



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

Office of the Administrator

800 Independence Ave., S.W.
Washington, DC 20591

October 12, 2022

The Honorable Peter A. DeFazio
Chair
Committee on Transportation and Infrastructure
U.S. House of Representatives
Washington, DC 20515

Dear Chair DeFazio:

I am pleased to provide you with a report on the Federal Aviation Administration (FAA) Multiagency Use of Airspace and Environmental Review in response to Section 543 of the FAA Reauthorization Act of 2018.

The report details how FAA plans to improve processes to resolve persistent challenges for special-use airspace requests in support of, or associated with, short-notice testing requirements at Major Range and Test Facility Bases, including the establishment of temporary military operations areas used for conducting short-term, scheduled exercises.

A similar response has been sent to the Ranking Member of the House Committee on Transportation and Infrastructure; the Chair and Ranking Member of the Senate Committee on Commerce, Science and Transportation; the Chairman and Ranking Member of the House Committee on Armed Services; and the Chairman and Ranking Member of the Senate Committee on Armed Services.

Sincerely,

A handwritten signature in black ink, appearing to read "Billy Nolen", with a stylized flourish at the end.

Billy Nolen
Acting Administrator

Enclosure



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

Office of the Administrator

800 Independence Ave., S.W.
Washington, DC 20591

October 12, 2022

The Honorable Sam Graves
Ranking Member
Committee on Transportation and Infrastructure
U.S. House of Representatives
Washington, DC 20515

Dear Ranking Member Graves:

I am pleased to provide you with a report on the Federal Aviation Administration (FAA) Multiagency Use of Airspace and Environmental Review in response to Section 543 of the FAA Reauthorization Act of 2018.

The report details how FAA plans to improve processes to resolve persistent challenges for special-use airspace requests in support of, or associated with, short-notice testing requirements at Major Range and Test Facility Bases, including the establishment of temporary military operations areas used for conducting short-term, scheduled exercises.

A similar response has been sent to the Chair of the House Committee on Transportation and Infrastructure; the Chair and Ranking Member of the Senate Committee on Commerce, Science and Transportation; the Chairman and Ranking Member of the House Committee on Armed Services; and the Chairman and Ranking Member of the Senate Committee on Armed Services.

Sincerely,

A handwritten signature in black ink, reading "Billy Nolen".

Billy Nolen
Acting Administrator

Enclosure



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

Office of the Administrator

800 Independence Ave., S.W.
Washington, DC 20591

October 12, 2022

The Honorable Maria Cantwell
Chair
Committee on Commerce, Science,
and Transportation
United States Senate
Washington, DC 20510

Dear Chair Cantwell:

I am pleased to provide you with a report on the Federal Aviation Administration (FAA) Multiagency Use of Airspace and Environmental Review in response to Section 543 of the FAA Reauthorization Act of 2018.

The report details how FAA plans to improve processes to resolve persistent challenges for special-use airspace requests in support of, or associated with, short-notice testing requirements at Major Range and Test Facility Bases, including the establishment of temporary military operations areas used for conducting short-term, scheduled exercises.

A similar response has been sent to the Ranking Member of the Senate Committee on Commerce, Science and Transportation; the Chair and Ranking Member of the House Committee on Transportation and Infrastructure; the Chairman and Ranking Member of the House Committee on Armed Services; and the Chairman and Ranking Member of the Senate Committee on Armed Services.

Sincerely,

A handwritten signature in black ink, appearing to read "Billy Nolen", with a stylized flourish at the end.

Billy Nolen
Acting Administrator

Enclosure



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

Office of the Administrator

800 Independence Ave., S.W.
Washington, DC 20591

October 12, 2022

The Honorable Roger F. Wicker
Ranking Member
Committee on Commerce, Science, and Transportation
United States Senate
Washington, DC 20510

Dear Ranking Member Wicker:

I am pleased to provide you with a report on the Federal Aviation Administration (FAA) Multiagency Use of Airspace and Environmental Review in response to Section 543 of the FAA Reauthorization Act of 2018.

The report details how FAA plans to improve processes to resolve persistent challenges for special-use airspace requests in support of, or associated with, short-notice testing requirements at Major Range and Test Facility Bases, including the establishment of temporary military operations areas used for conducting short-term, scheduled exercises.

A similar response has been sent to the Chair of the Senate Committee on Commerce, Science and Transportation; the Chair and Ranking Member of the House Committee on Transportation and Infrastructure; the Chairman and Ranking Member of the House Committee on Armed Services; and the Chairman and Ranking Member of the Senate Committee on Armed Services.

Sincerely,

A handwritten signature in black ink, appearing to read "Billy Nolen", with a stylized flourish at the end.

Billy Nolen
Acting Administrator

Enclosure



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

Office of the Administrator

800 Independence Ave., S.W.
Washington, DC 20591

October 12, 2022

The Honorable Adam Smith
Chairman
Committee on Armed Services
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Smith:

I am pleased to provide you with a report on the Federal Aviation Administration (FAA) Multiagency Use of Airspace and Environmental Review in response to Section 543 of the FAA Reauthorization Act of 2018.

The report details how FAA plans to improve processes to resolve persistent challenges for special-use airspace requests in support of, or associated with, short-notice testing requirements at Major Range and Test Facility Bases, including the establishment of temporary military operations areas used for conducting short-term, scheduled exercises.

