact military flying operations.

2.10.21. Ensure Special Experience Identifiers (SEI) are awarded for both officer (OUL) and enlisted (350) personnel IAW 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/AFRC). **NOTE:** Airspace managers require 6 months of consecutive experience in airspace management and completion of the USAF Military Airspace Management course.

2.10.22. 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. 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. See Attachment 7 for recommended training program content (Not applicable to NGB/AFRC).

2.10.23. Ensure airspace managers and advise operations personnel, 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/A7CI. For specific information on the AICUZ program, see AFI 32-7063, *Air Installation Compatible Use Zone Program*.

2.11. AF NEPA Center (AFCEE/TDX) Responsibilities.

2.11.1. AFCEE/TDX acts as the MAJCOM Environmental Planning Function (EPF) and assists the proponent in meeting requisite EIAP requirements. (NGB/A7 assists the proponent in meeting EIAP requirements and has the EPF responsibility for NGB airspace actions.)

2.11.2. Proponents identify EIAP requirements to EPFs at installation level and/or AFCEE/TDX well in advance of required execution in accordance with the Program Objective Memorandum (POM) cycle. Requirements that are not identified and budgeted through the POM process are, by default, funded by the proponent organization.

2.11.3. Proponents will coordinate with AF/A3O-BA, AF/A7CIB, and AFCEE/TDX to determine modifications of the normal EIAP to protect classified information and define

procedures for specific classified actions, in furtherance of 32 CFR §989.26 (40 CFR 1507.3(c)).

2.12. Airspace/Range Councils (ARC). (US Air Forces in Europe N/A). The USAF and NGB co-sponsor and co-chair regional and national ARC meetings to ensure that all USAF offices involved in airspace and range operations have a common understanding of objectives and key issues. Because today's actions are closely scrutinized by numerous federal and state agencies as well as public and private organizations and special interest groups, the USAF must be prepared to address concerns raised at the local, regional, national and international level during the development of any range or airspace action. To better address these challenges and ensure continued access to test and training space, the USAF has established preliminary review processes and a coordination forum in the form of ARCs.

2.12.1. The use, creation, modification, or transfer of military airspace and ranges has the potential to become controversial. The councils provide for a thorough review of airspace and range issues by interdisciplinary teams at all management levels. The council meetings are open to all military services, land management agencies, and other interested or concerned parties by invitation only. ARCs shall:

2.12.1.1. Foster interagency involvement and cooperation at the appropriate level and the appropriate time in the airspace process.

2.12.1.2. Advise units, MAJCOMs, and HAF on airspace and range issues, and provide a mechanism for cross flow of information and lessons learned. Regional councils are aligned geographically. Council meetings may be hosted by military units, MAJCOMs, AFREPs, or other agencies as appropriate and approved by the regional co-chairs.

2.12.1.3. Open action items from the ARCs will be reviewed quarterly by the regional and national co-chairs. AF/A3O-BA is responsible for coordinating the ARCs. NGB/A3A is responsible for maintaining the status of all open action items. The national co-chairs are the approval authority to close action items.

2.12.2. Regional ARCs. Regional ARCs are comprised of all units within regionally divided areas (figure 2.1) and are designed to improve communication, coordination and resolution of airspace issues. The council's co-chairs include one HAF senior active duty officer or Department of the Air Force (DAF) civilian and one senior ANG officer. A senior officer (O-6 or civilian equivalent and above) responsible for airspace and range management oversight at the unit, MAJCOM, and/or National Guard State Headquarters level are preferred co-chairs. Co-chairs may be elected by the council, or appointed by AF/A3O-B or the Deputy Director of the Air National Guard. Meetings occur annually and include a DoD Session and a Management Session. Units with minimal range or airspace management responsibility may, at wing commander discretion, elect not to participate in the councils.

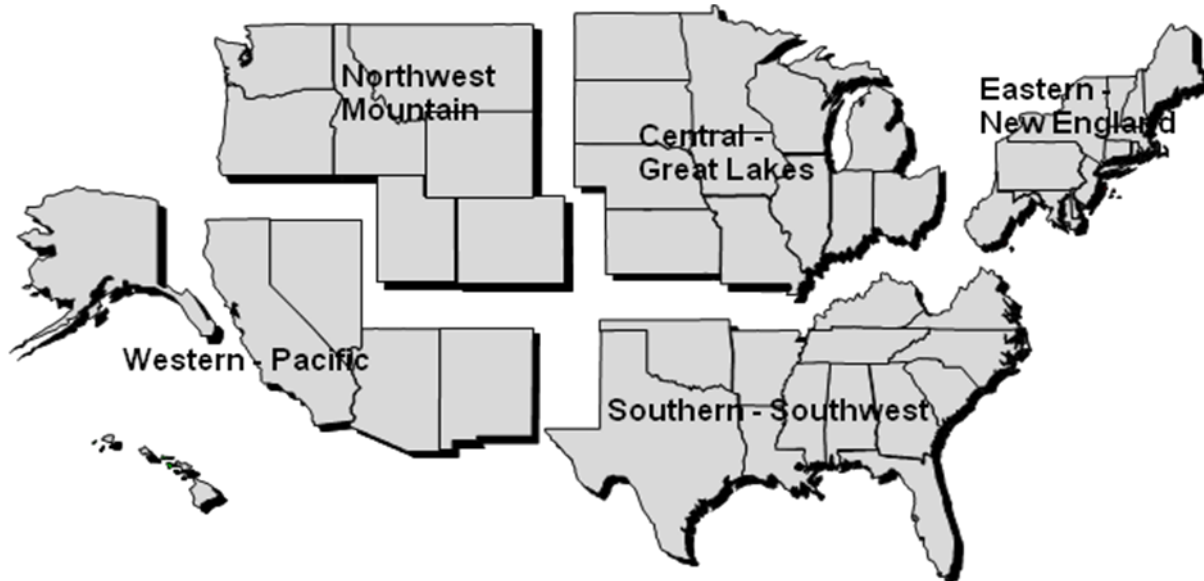


Figure 2.1. Regional ARC Alignment (*Alaska aligns with Western-Pacific)

2.12.2.1. The DoD session is attended by DoD stakeholders only. The purpose of the DoD session is to identify problems, issues, and shortfalls in training space or its attributes, present concepts to address shortfalls or meet new test or training requirements, and to develop a consistent communications approach to address development/resolution issues with the FAA and other aviation or environmental agencies. Minimum DoD membership includes the following: service area AFREP, MAJCOM representatives, Operations Group commanders (or designees), and unit airspace managers. The regional co-chair shall be responsible for inviting other service representatives in the region. Units will coordinate presentations on concepts for new or modified airspace through their MAJCOM Airspace/Range Management Office.

2.12.2.2. The management session provides a forum for dialogue between the DoD attendees and other organizations with either an aeronautical or environmental stake in military flight operations. Non-DoD participants may include the FAA Service Area representatives, ARTCC Airspace and Procedures and other representatives as necessary, National Park Service (NPS), Bureau of Land Management (BLM), Forest Service (USFS), Fish and Wildlife Service (USFWS), Bureau of Indian Affairs (BIA), state aviation officials, and other bodies/groups focused on national aviation issues. The session may include a short overview of military flight operations, training requirements, proposed airspace concepts and actions, areas commonly overflown, and problems or issues. The management session also provides the opportunity for other agencies to present aeronautical or environmental issues. Agendas should include sufficient time for breakout meetings to facilitate resolution of issues.

2.12.3. Regional Executive ARCs. Aligned with the FAA Service Areas, the purpose of the Executive Session is to provide oversight of issues identified at regional ARCs and executive level interface with senior FAA Service Area personnel. The convening of the Regional Executive ARCs may be waived by the NAREC co-chairs.

2.12.3.1. The Executive Session should provide strategic guidance for development of aerospace operational resources to support Air Force requirements. Participants should

formulate courses of action that will focus on resolution of long-term regional goals and national objectives.

2.12.3.2. Attendance is limited to the co-chairs, MAJCOM representatives, AFREPs and other MILREPs, and senior ANG representatives from each state in the region. The strategic interests of individual units will be represented by their MAJCOM and/or their ANG state representative. Attendance by units with specific issues requiring Executive ARC visibility is approved by the MAJCOM and co-chair. Non-DoD participants may be invited at the discretion of the co-chairs. Co-chairs are responsible for inviting representatives from other military agencies.

2.12.4. The National Airspace and Ranges Executive Council convenes annually to provide a forum for senior USAF leaders to review on-going, pending and proposed range and airspace actions from a national perspective and provide feedback to regional councils, MAJCOM, and HAF. The NAREC meeting also serves as a forum for senior USAF leaders to focus on the national strategic vision for airspace and ranges and keep members informed of national-level events and trends affecting airspace and range actions. NAREC membership includes the chair of each regional council and the senior officers charged with airspace and range responsibilities from the MAJCOM and HAF. The NAREC is co-chaired by AF/A3O (or designated representative) and an ANG general officer. All AFREPs and MAJCOM airspace and range managers and Range/Airspace Division Chiefs should attend this meeting. Senior representatives from other government agencies and services may be invited by the regional co-chair and approved by the national co-chairs as required.

2.12.5. NAREC/Regional Airspace and Range Council Minutes. Minutes from the NAREC and Regional ARCs will be distributed to all participants except those of the DoD only sessions which will be limited distribution.

Chapter 3

PROCESSING AIRSPACE ACTIONS

3.1. Strategic Airspace Action Process (SAAP). Strategic Airspace Action Process The SAAP is the process through which the AF/A3O reviews airspace actions IAW Title 32, CFR Part 989.28. In order to build public awareness and ensure the accuracy of information disseminated, the USAF encourages public access to the unprecedented amount of information on airspace actions. Airspace actions often occur across multiple boundaries and coordination must be accomplished with Congressional offices, the FAA, state executive and legislative bodies, national interests, MAJCOMs and TAGs. There could be competing requirements from different MAJCOMs that have unintended adverse impacts or significant resistance from external agencies. Applying a DoD-Wide, strategic approach to the development of comprehensive airspace actions can improve overall understanding of the intent and mission requirements, reducing overall completion time. As described in paragraph 2.12, the ARC can be a venue for coordinating actions between MAJCOMs, soliciting TAG involvement, and performing a DoD-Wide review of airspace proposals. The SAAP is conducted in four phases: Concept Phase, in which the Test/Training Space Needs Statement (T/TSNS) is proposed and developed; Proposal Phase, in which the proposal (normally expressed as chapters 1 and 2 of a draft Description of Proposed Action and Alternatives (DOPAA) as described in *Planning Requirements in the Environmental Impact Analysis Process (PREIAP)*) is developed and internal scoping activity managed by the proponent and the EPF; Engagement Planning Phase, where the engagement plan is prepared; and the Decision Phase, which is directed under the National Environmental Policy Act of 1969 as promulgated in Title 32, CFR, Part 989.

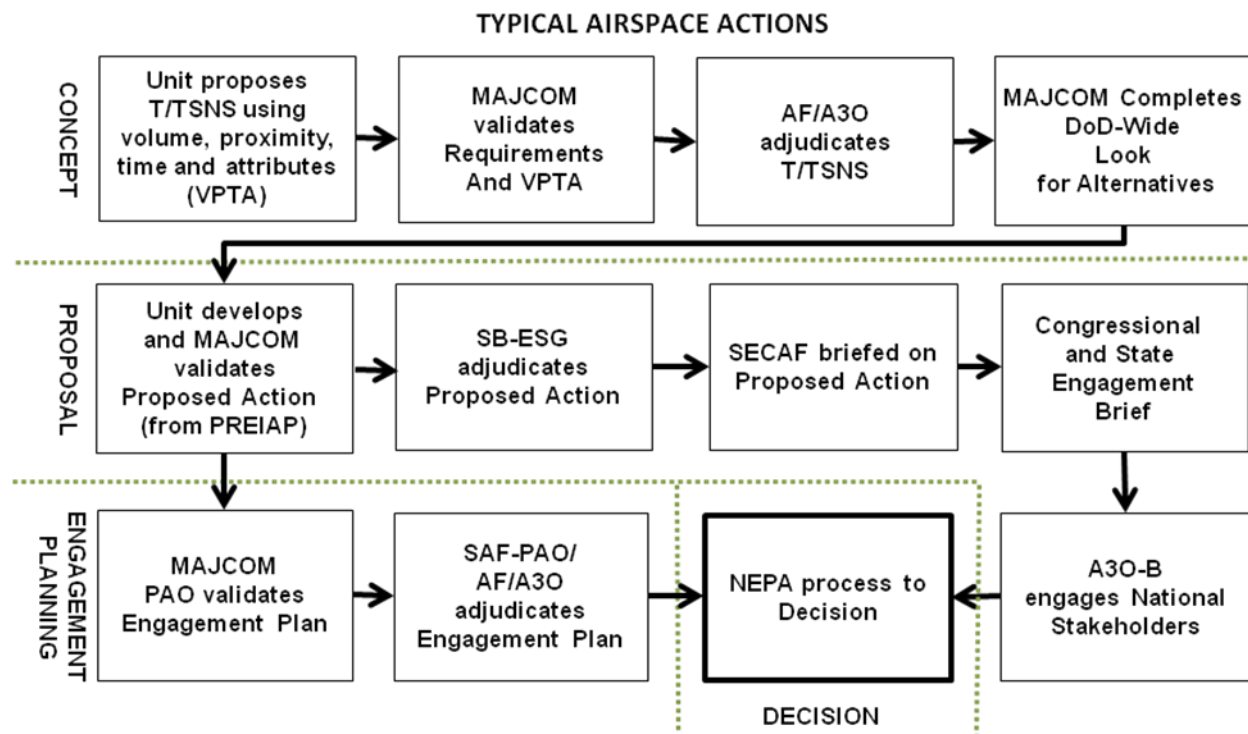


Figure 3.1. Strategic Airspace Action Process

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 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, 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 SAA, as defined in paragraph 1.3., except those purely administrative in nature or not approved and published by the FAA, will be developed by the unit, validated by the MAJCOM, evaluated by HAF (including the AFREPs) and adjudicated by AF/A3O (CONUS, Hawaii, Guam, Puerto Rico and Alaska only). Coordination should include the MAJCOM Civil Engineer office responsible for Environment Analysis, Legal, and PA offices. Modifications to SAA that do not alter 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) changes, etc.) will be reviewed by the unit and MAJCOM, but does not require a T/TSNS.

