

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

ADOPTION OF UNITED STATES MARINE CORPS

SUPPLEMENTAL ENVIRONMENTAL ANALYSIS

FOR TEMPORARY ACTIVATION OF PLAYAS MILITARY OPERATIONS AREA

FINDING OF NO SIGNIFICANT IMPACT

AND RECORD OF DECISION FOR

Establishing the Playas Temporary Military Operations Area

New Mexico

July 2018

Introduction

This document serves as the Federal Aviation Administration's (FAA) adoption, in part, of the United States Marine Corps (USMC) Supplemental Environmental Analysis for Temporary Activation of Playas Military Operations Area ¹(SEA) dated July 2018. The FAA hereby adopt each section of the SEA except for the cumulative impacts analysis as explained below.

Prior NEPA Documentation

On August 4, 2017, FAA adopted the U.S. Marine Corps (USMC) Tactical Recovery of Aircraft and Personnel (TRAP) and Training Readiness Certification Exercise (CERTEX) for Playas, Temporary Military Operations Area (TMOA) Environmental Assessment (EA) dated June 23, 2017, which is Appendix A in the SEA. The FAA adopted the EA and executed a Finding of No Significant Impact (FONSI) and Record of Decision (ROD) in August 2017. (See Appendix B of the SEA.) ²

The FAA's August 4, 2017 FONSI/ROD and the USMC's June 23, 2017 EA analyzed the potential environmental impacts associated with the temporary activation of FAA controlled airspace over the Playas, New Mexico Training and Research Center (PTRC). That FONSI provides the environmental impact determination and resulting decisions. Pursuant to section 102(C) of the National Environmental Policy Act (NEPA) of 1969, and the Council on

¹ A permanent Military Operations Area does not exist. This document allows FAA to create a *Temporary* Military Operating Area (TMOA) and publish the TMOA in the Notice to Airman (commonly referenced as NTAP) and activate the TMOA.

² Inadvertently, the FONSI, dated August 4, 2017 references an August 3, 2017 EA in error; the correct date of the EA is June 23, 2017. The term in the EA and FONSI, "Military Operating Area" is a typo and should be Military Operations Area.

Environmental Quality (CEQ) regulations (40 CFR parts 1500-1508), the FAA announced its decision to adopt the TRAP-CERTEX Playas TMOA and FONSI for the purpose of temporary activation of the airspace over the PTRC to allow for a Training and Readiness Certification Exercise.

On February 28, 2018, the FAA adopted the United States Air Force Playas Military Operating Area and Red Flag Rescue Supplemental Environmental Analysis dated February 2018. The USAF exercise gave combat air forces the opportunity to practice effective integrations with ground forces. The exercise occurred in May 2018.

The proposed actions analyzed in these prior NEPA documents had independent utility. Nevertheless, as explained in the SEA (see e.g., pages 2, 16-17) the USMC prior analyses are relevant to FAA's analysis of the current proposed action and are therefore incorporated herein by reference. As explained below, the USAF SEA was relevant to the FAA analysis of cumulative impacts and is also incorporated herein by reference.

Background

Airspace Proposal

On November 30, 2017, the FAA received a formal airspace proposal from the US Navy for a TMOA. Appendix D of the SEA contains the proposal.

FAA Order JO 7400.2 describes the steps required to process a non-rule making Special Use Airspace (SUA) action. Primary service area responsibilities include tasking the controlling agency to conduct an aeronautical study, circularize the proposal to solicit public comment, review draft environmental documents, coordinate with other FAA Lines of Business, mitigate any Air Traffic or substantive public concerns, and prepare the final service area recommendation to Headquarters FAA.

FAA prepared a circular and mailed the circular to 56 interested aviation groups in the areas required by 7400.2. Circularization of the aeronautical proposal resulted in one public comment. The only comment supported the proposal.

Military Operations Area (MOA)

A MOA is airspace designated outside of Class A airspace, to separate or segregate certain nonhazardous military activities from Instrument Flight Rules (IFR) traffic and to identify for Visual Flight Rules (VFR) traffic where these activities are conducted. MOAs are designed to contain nonhazardous, military flight activities including, but not limited to, air combat maneuvers, air intercepts, low altitude tactics, etc. According to FAA Order 7400.2L, Chapter 25, Section 25-1-7, a temporary MOA is defined as:

- a. Temporary 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, Airspace Regulations and ATC Procedures Group may approve a longer period if the proponent provides justification for the increase.

b. When it is determined that the need for a 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.

c. Once a temporary MOA is approved, the military must be responsible for publicizing the exercise within 100 miles of the affected airspace. The publicity may be accomplished through the public media, pilot forums, distribution of information bulletins to known aviation interests, etc.