A similar response has been sent to the Ranking Member of the House Committee on Armed Services; the Chair and Ranking Member of the House Committee on Transportation and Infrastructure; the Chair and Ranking Member of the Senate Committee on Commerce, Science and Transportation; and the Chairman and Ranking Member of the Senate Committee on Armed Services.

Sincerely,

A handwritten signature in black ink, appearing to read "Billy Nolen", with a stylized flourish at the end.

Billy Nolen
Acting Administrator

Enclosure



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

Office of the Administrator

800 Independence Ave., S.W.
Washington, DC 20591

October 12, 2022

The Honorable Mike Rogers
Ranking Member
Committee on Armed Services
U.S. House of Representatives
Washington, DC 20515

Dear Ranking Member Rogers:

I am pleased to provide you with a report on the Federal Aviation Administration (FAA) Multiagency Use of Airspace and Environmental Review in response to Section 543 of the FAA Reauthorization Act of 2018.

The report details how FAA plans to improve processes to resolve persistent challenges for special-use airspace requests in support of, or associated with, short-notice testing requirements at Major Range and Test Facility Bases, including the establishment of temporary military operations areas used for conducting short-term, scheduled exercises.

A similar response has been sent to the Chairman of the House Committee on Armed Services; the Chair and Ranking Member of the House Committee on Transportation and Infrastructure; the Chair and Ranking Member of the Senate Committee on Commerce, Science and Transportation; and the Chairman and Ranking Member of the Senate Committee on Armed Services.

Sincerely,

A handwritten signature in black ink, appearing to read "Billy Nolen", with a stylized flourish at the end.

Billy Nolen
Acting Administrator

Enclosure



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

Office of the Administrator

800 Independence Ave., S.W.
Washington, DC 20591

October 12, 2022

The Honorable Jack Reed
Chairman
Committee on Armed Services
United States Senate
Washington, DC 20510

Dear Chairman Reed:

I am pleased to provide you with a report on the Federal Aviation Administration (FAA) Multiagency Use of Airspace and Environmental Review in response to Section 543 of the FAA Reauthorization Act of 2018.

The report details how FAA plans to improve processes to resolve persistent challenges for special-use airspace requests in support of, or associated with, short-notice testing requirements at Major Range and Test Facility Bases, including the establishment of temporary military operations areas used for conducting short-term, scheduled exercises.

A similar response has been sent to the Ranking Member of the Senate Committee on Armed Services; the Chair and Ranking Member of the House Committee on Transportation and Infrastructure; the Chair and Ranking Member of the Senate Committee on Commerce, Science and Transportation; and the Chairman and Ranking Member of the House Committee on Armed Services.

Sincerely,

A handwritten signature in black ink, reading "Billy Nolen".

Billy Nolen
Acting Administrator

Enclosure



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

Office of the Administrator

800 Independence Ave., S.W.
Washington, DC 20591

October 12, 2022

The Honorable James Inhofe
Ranking Member
Committee on Armed Services
United States Senate
Washington, DC 20510

Dear Ranking Member Inhofe:

I am pleased to provide you with a report on the Federal Aviation Administration (FAA) Multiagency Use of Airspace and Environmental Review in response to Section 543 of the FAA Reauthorization Act of 2018.

The report details how FAA plans to improve processes to resolve persistent challenges for special-use airspace requests in support of, or associated with, short-notice testing requirements at Major Range and Test Facility Bases, including the establishment of temporary military operations areas used for conducting short-term, scheduled exercises.

A similar response has been sent to the Chairman of the Senate Committee on Armed Services; the Chair and Ranking Member of the House Committee on Transportation and Infrastructure; the Chair and Ranking Member of the Senate Committee on Commerce, Science and Transportation; and the Chairman and Ranking Member of the House Committee on Armed Services.

Sincerely,

A handwritten signature in black ink, appearing to read "Billy Nolen", with a stylized flourish at the end.

Billy Nolen
Acting Administrator

Enclosure



Federal Aviation Administration Air Traffic Organization

FAA Reauthorization Act Section 543

Report to Congress: Multiagency Use of Airspace and Environmental Review

Executive Summary

The Federal Aviation Administration (FAA) and the Department of Defense (DoD) continuously look for ways to improve processes to assess DoD requests to approve or modify Special Use Airspace (SUA).¹ The FAA's efforts include streamlining and ensuring consistency of National Environmental Policy Act (NEPA) reviews through a revised Memorandum of Understanding (MOU) that clarifies the FAA's and the DoD's roles, both as lead and cooperating agencies.² With the Council on Environmental Quality (CEQ) final rule updating the regulations implementing NEPA issued in September 2020, the FAA and the DoD are analyzing further options for streamlining NEPA reviews.³

Introduction

This report responds to the reporting requirement in the FAA Reauthorization Act of 2018 (Pub. L. 115-254), Section 543 "Report on Multiagency Use of Airspace and Environmental Review," which states:

(a) In General.--Not later than 180 days after the date of the enactment of this Act, the Administrator, in consultation with the Secretary of Defense, shall submit to the covered committees of Congress a report documenting efforts made toward improving processes to resolve persistent challenges for special use airspace requests in support of, or associated with, short notice testing requirements at Major Range and Test Facility Bases, including the establishment of temporary military operations areas used for conducting short-term, scheduled exercises.