3.1.1.2. Development of the T/TSNS will vary depending upon the level of initiation and scope of the need. AFCEE/TDX can support development of the T/TSNS as NEPA subject matter expertise as part of an interdisciplinary PREIAP team. Units may initiate their own T/TSNS for requirements or MAJCOM-directed unit mission change. For example, an F-16 unit may be directed to change their mission from air defense to general purpose, or a fighter unit may be equipped with new munitions with capabilities and tactics requiring different operating space characteristics. A MAJCOM may have the need to implement significant changes in training for a new weapon system. New and ongoing T/TSNSs will be addressed at all affected ARCs. Unit or MAJCOM procedures apply as follows:

3.1.1.2.1. Unit T/TSNS is initially approved by the wing commander (or equivalent).

3.1.1.2.2. MAJCOM T/TSNSs are initiated by a MAJCOM and would be appropriate when a new weapons system requires a significant change in operating space configuration.

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. See Attachment 6 for an example of a T/TSNS. The general format for a T/TSNS is as follows:

3.1.1.3.1. Title. The title of the T/TSNS shall consist of a concise description of the concept and be given a unique alphanumeric designation utilizing the following format: MAJCOM, 2-digit year, 3-digit sequence number (assigned by MAJCOM), unit or proponent designator, and the title of the initiative (e.g., ACC-12-001: Sample AFB, Operating Airspace for F-45 Bed down). 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 that 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. 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. To ensure proponents remain actively involved in the development of proposals and alternatives, it is recommended that units do not use contractors for this purpose. If a T/TSNS affects more than one MAJCOM, then one MAJCOM will be designated the proponent MAJCOM. Close coordination may be required at unit, base and MAJCOM level 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 coordination with MAJCOM B's A3 directorate.

3.1.1.5. Upon completion of the MAJCOM validation, the T/TSNS will be forwarded to A3O-BA to begin the A3O's adjudication. This adjudication process has three steps; a review by the other MAJCOMs, TAGs, Regional ARC and AFREPs; followed by a review by the ARRP; and lastly a final adjudication by the A3O. This adjudication will primarily consider the validity and defensibility of the requirements. 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 other appropriate MAJCOMs, TAGs and Regional ARC for their coordination. 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 chaired by the AF/A3O-B and its members will include, at a minimum, Operations Force Management Division (AF/A3O-A), Planning Division Office of the Air Force Civil Engineer (AF/A7CI), the AF NEPA Center (AFCEE/TDX), Strategic Basing office, Directorate of Programs (AF/A8PB), NGB Strategy and Forces Structure Division (NGB/A8X), the AF General Counsel Environment and Installations Law office (SAF/GCN), Deputy Assistant Secretary of the Air Force for Installations (SAF/IEI), Deputy Assistant Secretary of the Air Force for Energy, Environment, Safety and Occupational Health (SAF/IEE), Air Force Public Affairs Current Operations (SAF/PAO), and Air Force International Affairs (SAF/IA) (if applicable).

3.1.1.5.3. After a successful review by the MAJCOMs, TAGs, Regional ARC, AFREPs and ARRP, the T/TSNS will be forwarded to the AF/A3O for final adjudication.

3.1.1.6. Initial HAF review shall be completed within 60 calendar days of AF/A3O-BA receipt. Final T/TSNS adjudication from AF/A3O may exceed the 60 calendar days, in which case the MAJCOM will be notified by AF/A3O-BA. 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 MAJCOM completion of the DoD-Wide Look, completed by the MAJCOM upon final adjudication by the AF/A3O. This step normally runs concurrent with the development of the concept and will help determine the preferred alternative and identify additional reasonable alternatives for consideration during the proposal phase. Early in the concept phase, units/MAJCOMs are encouraged to begin informal discussions with interagency and aviation professional groups. During this step, the concept is reviewed by the MAJCOM to determine if there are alternative solutions to satisfy the requirements of the proposal within the MAJCOM or across the AF. AF/A3O-BA will assist as requested during these discussions. These informal discussions can continue through the development of the proposal.

3.1.2. Proposal Phase. With final adjudication from AF/A3O, 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 per 32 CFR 989 to initiate the PREIAP with the Environmental Planning Function (EPF) (installation and/or AF NEPA Center) to produce the Draft DOPAA and other data. This satisfies CEQ 1501.2 which states that agencies should apply NEPA early in the process. Refer to the PREIAP Guidance for further information. 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. Failure to do so prior to submission of the proposal may delay processing.

3.1.2.3. After completing PREIAP, the proponent MAJCOM submits their proposal to the SB-ESG through AF/A3O-BA. AF/A3O-BA will review the proposal and submit the proposal to the ARRP for review and SB-ESG for its adjudication.

3.1.2.4. The weekly SB-ESG is a high-level body which guides the USAF basing process. This group will review the proposal and will adjudicate and refer the proposal to the SecAF. The proposal is then briefed to the SecAF as part of the monthly Basing Update before it moves forward to governmental and public engagement in the decision phase as required IAW 32 CFR Part 989, *Environmental Impact Analysis Process*. Details on the SB-ESG can be found in AFI 10-503, *Strategic Basing*.

3.1.3. Engagement Planning Phase. 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 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/A3O-BA 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. In coordination with Public Affairs, public engagement

should take place in accordance with the National Environmental Policy Act of 1969 as promulgated in Title 32, Code of Federal Regulations, Part 989. Attachment 8 provides a matrix of required and suggested communication activities based on the type of NEPA action being accomplished.

3.1.4. Decision Phase. Airspace and range actions are subject to environmental analysis in order to comply with the National Environmental Policy Act of 1969 as promulgated in Title 32, Code of Federal Regulations, Part 989. MAJCOMs develop concepts (including the Aeronautical Proposal) that concern airspace under FAA jurisdiction according to the procedures outlined in FAA JO 7400.2 and FAA 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. Once the concept is recommended by the SecAF IAW paragraph 3.1.2, MAJCOMs submit USAF airspace actions (both environmental analysis and aeronautical proposals) to the FAA through the AFREP.

3.1.4.1. The Decision Phase is concluded when a decision is reached on the proposed airspace action, and the decision is properly coordinated, documented and announced in accordance with the Environmental Impact Analysis Process requirements in 32 CFR 989.

3.1.4.2. Airspace proposals for temporary exercise airspace, provisions for short-term special missions outside of established airspace, or similar actions should be reviewed by the MAJCOM with an information copy routed to the AFREP and AF/A3O-BA.

3.2. Processing a National Security Area (NSA) 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. 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.

3.2.1. 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. AFREPs will not take action on NSA proposals until formal coordination has been requested by AF/A3O-BA.

3.2.2. Once approved by the MAJCOM, forward the NSA proposal to AF/A3O-BA.

3.2.3. AF/A3O-BA will coordinate the proposal with SAF/GCN and other HAF agencies as appropriate. Once approved, AF/A3O-BA will forward the proposal to the AFREP for coordination with the FAA.

3.2.4. The USAF recognizes the potential vulnerability of certain facilities to threats from the air. However, concerns about the affect 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.

3.3. Letters of Agreement (LOA). Develop actions that concern airspace under FAA jurisdiction according to the procedures outlined in FAA JOs 7400.2 and 7610.4. Additional information on creating LOAs with the FAA can be found in FAA JO 7210.3, *Facility Operation and Administration* and AFI 13-204 Volume 3.

3.4. Supersonic Operations (CONUS, Hawaii, Guam, Puerto Rico and Alaska only).

3.4.1. When operationally necessary, conduct planned supersonic operations IAW current, approved EIAP and only under the following conditions:

3.4.1.1. Over open water areas, above 10,000 feet MSL and more than 15 NM from any land area.

3.4.1.2. Over land areas, above 30,000 feet MSL.

3.4.1.3. Avoid areas of population concentration and “Avoidance Locations,” as well as HAF specified critical areas listed in FLIP AP/1B.

3.4.2. 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). 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). These materials must accompany the waiver request to AF/A3O-BA for HAF review, coordination (AF/A7CI at a minimum) and approval. Waivers will be valid for a period not to exceed three years.

3.4.2.1. Submit requests for supersonic tests/exercises of short duration (30 days or less) through MAJCOM/A3 channels to AF/A3O-BA for approval (with AF/A7CI concurrence) at least 60 days prior to mission requirement date. Accompany waiver requests with the appropriate level of environmental analysis (Environmental Assessment, unsigned Finding of No Significant Impact, or draft Environmental Impact Statement).

3.4.2.2. For recurring tests/exercises or tests/exercises of duration greater than 30 days, submit requests IAW paragraph 3.4.2. not later than 60 days prior to the mission start date.

3.4.3. 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.

3.4.3.1. Promptly advise AF/A3O-BA 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).

3.4.3.2. If the waiver renewal is not completed prior to the 3 year expiration date, the controlling MAJCOM/A3 (with environmental planning function 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.

3.4.4. MAJCOM airspace management offices shall notify AF/A3O-BA of MAJCOM/A3 waiver renewals or temporary continuation of existing supersonic operations within 30 days and maintain supporting documents for a minimum of 10 years.

3.4.5. Sonic Boom Events. The characteristics of sonic booms are such that damage to property may result. The USAF adjudicates sonic boom claims caused by Air Force, AFRC, 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. 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. This data is not required for supersonic activity that is part of combat or combat support missions.

3.4.5.1. Acknowledgment of unauthorized supersonic activity will be made to the originating or scheduling activity of the airspace. 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.

3.4.5.2. 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.

3.5. SUA Review Teams. The FAA SUA Review Program provides for a continuing review of all airspace allocations IAW FAA 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.

3.5.1. 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.

3.5.2. 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)). 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.

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

3.6. 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. Take the following steps to return unneeded airspace to the NAS:

3.6.1. Originating activity notifies the MAJCOM of intention to return airspace.

3.6.2. 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.

3.6.3. If no requirement is identified within the MAJCOM, the MAJCOM will notify AF/A3O-BA, who will solicit input from other MAJCOMs.

3.6.4. If AF/A3O-BA determines there is no USAF requirement, AF/A3O-BA will notify the Airspace 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/A3O-BA will initiate action through FAA/AJR-01 to return the airspace to the NAS. FAA/AJR-01 will maintain a listing of airspace returned 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 989. Coordinate all community relations issues with the wing/installation or MAJCOM PA office, and the Environmental Planning Function office for new proposed airspace actions.

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 the FAA, NPS, BLM, USFS, USFWS, BIA, state aviation officials, and other bodies/groups focused on national aviation issues. Active participation in the ARCs is an essential part of an outreach program.

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 AOB at least annually. AOB minutes serve as documentation of the annual evaluation.

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 Title 32, Code of Federal Regulations, 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 our operations may not impact our 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 should:

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

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. Use aids such as charts, photographs, and film footage for visual clarification. Send the letter and appropriate visual materials through PA for release to appropriate community news media. Send this information to each interested stakeholder.

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. Provide additional information for follow-up news releases as required.

4.1.4.4. Ensure community and news media inquiries on changes to operations areas or routes are answered promptly.

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. This serves to promote better understanding of the USAF's flying mission and prepare Congressional offices to address public comments.

4.1.5.1. Timely and accurate response to Congressional inquiries is paramount. HQ OI 33-3, *Correspondence Preparation, Control, and Tracking*, Table 6.1, states that tasks from Members of Congress to SecAF/CSAF, have a suspense of 10 calendar days. There should be no expectation of an extension to the 10 day response requirement unless there are significant issues justifying additional time. AF/A3O-BA will be the A3/5 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). 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 Adjutant Generals 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. Coordinate official visits to the FAA through FAA/AJR-01. Coordinate all official visits to FAA service area offices through the applicable AFREP. 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 instruction 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 United States 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 Sections 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. Waivers to 14 CFR, Federal Aviation Regulations, are processed by forwarding four copies of FAA Form 7711-2, *Application for Certificate of Waiver or Authorization*, (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.

4.2.4. 14 CFR Part 91.117 covers aircraft speed. Recognizing that some DoD aircraft performance requirements exceed 250 knots, the FAA issued an exemption to 14 CFR Part 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 JO 7610.4.

4.2.5. 14 CFR Part 91.119 states minimum safe altitudes. Recognizing there is a requirement to train below these altitudes, the FAA issued an exemption to 14 CFR to permit Department of Defense to the extent necessary to conduct all-weather low-altitude route operations.

4.3. International, Foreign National Operations 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/A3O-BA oversees international and foreign operations and coordinates with MAJCOMs as applicable.

4.3.1. Host nation laws, regulations, and procedures are detailed in AIP, ICAO Rules and Practices, or locally published directives. Non-conflicting USAF and DoD directives 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/A3O-BA 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 AIP, non-conflicting applications of USAF or DoD directives, and special LOAs for

strategic, tactical readiness, or training operations. See FLIP and DoD Foreign Clearance Guide.

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 to ensure sufficient safety mitigations are in place to meet a “See and Avoid” capability as required by Title 14 CFR §91.113 (b). FAAJO 7610.4 describes the COA application process.

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 before beginning the COA application and to request access to the FAA on-line application web site. While informal discussions with the FAA may be beneficial and lead to expedited COA processing, units will not formally contact the FAA directly. MAJCOMs must coordinate all sUAS/RPA COA requests through the lead MAJCOM. The USAF has designated lead MAJCOMs for sUAS/RPA COA submissions:

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/A3A is the primary POC for integration and COA issues. ACC will establish policy and procedures to support lead and user command responsibilities, IAW AFPD 11-2, *Aircraft Rules and Procedures*.

4.4.1.2. AFSOC is the lead MAJCOM for all Group 1 through 3 sUAS operations per AFPD 10-9. AFSOC/A3OU is the primary POC for integration and COA issues. AFSOC will establish policy and procedures to support lead and user command responsibilities IAW AFPD 11-5, *Small Unmanned Aircraft Systems (SUAS) Rules, Procedures, and Service*.

