

**DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION'S  
ADOPTION ENVIRONMENTAL ASSESSMENT of  
The UNITED STATES MARINE CORPS'  
SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT,  
FINDING OF NO SIGNIFICANT IMPACT  
AND RECORD OF DECISION for  
ESTABLISHMENT of a TEMPORARY MILITARY OPERATIONS AREA at  
Playas, New Mexico**

**June 2019**

**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*<sup>1</sup> (SEA) dated July 2018 ("USMC SEA" and enclosed herein as Enclosure 1). The FAA is also relying on and incorporating by reference the USMC Supplemental Technical Analysis, dated May 9, 2019, (referred to as the "USMC STA" and enclosed herein as Enclosure 2) and its accompanying attachments, to support this Finding of No Significant Impact (FONSI) and Record of Decision (ROD). The USMC STA demonstrates that the USMC SEA sufficiently addresses the activities proposed for the Playas Temporary Military Operations Area (TMOA) and that the activities analyzed in the USMC SEA are similar to the activities proposed for the Playas TMOA for the August 2019 exercise.

Pursuant to section 102 of the National Environmental Policy Act (NEPA) of 1969, as amended, the Council on Environmental Quality (CEQ) regulations (40 Code of Federal Regulations [C.F.R.] Parts 1500-1508) implementing the procedural provisions of NEPA, the FAA announces its decision to adopt the USMC SEA for the purpose of temporary activation of the airspace in the form of a TMOA over the Playas, New Mexico Training and Research Center to allow for a Training and Readiness Certification Exercise (CERTEX). The USMC SEA complies with FAA Order 1050.1F, Chapter 4 (Impact Categories, Significance, and Mitigation). The FAA hereby adopts each section of the USMC SEA except for the cumulative impacts analysis, as explained below.

**Prior NEPA Documentation**

FAA adopted the *USMC Tactical Recovery of Aircraft and Personnel (TRAP) and CERTEX for Playas, TMOA Environmental Assessment* (EA) ("USMC 2017 EA") dated June 23, 2017, and executed a FONSI/ROD in August 2017.

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<sup>1</sup> A permanent Military Operations Area does not exist. This document provides for the FAA's creation of a *Temporary* Military Operating Area (TMOA), the publication of the TMOA in the Notice to Airman (commonly referenced as NTAP), and the activation of the TMOA.

The USAF prepared the *Playas Military Operating Area<sup>2</sup> and Red Flag Rescue Supplemental Environmental Analysis*, dated February 2018 (“USAF SEA”) (See Enclosure 3). The FAA adopted the USAF SEA and executed a FONSI/ROD in February 2018 and in May 2019 (Enclosure 4).

The USMC prepared the USMC SEA, dated July 16, 2018 (Enclosure 1). The FAA adopted each section of this USMC SEA except for the cumulative impacts analysis and executed a FONSI/ROD in July 2018 (Enclosure 5).

## **Background**

### **Airspace Proposal**

On October 9, 2018, the FAA received a formal Aeronautical Proposal (AP) from the US Navy, on behalf of the USMC, for a TMOA (Enclosure 6).

FAA Order JO 7400.2M 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 42 interested aviation groups in the areas required by JO 7400.2M. Circularization of the aeronautical proposal was published with the case number 18-AWP-21NR from February 13 – April 1, 2019 and resulted in zero public comments.

### **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 7400.2M, 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

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<sup>2</sup> A permanent Military Operations Area does not exist. This document provides for the FAA’s creation of a *Temporary* Military Operating Area (TMOA), the publication of the TMOA in the Notice to Airman (commonly referenced as NTAP), and the activation of the TMOA.

the public media, pilot forums, distribution of information bulletins to known aviation interests, etc.

### **Proposed Federal Action**

FAA's proposed action is to provide temporary activation of the Playas TMOA for a period not to exceed one, five hour block between 1900 Coordinated Universal Time Zone (UTC) August 26, 2019 and 0645 UTC August 31, 2019. The Playas TMOA will be activated by publishing a Notice to Airman (NOTAM) two cycles (56 days) prior to the exercise in the Notices to Airman Publication (NTAP) and by publishing a Notice to Airman (NOTAM) at least 4 hours in advance. The AP lists the participating aircraft types and the legal description and can be found in the aeronautical proposal (Enclosure 6).

### **Purpose and Need**

The purpose of the proposed action is to provide an integrated, properly configured, realistic military training airspace with adequate dimension and size to support combat search and rescue training for U.S. and allied air-combat aircrews, para-rescue teams, survival specialists, intelligence personnel, air battle managers and Joint Personnel Recovery Center personnel. The need for the proposed action is driven by the need to conduct realistic combat rescue training.

### **Alternatives**

NEPA, the CEQ regulations, and FAA Order 1050.1F require consideration of a No Action Alternative. Prior NEPA documentation and environmental impact analysis were completed for two alternatives: the No Action Alternative and the Proposed Action.

### **Environmental Impacts**

The USMC SEA analyzed or incorporated by reference prior analyses of the following impact categories:

- Air Quality
- Biological resources (including fish, wildlife, and plants)
- Historical, architectural, archeological, and cultural resources
- Noise and compatible land use

The Proposed Action would not involve land acquisition, physical disturbance, or construction activities. The following NEPA impact categories were assessed and were considered to have potentially negligible or non-existent effects, and in accordance with CEQ regulations, did not warrant further analysis in the USMC SEA:

- Climate
- Coastal resources
- Department of Transportation Act, Section 4(f)
- Farmlands
- Hazardous materials, solid waste, and pollution prevention
- Land use
- Natural resources and energy supply
- Socioeconomics, environmental justice, and children's environmental health and safety risks
- Visual effects (including light emissions)
- Water resources (including wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers)

The following sections 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 USMC SEA). The strategy for modeling the noise and air quality is located on Page 10 of the USMC 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.