(b) Elements.--The report required under subsection (a) shall include the following elements:

(1) Analysis of previous efforts to streamline internal processes associated with the designation of temporary military operations areas at Major Range and Test Facility Bases and the use of such areas for scheduled exercises.

(2) Analysis of progress made to ensure consistency of environmental review, including impact analysis, associated environmental studies, or consultation, while complying with the

¹ Pursuant to FAA Order 7400.2, SUA is "airspace of defined dimensions wherein activities must be confined because of their nature, or wherein limitations may be imposed upon aircraft operations that are not a part of those activities".

² Pursuant to 40 C.F.R. § 1508.5, the cooperating agency is "any Federal agency other than a lead agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major Federal action significantly affecting the quality of the human environment."

³ *Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act*, 85 FR 43304 (July 16, 2020).

National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) and other environmental requirements.

(3) Identification of challenges, if any, in complying with the National Environmental Policy Act of 1969.

(4) A description of airspace requirements, current test and training needs statements completed during the 10-year period preceding the report, and future 5-year requirements, including all temporary military operating areas, special use airspaces, instrument routes, visual routes, and unfulfilled user requirements.

(5) Proposed options and solutions to overcome identified challenges, if any, including identifying whether--

(A) a solution or solutions can be incorporated within the existing Federal Aviation Administration and Department of Defense Memorandum of Understanding; or

(B) changes to current law are required.

(c) Definitions.--In this section:

(1) Covered committees of Congress.--The term “covered committees of Congress” means--

(A) the Committee on Commerce, Science, and Transportation and the Committee on Armed Services of the Senate; and

(B) the Committee on Transportation and Infrastructure and the Committee on Armed Services of the House of Representatives.

(2) Major range and test facility base.--The term “Major Range and Test Facility Base” has the meaning given the term in section 196(i) of title 10, United States Code.

(3) Special use airspace.--The term “special use airspace” means certain designations of airspace designated by the Federal Aviation Administration, as administered by the Secretary of Defense.

This report documents “efforts made toward improving processes to resolve persistent challenges for special use airspace requests in support of, or associated with, short notice testing requirements at Major Range and Test Facility Bases, including the establishment of temporary military operations areas used for conducting short-term, scheduled exercises.”^{4 5} This report also documents previous efforts to streamline processes; progress made ensuring consistency in environmental review; NEPA challenges; airspace requirements; and proposed solutions to further improve processes and resolve persistent challenges for these same SUA requests.^{6 7}

⁴ Pursuant to Title 10 of the United States Code (10 U.S.C.) § 196(i), Major Range and Test Facility Base means “test and evaluation facilities and resources that are designated by the Secretary of Defense as facilities and resources comprising the Major Range and Test Facility Base.”

⁵ Section 543(a)

⁶ Pursuant to Title 14 of the Code of Federal Regulations (14 CFR) § 1.1, military operations area “is airspace established outside Class A airspace to separate or segregate certain nonhazardous military activities from IFR Traffic and to identify for VFR traffic where these activities are conducted.”

⁷ Pursuant to FAA Order 7400.2, Chapter 25-1-7, “[t]emporary MOAs are designated 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, temporary MOAs may be established for a period not to exceed 45 days. On a case-by-case basis, Rules and Regulations Group may approve a longer period if the proponent provides justification for the increase.” However, “[w]hen it is determined that the need for a

Background

The FAA is required to develop plans and policies for the use of the navigable airspace and to assign the use of the airspace by regulation or order to ensure aircraft safety and National Airspace System (NAS) efficiency.⁸ The FAA is required to encourage and allow maximum use of the navigable airspace by civil aircraft and, in consultation with the Secretary of Defense, may establish SUAs deemed necessary for national defense purposes.⁹

Description of Airspace and Airspace Requirements

There are seven types of SUA: Prohibited Areas (PA), Restricted Areas (RA), MOA, Warning Areas, Alert Areas, Controlled Firing Areas (CFA), and National Security Areas (NSA). More details about each of these areas can be found in FAA Order 7400.2M, Chapter 21-1-3.¹⁰ The majority of DoD requested airspace changes that trigger NEPA requirements, with the FAA as a cooperating agency, are for DoD projects that propose to utilize RAs and MOAs. However, between 2008 and 2018, only five of the approximately 21 sites designated as MRTFBs requested airspace changes that trigger NEPA requirements, all of which involved restricted areas (as opposed to requesting temporary MOAs).

The seven types of SUA fall into two categories: 1) regulatory (which are subject to notice-and-comment rulemaking) and 2) “other than regulatory” (non-rulemaking). PA and RAs are regulatory. MOAs, Warning Areas, Alert Areas, CFAs, and NSAs are non-rulemaking SUA actions.¹¹ Authorized operations differ in each type of airspace, with regulatory SUA being more restrictive or prohibited for non-participants than non-regulatory SUA, which allow certain rights of transit for certain aircraft.

Pursuant to Title 14 *Code of Federal Regulations* (CFR) § 1.1, an MOA is airspace established outside Class A airspace (i.e., below 18,000 feet above mean sea level) to separate or segregate certain nonhazardous military activities from instrument flight rules (IFR) traffic and to identify for visual flight rules (VFR) traffic where activities are conducted. As such, aircraft operating under VFR are allowed to transit this airspace. The MOA depiction allows aviators to recognize where these activities are conducted. Permanent MOAs, or temporary MOAs, typically are established by the FAA for the DoD to conduct aircraft tests and pilot training exercises.

temporary MOA will occur on a regular and continuing basis, the airspace should be considered for establishment as a permanent MOA with provisions for activation by NOTAM/Special Notice disseminated well in advance of scheduled exercises.”