4.4.2. COA Reporting Requirements: Monthly operations reports are required to be submitted to the FAA via COA Online. RPA units (Groups 4 and 5) will track and report operational data requested directly to the FAA via COA Online. sUAS units (Groups 1 through 3) will submit their operational data to AFSOC/A3OU via email (AFSOC.A3OU.WF@Hurlburt.AF.Mil). Reports will be submitted no later than 5 working days after the end of the reporting period. Lead MAJCOM offices (ACC/A3AA and AFSOC/A3OU) will develop a process to ensure reports are submitted to the FAA no later than 7 working days after the end of the reporting period.

4.4.3. Accident and Incident Reporting: Accident/incident data will be reported through the standard USAF safety process. AF/A3O-BA, in conjunction with the USAF Safety Center, will review the data and share appropriate data with the FAA. Units will not report accident/incident data directly to the FAA.

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).

4.6. Center Scheduling Enterprise (CSE). CSE is the Air Force wide web-based tool for the scheduling, management and recording the utilization of airspace and ranges. All Air Force units shall manage, schedule and report the utilization of airspace in CSE (SUA except Alert Areas).

4.7. Military Airspace Data Entry (MADE). Use of MADE streamlines the process for scheduling of SUA between Air Force units and the FAA. All USAF units shall utilize MADE for scheduling SUA. Inherent in CSE functionality is the ability to transmit SUA schedules directly to MADE. Use of this functionality in CSE satisfies the requirement to use MADE.

Chapter 5

AIRSPACE REPORTS

5.1. 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.

5.2. Airspace Denial Report. Each USAF using agency shall maintain FAA denial information in CSE. Until so equipped and trained, airspace denial reports will be submitted IAW Attachment 10. Include both denials of airspace and restrictions on availability of military airspace. MAJCOMs may stipulate other reporting requirements.

5.3. Annual Restricted Area and Military Operations Area (MOA) Utilization Reports. CSE has the capability to generate the Annual Reports per FAA JO 7400.2 and will be used to submit these reports for all US States (including territories and possessions). Once CSE is in use at a location, the development of the Annual Reports is not required covering that period forward. Reports for the period of time prior to CSE implementation will be submitted as follows:

5.3.1. Each USAF scheduling agency must submit a Restricted Area Utilization Report NLT 1 January each year, covering the period from 1 October through 30 September which was not recorded in CSE. Prepare reports according to FAA JO 7400.2. Submit these reports for all US (including territories and possessions) restricted areas.

5.3.1.1. Send the restricted area utilization report through the MAJCOM to the AFREP. Assign the Interagency Report Control Number (IRCN) 1412-DOT-AN.

5.3.1.2. ANG units report directly through their State Adjutant General to the regional AFREP and send an information copy to NGB/A3A.

5.3.1.3. The AFREP will send one copy to the Director of Operations in the FAA service area having jurisdiction over the airspace being reported; one copy to the Director of System Operations Airspace and AIM, Federal Aviation Administration, 800 Independence Avenue, SW, Room 400E, Washington, DC 20591; and one copy to AF/A3O-BA, 112 Luke Ave Suite 340, Joint Base Anacostia-Bolling, DC 20032.

5.3.2. Each USAF scheduling agency must submit a MOA utilization report NLT 1 January each year covering the period from 1 October through 30 September which was not recorded in CSE. Prepare reports according to FAA JO 7400.2. Submit these reports for all US (including territories and possessions) MOAs.

5.3.2.1. Send this report through MAJCOM to the AFREP. Assign the IRCN 1412-DOT-AN.

5.3.2.2. ANG units must report directly through their State Adjutant General to the regional AFREP and send an info copy to NGB/A3A.

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5.4. Release of SUA/ASU Utilization Data. Although the USAF does not release detailed information to the public, generic data (i.e., we flew XX sorties on XX route, MOA, etc., during the month of _____) is an acceptable response to inquiries requesting information on SUA/ASU utilization. More detailed data should be considered For Official Use Only.

5.5. Military Training Route (MTR) Evaluations. MTR evaluations consist of both a route review and annual flight evaluations. Units with scheduling authority for an MTR will conduct and document both evaluations for all MTRs 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 flight evaluation. Failure to complete them in the prescribed time limits requires closing the route/segment, unless waived by the MAJCOM (or NAF when delegated by the MAJCOM). All MTRs shall be surveyed across their entire route width and length and aircrew route briefing guides updated to reflect new areas of concern. The SUA/MTR Review, Attachment 9, contains additional information required when reviewing MTRs.

5.5.1. Route reviews should 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. Route reviews should annotate the following:

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

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

5.5.1.3. 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.

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

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

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

5.5.1.7. TFRs established by FAA NOTAMs/Defense Internet NOTAM Service (DINS) (i.e., DoI environmentally sensitive animal breeding areas or parachute jumping areas).

5.5.1.8. Other potential flight safety hazards.

5.5.1.9. Verify the accuracy of aircrew route briefings and ensure MTR 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.

5.5.1.10. Wing/base civil engineering environmental office shall review the route for environmentally sensitive areas.

5.5.2. 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.). 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).

5.5.2.1. Unless waived by the MAJCOM, failure to meet the annual suspense shall preclude the use of MTRs until evaluation requirements are met.

5.5.2.2. Evaluations should be conducted at low airspeeds to allow more time for observation. Evaluation aircraft should be either conventional aircraft capable of low airspeeds or helicopters. The evaluation should be conducted at the slowest operational airspeed consistent with the type of aircraft normally flying the route. Use of Civil Air Patrol, aero club, or contract/charter is acceptable, but not required.

5.5.2.3. 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. If possible, the airspace manager should act as a pilot or as an observer on as many evaluation flights as possible. Commanders are encouraged that Non-Rated Airspace Managers are given unrestricted Mission Essential Ground Personnel status as a requirement to accomplish this route evaluation program.

5.5.2.4. 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.

5.5.2.5. The scheduling activity, in coordination with the airspace manager, must develop an MTR survey schedule. 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.

5.5.2.6. Routes less than 4 NM wide may require two passes on each side of the centerline. Routes greater than 4 NM wide may require additional passes to complete an adequate evaluation. Route centerlines are established for charting and route width measurement purposes only and may not require a direct pass.

5.5.2.7. All users must 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 must

consider the impact of foliage, haze, clouds, fog contrast (light), airspeed/ground speed, terrain, snow, and task saturation.

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

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

5.5.2.8.2. Accuracy and completeness of the aircrew route briefing.

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

5.5.2.8.4. Identify obstacles not listed in the CHUM that pose a hazard.

5.5.2.8.5. 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.

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

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

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

5.5.2.8.9. Environmentally sensitive areas not previously identified.

5.5.2.8.10. Possible interference to night vision goggle operations.

5.5.2.8.11. Other potential flight safety hazards.

5.5.2.9. 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.

5.5.3. Route evaluations are intended as ongoing operational checks of how a specific route is mission planned, entered, flown, and exited during day-to-day operations. Route evaluations are used to document uncharted or undocumented obstacles, environmentally sensitive areas, and other potential flight safety hazards, to include planning deficiencies and potential flight conflicts with other routes, Class B, C, and D airspace, and air traffic service procedures. Data gathered during route evaluations is used to recommend changes to USAF policy and procedures and to update in-flight guides, FLIP, and other pertinent publications. Airspace managers should work with route schedulers and users to develop local evaluation methods to facilitate effective route evaluation by users and document follow-up and corrective action taken to alleviate flight safety hazards identified during evaluations.

5.5.4. 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. An assessment of the hazard must be conducted prior to closing or reopening the route or route segment. Ensure corrective actions are documented.

5.5.4.1. Aircrews report uncharted obstacles on MTRs to the scheduling agency/airspace manager as soon as possible after landing. 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.

5.5.4.2. Units shall remove all references to charted obstacles from the route Special Operating Procedures in FLIP AP/1B. Include uncharted obstacles in the aircrew route briefing guides.

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

5.6. FLIP AP/1B, Area Planning, Military Training Routes (North and South America). 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. Airspace information is also contained in FAA JO 7400.8. Units shall ensure the accuracy and consistency of their entries in both FLIP and FAA JO 7400.8 documents. Units shall include the following in Special Operating Procedures or FLIP Remarks:

5.6.1. 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.

5.6.2. Unpublished/uncharted obstruction data pending publishing/charting.

5.6.3. Route deconfliction procedures.

5.6.4. Possible bird attractant areas and migratory routes.

5.6.5. Noise and low-level flight sensitive areas.

5.6.6. Uncharted airports.

5.6.7. Other potential flight safety hazards.

Chapter 6

DEVELOPMENT AND OBSTRUCTION EVALUATION

6.1. General. The purpose of the Development and Obstruction evaluation is to identify and evaluate projects which may adversely affect operations associated with military airfields, ranges, and airspace. This process includes both formal OE/AAA requests (Attachments 11-14) submitted by the FAA and similar requests received from other agencies such as BLM. The program described in this chapter applies only to projects in CONUS, Alaska, Hawaii, Guam and Puerto Rico. Successful execution depends on unity of effort at all levels.

6.2. Responsibilities.

6.2.1. AF/A3O-BA. Develops overall policy and procedures for USAF implementation of the evaluation program. Assists MAJCOMs with development and submission of impact assessments to Headquarters-level review committees. Oversees and manages the activities of the OE/AAA Program Manager and Specialists. Provides operational expertise for the HAF Encroachment Management Working Group (EMWG).

6.2.2. OE/AAA Program Manager. Oversees daily operations and training for the OE/AAA program. Interfaces with other DoD services and FAA Obstruction Evaluation Group (OEG) personnel. Ensures modifications and enhancements to DoD modules of the FAA OE/AAA system are tested prior to implementation.

6.2.3. OE/AAA Specialist. Distributes Obstruction Evaluations/Landing Area proposals affecting military airspace to the applicable airspace manager, MAJCOM and unit Terminal Procedures (TERPS) specialists consistent with current DoD and AF procedures.

6.2.4. MAJCOM. Responds to OE/AAA taskings on behalf of the unit if the unit airspace manager/TERPS specialist is unable to do so. Reviews unit impact assessments for adequacy and completeness. Presents and advocates for impact assessments at Headquarters-level review committees.

6.2.5. Unit Airspace Manager. Evaluates proposals and determines the technical and operational impacts on military operations. When applicable, ensure TERPS and other evaluations are completed and considered in the operational impacts evaluation. Responds, in writing, to proposed construction or landing area proposals in accordance with the procedures defined in this chapter.

6.2.6. AF/FAA. Evaluates proposals for technical impact to AF Navigational Aids (NAVAIDS) and terminal radars.

6.3. Processing Evaluations.

6.3.1. FAA OE/AAA Requests: In accordance with section 358 of the 2011 National Defense Authorization Act (Public Law 111-383), OE/AAA requests from the FAA will be coordinated by the DoD Siting Clearinghouse. The Clearinghouse will distribute the requests through individual service channels to the affected airspace managers. Unit responses will be submitted through the MAJCOM to the Clearinghouse. Cases that present major impacts to operations require additional coordination and approval at the HAF, as described in paragraph 6.5. IAW Public Law 111-383, DoD has 30 days to provide a preliminary

response to FAA OE/AAA requests. AF personnel at all levels shall expedite reviews/processing to ensure DoD meets the required suspense. The tasking will have a shorter deadline, as the 30 day timeline includes coordination with the Office of the Secretary of Defense.

6.3.2. Non-FAA OE/AAA Requests: Other agencies (e.g., BLM) may request the DoD opinion on proposed projects outside the formal FAA process. These requests may be received at any level, including the individual unit. Units and MAJCOMs receiving direct requests from non-DoD entities shall ensure the request is forwarded to the HAF Encroachment Management Working Group to facilitate coordination with Office of the Secretary of Defense and other services. Airspace managers will evaluate requests and develop unit responses to be submitted through the MAJCOM to the Clearinghouse. Non-FAA requests are not subject to the 30 day initial response window established in Public Law 111-383, but may have an associated deadline as outlined in 6.3.1.

6.3.3. Informal Feedback: The best opportunity to eliminate or minimize operational impacts occurs early in the project scoping period (before the proponent has invested in land use rights, finalized designs, obtained permits, etc.). Through early engagement, the project proponent may be willing and able to adjust the proposal to alleviate impacts to USAF operations. Unit-level organizations may provide informal feedback to developers and local entities on potential mission impacts from proposed projects, but must ensure the requestor understands the feedback does not constitute the official USAF or DoD position. Any official response must be coordinated, reviewed, and approved at the DoD level in accordance with the procedures described in paragraphs 6.3.1 and 6.3.2.

6.4. Impact Assessments

6.4.1. General guidance for managing energy development impacts on USAF operations are provided at Attachment 15. The parent MAJCOM, Regional Office (RO)/Regional Environmental Coordinator (REC), and AF/A3O-BA will support airspace managers as needed.

6.4.2. Effects from traditional obstructions, such as buildings and antennae, are typically direct (physical obstacle). Some proposals (particularly renewable energy projects) may also present indirect effects, such as interference with radar performance.

6.4.3. Requests for additional technical review shall be routed through the MAJCOM to AF/A3O-BA. AF/A3O-BA will engage radar experts and other stakeholders, as appropriate.

6.4.4. Regardless of the type of proposal, all assessments and associated responses must focus on mission impact.

6.4.5. All proposals must be designated in one of the four following categories:

6.4.5.1. Category 1: Minor/No Impact. Project will have no impact or an impact that can be easily overcome with little or no impact to mission.

6.4.5.2. Category 2: Impact/No objection. Project has impacts to military operations and readiness, but do not warrant an objection through this process.

6.4.5.3. Category 3: Major Impact/ Mitigation Required. This category includes projects that have an impact that will require mitigation. Subsequent negotiations with the developer will determine whether any mitigation options are viable.