Proposed Federal Action³⁴

FAA's proposed action is to establish a TMOA, publish the TMOA in the Notice to Airman (commonly referenced as NTAP) and provide, activation of the Playas TMOA for a period not to exceed a 5-hour block between 1200 MST 27 August 2018 to 2345 MST 31. More information, including the legal description and the types of aircraft, can be found in the USMC Proposal dated 30 November -2018, included in Appendix D of this SEA.

The proposed Las Playas TMOA comprises a 20 nautical mile (NM) by 20 NM box of airspace extending from 300 feet (ft) above ground level (AGL) up to, but not including, flight level (FL) 180 (18,000 ft) in Playas, New Mexico. See Figures 1 and 2 of the SEA.

Purpose and Need

The purpose of the proposed action is in support of First Marine Expeditionary Force Special Purpose Marine Air-Ground Task Force Certification Exercise 19.1. The purpose of this exercise is to provide the Special Purpose Marine Air Ground Task Force the opportunity to conduct training in unfamiliar environments during the final phase of its pre-deployment program. The need for the proposed action is to conduct challenging and realistic training to test its ability to conduct conventional and specialized missions.

The USMC exercise provides military training and readiness activities for small, squad-sized units of up to 15 Marine Special Operations Command forces per aircraft. USMC search and rescue teams are tasked to quickly and quietly locate, medically assist (simulated) and recover (extract) "downed pilot(s)" (simulated/staged) during a five (5) hour exercise window, of which the search and rescue teams would remain on the ground from 1-3 hours. The "staged pilot(s)" would be situated somewhere within the existing, abandoned town site (a former residential housing area, abandoned since 1999 when the mining operations closed), which is referred to as

³ Page 2 of the SEA inadvertently uses the term establishment for activation. Activation is the use of the airspace while establishment is the creation of the airspace.

⁴ Although the SEA discusses ground activities, FAA does not have a federal action associated with ground activities. The helicopter activity below the proposed TMOA is authorized without this TMOA. CFR 14 part 91 has the regulations that define the operation of small non-commercial aircraft within the US.

PTRC. MV-22 aircraft would conduct the primary rescue role to retrieve a simulated downed-pilot behind enemy lines, while all other aircraft types would support the training exercise.

Alternatives

NEPA, the CEQ regulations, and FAA Order 1050.1F require consideration of a No Action Alternative. Detailed environmental impact analysis was therefore completed for two alternatives: the No Action Alternative and the Proposed Action. The Proposed Action is described above.

Under the No Action alternative, the FAA would not create the TMOA. The USMC training would be conducted either in a simulated manner, moved to more familiar training environments or would be canceled, resulting in reduced tactical realism and/or delayed/missed training objectives. The USMC has a requirement for a 450+-mile flight radius for this training. The flight distance (450+ mile radius), in combination with the operators lack of familiarity with the environment of the PTRCs facilities, and the many tactical amenities provided by the PTRC provide the necessary tactical realism essential for effective pre-deployment training. See page 7 of the SEA for more information on the No Action Alternative.

The No Action alternative does not meet mission requirements and/or training objectives for the USMC (purpose of and need for the Proposed Action).

Environmental Impacts

Impact Categories Not Affected:

The following NEPA environmental impact categories would not affect or be affected by the Proposed Action because the resource is either not present or would be minimally impacted by the proposed action. These impact categories were considered, but not carried forward for detailed analysis, as they were deemed individually and cumulatively to have negligible to no effect on the human and/or natural environment: land use; Section 4(f)⁵; socioeconomics; environmental justice; climate; coastal resources; farmlands; hazardous materials; solid waste; pollution prevention; natural resources and energy supply; visual effects and light emissions (aesthetics); and water resources.”

The following section contains the results of the FAA’s independent evaluation regarding the potential environmental impacts associated with the Proposed Action.

Impact Categories Affected

Noise and Land Use:

The USMC in the SEA discusses noise and land use. (see pages 8-13 of the SEA and Chapters One through Four in Appendix E of the SEA for a more thorough description). The strategy for modeling the noise and air quality is located on Page 10 of the SEA. Due to the different activities and models required for Department of Defense (DoD) and FAA and the activities within the TMOA and beneath the TMOA, the SEA lists three components of the modeling strategy.