⁸ 49 USC § 40103(b)(USE OF AIRSPACE.— (1) The Administrator of the Federal Aviation Administration shall develop plans and policy for the use of the [navigable](#) airspace and assign by regulation or order the use of the airspace necessary to ensure the safety of [aircraft](#) and the efficient use of airspace.

⁹ Pursuant to 49 USC § 40103(b)(3), the FAA is permitted “to establish security provisions that will encourage and allow maximum use of the [navigable airspace](#) by [civil](#) aircraft consistent with national security, the Administrator, in consultation with the Secretary of Defense, shall— (A) establish [areas](#) in the airspace the Administrator decides are necessary in the interest of national defense.

¹⁰ FAA Order 7400.2, Procedures for Handling Airspace Matters, available at:

https://www.faa.gov/air_traffic/publications/

¹¹ FAA Order 7400.2, Chapter 21-1-4

NEPA

The FAA is the Federal agency with jurisdiction over the NAS. When a DOD SUA is established or modified, the DoD is required to conduct a NEPA review of the military operations to be conducted in the airspace. The FAA's final designation of SUA airspace must be deferred until applicable NEPA requirements are completed. For DoD SUA proposals, the DoD is typically the lead agency for the preparation of the required NEPA documentation, and the FAA is the cooperating agency. The NEPA process starts when the DoD submits an airspace proposal. The DoD conducts the NEPA analysis, which the FAA eventually "adopts" after a review to ensure consistency with the FAA's NEPA requirements. The DoD identifies its purpose, intent, and parameters for airspace needed within a particular type of SUA. The FAA reviews the airspace proposal against the FAA's statutory requirement to manage the maximum use of the navigable airspace by civil aircraft consistent with national security. This review also verifies that the DoD NEPA analysis conforms to the airspace for the proposed SUA. Once the FAA is satisfied that the NEPA analysis is complete and that the DoD proposal comports with the FAA's statutory responsibility, the FAA will designate the SUA airspace.

On July 16, 2020, the CEQ published a final rule updating its regulations on implementing NEPA. The updated regulations became effective on September 14, 2020. The amended regulations contain provisions that will assist the FAA and the DoD with streamlining the NEPA review process for SUA. The amended regulations were revised to permit Federal agencies to adopt Categorical Exclusion (CATEX) determinations of another agency.¹² The revisions also include a provision that permits Federal agencies to establish a process that allows agencies to use a CATEX listed in another agency's NEPA procedures.¹³ These provisions will assist in addressing some of the challenges the FAA has had in being unable to adopt or use DoD CATEXs (see "Identification of challenges, if any, in complying with NEPA" below). Prior to adopting a DoD CATEX, the FAA must determine whether the proposed project would result in any extraordinary circumstance that may have a significant impact. This determination may require screening or other analyses.

Analysis of previous efforts to streamline internal processes associated with the designation of temporary military operations areas at MRTFB and the use of such areas for scheduled exercises.

In 2005, the FAA and the DoD entered into an MOU for "Environmental Review of Special Use Airspace Actions" in an effort to streamline and ensure consistency of environmental reviews. From March 2017 to February 2018, the FAA met with representatives from the Air Force, Navy, Marine Corps, Army, and MRTFB to draft amendments and clarifications to the MOU, which the FAA incorporated into FAA Order 7400.2, Procedures for Handling Airspace Matters, in October 2019.

The October 2019 revised MOU addressed many of the challenges that the DoD and the FAA encountered during the March 2017 to February 2018 time period. The revised MOU:

¹² See 40 CFR 1506.3(d)

¹³ See 40 CFR 1507.3(f)(5)

- Describes guidelines for compliance with NEPA and CEQ Regulations (40 CFR Parts 1500–1508) without unnecessary duplication of effort by the FAA and the DoD.
- Promotes early project planning coordination and inter-agency cooperation between the FAA and the DoD during the environmental document development processes when SUA is established, designated, or modified.
- Applies “lead agency” (40 CFR §1501.5) and “cooperating agency” (40 CFR §1501.6) concepts and requirements to CATEXs, Environmental Assessments (EAs), Finding of No Significant Impact (FONSI), Environmental Impact Statements (EIS), and other related or supporting documents when SUA is developed, designated, or modified.
- Clarifies that DoD and FAA actions related to SUA can be subject to different levels and scope of environmental impact analyses pursuant to NEPA, as implemented by the CEQ regulations and by DoD’s and FAA’s agency-specific NEPA implementing procedures.
- Acknowledges the purposes of NEPA (40 CFR §1500.1) and recognizes the need to eliminate duplication, with the agreement to integrate NEPA considerations and requirements of both agencies into the SUA project planning process as early as possible in their respective project planning schedules.
- Acknowledges that background data and impact analyses prepared by either the DoD or the FAA in support of an SUA request shall be shared and may be used by either agency as allowed by their respective regulations/directives. States that environmental documentation will be developed and processed in accordance with applicable FAA Orders and DoD Service directives and regulations.
- Acknowledges that the lead and/or cooperating agency will independently evaluate any information or analysis before that information is used to support a NEPA review. The intent of the lead and cooperating agency relationship is to ensure mutually adequate documentation that complies with both the lead and cooperating agencies’ NEPA-implementing procedures. Deficiencies in information, analysis, or other issues covered within the scope of the documentation will be addressed and corrected during cooperating agency concurrent review(s).
- Recognizes that DoD and FAA CATEXs are not interchangeable between the agencies. If the lead agency) for an SUA project decides to rely on a CATEX for its action and the cooperating agency cannot rely on a CATEX for its action, the lead agency will provide information and analysis the cooperating agency identifies as necessary for the cooperating agency’s NEPA review. To the extent consistent with the cooperating agency’s NEPA-implementing procedures, the cooperating agency may request that the lead agency prepare or fund an EA or EIS.
- Clarifies that the FAA and the DoD, as either lead or cooperating agency, agree to develop and maintain an administrative record of each SUA project in accordance with