6.4.5.4. Category 4: Critical Impact/ No Mitigation Possible. Projects in this category must present an unacceptable adverse impact on military operations that cannot be overcome by known mitigation techniques.

6.5. Determinations of Major or Critical Impact

6.5.1. All Category 3 or 4 findings will be validated and approved at the appropriate level. In accordance with Public Law 111-383, the Secretary of Defense shall review the project and provide an assessment of the level of risk of adverse impact on military operations and readiness that would arise from the project and the extent of mitigation that may be needed to address such risk.

6.5.2. MAJCOMs will determine the required content and format for unit-level OE/AAA responses. At a minimum, Category 3 or 4 recommendations submitted by the MAJCOM shall contain adequate detail on the following:

6.5.2.1. Technical Impact. The technical impact describes the proposal's effect on airfield/range operations and procedures. Examples include changes to the minimum vectoring altitude, or significant reductions in radar coverage.

6.5.2.2. Operational Impact. The operational impact describes the adverse effect on mission accomplishment. It must be based on the technical impact described above. Some technical impacts will have natural operational impacts, others will not.

6.5.3. MAJCOMs shall brief proposed Category 3 or 4 findings at Headquarters-level review committees. Required forums may include the EMWG, the SB-ESG, or both. AF/A3O-BA will facilitate MAJCOM participation in these groups.

6.5.4. Once approved by the appropriate review function, the proposed Category 3 or 4 finding will be reviewed by the Chief of Staff of the Air Force. If approved by the Chief of Staff, the determination will be forwarded to the Siting Clearinghouse for DoD coordination.

6.6. Impact Mitigation

6.6.1. Recommendations for a Category 3 response "Major Impact/Mitigation Required" shall include potential measures to mitigate the technical and/or operational impacts. Options should be objective and may include a range of potential actions by the developer (proponent), the AF, or both.

6.6.2. Recommendations for a Category 4 response "Critical Impact/ No Mitigation Possible" shall include a summary of any mitigation techniques that were considered, and the reason they are not acceptable.

6.6.3. IAW Public Law 111-383, the AF will engage the developer to explore mitigations after designation by the OSD Siting Clearinghouse adverse impact to military operations and readiness.

6.6.4. Unit-level personnel have the most in-depth knowledge of local conditions and should be at the forefront of all mitigation discussions; however they are not expected to bear the

full burden of negotiations. MAJCOM and Air Staff personnel shall assist units to ensure consistency across the CONUS and to provide expertise not resident at the unit level.

HERBERT J. CARLISLE, Lt Gen, USAF
Deputy Chief of Staff, Operations, Plans and
Requirements

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

- AFI 10-1001, *Civil Aircraft Landing Permits*, 1 Sep 95
- AFI 10-1002, *Agreements for Civil Aircraft Use of Air Force Airfields*, 1 Sep 95
- AFI 10-503, *Strategic Basing*, 27 Sep 10
- AFI 11-202, Volume 3, *General Flight Rules*, 22 Oct 10
- AFI 11-208 (IP), *Department of Defense Notice to Airmen (NOTAM) System*, 3 Jun 11
- AFI 11-209, *Aerial Events Policy and Procedures*, 4 May 06
- AFI 13-204 Volume 3, *Airfield Operations Procedures and Programs*, 1 Sep 10
- AFI 13-212, *Range Planning and Operations*, 16 Nov 07
- AFI 25-201, *Support Agreements Procedures*, 1 May 05
- AFI 32-7060, *Interagency and Intergovernmental Coordination for Environmental Planning*, 25 Mar 94
- AFI 32-7063, *Air Installation Compatible Use Zone Program*, 13 Sep 05
- AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*, 14 Jun 10
- AFI 51-503, *Aerospace Accident Investigations*, 26 May 10
- AFI 91-202, *USAF Mishap Prevention Program*, 5 Aug 11
- AFI 91-204, *Safety Investigations and Reports*, 24 Sep 08
- AFJI 11-204, *Operational Procedures for Aircraft Carrying Hazardous Materials*, 11 Nov 94
- AFMAN 11-217 (Vol 1 & 2), *Instrument Flight Procedures*, 22 Oct 10
- AFMAN 33-363, *Management of Records*, 1 Mar 08
- AFPD 10-9, *Lead Command Designation and Responsibilities for Weapon Systems*, 8 Mar 07
- AFPD 11-2, *Aircrew Operations*, 19 Jan 12
- AFPD 11-5, *Small Unmanned Aircraft Systems (SUAS) Rules, Procedures, and Service*, 17 Aug 11
- AFPD 13-2, *Air Traffic, Airfield, Airspace and Range Management*, 7 Aug 07
- AFPD 35-1, *Public Affairs Management*, 17 Sep 99
- AIM, *Aeronautical Information Manual*, 11 Feb 10
- DoD Directive 3200.11, *Major Range and Test Facility Base (MRTFB)*, 27 Dec 07
- DoD Directive 4540.1, *Use of International Airspace by U.S. Military Aircraft and for Missile/Projectile Firings*, 28 Mar 07

DoD Directive 5030.19, *DoD Responsibilities on Federal Aviation and National Airspace System Matters*, 15 Jun 97

DoD Flight Information Publications (FLIP), General Planning, AP1, AP/1A, AP/1B, AP/2, AP/2A, AP/3, AP/3A, and AP/4 & 4A, *Flight Information Handbook (FIH)*

DoD Foreign Clearance Guide

FAA JO 7110.10U, *Flight Services*, 11 Feb 10

FAA JO 7110.65T, *Air Traffic Control*, 11 Feb 10

FAA N JO 7210.766, *Unmanned Aircraft Operations in the National Airspace System (NAS)*, 28 Mar 11

FAA JO 7210.3W, *Facility Operation and Administration*, 11 Feb 10

FAA JO 7350.7P, *Location Identifiers*, 30 Jun 11

FAA JO 7400.2H, *Procedures for Handling Airspace Matters*, 10 Mar 11

FAA JO 7400.8T, *Special Use Airspace*, 7 Feb 11

FAA JO 7400.9V, *Airspace Designations and Reporting Points*, 9 Aug 11

FAA JO 7610.4P (FOUO), *Special Operations*, 25 Aug 11

Headquarters Mission Directive 1-54, *Deputy Chief of Staff, Operations, Plans & Requirements*, 9 Feb 12

HQ OI 33-3, *Correspondence Preparation, Control, and Tracking*, 20 Sep 10

ICAO Documents 4444/RAC/501, 7030, 8168/OPS/611, and Annexes 2, 6, 11, and 14

Planning Requirements in the Environmental Impact Analysis Process (PREIAP) Guidance, 26 Jul 12

Public Law 111-383, *2011 National Defense Authorization Act*

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

Title 3 Code of Federal Regulations (CFR), *Presidential Proclamation 5928*

Title 5 United States Code Sections 551–559, *Administrative Procedure Act*

Title 14 Code of Federal Regulations (CFR) Parts 1, 11, 71, 73, 75, 77, 91, 93, 99, 101, and 157

Title 32 CFR 32 Part 989, *Environmental Impact Analysis Process*

UFC 3-260-1, *Unified Facilities Criteria*

Prescribed Forms

None

Adopted Forms

AF Form 813, *Request for Environmental Impact Analysis*

AF Form 847, *Recommendation for Changes of Publication*

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

Abbreviations and Acronyms

AF—Air Force
AFCEE—Air Force Center for Engineering and the Environment
AFFSA—Air Force Flight Standards Agency
AFI—Air Force Instruction
AFREP—Air Force Representative to the FAA
AFRC—Air Force Reserve Command
AGL—Above Ground Level
AICUZ—Air Installation Compatible Use Zone
AIP—Aeronautical Information Publications
ANG—Air National Guard
AR—Aerial Refueling
ARC—Airspace and Range Council
ARRP—Airspace Request Review Panel
ASU—Airspace for Special Use
ATO—Air Traffic Organization
ATC—Air Traffic Control
ATCAA—Air Traffic Control Assigned Airspace
BIA—Bureau of Indian Affairs
BLM—Bureau of Land Management
BRAC—Base Realignment and Closure
CHUM—Chart Updating Manual
CFA—Controlled Firing Area
CFR—Code of Federal Regulations
COA—Certificate of Waiver and Authorization
CONUS—Continental United States
DAF—Department of the Air Force
DoD—Department of Defense
DOI—Department of Interior
DOPAA—Description of Proposed Action and Alternatives
DRU—Direct Reporting Unit
EA—Environmental Assessment

EIAP—Environmental Impact Analysis Process
EIS—Environmental Impact Statement
EMI—Electromagnetic Interference
EPF—Environmental Planning Function
FAA—Federal Aviation Administration
FAA JO—Federal Aviation Administration Joint Order
FAAO—Federal Aviation Administration Order
FAR—Federal Aviation Regulation
FLIP—Flight Information Publications
FONPA—Finding Of No Practicable Alternative
FONSI—Finding of No Significant Impact
FYI—For Your Information
GARS—Global Area Reference System
GPS—Global Positioning System
HATR—Hazardous Air Traffic Report
HN—Host Nation
IAW—in accordance with
ICAO—International Civil Aviation Organization
IFR—Instrument Flight Rules
IR—Instrument Routes
IRCN—Interagency Report Control Number
LATN—Low Altitude Tactical Navigation
LOA—Letter of Agreement
MACA—Midair Collision Avoidance
MADE—Military Airspace Data Entry
MAJCOM—Major Command
MILREP—Military Representative
MOA—Military Operations Area or Memorandum of Agreement
MSL—Mean Sea Level
MTR—Military Training Route
NAREC—National Airspace/Range Executive Council
NAF—Numbered Air Force

NAS—National Airspace System
NAVAID—Navigational Aid
NEPA—National Environmental Policy Act
NGB—National Guard Bureau
NM—Nautical Mile
NPRM—Notice of Proposed Rulemaking
NPS—National Park Service
NRA—Non-Rulemaking Airport
NSA—National Security Area
OCONUS—Outside the Continental United States
OES—Obstruction Evaluation Service
OE/AAA—Obstruction Evaluation/Airport Airspace Analysis
OPR—Office of Primary Responsibility
OSD—Office of the Secretary of Defense
PA—Public Affairs
PBFA—Policy Board on Federal Aviation
PREIAP—Planning Requirements in the Environmental Impact Analysis Process
RAP—Rated Aircrew Program
RNAV—Area Navigation
ROD—Record of Decision
RPA—Remotely Piloted Aircraft
SAA—Special Activity Airspace
SAAP—Strategic Airspace Action Process
SB—ESG – Strategic Basing – Executive Steering Group
SEI—Special Experience Identifier
SR—Slow Speed Low Altitude Training Route
SUA—Special Use Airspace
SUAS—Small Unmanned Aircraft Systems
TAG—The Adjutant General
TERPS—Terminal Instrument Procedures
T/TSNS—Test/Training Space Needs Statement
USDAO—US Embassy Defense Attaché Office

USAF—United States Air Force

USFS—US Forest Service

USFWS—US Fish and Wildlife Service

VFR—Visual Flight Rules

VR—Visual Routes

WGEF—Wind Generated Energy Facility

Terms

Aeronautical Objection— A written objection to proposed construction, an airspace proposal, or a proposed facility that infringes (or is believed to infringe) on the safe, orderly, and expeditious flow of air traffic.

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. Accomplish the preliminary review process (T/TSNS) IAW 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 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 JO 7610.4).

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

Airspace Concept— For identification purposes, informal initial requests for additional military airspace are referred to as ‘concepts’ and is part of the T/TSNS process.

Airspace for Special Use (ASU)— Used to collectively identify non-SUA assets. ASU is airspace of defined dimensions wherein activities must be confined because of their nature, and/or wherein limitations may be imposed upon aircraft operations that are not a part of those activities.

Airspace for Special Use (ASU) Designations— These designations are in FAA 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.

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 JO 7400.8)

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 or the Central Altitude Reservation Function (CARF). They can be either Moving or Stationary. (FAA JO 7610.4)

Concurrent Use— The use of a portion of Special Use Airspace (SUA) for a specifically defined period of time, by multiple flights, units or events who in coordination with each other and the scheduling agency, have mutually agreed to procedurally deconflict their operations, thus allowing simultaneous or concurrent use of the SUA to accomplish multiple missions or events. Concurrent use maximizes the availability of limited SUA resources for a larger population of users. Units must spell out limitations (maximum number of aircraft) and deconfliction procedures (north/south or high low division) in their range regulation or base airfield operations instruction.

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 JO 7400.2)

Code of Federal Regulations (CFR)— The codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the Federal Government. It is divided into 50 titles that represent broad areas subject to Federal regulation. Each volume of the CFR is updated once each calendar year and is issued on a quarterly basis. 14 CFR represents Title 14 of the Code of Federal Regulations, which contains the Federal Aviation Regulation (FAR) parts.

Cruise Missile Routes— Cruise missile operations conducted in excess of 250 knots and below 10,000 feet MSL that are conducted in restricted areas, MOAs, and along selected IRs during daylight hours under VFR conditions. Cruise missiles are accompanied by two escort aircraft that have the ability to maneuver the missile out of the flight path of conflicting traffic at all times.

Dynamic (Adaptive) and Predictable Airspace— This concept involves establishing airspace by tailoring airspace boundaries to meet specific operational requirements. This concept further ensures the integrity of the NAS by only activating the required volume of airspace, for the exact period of time, to meet stated operational requirements. This allows airspace planners, both civil and military, to plan accordingly to maximize NAS effectiveness.

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

Exclusive Use— The use of a portion of Special Use Airspace (SUA) for a defined period of time, solely by one unit, mission or group briefed to operate singularly within SUA; that due to the nature of the event or special test evolution and to maintain safety of flight, cannot accept the potential encumbrance of nonparticipating aircraft. Users and scheduling agencies shall restrict the exclusive use of SUA to the greatest extent practicable to only those few events whose accomplishment cannot be met through the concurrent use of the SUA. Exclusive use limits the availability of limited SUA resources and restricts usage to a small population of users.