⁵ U.S. Department of Defense Reauthorization Act, P.L. 105-85, Div. A, Title X, Section 1079, Nov. 18, 1997, 111 Stat. 1916.exempts military flight operations and designation of airspace for such operations from Section 4(f).

1. Onset Rate-Adjusted Monthly Day-Night Average Sound Level (Ldnmr), for measuring distributed sound levels throughout the TMOA during the exercise;
2. Yearly Day-Night Average Sound Level (DNL), the FAA primary modeling metric ⁶
3. Single-event analysis of overflight levels and landing site operation during USMC-USAF PLAYAS TRAP CERTEX (August 2018)

The noise analysis utilizes the DoD NOISEMAP (NMAP) suite of computer programs (Wasmer Consulting 2006a, 2006b) containing the MOA Range NOISEMAP (MRNMAP) version 3.0. (See Page 2-1 of Appendix E.). FAA has approved the use of the U.S. Department of Defense's Military Operating Area and Range Noise Model (MR_NMAP⁷). MR_NMAP calculates noise levels from subsonic aircraft operations on Military Training Routes (MTRs), Military Operating Areas (MOAs), and Special Use Airspaces (such as ranges). Chapter 3 of Appendix E describes the noise environment the single-event sound overflight levels computed for each aircraft type expected to operate during TRAP CERTEX.⁸ The Take-Offs and Landings for the helicopters occur below the floor of the TMOA utilizes the Rotary Noise Model. See Attachment 1 of this FONSI for the Office of Energy and Environmental's Approval of the Rotary Noise Model for this study. Chapter 4 of Appendix E covers the landing and takeoffs and provides the dNL for the proposed action.

The metric used for portraying noise levels for aircraft operations, in special use airspace, and used for analyzing their impacts is the "Onset Rate-Adjusted Monthly Day-Night Sound Level", depicted by the symbol Ldnmr. The Onset Rate-Adjusted Monthly Day-Night Sound Level metric is similar to the "day night level represented by the symbols Ldn or DNL used at military and civilian airfields, in that it includes the same 10 decibel (dB) penalty (i.e., adjustment) for aircraft operations that occurs after 10 p.m. at night.

However, because flight operations in MOAs may result in noise levels increasing rapidly for a short period of time, another adjustment may be incorporated to account for the high onset rate of aircraft noise (sometimes referred to as the "surprise" effect). Aircraft events exhibiting a high onset rate are assessed a penalty ranging from 0-11 dB. The Ldnmr is calculated from the month with the most aircraft operations because airspace activity varies more than airfield activity. All noise metrics are weighted. Weighted sound levels have been shown to correlate moderately well with the human response to noise to emphasize the range of the frequency spectrum. When A-weighting is applied to noise levels, very high and very low sound frequencies that are outside the range of human hearing are screened out, thereby weighting the

⁶ The SEA states that DNL is comparable to Ldnmr in many respects but without an onset adjustment for assessing environmental noise impacts.

⁷ FAA uses the acronym MR_NMAP while the SEA and Appendix E use MRNMAP. For purposes of this review, MR_NMAP and MRNMAP are the same.

⁸ Due to the demands on the different types of aircraft, the aircraft modeled may be more than shown in the airspace proposal and more than may actually fly in the exercise. This overestimation of aircraft during modeling provides a more conservative approach.

sound to reflect what people actually hear. All metrics (Ldn and Ldnmr) used for aircraft noise are A-weighted.

For aviation noise analyses, the FAA has determined that the cumulative noise energy exposure of individuals to noise resulting from aviation activities must be established in terms of Yearly Day Night Average Sound Level (DNL), the FAA's primary noise metric. The compatibility of existing and planned land uses with proposed aviation actions is usually determined in relation to the level of aircraft noise. Federal compatible land use guidelines for a variety of land uses are provided in Table 1 in Appendix A of 14 Code of Federal Regulations (CFR) part 150, Land Use Compatibility with Yearly Day-Night Average Sound. These guidelines are included in the Noise and Noise-Compatible Land Use Chapter of the 1050.1F Desk Reference.

Under FAA Order 1050.1F, an action would cause a significant noise effect if it "would increase noise by DNL 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the 65 DNL dB due to a 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe." The Order also requires that special consideration be given to the evaluation of the significance of noise impacts on noise sensitive areas within certain specified types of properties, including national wildlife refuges and historic sites "including traditional cultural properties" where the land use compatibility guidelines in 14 CFR part 150 are not relevant.