their agency's respective administrative record and document retention rules and requirements and to share with each other their administrative records for each SUA project in the event that either agency's action is challenged.

- Clarifies that if the FAA and the DoD fail to reach an agreement at the normal working level on any issue relating to environmental processing of SUA proposals, the matter will be referred, in ascending order, as outlined in the MOU. At any time, the FAA's Office of the Chief Counsel and the Office of the General Counsel of the Service Department involved shall be consulted for assistance with legal issues.
- Acknowledges that agency budget constraints may delay the processing and implementation of SUA projects. States that as part of the lead agency-cooperating agency relationship, the DoD and the FAA will determine responsibilities, consistent with the MOU, for funding NEPA documentation (40 CFR §1501.6(b)(5)) and, if appropriate, decision implementation measures (40 CFR §1505.3).

The DoD and the FAA are currently working on revising the 2019 MOU to address the updated CEQ regulations.

Analysis of progress made to ensure consistency of environmental review, including impact analysis, associated environmental studies, or consultation while complying with NEPA and other environmental requirements.

The update of the 2019 MOU is just one step in improving the environmental review process required by the DoD and the FAA. Early communication between the DoD and the FAA is critical to ensure the project can be completed on schedule. This early communication is especially important since both the DoD and the FAA must issue environmental decision documents. The FAA also must implement the airspace action. This implementation only can occur after both organizations complete their respective environmental decision documents. These decisions are facilitated when the FAA is identified as a cooperating agency for the DoD environmental review. The FAA then is able to ensure that any additional requirements will be addressed in the DoD environmental document to the extent practicable. This allows the FAA to adopt the DoD environmental document more easily. To the extent the DoD environmental document does not comply with the FAA's NEPA standards, the DoD needs to address the deficiency before the FAA can implement its SUA action.

The FAA and the DoD also have established tiger teams to improve the environmental review process for DoD airspace projects. The tiger teams include a team specifically tasked with addressing both the environmental process and the aeronautical process. The goal of the tiger team is to ensure consistency with the environmental process and also find ways to improve and streamline the environmental and aeronautical decision-making processes. As an example, the tiger team addresses how to fulfill the consultation requirements under Section 106 of the National Historic Preservation Act. Due to the different types of DoD airspace requests, including seven types of SUA, it is not uncommon for there to be different viewpoints on the level of consultation needed. Separate from the tiger team, environmental attorneys from the

FAA and the DoD have been conferring monthly to address environmental law issues and improve communication. These environmental law discussions include addressing the January 2021 CEQ updates discussed further in other sections of this report.

Identification of challenges, if any, in complying with NEPA.

Although the environmental analysis for many of the impact categories of an SUA project are the same for both agencies, the DoD and the FAA do not use the same analytical tools, particularly for measuring the impact levels of aircraft noise. While the standards of significance for noise are similar, the way they are measured and analyzed are different.

When the DoD conducts its NEPA analysis on SUA proposals, its study analyzes how the DoD intends to use that airspace and the potential for environmental impacts, such as noise impacts. The DoD, as the project proponent, initiates the NEPA review and acts as the lead agency per the CEQ's NEPA implementing regulations and the MOU. The FAA, because of its jurisdiction by law over the SUA, acts as a cooperating agency. Under the CEQ regulations, upon request of the lead agency, an agency with jurisdiction by law must participate as a cooperating agency in the NEPA process.¹⁴ This arrangement enables the agencies to resolve any analytical issues early in the environmental review process and avoid duplication of efforts, thereby ensuring efficient use of Federal resources and streamlining the process of approving DoD requests to establish or modify SUA to support their SUA use proposals.

The DoD notifies the FAA when SUA airspace is proposed. The FAA will assist with the analysis. Delayed notification can impact the FAA's responsiveness. Timely notification from the DoD often is more critical when assessing aviation noise impacts. As a result, the FAA frequently faces difficulty in meeting its own NEPA documentation requirements when reviewing DoD's NEPA analyses. The DoD analysis often lacks sufficient detail for the FAA to adopt the DoD NEPA document per FAA's NEPA implementing procedures, thus requiring supplemental analysis, which delays the completion of the NEPA process.¹⁵

Each agency has its own NEPA implementing procedures. Therefore, the two agencies do not always conduct the same level of NEPA analysis: CATEX EA; or EIS. For example, the FAA has its own CATEXs. The DoD, likewise, has its particular agency and service-specific CATEXs. With the update to the CEQ regulations, the DoD's determination that one of its CATEXs applies to its SUA action can be adopted by the FAA, subject to criteria in the regulations. Before adopting DoD's CATEX determination, the FAA must verify that DoD's CATEX determination contains sufficient information to make the requisite findings in accordance with its NEPA procedures, including with respect to the existence of extraordinary circumstances. The 2019 MOU will be updated to address the information required in a DoD CATEX determination in order to facilitate adoption by the FAA.