Federal Register— An official publication that provides a uniformed system for making regulations and legal notices issued by Federal agencies available to the public. These include Presidential proclamations and executive orders, Federal agency documents having general applicability and legal effect, documents required to be published by an Act of Congress, and other Federal agency documents of public interest. All rulemaking actions are published in the Federal Register.

Global Area Reference System (GARS)— A two-dimensional (2-D) framework from which 3-D control and coordination measures can be constructed. The National Geospatial-Intelligence Agency (NGA) developed GARS to provide a worldwide standard for DoD mission planning and operations. More information is available in Chairman of the Joint Chiefs of Staff Instruction, CJCSI 3900.02. GARS can be applied to SUA with a temporal addition to provide a 4-D method for allocating and coordinating airspace.

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

Local Flying Areas— Most military facilities develop local flying areas within which they can conduct routine, training activity. These areas are normally developed in conjunction with local FAA controllers and airspace managers and are de-conflicted with other airspace such as Class B, C, or D airspace, SUA, or ASU.

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. Environmental documentation in accordance with Title 32 CFR Part 989 is required. Send copies of LATN areas to the appropriate AFREP. A full description of the LATN area(s) and any restrictions will be maintained in the unit flight operations office.

Maneuver Area— A designated segment of an IR or VR where aircraft may perform various maneuvers dictated by operational requirements. The entire MTR is considered a Corridor/Maneuver Area except where stated otherwise in FLIP. Aircraft vary their route of

flight and altitudes in the corridor to avoid obstacles, reduce noise impacts, and achieve IFR or VFR point-to-point navigation and tactical training. Maneuver areas are not substitutes for MOAs. Do not develop maneuver areas in lieu of MOAs. Include details of maneuver area operations in the IR/VR proposal.

Military Airspace— Also known as SAA, a collective term used to indicate both SUA and ASU.

MADE (Military Airspace Data Entry)— 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 Briefing Guides— Unit maintained briefing guides for each MTR that include route deconfliction procedures, special operating procedures, and/or constraints not listed in current FLIP AP/ 1B.

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 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 JO 7610.4. Routes are established as either IR or VR. The DoD has a speed exemption to 14 CFR Part 91.117 (see FAA JO 7610.4). The FAA has approval authority over IR establishment and the appropriate MAJCOM approves establishment of VRs. Environmental documentation in accordance with Title 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 JO 7400.8)

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 JO 7610.4)

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. 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, on-going proponent responsibilities.

Prohibited Area— A prohibited area is airspace established under Title 14 CFR part 73 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 JO 7400.2).

Restricted Area— A restricted area is airspace established under 14 CFR Part 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 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 Speed Low Altitude Training Routes (SR)— 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 FAAO 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. A full description of the SRs and any restrictions will be maintained in the unit flight operations office. (FAA 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 JO 7400.2. Stationary ALTRV guidance is listed in FAA 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 CFR section 91.137(a)(1-3)) TFRs are used for: Air shows (Title 14 CFR section 91.145); Space launches (Title 14 CFR section 91.143); Presidential/VIP movements (Title 14 CFR section 91.141); or Special Security Instructions/National Special Security Events (Title 14 CFR section 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 JO 7400.2)

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

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 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 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 7400.8)

Attachment 2**SUPERSONIC WAIVER REQUEST**

- A2.1.** Describe all current and projected supersonic mission requirements.
- A2.2.** Describe how the projected supersonic operations will be conducted.
- A2.3.** Describe how and where current supersonic needs are being satisfied.
- A2.4.** Describe the proposed airspace that could be used for supersonic operations (Volume, Proximity, Time, & Attributes).
- A2.5.** Describe the available alternatives for conducting supersonic training.
- A2.6.** 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?
- A2.6.1. Native American traditional use areas or sacred sites
 - A2.6.2. National Parks, wilderness areas, wildlife refuges or wildlife management areas
 - A2.6.3. Ratite (ostrich/emu) operations
 - A2.6.4. Urban Areas (towns, cities, etc.)
 - A2.6.5. Prehistoric/Historical structures
- A2.7.** Summarize the mitigation measures identified in the EIS/ROD or EA/FONSI.
- A2.8.** Identify public concerns raised during the EIAP public comment period.
- A2.9.** If the waiver is not granted will there be additional costs to implement one of the alternatives?
- A2.10.** 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. Include the date of original supersonic flight ops below 30,000 feet MSL and subsequent renewal dates.

A3.2. Attach the justification and information used for the original request or the most recent waiver renewal analysis.

A3.3. 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.

A3.4. 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.

A3.5. 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.

A3.6. 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:

A3.6.1. Native American traditional use areas or sacred sites

A3.6.2. National parks, federally designated wilderness areas, wildlife refuge, or wildlife management areas

A3.6.3. Ratite (ostrich/emu) operations

A3.6.4. Urban areas (towns, cities, etc.)

A3.6.5. Prehistoric/historical landmarks

A3.7. 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.

A3.8. Note any increased or unusual public controversy with these operations.

**Attachment 4
AFREP OFFICES**

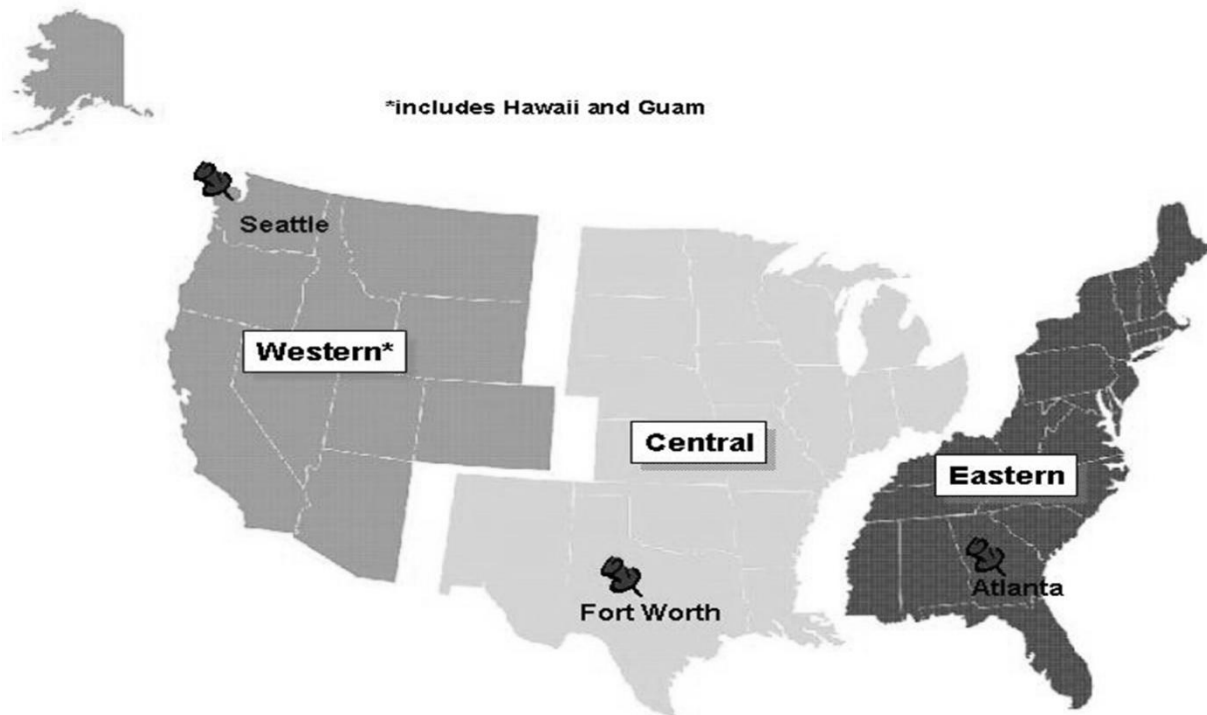


Fig A4.1 AFREP Office Addresses

FAA HEADQUARTERS	DoD Military Representative / AJR-01 HQ Federal Aviation Administration 800 Independence Ave, SW Washington, DC 20591	V (202) 267-9427 V DSN 325-6270 F (202) 267-5868
EASTERN SERVICE AREA	AF Rep, FAA Southern Rgn/ ASO-910 P.O. Box 20636 Atlanta, GA 30320-5000	V (404) 305-6900/2 V DSN 797-5481/2 F (404) 305-6911
CENTRAL SERVICE AREA	AF Rep, FAA Southwest Rgn/ ASW-910 2601 Meacham Blvd Fort Worth, TX 76193-0910	V (817) 222-5910/1/2/3 V DSN 477-2910/1/2/3 F (817) 222-5992 F DSN 477-2992
WESTERN SERVICE AREA	AF Rep, FAA Northwest Mtn Rgn/ANM-900 1601 Lind Ave, S.W. Renton, WA 98057-4056	V (425) 227-2947/8/9 V DSN 984-5204 F (206)227-1114
ALASKA	AF Rep, FAA Alaskan Rgn 5800 G. St., Suite 222 Elmendorf AFB, AK 99506-2130	V (907) 552-4056 V DSN 317-552-2374 F (907) 552-5715 F DSN 317-552-5715

Attachment 5**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, Bases, Ranges and Airspace

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 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. 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: Aeronautical Coordination. As specified in this AFI, the Air Route Traffic Control Center (ARTCC) must be coordinated with prior to forwarding this T/TSNS. 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.

Sample Test/Training Space Needs Statement (T/TSNS)

ABC 06-001
999 FW, SPAATZ AFB, USA
Modification of the Milhouse MOA

Proponent's 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: 3 October 2011

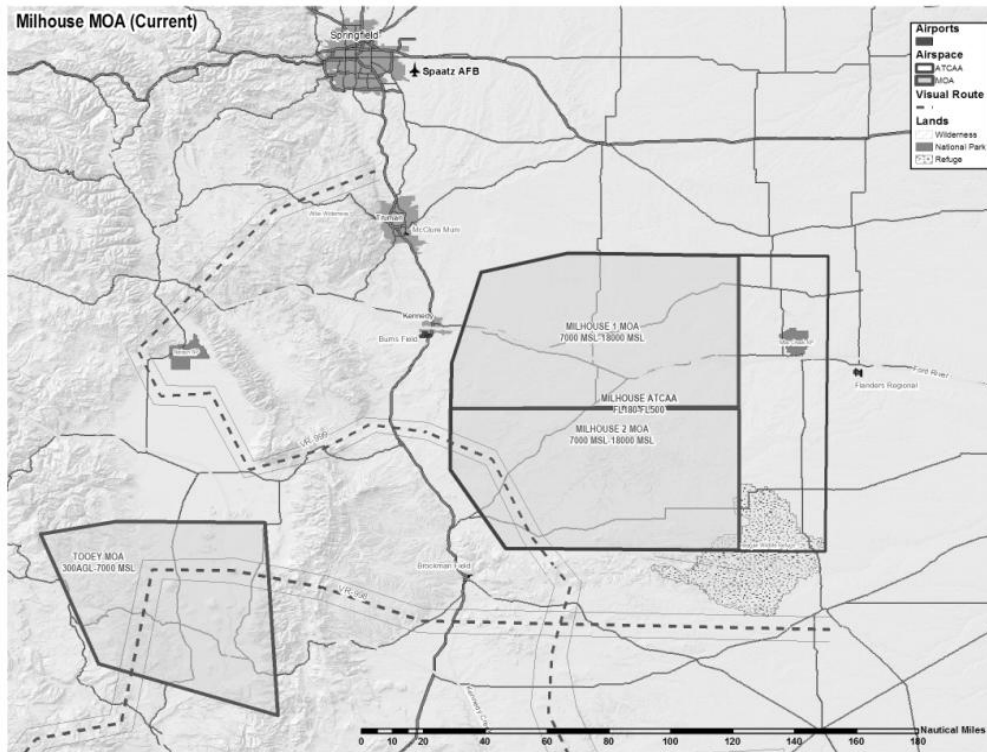
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1. Overview.

1.1. Concept/Purpose. This T/TSNS addresses the requirement to establish airspace sufficient to accommodate AIM-120 AMRAAM missile tactics and 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 Low-Altitude Training missions (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 99th FW plans to analyze both MOA options in this T/TSNS and in the NEPA process.

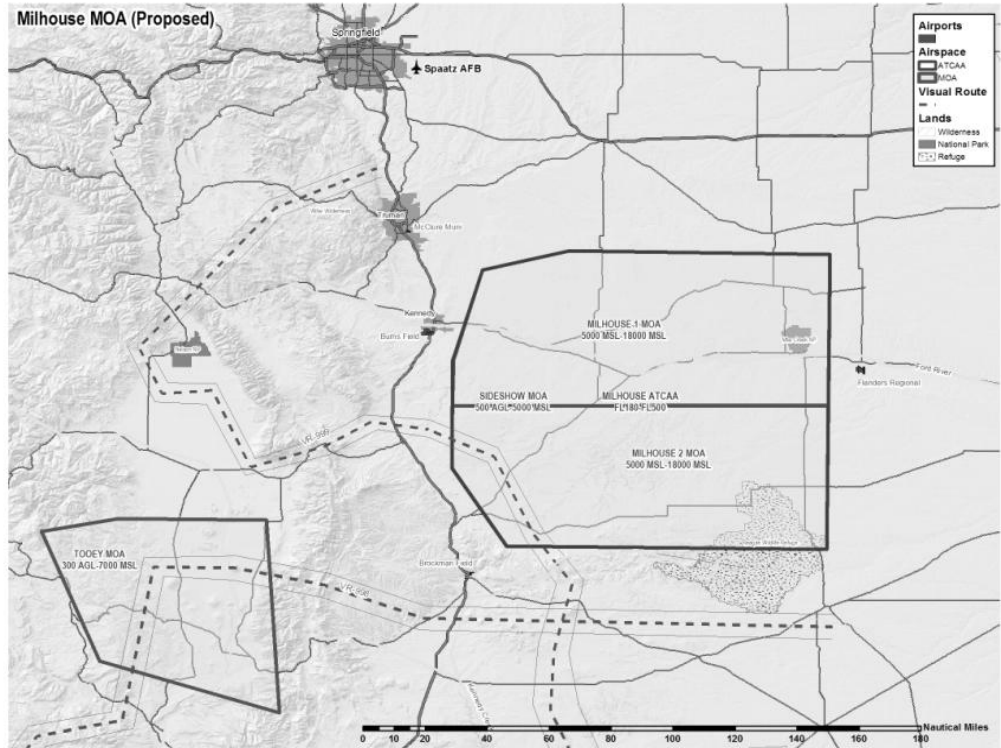
1.2. Existing Structure (Current Map – Milhouse MOA).