Table 4 of the SEA and Appendix E's Table 2-3. Playas Temporary MOA –Distributed Sound Levels for Proposed Action show the busiest month Ldnmr would be 44 and the DNL would be 33. This is below the threshold of significance and below the levels FAA considers reportable.

Appendix E's Figure 4-6 shows the Yearly Day-Night Average Sound Level Contours for TRAP CERTEX Aircraft Activity with the entire TMOA having 30 dB and the area near the landing and take-offs to be 35 dB. A Noise Sensitive Area is an area where noise interferes with normal activities associated with its use. Normally, noise sensitive areas include residential, educational, health, and religious structures and sites, and parks, recreational areas, areas with wilderness characteristics, wildlife and waterfowl refuges, and cultural and historical sites. FAA Order 1050.1F, para. 11.5.b.(10). Therefore, the increased noise from this activity is not a significant impact nor is it reportable.

The proposed action will not significantly impact noise or land use.

Air Quality:

Under FAA Order 1050.1F, an action would significantly affect air quality if it would "cause pollutant concentrations to exceed one or more of the National Ambient Air Quality Standards (NAAQS), as established by the Environmental Protection Agency under the Clean Air Act, for any of the time periods analyzed, or to increase the frequency or severity of any such existing violations." According to the CAA, the NAAQS are applicable to all areas of the United States and associated territories. For the poor air quality regions that have ambient concentrations of criteria pollutants above the NAAQS, the EPA has designated these areas as not being in attainment of the NAAQS, or "nonattainment areas."

The Playas TMOA, as well as the PTRC facility itself, is situated within a portion of the Air Quality Control Region that is currently in full attainment status for all monitored criteria pollutants, which include ozone, nitrogen dioxide (NO₂), carbon monoxide (CO), SO₂, particulate matter less than or equal to 2.5 microns in diameter (PM_{2.5}), and particulate matter less than or equal to 10 microns in diameter (PM₁₀). At present, only PM₁₀ contaminants are being monitored during and after major storm and wind events. (See Pages 13 and 14 of the SEA and Chapter 5 of Appendix E for more information.)

Aircraft data were obtained from the U.S. Navy Aircraft Environmental Support Office (AESO) technical memoranda on individual aircraft types and the U.S. Air Force Air Emissions Guide for Air Force Mobile Sources (USAF 2017b). The analysis of the potential air quality impacts associated with the action was performed in accordance with Marine Corps Order 5090.2a, Chapter 12, Environmental Planning and Review. The calculations were performed for one TRAP CERTEX (one day). The results are provided in Table 5-1. The totals were added so the totals reflect emissions for the MV-22, F-18 A/C, A-10, C-130J, and H-60 for one day (one training event).

No significant impact to air quality is expected, as none of the estimated emissions exceed General Conformity Rule indicators. (See Appendix F for the Record of Non Applicability for General Conformity.)

Historic Architectural, Archeological, and Cultural Resources:

The SEA contains the documentation between the USMC and the New Mexico State Historic Preservation Office (SHPO). The New Mexico SHPO issued its No-Effect determination on June 6, 2018, which can be found in Appendix G of the SEA. Page 14 of the SEA provides additional information.

Biological Resources:

A records search of the project location was conducted on the U.S. Fish and Wildlife web site yielded 18 listed species that may occur within the greater boot heel region of New Mexico. Appendix G contains a list, with additional information, of the species potentially present in the Playas region. Of the 18 species, 13 are primarily associated with aquatic or riparian habitat. There is no riparian or aquatic habitat at the PTRC location. Three (3) of the 18 species identified by the USFWS are primarily associated with forested habitat. There is no forested habitat within the Action Area or the PTRC. One (1) of the 18 species is a bat. They would not be active (flying) during daylight hours when activities are planned/to be executed, and the PTRC facility is not likely to support any roosts, maternity sites, or hibernaculum. The last of the 18 species is listed as experimental and non-essential, therefore consultation under Section 7 of the Endangered Species Act is not required. Lastly, no designated critical habitat exists within or adjacent to the PTRC facility. (See Pages 14 and 15 of the SEA and Appendix H.)

The likelihood of encountering a dispersing or migrating individual on the ground or in the air within the Action Area during the extremely brief exercise (5-hour TMOA activation) window is so low as to be insignificant and discountable.