Previously, when the DoD conducted analysis under a CATEX, there was often not enough information known about DoD SUA operations for the FAA to fulfill its NEPA obligations and

¹⁴ See 40 CFR § 1501.8 - Cooperating agencies.

¹⁵ See FAA Order 1050.1F, Paragraph 8-2; Adoption of Other Agencies' NEPA Documents.

approve the DoD request. As a result, the FAA prepared an EA. In these circumstances, and in accordance with the 2019 revised MOU between the DoD and the FAA, the DoD is responsible for providing information and analysis the FAA identifies as necessary for its EA. The FAA is required to provide sufficient grounds to support a FONSI. The FAA will approve the DoD's proposed use of SUA even if there are significant impacts only if DoD documents methods to mitigate potentially significant environmental impacts sufficiently, or an EIS is completed. In the past, the DoD has, in some cases, failed to provide a sufficient level of data and detailed analysis for the FAA to draft a legally defensible adoption document. The FAA then had to complete additional analysis and could require an EA, including an analysis of aircraft noise data to support a FONSI. For the FAA, an EA would require a more in-depth analysis of aircraft noise data to make a more reliable finding that there are potentially significant aircraft noise impacts.

The FAA and the DoD are increasing communication early in the NEPA process to address issues related to the FAA's adoption of DoD environmental documents. The 2019 MOU will be updated to reflect the updated CEQ regulations.

A description of airspace requirements, current test and training need statements completed during the 10-year period preceding the report, and future 5-year requirements, including all temporary military operating areas, special use airspaces, instrument routes, visual routes, and unfulfilled user requirements.

The individual Military Departments (including the Air National Guard facilities in each state) and other DoD components require SUAs primarily in the interest of national defense, security, and/or welfare. Those activities include conducting research, development, testing, and evaluation of surface, sub-surface, ground-based and airborne equipment, systems, munitions and capabilities; training of individuals involved in handling and operating those aforementioned systems; supporting the development and rehearsal of large scale and/or sensitive military operations; and, supporting training missions and exercises to integrate and evaluate the effectiveness of, and determine the need for, new or revised military tactics, techniques, and procedures.

Military requirements for revisions to existing airspace or requests for new SUA typically are linked to the new or evolving acquisition of equipment and implementation of new or enhanced technologies that improve defense capabilities. The Military Departments and other DoD components implement a continuous process to assess the existing SUA footprint to help inform decisions regarding the location of military aircraft units. Development and fielding of military capabilities continue to create challenges and drive changes in airspace usage. F-16 basing at Holloman AFB is one example. Individual Military Department submissions of airspace proposals for rulemaking and non-rulemaking airspace have described the national defense, security, and/or welfare requirements associated with each proposal clearly. The Military Departments submit an Annual Utilization Report to the FAA that quantifies the efficiency and use of all RAs and MOAs.¹⁶

¹⁶ 14 CFR § 73.19; FAA Order 7400.2, Chapter 21-1-11

There have been challenges in the past ten years in complying with NEPA requirements when establishing or modifying airspace to accommodate new technology. Below are two examples of MRTFB test and training needs statements challenging the FAA's approval process, and therefore impacting DoD timelines:

1. R-2306F - Yuma Proving Ground, Arizona. In 2012, R-2306F proposed RA to support stationary aircraft laser tests, munition storage, and Unmanned Aircraft System operations; the Army approved plans to pursue an airspace proposal in 2014. On September 26, 2017, R-2306F was designated and posted in the Federal Register for effective use.¹⁷

2. R-4001C - Aberdeen, Maryland. R-4001C was created in July 2014 from existing RAs R-4001A and R-4001B by amending R-4001 boundaries. R-4001C was designed to protect the emplacement of the Joint Land Attack Cruise Missile Elevated Netted Systems (JLENS), which was comprised of two 80,000-pound tethered aerostats designed to operate at 9,950 feet Mean Sea Level, five kilometers apart. The DoD selected the JLENS to fill a requirement to provide early warning missile detection. A Joint Use Letter of Procedure with Potomac Consolidated TRACON is in place to govern the use of R-4001C.

There will be challenges posed by future DoD requirements for additional MRTFB airspace or modifications to MRTFB airspace to support advanced combat aircraft testing and training in the next five years at the following locations:

1. Utah Test and Training Range (UTTR), Nellis Test and Training Range (NTTR), and the Naval Air Warfare Development Center in Fallon, Nevada, are integral for critical DoD combat readiness objectives outlined in the National Defense Strategy. Improved access through strategically placed orbit points between these locations is a high priority for the Joint Chiefs of Staff-directed tests and training exercises. These proposals will be led by the Salt Lake Air Route Traffic Control Center, which is responsible for the safety and efficiency of this airspace. It will manage the tactical development of the airspace coordination. It is more challenging to accommodate these national defense needs and balance the safety and efficiency of existing airspace as more technology is integrated into the NAS.