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.

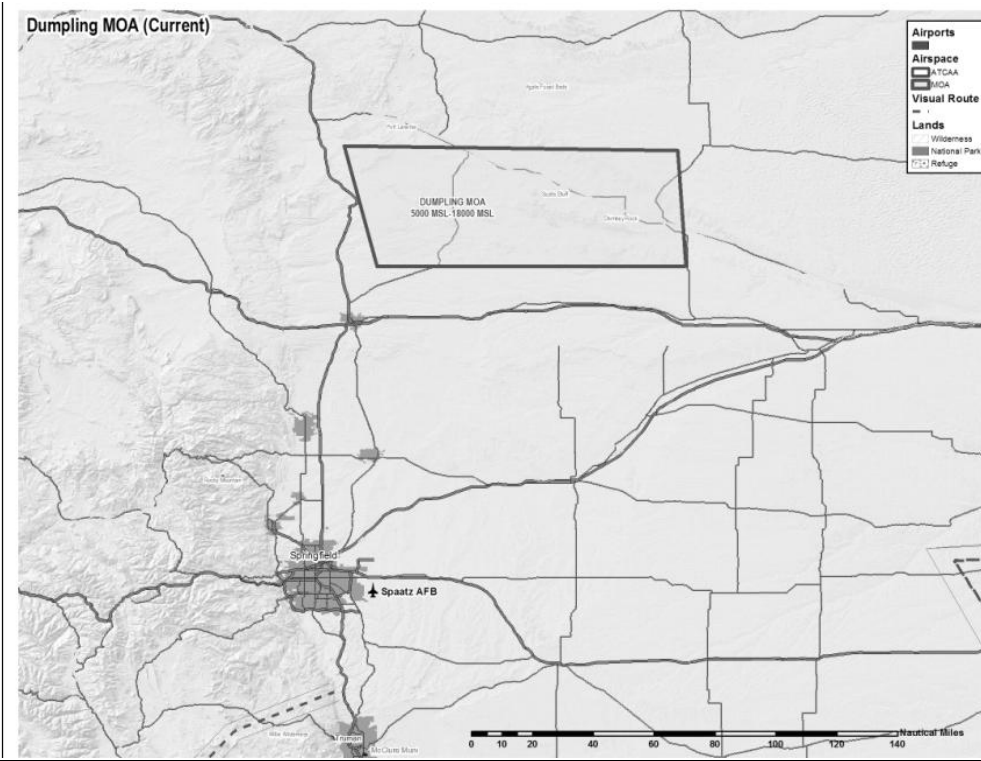
1.3.

Proposed Structure (Future Design – Milhouse MOA).



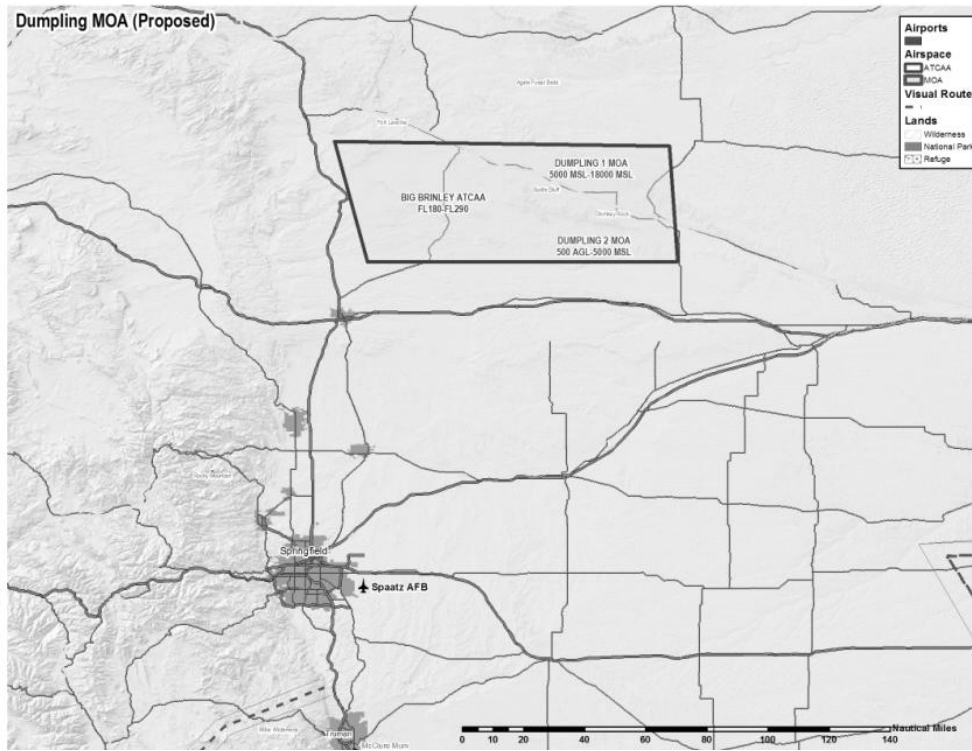
Type Boundary	Designation	Altitudes
Current Boundary line. (Blue - Solid)	Current airspace boundaries for Milhouse 1 & 2 MOAs and the Proposed Sideshow MOA.	Proposed: <u>Sideshow:</u> 500' AGL up to but not including 5000' MSL <u>Milhouse 1 & 2:</u> 5000' MSL up to but not including FL 180

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



Type Boundary	Designation	Altitudes
Current Boundary line. (Blue – Solid)	Current airspace boundaries for Crowe MOA.	<u>Crowe:</u> 5000’ MSL up to but not including FL 180. There is no associated ATCAA with this MOA.

1.5. Proposed Structure (Future Design – 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 Spartz 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 Tooy

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 units compete for this LOWAT airspace and it prevents all three units from meeting their RAP requirements. Additionally, Spatz 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 Tooley 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 %
Spatz	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 Tooley MOA and VR-999 to accomplish LOWAT training. Tooley 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 Tooley 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:

The average daily Tooey MOA is following chart.

	Authorized	Scheduled	Utilized
Tooey MOA	12.0	11.5	10.8

utilization for contained in the 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. Aeronautical 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 (NextGen).

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. Per coordination with the wing 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 AFREP 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.

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. AFI 13-201, *Airspace Management*, and appropriate MAJCOM supplements or regulations.

A7.2.2. AFI 11-202 Volume 3, *General Flight Rules*, and supplements.

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

A7.2.4. Title 32, Code of Federal Regulations, Part 989 (32 CFR Part 989), *Environmental Impact Analysis Process (EIAP)* to include PREIAP guidance.

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

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

A7.2.7. AIM.

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

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

A7.2.10. FAA JO 7210.3, *En Route Minimum Flight Rule (IFR) Altitude (MIA) Sector Charts*.

A7.2.11. Other military regulations and publications appropriate to mission.

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.

Attachment 8

**A8. TABLE OF PUBLIC NOTIFICATION FOR NATIONAL ENVIRONMENTAL
POLICY ACT ACTIONS**

Action should be accomplished in coordination with Public Affairs

	EIAP ACTION	PUBLIC NOTIFICATION	COMMENT	REFERENCE
1	AF Form 813	N/A		32 CFR 989.12; AFI 35-101, Figure 9.1
2	Categorical Exclusion	N/A		
3	Environmental Assessment	Required (R)	(See rows 4-13 below)	32 CFR 989.15(1); 32 CFR 989.24(b)(1)
4	Environmental Assessment with significant or national interest	R	- Notice of availability and 30-day public comment period for EA with unsigned FONSI/FONPA	- 32 CFR 989.15.(e)(2); 40 CFR 1501.4(e)(2)
5		R	-- Display ad purchased with EPF funds must be placed in prominent section of local, general circulation newspaper	32 CFR 989.24(c)
6		R	-- Notice must be mailed to any who have requested it.	40 CFR 1506.6(b)(1)
7		Suggested (S)	-- EPF should consider using any or all of the recommended methods of notification listed in 40 CFR 1506.6(3)	32 CFR 989.24(c)
8		R	- Notice of availability and 30-day public comment period for Final EA and signed FONSI/ Finding Of No Practicable Alternative (FONPA)	32 CFR 989.24a(1)
9		R	-- Display ad purchased with EPF funds must be placed in prominent section of local, general circulation newspaper --- Display ad must be 1/16-page ad. If state requires legal notice	32 CFR 989.24(c) and AFI 35-101, 9.9.3.2

			such notice should be used in conjunction with the display ad.	
11	Environmental Assessment with local or regional interest	R	- Notice of availability and public comment period for EA and FONSI/FONPA	32 CFR 989.24(b)(1); 989.15(d)(e); AFI 35-101, Figure 9.1
12		R	-- Notice must be mailed to any who have requested it.	40 CFR 1506.6(b)(1)
		R	-- Display ad purchased with EPF funds must be placed in prominent section of local, general circulation newspaper --- Display ad must be 1/16-page ad. If state requires legal notice such notice should be used in conjunction with the display ad.	AFI 35-101, 9.9.3.2 and Figure 9.1
13		S	-- EPF should consider using the additional methods of notification listed in 40 CFR 1506.6(3)	32 CFR 989.24(c)
14	Environmental Impact Statement	R	(See rows 15-33 below)	40 CFR 1502; 32 CFR 989; AFI 35-101,
15	Notice of Intent	R	- Published in Federal Register	40 CFR 1506.6(b)(2); 32 CFR 989.17; AFI 35-101, Figure 9.1
16		R	- Display ad purchased with EPF funds must be placed in prominent section of local, general circulation newspaper -- Display ad must be 1/16-page ad. If state requires legal notice such notice should be used in conjunction with the display ad	32 CFR 989.24(c); AFI 35-101, 9.9.3.2
17		R	- The Approved NOI must be provided to all media in the area potentially affected by the proposed action, the state point of contact and any agencies or individuals who have requested it.	40 CFR 1506.6(b)(1); 32 CFR 989.17; and AFI 35-101, Figure 9.1
18		S	- EPF should consider using any the additional methods of notification listed in 40 CFR	32 CFR 989.24(b)(2)

			1506.6(3)	
19	Scoping	R	- Display ad purchased with EPF funds must be placed in prominent section of local, general circulation newspaper -- Display ad must be at least 1/16-page	AFI 35-101, 9.9.3.2 and Figure 9.1
20		R	- Notice must be mailed to any who have requested it.	40 CFR 1506.6(b)(1)
21		R	- Invite participation of any potentially affected Indian Tribe and any other interested persons, including those who might not be expected to support the proposed action	40 CFR 1506.6(d) and 1501.7(a)(1); CFR 989.18(a); AFI 35-101, Figure 9.1
22		S	-- EPF may use any the additional methods of notification listed in 40 CFR 1506.6(3)	40 CFR 1501.7(a)(1); 32 CFR 989.24(b)(3)
23	Draft EIS	R	- NOA published in Federal Register	40 CFR 1506.6(b)(2); 32 CFR 989.19(b)-(c);
24		R	- Display ad purchased with EPF funds must be placed in prominent section of local, general circulation newspaper announcing the availability of the draft EIS for a 45-day comment period and the schedule for public hearings. -- Display ad must be at least 1/16-page	40 CFR 1506.6 (b); 32 CFR 989.24 (b) (3), (c); AFI 35-101, 9.9.3.2 and Figure 9.1
25			- NOA must be mailed to any who have requested it	40 CFR 1506.6(b)(1)
26		S	-- EPF should consider use of any the additional methods of notification listed in 40 CFR 1506.6(3)	32 CFR 989.24(a), (c)
27	Final EIS	R	- NOA published in Federal Register	40 CFR 1506.6(b)(2); 32 CFR 989.20(a)
28		R	- Display ad purchased with EPF	40 CFR 1506.6

			funds must be placed in prominent section of local, general circulation newspaper -- Display ad must be at least 1/16-page	(b); 32 CFR 989.24(b)(4), (c); and 989.20(a); AFI 35-101, Figure 9.1
29			- Notice must be mailed to any who have requested it.	40 CFR 1506.6(b)(1)
30		S	-- EPF should consider use of any the additional methods of notification listed in 40 CFR 1506.6(3)	32 CFR 989.24(a),(c)
31	Record of Decision	R	- Display ad announcing ROD purchased with EPF funds must be placed in prominent section of local, general circulation newspaper -- Display ad must be at least 1/16-page	40 CFR 1506.6 (b); 32 CFR 989.24(b)(7); and 989.21(b); AFI 35-101, Figure 9.1
32		R	- Notice must be mailed to any who have requested it.	40 CFR 1506.6(b)(1)
33		S	-- EPF should consider use of any the additional methods of notification listed in 40 CFR 1506.6(3)	32 CFR 989.24(a),(c)

Attachment 9**PERIODIC AIRSPACE REVIEW CHECKLIST****A9.1. Land Ownership (Restricted Areas).**

A9.1.1. Are all lands inside the airspace boundary owned, leased, or controlled by agreement?

A9.1.2. Are the safety weapons danger zones of each weapon used within the airspace boundary?

A9.1.3. Are adequate safety measures taken with respect to public/private land?

A9.1.4. Is the land area within the restricted airspace congested, sparsely populated, or uninhabited?

A9.1.5. Does SUA allow for aerial access to private and public lands?

A9.2. Intended Use.

A9.2.1. Does the original intended use match the actual use?

A9.2.2. Is the airspace adequate for intended use?

A9.2.3. Is the SUA/MTR shared with other users?

A9.2.4. Does actual activities justify the type of airspace as designated?

A9.2.5. Is the activity (restricted areas):

A9.2.5.1. Air-to-air?

A9.2.5.2. Air-to-ground?