Cumulative Impacts:

Cumulative actions, when viewed with other proposed actions, have cumulatively significant impacts. Cumulative actions should be discussed in the same NEPA document (see 40 CFR § 1508.25(a)(2), CEQ Regulations). If the proposed action would cause significant incremental additions to cumulative impacts, an EIS is required.

As mentioned in the “Prior NEPA Documentation” section above, the FAA adopted the USAF SEA February 28, 2018. This SEA overestimated USAF operations by a day, included twenty percent night time operations, and estimated operations with the USMC to ensure the cumulative noise impacts of the training exercises were captured and did not exceed significant thresholds. See pages 5-7 of the USAF SEA.

Due to the detailed analyses in the USAF SEA, the FAA chooses to continue to rely on that analysis and not to adopt the Cumulative Section of the USMC SEA.

The Proposed Action will not result in a significant cumulative impact as a result of the establishment of the additional TMOA. The USAF’s SEA overestimated the noise and air quality impacts by using more aircraft and more time will cover the planned and past USMC activities and the twice a year USAF activities. Analysis of the Proposed Action, when considered cumulatively with past, present, and reasonably foreseeable future actions would not result in adverse and/or significant impacts to noise, biological resources (including fish, wildlife, and plants); historical, architectural, archeological and cultural resources. Based on independent review of the airspace proposal and the SEA, the FAA has determined there would be no significant cumulative impacts as a result of the establishment of the TMOA.

Impact Analysis

Based on documentation contained in the SEA, no significant adverse environmental impacts are associated with the Proposed Action. The attached SEA addresses the effects of the Proposed Action on the human and natural environment and is made a part of this FONSI. The proposed action as described in the SEA is similar to the action in the EA and there are no substantial changes in the action that are relevant to environmental concerns. The SEA updates the noise and air quality data from the EA. FAA confirmed that the SHPO analysis is still valid. The remaining data and analyses contained in the EA and FONSI/ROD are substantially valid and there are no significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

Because there are no environmental impacts associated with the Proposed Action that would exceed applicable thresholds of significance, the action is not one normally requiring preparation of an EIS, no special circumstances apply, and the brief duration of the Proposed Action, circulation and review of the Draft SEA was not warranted in accordance with FAA Order 1050.1F, Environmental Impacts: Policies and Procedures.

The FAA has conducted an independent evaluation of the SEA. Based on its independent evaluation, the FAA has determined that the SEA adequately assesses and discloses the environmental impacts of the Las Playas Temporary MOA and that adoption of the SEA by the FAA is authorized under 40 C.F.R. § 1506.3 and FAA Order 1050.1F, paragraph 8-2.c.

Finding

The FAA has determined that no significant impacts would occur as a result of the Federal Action and therefore preparation of an Environmental Impact Statement is not warranted, and a Finding of No Significant Impact, in accordance with 40 CFR Part 1501.4 (e), is appropriate.

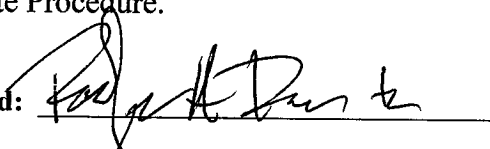
Statement

After careful and thorough consideration of the facts contained herein, the undersigned finds that the proposed Federal action is consistent with existing national environmental policies and objectives as set forth in Section 101 of the NEPA and other applicable environmental requirements will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to Section 102(2) (C) of NEPA.

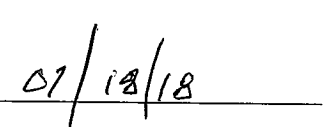
Order and Right of Appeal

This decision to adopt the airspace portion of the USMC's *Playas SEA* constitutes an order of the FAA Administrator pursuant to 49 U.S.C. § 40103. It is subject to exclusive judicial review under 49 U.S.C. § 46110 by the U.S. Circuit Court of Appeals for the District of Columbia or the U.S. Circuit Court of Appeals for the circuit in which the person contesting the decision resides or has its principal place of business. Any party having substantial interest in this order may apply for review of the decision by filing a petition for review in the appropriate U.S. Court of Appeals no later than 60 days after the order is issued in accordance with the provisions of 49 U.S.C. § 46110. Any party seeking to stay implementation of the ROD must file an application with the FAA prior to seeking judicial relief as provided in Rule 18(a) of the Federal Rules of Appellate Procedure.

Approved: _____



Date: _____



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