The Air Force will request a permanent SUA around the UTTR to increase the demand for high-altitude airspace to meet the needs of advanced combat aircraft tests and training. The current airspace constraints affect the existing and emerging capabilities of current and future aircraft (e.g., B-21) test and training requirements.

2. Naval Air Warfare Center Weapons Division (NAWCWD) anticipates a request for a new (RA) the same size and location as the existing Trona CFA to support an increase in current and future operations such as missile flights. The purpose of the Trona CFA/future RA is to support free flight weapons systems transiting from launch areas within R-2505 to target areas within R-2524 and from launch areas with R-2524 to target areas within R-2505. The weapon systems include High-Speed Anti-Radiation Missile,

¹⁷ 82 FR 44721

Advanced Medium-Range Air-to-Air Missile, Standoff Land Attack Missile, and Joint Standoff Weapon. Other systems must meet the minimum safety criteria outlined in the Letter of Authorization before being considered.

3. Yuma Proving Ground - The highest priority for the Army's newly established Future Command is long-range precision fires. Artillery testing is one of the core responsibilities of the Yuma Proving Ground. The expected increase in distance exceeds the Yuma Proving Ground capabilities and requires alternative solutions to meet critical milestones. Yuma Proving Ground is currently engaged in discussions with the FAA and other DoD airspace stakeholders to potentially increase established SUA, create new SUA, or determine if present FAA rules and regulations can accommodate artillery tests outside of SUA.
4. RA R-5121 – A SUA amendment currently is ongoing at White Sands Missile Range (WSMR), New Mexico, to accommodate solid rocket fuel launches in support of improved rocket and missile technology. The amendment is a vertical expansion from the Surface (SFC) to Flight Level 200 (FL200). The resulting action is likely the dual sectioning of R-5121 with one section extending from the SFC to FL200 and the other section encompassing the present restriction of FL200 to unlimited. The final environmental assessment and finding of no significant impact was completed in early March 2019 in support of an FAA final rule.
5. Electronic Proving Ground (EPG), Fort Huachuca, Arizona. Based on the new Defense Strategy and the Army's modernization priorities, the requirements for manned and unmanned aerial Intelligence, Surveillance, and Reconnaissance and Electronic Warfare testing, training, and tactics development will increase considerably. EPG also anticipates the convergence of testing, training, and Joint Operations, which will result in increased airspace and range requirements. To meet the future increase in training and testing requires additional restricted airspace in order to achieve desired detection/neutralization distances and to provide greater flexibility with the use of unmanned aerial systems. As a result, EPG supports Fort Huachuca and the Air Force initiative to convert the Tombstone MOA into restricted airspace that will support training, testing, and tactics development.

Additionally, the DoD is conducting a number of studies to refine the airspace required to support the incorporation of advanced technologies and improve military readiness highlighted in the National Defense Strategy. These studies include:

- Complex Long Range Weapon Systems Test. Numerous DoD-sponsored studies have identified the need for a more robust Live-Virtual-Constructive (LVC) environment that adequately can test increasingly complex and long-range weapon systems. The test community foresees needs similar to the requirement for temporary airspace between NTTR and Fallon, including the need for corridors linking Point Mugu Sea Range, China Lake Land Range, National Test Center, Nevada Test & Training Range, Utah Test & Training Range, and Fallon Range Training Complex. Linking and networking these ranges and providing a threat representative environment that will stress future weapon

systems is required to ensure these new systems will support the warfighter against the evolving threat.

- **Hypersonic Systems.** The DoD is planning for a substantial increase in the number of hypersonic flight tests requiring the use of open-air ranges. Current open-air range flight test infrastructure capacity does not support long-range flight test demand. The Office of the Secretary of Defense's Test Resource Management Center is studying new long-range flight test corridors to support hypersonic flight tests. The corridors included in the analysis represent both options inside the Continental United States and outside the Continental United States to be considered for hypersonic flight testing.
- **Atlantic Fleet Training and Testing (AFTT) initiative.** AFTT is part of a Navy Fleet Forces Command supported EIS/Overseas EIS for testing and training in the Atlantic. AFTT encompasses the Virginia Capes and Jacksonville Operating Areas as well as international air/water space. The initiative is nearing a final ruling determination and has potential applications for large range requirement systems such as the F-35 and Hypersonic.
- **Directed Energy Laser (DEW) High Energy Laser (HEL) & High Powered Microwave (HPM) Systems.** The portfolio of Directed-energy systems includes multiple technology applications across several different warfare areas. The range's safety models and procedures to accommodate these systems are under revision, and the impact of the revised safety models and procedures on Restricted and Warning Area airspace is evolving. There are active DEW programs at the following DoD test locations:
 - The Joint Directed Energy Test Center (JDETC) at White Sands Missile Range includes a new DEW Laser that will allow testing of air to air and air to ground DEW engagements. The associated high energy levels pose a hazard to aircraft and ground personnel not adequately protected. The JDETC also is developing higher power weapons that will impact Range Safety calculations and airspace requirements.
 - The Naval Surface Warfare Center, Dahlgren Division (NSWCDD), has a lethality lab to assess engagements with HEL and HPM systems. NSWCDD operates the Maginot Open-Air Test Site for testing a variety of HPM technologies. NSWCDD has the capability to fire over water at targets located in the Potomac River Test Range with both HEL and HPM to evaluate systems performing surface vehicle stopping missions. This technology has the potential to endanger low-flying aircraft if not properly mitigated. NSWCDD also is the lead lab for the HEL integration for the USAF Special Operation Command (AFSOC) C-130HEL program.
 - The Naval Air Warfare Development Center - Point Mugu Sea Range and land-based facilities are the primary locations for overwater and dynamic engagements for assessments of systems for the maritime environment.