A9.2.5.3. Ground-to-ground?

A9.2.5.4. Ground-to-air?

A9.2.5.5. What mission profiles are utilized?

A9.3. Does the unit initiate return of airspace to the NAS when no longer required for mission accomplishment?

A9.4. When available, are Military Radar Units used to provide military command and control in SUA to enhance safety and utility?

A9.5. Activation Procedures.

A9.5.1. Is the SUA/MTR scheduled sufficiently in advance?

A9.5.2. Is the SUA/MTR coordinated with FAA IAW LOA/LOP?

A9.5.3. Is the controlling agency properly notified when the scheduled activity is canceled?

A9.5.4. What are the activation/deactivation procedures?

A9.5.5. Is there a point of contact (name/phone number) established between using and controlling agencies for coordinating changes?

A9.5.6. Are "real time use" concepts in daily activities efficiently used?

A9.5.7. Is the airspace efficiently subdivided so only the minimum required airspace for a particular mission is activated?

A9.5.8. Is SUA released to other users when not needed for military operations?

A9.6. Letters of Agreement/Letters of Procedure (LOA/LOP).

A9.6.1. Are LOA/LOPs current and accurate?

A9.6.2. Are "real time use" procedures incorporated into the LOA/LOPs?

A9.6.3. Do LOA/LOPs contain provisions for safe operations in case of radar/communication failure?

A9.6.4. Are joint-use restricted areas and their operating procedures outlined in a LOA/LOP?

A9.7. Records.

A9.7.1. Are utilization records available for the past 2-years?

A9.7.2. Are records kept of activation changes?

A9.7.3. Do records describe times and portions of airspace activated?

A9.7.4. Do records reflect scheduled versus activated times?

A9.8. Weather Observations (Restricted Areas).

A9.8.1. Is ceiling and visibility information available?

A9.8.2. What are the weather minima?

A9.9. Communications.

A9.9.1. What type of air-to-ground communications are available?

A9.9.2. What type of communications are available to FAA or other agencies?

A9.9.3. Is communication/radar coverage available with a military or FAA air traffic control agency when entering or exiting SUA/MTRs?

A9.10. Aircrew Briefings.

A9.10.1. Is the SUA/MTR briefing current and are there established procedures for updating the briefing?

A9.10.2. How are briefings and procedures made available to other users of the SUA/MTR?

A9.10.3. Are aircrews, especially non-unit aircrews, briefed on environmental hot spots and noise sensitive areas?

A9.11. Environmental.

A9.11.1. Do the current environmental documents accurately define your operations?

A9.11.2. Do you have a copy of the environmental document?

A9.11.3. Where are the basic environmental analysis and all additional supplementals filed?

A9.11.4. Do supplementals address cumulative effects?

A9.11.5. Do the environmental documents include all the shared users of the airspace?

A9.11.6. List the aircraft authorized by the environmental document to routinely fly in the airspace.

A9.11.7. List the flares and chaff, by type, authorized to be expended in the airspace.

A9.11.8. What is the date that the environmental office coordinated on your annual utilization review?

A9.11.9. Was a supplemental document required as a result of your annual utilization review?

A9.12. Miscellaneous.

A9.12.1. Does the airspace proposal describe the current requirement for the airspace?

A9.12.2. Is radar available/used for control?

A9.12.3. Are spill-ins/outs recorded and what follow-up action is taken?

A9.12.4. Are public-use airports avoided by 3 NM or 1500 feet AGL?

A9.12.5. Do aircraft operations within SUA/MTR conform to applicable FARs?

A9.12.6. Does the SUA/MTR create potential for air traffic conflicts with terminal VFR and IFR operations?

A9.12.7. Does the SUA/MTR create potential for air traffic conflicts with federal airways and regularly used VFR routes?

A9.12.8. Are there waivers for separation of non-participating aircraft from the boundaries of the airspace?

A9.12.9. Are waivers current?

A9.12.10. Have all MTRs been surveyed for obstacles at least annually?

A9.12.11. Are uncharted obstacles on MTRs reported to the scheduling agency as soon as possible after landing and included in aircrew briefings?

A9.12.12. 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?

A9.12.13. Have MTR surveys been documented and maintained?

A9.12.14. Have potential flight safety hazards (e.g., obstacles, migratory bird routes, possible bird attractant areas, etc.) been identified and published in FLIP AP/1B?

A9.12.15. Have MTR Special Operating Procedures or Remarks published in FLIP AP/1B been reviewed annually for accuracy?

Attachment 10

AIRSPACE DENIAL REPORT

A10.1. 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.

A10.2. 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.

A10.3. 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 No

Will 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):

Attachment 11
FYI INFORMATION LETTER



DEPARTMENT OF AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON, DC.

DATE: 06 Feb 2009

MEMORANDUM FOR Little Rock Airpace Manager

FROM: Air Force Representative, Eastern Service Area
P. O Box 20636
Atlanta, GA 30320-0631

SUBJECT: OE FYI Letter

The following OE study/studies are forwarded "For Your Information" only. A response is not required.

OE Study Numbers:

2009-ASO-518-OE SR221

Case(s) marked with * are Rush.

If you have any questions, please contact Terri Johnson at DSN 797-5481 or Commercial (404)305-6920.

Terri Johnson
USAF OE/AAA Program Manager

Attachment 12
SUA LETTER



DEPARTMENT OF AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON, DC.

DATE: 05 Feb 2009

MEMORANDUM FOR Lt Col Alfred Tomaselli

FROM: Air Force Representative, Eastern Service Area
P. O Box 20636
Atlanta, GA 30320-0631

SUBJECT: OE ASU/SUA Letter

The following OE study/studies should be reviewed for impact(s) to Airspace for Special Use (ASU) / Special Use Airspace (SUA) as applicable in accordance with applicable Air Force Instructions or Directives and JO 7400.2G chapter 6 paragraphs 6-3-8 and 6-3-9. A response is required via email to terri.johnson@faa.gov no later than **19 Feb 2009**. Should you need additional response time, please contact this office at the telephone numbers listed below prior to the response date.

OE Study Numbers:

2009-ANE-99-OE VR1800

Case(s) marked with * are Rush.

If you have any questions, please contact Terri Johnson at DSN 797-5481 or Commercial (404)305-6920.

Terri Johnson
USAF OE/AAA Program Manager

Attachment 13
NRA LETTER



DEPARTMENT OF AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON, DC.

DATE: 25 Jun 2008

MEMORANDUM FOR Charleston Airspace Manager

FROM: Air Force Representative, Eastern Service Area
P. O Box 20636
Atlanta, GA 30320-0631

SUBJECT: NRA Letter

The following NRA study/studies should be reviewed for impact(s) to your flying mission in accordance with applicable Air Force Instructions or Directives and FAA 7400.2F, Chapter 11, Section 2.
A reply to this memo is required to terri.johnson@faa.gov no later than 09 Jul 2008. Should you need additional response time, please contact this office at the telephone numbers listed below prior to the response date.

NRA Study Numbers:

2008-ASO-602-NRA

Case(s) marked with * are Rush.

If you have any questions, please contact Terri Johnson at DSN 797-5481 or Commercial (404)305-6920.

Terri Johnson
USAF OE/AAA Program Manager

Attachment 14**NRA FYI INFORMATION LETTER**

DEPARTMENT OF AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON, DC.

DATE: 23 Jan 2009

MEMORANDUM FOR HQ AFSOC TERPS/Airspace

FROM: Air Force Representative, Eastern Service Area
P. O Box 20636
Atlanta, GA 30320-0631

SUBJECT: NRA FYI Letter

The following NRA study/studies are forwarded "For Your Information" only. A response is not required.

NRA Study Numbers:

2009-ASO-86-NRA

Case(s) marked with * are Rush.

If you have any questions, please contact Terri Johnson at DSN 797-5481 or Commercial (404)305-6920.

Terri Johnson
USAF OE/AAA Program Manager

Attachment 15

GENERAL GUIDANCE ON MANAGING ENERGY DEVELOPMENT IMPACTS ON AIR FORCE OPERATIONS

A15.1. Purpose. Air Force installations and operating space are valuable national resources and we must preserve them in order to successfully accomplish our mission. Development of domestic energy sources is a high priority for the country and for the Air Force, however there are situations where striving to meet national energy goals may result in activities that negatively impact the Air Force's operational, testing, and training missions. This general guidance is designed to help installations and MAJCOMs more proactively understand, assess, and react to potential mission impacts that might occur from energy-related development. It also provides process diagrams and a sample coordination template to assist stakeholders, including Commanders, MAJCOM A3 Airspace, Range and Operational Mission Management, and Installation and Mission Support personnel in preparing and coordinating a proposal response.

A15.2. The Challenge. The current means for siting alternative energy development in the United States create challenges for both the proponent and the Department of Defense. The lack of a single, defined process has the developer seeking out multiple agencies to identify and mitigate any predicted negative impacts from a proposal. Meanwhile, the AF and DOD have no assured visibility on projects that may adversely impact military missions. Consequently, late engagement has often resulted in contentious and sub-optimal outcomes for both parties. The American Wind Energy Association's (AWEA) Siting Handbook lists eleven relevant statutes governing project development, such as the National Environmental Policy Act, Endangered Species Act, Migratory Bird Treaty Act, and Clean Water Act along with the Federal Aviation Administration's (FAA) Obstruction Evaluation process. While DOD has a voice in some of these arenas, it has no direct authority over development of projects off of DOD-controlled land.

In most cases, when an impact is found, the Air Force must ask another government agency to exert authority to alter a proposal. When the Air Force reasonably anticipates mission degradation, it must meet this challenge by actively engaging the developer and other authorities with sound data and analysis. Anything less only serves to weaken the Air Force position.

A15.3. Mission Impact. There are many different types of development projects that can adversely impact military missions. During the early planning process, identifying areas of concern based on the entire envelope of characteristics is appropriate. Evaluating each project based on its specific characteristics and location is critical. Experience with project evaluation has shown that some characteristics, which may be of concern in one location, are not of concern in another. Simply identifying the characteristics of a project do not by themselves form a basis for an objection. Identifying the empirical impact to the mission will determine which concerns can justify opposition. In evaluating a project's impact on the mission, some characteristics to consider, which have had supportable significant impact, include: electro-magnetic interference to radar or frequency spectrum, lighting related to night operations, and obstructions causing safety concerns to flight paths and airspace. Evaluating projects within these areas have been most successful at identifying concerns early in the process. Other characteristics, which should be included in long-term planning but do not normally result in supportable opposition, include: reflections, structures underlying airspace not causing safety concerns, and minor spectrum interference. Additionally, objections based on concern for precedent-setting or future cumulative impacts without sufficient technical support have generally not been successful.

A15.4. Planning. Current DOD policy calls for case-by-case reviews of energy development. Each review is specific to the characteristics of the proposal and how it affects the unit's mission. This practice should take into account other developments or the cumulative effects of adjacent projects, but typically does not.

A15.4.1. For effective management, airspace managers must be aware of a unit's operating space to determine which areas need elevated protection. Factors that should be included in this assessment are usage frequency, rarity or mission criticality of attributes, and usage type (testing, training, etc.) as well as current and proposed development affecting the space. Once a baseline of mission capabilities and requirements is established, the true impact to mission will become evident. This information will improve the ability of the unit to conduct case-by-case assessments by:

A15.4.1.1. Identifying proposals that threaten high-priority operating space

A15.4.1.2. Providing the necessary rationale for mitigation or formal objection

A15.4.2. This is not an Operational, Environmental, Civil Engineering, or Base Community Planner's problem to solve alone. All stakeholders, including MAJCOMs, must become involved to truly realize the effects on the AF mission and to preserve Air Force operating space by planning wisely.

A15.5. Engagement

Installations should seek early notification of pending energy projects near AF installations through the Installation Encroachment Management Team (IEMT,) RO/REOs, POCs at nearby DOD installations, base Community Planners, local media sources, and off-base functions with civic leaders. Once the installation discovers project development, they are encouraged to learn more by calling the developer. Direct engagement with a developer is the best way to solve issues early. Key points when contacting a developer:

A15.5.1. Use a single point of contact even though the unit may have multiple Subject Matter Experts on the IEMT. Recommended team members include the base Community Planner, an Operations Officer, Mapping (GIS) POC, Base Judge Advocate, Safety, Environmental, a TERPS specialist and others as necessary.

A15.5.2. Do not wait for official filing or notification. Engage as early as possible. Approach developers similar to local elected officials by laying out the concerns, preferably on maps they can keep, and guide them to where there is no or minimal impact.

A15.5.3. A site visit to the local installation with tours of the flightline and mission briefings will educate developers about unit requirements. Experience shows this type of engagement provides the best opportunity to reach a mutually acceptable solution.

A15.5.4. If a project has impacts on the unit's mission or operating space, explore possible mitigation options (moving turbines, decreasing heights, etc.) with the developer. Prior to negotiating mitigation agreements, coordinate efforts and official positions as outlined below.

A15.6. Proposal Response. There are several agencies with formal processes that an energy developer must follow in order to proceed with a project. The Air Force has an opportunity to review and comment on projects by participating in the official processes of the FAA, Bureau of Land Management (BLM) and other federal, regional and local entities. These opportunities to review do not cover all energy projects, such as those proposed on private- or state-owned land.

Even though the Air Force participates in these processes, often it is notified too late and is unable to effect change. Therefore, the Air Force reaches out to engage developers early whenever possible. Early discussions that occur while the developer still has site selection flexibility offer the best opportunity for a mutually acceptable outcome. Also, because sustaining Air Force missions involves a variety of stakeholders at all levels, communication is necessary during all phases to avoid isolated, redundant or conflicting efforts and messages. Appropriate communication allows for shared learning and problem-solving in defending and articulating Air Force mission needs. Traditional methods of engaging solely at the unit level without MAJCOM and/or Air Staff awareness may jeopardize mission sets outside of the local unit's purview. The coordination process for obtaining an official Air Force position during early engagement is shown in Figure 1. This process allows installations to engage with developers beyond informal feedback and provide a coordinated official Air Force response during the discussion and siting phases. It also shows decision points and approval authority. Timelines outlined in Section 6.3 do not apply to this process if a preliminary (pre-filing) assessment is requested.