- The Navy Surface Combat Systems Center, collocated with NASA Wallops Flight Facility, has an emerging need to develop a DEW/HPM test capability on the East Coast to support the planned installation of DEW/HPM systems on East Coast-based Navy ships.
- The Naval Air Warfare Center – Weapons Division at China Lake will support multiple near-term HPM test events for which range airspace may require an adjustment.
- The 96th Test Wing at Eglin AFB has conducted over-water and over-land DEW test events for several years and will be supporting the testing of the DEW/HPM equipped AFSOC C-130.

In all of the above cases, the airspace needs above and around these test locations will be determined by new range safety processes with unknown impacts to existing RAs and Warning Areas. The current designated airspace for inherently hazardous activities associated with Test and Evaluation is under stress as the F-35 basing and deployment plans mature. Where these basing and deployment plans are in proximity of MRTFB airspace, the training community is increasingly interested in more access to MRTFB associated RAs. DPG/UTTR and WSMR/Holloman are current MRTFB/Training pairs with ongoing discussions with the training community. The MRTFB activities comply with range access prioritization rules in DOD Instruction 3200.18. Specifically, scheduling of the MRTFB is based on a priority system that gives equitable consideration to all DoD Components, does not discriminate among DoD programs on the basis of DoD Component sponsorship, and accommodates DoD acquisition program priorities.

Proposed options and solutions to overcome identified challenges, if any, including identifying whether—

- (A) a solution or solutions can be incorporated within the existing Federal Aviation Administration and Department of Defense Memorandum of Understanding; or**
(B) changes to current law are required.

The 2019 MOU, as described above, reiterates the NEPA compliance responsibilities currently in effect. The 2019 MOU is not an appropriate document to impose new environmental compliance responsibilities that are not already in the FAA and the DoD's respective NEPA implementing regulations. However, as noted above, the 2019 MOU will be updated to reflect the updated CEQ regulations and identify FAA environmental information needs where appropriate. The FAA and the DoD do not recommend changes to current law at this time. [See draft DoD Recommendation at the end of section]

To assist its DoD partners in facilitating more robust early planning of its SUA needs, the FAA, in negotiations with the DoD related to revisions to the 2019 MOU, has already suggested that DoD examine the potential use of various available NEPA documentation methodologies as early planning tools. These include, but are not limited to, the DoD proponent's drafting of Programmatic EAs and Programmatic EISs in circumstances where DoD's specific SUA needs

and/or proposed activities are not fully defined.¹⁸ The use of such documentation will facilitate early planning, improve identification of SUA needs, and would allow for improved advance notification of DoD training proposals to the FAA. This could expedite review by the FAA of DoD's NEPA documentation and the drafting of the FAA's adoption of NEPA documents. This, in turn, would allow the FAA to understand the DoD's future and impending SUA needs better. With a better understanding, the FAA can assist the DoD in the development of more fully compliant impact analyses in DoD's NEPA documents.

The DoD currently is obligated to collect and analyze data to assess the potential for significant environmental impacts (or lack thereof) posed by their airspace use activities. The FAA must rely on DoD-provided data and impact analysis to prepare a thorough and compliant NEPA adoption document per FAA requirements for adopting other agencies' actions.

The FAA recognizes that, as a cooperating agency, its ability to create a new CATEX that helps streamline or expedite environmental review and adoption of DoD proposals is limited by its lack of knowledge about military preparedness needs. With the update to the CEQ regulations, the 2019 MOU will be updated to identify any additional information the FAA will need when adopting DoD CATEXs. Such revisions to the 2019 MOU could expedite the review of DoD training and testing projects that require the use of certain SUA, such as TMOAs, especially for short-term aircraft exercises that can be shown to have little to no significant impact on the environment.

In response to the updated CEQ recommendations, the FAA and the DoD have begun reviewing current NEPA compliance practices as necessary. This will help ensure that, among other things, available CATEXs (both the FAA's and the DoD's) are applied appropriately to specific SUA proposals and that available NEPA documentation strategies are being used to their greatest utility. Additionally, the FAA is looking to develop CATEXs to accelerate the approval of SUAs.

In addition, the FAA recommends that it continues to collaborate with the DoD on strategic airspace planning, including having a group of FAA planners identify long-term requirements for better anticipating upcoming DoD needs.

Under 49 USC § 46110, challenges to an FAA decision to establish SUA are subject to a 60-day statute of limitations and original circuit court jurisdiction. While the separate DoD and FAA actions establishing SUA are intertwined sufficiently that this jurisdictional provision should apply to the DoD action under the principle of ancillary jurisdiction, congressional clarification on this point would be beneficial.

¹⁸ Council on Environmental Quality, Guidance for Federal departments and agencies on effective use of programmatic National Environmental Policy Act (NEPA) reviews. December 18, 2014. https://www.energy.gov/sites/prod/files/2014/12/f19/effective_use_of_programmatic_nepa_reviews_18dec2014.pdf