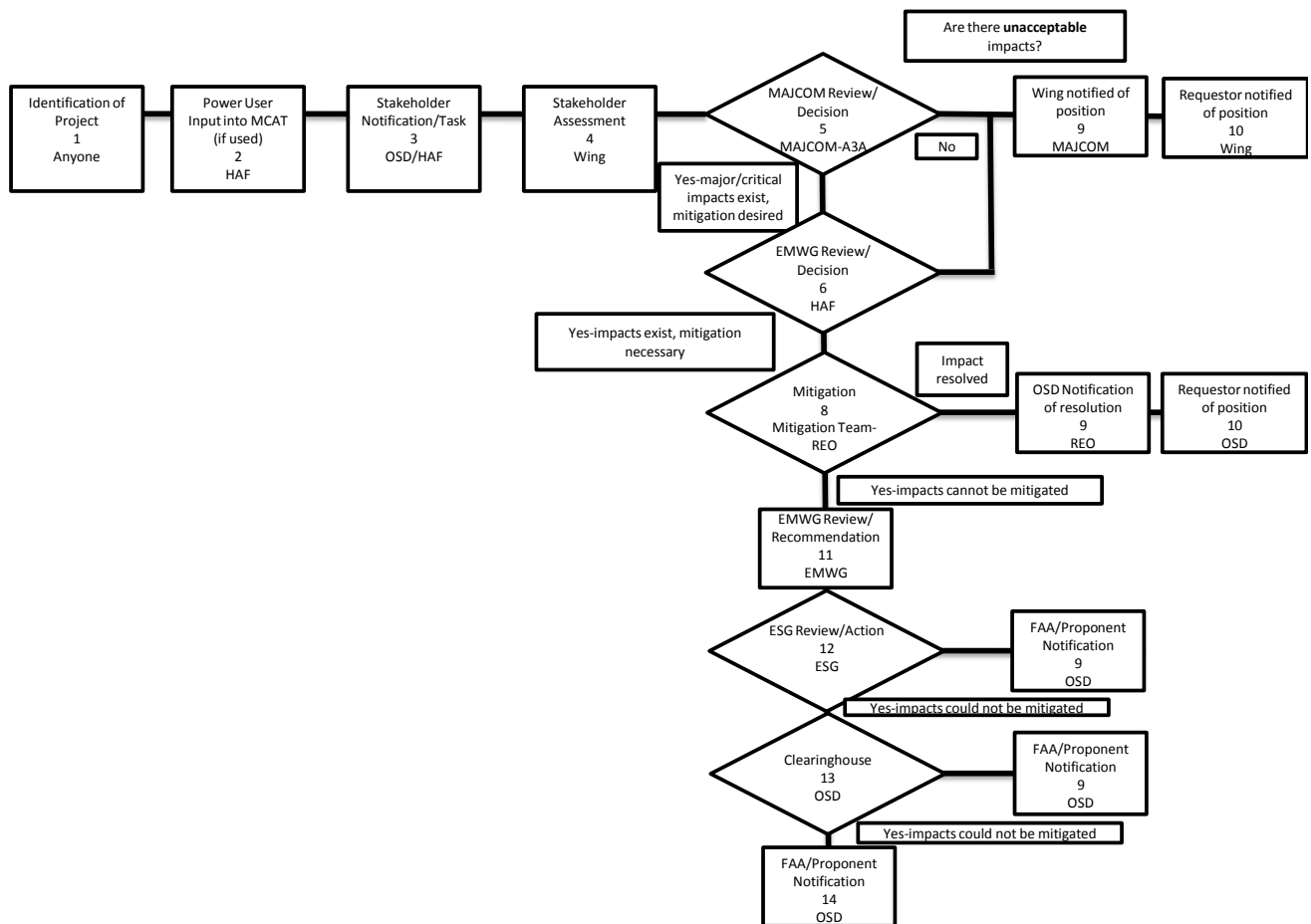


Figure A15.1: Process for receiving Air Force position not under section 358

Once a developer officially files a project under one of the following processes for evaluation with the FAA or other agency, as outlined in Section 6.3, Figure A15.2 applies and illustrates the required additional coordination.

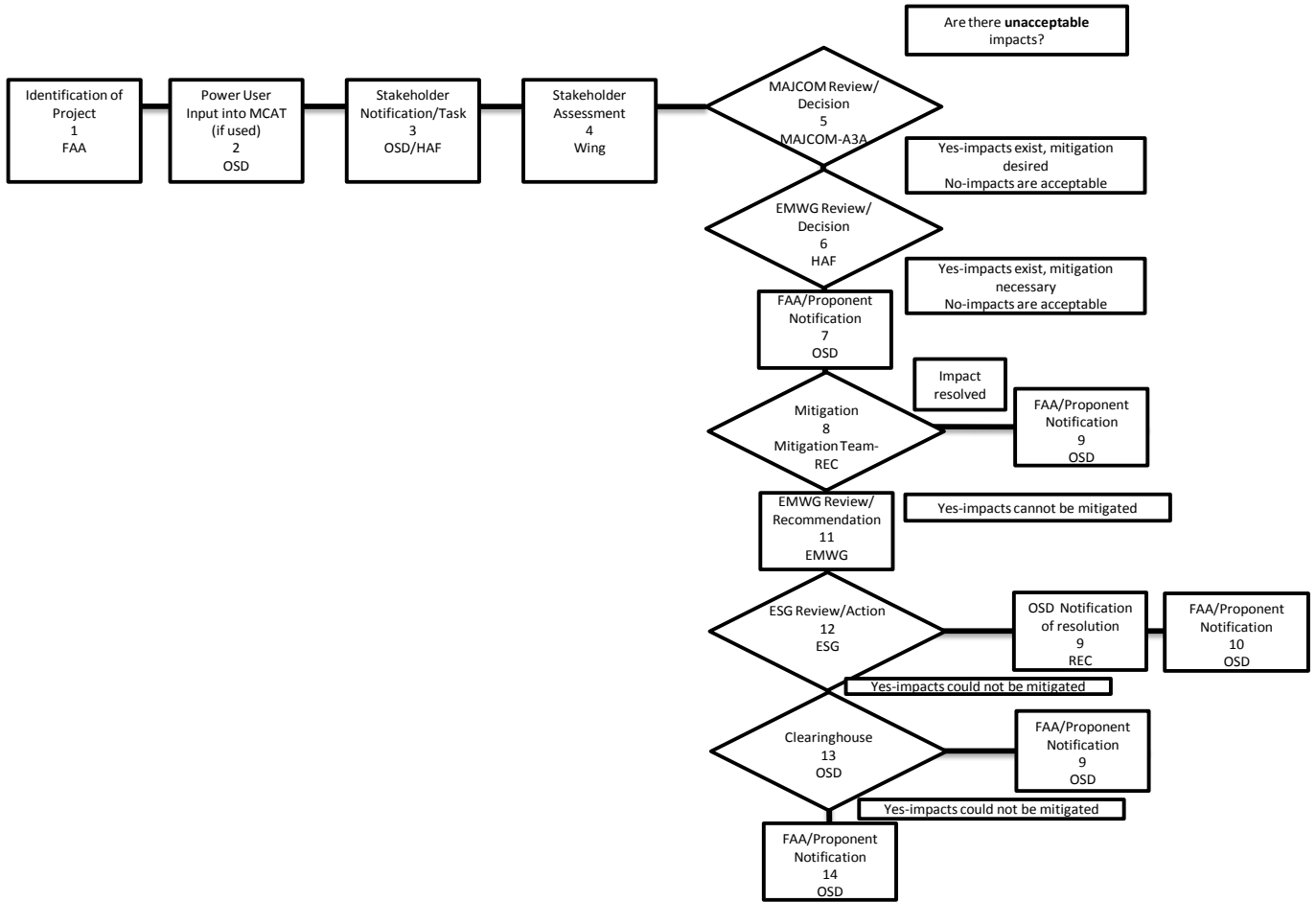


Figure A15.2: Process for receiving Air Force position under section 358

The following paragraphs provide additional background related to these official filing processes.

A15.6.1. The OE/AAA process reviews any proposed structures over 199’ tall for hazards to air navigation. The FAA will consult the Services and others for inputs prior to deciding whether or not to issue a Notice of Presumed Hazard (NPH). When a NPH is issued, the proponent has 60 days to respond before an FAA final determination is made. While the threshold of impact for an NPH is relatively low, only impacts covered in Title 49 Code of Federal Regulations (CFR) Part 77 will result in a final Determination of Hazard (DH). While the necessary justification for any single determination is the sole purview of the FAA, recent history has shown that the only AF-related impacts likely to result in a DH are:

- A15.6.1.1. Impacts to Terminal Instrument Procedures (TERPS)
- A15.6.1.2. Impacts to Long Range Radar
- A15.6.1.3. Obstruction within 10NM of an airfield

A15.6.2. Even impacts listed above must be quantified and shown to present an unacceptable safety hazard. Note that military operations are not protected under Part 77. Any objection under the OE/AAA process should be based on hazard to air navigation.

A15.7. DoD/BLM Wind Energy Development Protocol. The 2008 wind energy development protocol crafted by DoD and BLM calls for BLM to consult with the military services whenever BLM receives a request for a permit for a right-of-way (ROW) to develop wind projects on BLM land (previously identified as sensitive or critical by DoD). The consultation will be completed prior to BLM approving the ROW.

A15.7.1. The protocol defines the process and includes relevant timelines and points-of-contact. In short, the DoD Regional Environmental Coordinator (REC) is the Air Force lead for receiving the proposal and returning a response. The REC will consult the potentially affected Air Force Airspace Managers (or other Service equivalents) for impact reviews. The AF has three response options that align with the categories outlined in 6.4.5.

A15.7.2. The response may have a combination of the three options, as some renewable energy technologies may have impacts that others would not. The response should be coordinated through the respective MAJCOM Encroachment Management Team. However, this coordination does not always take place. The local BLM office has the option to elevate an objection to their headquarters, which will engage DoD and AF headquarters. As detailed in the protocol, the local/MAJCOM response deadline is 45 days (with a 45 day extension upon request). The HQ review timeline is 30 days. Some key points on the protocol:

A15.7.2.1. A negative AF response does not guarantee a denial of the ROW. BLM has full discretion.

A15.7.2.2. A ROW application may be filed solely for meteorological (MET) towers, which are shorter anemometers, used to measure wind strength and consistency. AF policy is to assess the towers as wind turbines and give feedback accordingly. This is in recognition that the METs are likely to result in the development of a wind farm nearby.

A15.7.2.3. The protocol currently covers only wind turbines. However OSD is engaging BLM to expand it to cover additional project types.

A15.8. Local Permitting Processes—Local jurisdictions with planning and zoning authority may require special use permits for any type of energy development to ensure compatibility with land use plans. These processes provide the Air Force an opportunity to raise concerns through the traditional land use planning process. Some local land use permitting boards may even require a developer to address military mission impacts prior to approving a permit

A15.9. State/Regional Energy Authorities and Regulatory Processes—Some states and regions have developed renewable energy authorities or administer energy development regulatory processes. The Air Force Regional Environmental Offices are familiar with such offices and agencies and will be able to identify opportunities where the Air Force can engage with them to ensure mission concerns are adequately considered.

A15.10. Encroachment evaluation coordination

Once the assessment of a proposal has been accomplished, appropriate coordination is necessary as outlined in the above processes. Below is the information identifying the scope of information necessary needed to respond as outlined in Section 6.4 and Section 6.5.

A15.10.1. Installation Recommendation Determine which of the four responses best characterizes the proposed development. As outlined in above, proposals will be designated in one of four categories (See Section 6.4.5.) Note that category 3 and 4 findings are

required to have the highest levels of signoff and should therefore have appropriate installation signoff.

A15.10.2. Installation Assessment. Briefly explain rationale for the recommendation. Explain and quantify impacts to mission. Provide any additional supporting materials or outside evaluations which detail the impact. Include a summary of installation mitigation discussions with the developer (if any). See Section 6.5 for impact requirements for Category 3 and 4 findings.

A15.10.3. Mitigations Considered. Briefly describe mitigation options considered and whether or not any are determined to be sufficient to resolve potential impacts. Reasonable options should be assessed, including but not limited to: modifications to flight routes, changes to or upgrades of existing hardware, and modifications to the proposed development. Modifications to the proposal must have the consent of the developer to be considered as a reasonable mitigation option. Unreasonable options should be considered as objections. See Section 6.6

A15.10.4. MAJCOM Recommendation. Same as *Installation Recommendation*, but to be filled by MAJCOM. Category 1 and 2 recommendations and preliminary objections should be signed by MAJCOM-designated lead office. Final Objections should be signed by MAJCOM/A3

A15.10.5. MAJCOM Assessment. Briefly explain rationale for concurrence or disagreement with the installation assessment. If relevant information or supporting material is known regarding Air Force authority (OE/AAA, federal land, local permitting) it should be included it with the assessment.

REGIONAL AFCEE OFFICES

Air Force Center for Engineering and the Environment (AFCEE) Regional Environmental Coordinators are at three locations within CONUS.

Figure A15.3. AFCEE locations



Western	Central	Eastern
AFCEE / RO-W 50 Fremont St, Suite 2450 San Francisco CA 94105 Phone: (415) 977-8888 Toll Free: (888) 324-9254 Email: afcee.row@us.af.mil	AFCEE / RO-C 525 Griffin St Suite 505 Dallas TX 75202 - 5023 Phone: (214) 767 - 4650 Toll Free: (888) 610-7418 FAX: (214) 767 - 4661 Email: afcee.ro-c.awag@us.af.mil	AFCEE / RO-E 60 Forsyth St SW ST, Suite 8M80 Atlanta GA 30303-3416 Phone: (404) 562-4205 FAX: (404) 562-4221 Toll Free: (888) 610-7419 Email: afcee.re-e.awag@brooks.af.mil