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 <sup>3</sup>
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. FAA has approved the use of the U.S. Department of Defense's Military Operating Area and Range Noise Model (MR\_NMAP<sup>4</sup>). MR\_NMAP calculates noise levels from subsonic aircraft operations on Military Training Routes (MTRs), MOAs, and SUAs (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.<sup>5</sup> The take-offs and landings for the helicopters occur below the floor of the TMOA utilizes the Rotary Noise Model. See Enclosure 7 for the Office of Environmental and Energy's Approval of the Rotary Noise Model for this study. Chapter 4 of Appendix E of the USMC SEA covers the landing and takeoffs and provides the DNL for the proposed action.

The metric used for portraying noise levels for aircraft operations, in SUA, 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 sound to reflect what people actually hear. All metrics (Ldn and Ldnmr) used for aircraft noise are A-weighted.

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<sup>3</sup> The USMC SEA states that DNL is comparable to Ldnmr in many respects but without an onset adjustment for assessing environmental noise impacts.

<sup>4</sup> FAA uses the acronym MR\_NMAP while the USMC SEA and Appendix E use MRNMAP. For purposes of this review, MR\_NMAP and MRNMAP are the same.

<sup>5</sup> 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.

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 USMC 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 per 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.

Based on the noise modeling and the resulting Ldnmr and DNL values, the Proposed Action would not have a significant impact on the environment.

#### **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 (EPA) under the Clean Air Act (CAA), 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 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 (NO<sub>2</sub>), carbon monoxide (CO), SO<sub>2</sub>, particulate matter less than or equal to 2.5 microns in diameter (PM<sub>2.5</sub>), and particulate matter less than or equal to 10 microns in diameter (PM<sub>10</sub>). At present, only PM<sub>10</sub>

contaminants are being monitored during and after major storm and wind events. (See Pages 13 and 14 and Chapter 5 of Appendix E of the USMC SEA 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 of Appendix E of the USMC SEA. 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 of the USMC SEA for the Record of Non Applicability (RONA) for General Conformity.)

**Historic Architectural, Archeological, and Cultural Resources:**

The USMC 2017 EA 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 May 25, 2017.

At the request of the FAA, the USAF consulted with the SHPO again on April 30, 2019 and indicated to the SHPO that the proposed August 2019 exercise and location is similar to those held in August 2017 and 2018 by the USMC (Enclosure 2, Attachment 1). The SHPO concurred on May 10, 2019 that the proposed August 2019 exercise would not affect historic properties (Enclosure 8).

**Biological Resources:**

The U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) online tool was used to request a species list for the project area (Enclosure 2, Attachment 1). The USFWS species list included 18 listed species that may occur within the greater boot heel region of New Mexico. Of the 18 species, 13 are primarily associated with aquatic or riparian habitat. There is no riparian or aquatic habitat at the project location. Three of the 18 species are primarily associated with forest habitat. There is no forest habitat at the project location. One of the species is a bat and the project site is not expected to support any roosts, maternity sites, or hibernaculum for listed bats. Likelihood of harm to individual bats from this exercise is insignificant and discountable. The final species is listed as experimental, non-essential and consultation under Section 7 of the Endangered Species Act is not required. Additionally, the Mexican wolf (*Canis lupus baileyi*), primarily associated with forested habitat is also designated an experimental, non-essential population in the project action area (Enclosure 2, Attachment 5).

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. The USMC documented their no effects determination in Enclosure 2, Attachment 4, which indicates that the exercise will have no effect on any species listed or proposed for listing under the Endangered Species Act and will have no effect on any designated or proposed critical habitat.

### **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 on 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 USMC STA provided in Enclosure 2 indicates that impacts described in the 2019 analysis for each impact category would be similar to those analyzed in the 2018 USMC SEA. The USMC consulted with the SHPO and the SHPO concurred with the no effect determination in May 2019. The remaining data and analyses contained in the USMC SEA and the July 2018 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 USAF SEA was not warranted in accordance with FAA Order 1050.1F, Environmental Impacts: Policies and Procedures.

### **Adoption**

The FAA has conducted an independent evaluation of the USMC SEA and the USMC STA. Based on its independent evaluation, the FAA has determined that the USAF SEA and USMC STA adequately assess and disclose the environmental impacts of the Las Playas Temporary MOA and that

adoption of the USAF SEA and Letter 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 FONSI, 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 USAF 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.

for Approved:  \_\_\_\_\_

Date: 6/4/2019

Rodger A. Dean, Manager  
Airspace Regulations and Policy Group  
Mission Support Services  
Air Traffic Organization  
Federal Aviation Administration

Enclosures:

Enclosure 1: USMC Supplemental Environmental Analysis for Temporary Activation of Playas Military Operations Area, July 2018

Enclosure 2: USMC 2019 Supplemental Technical Analysis, May 2019

Included with the Supplemental Technical Analysis are the following attachments:

Attachment 1: August 2019 SHPO Response (email)

Attachment 2: Species List

Attachment 3: Playas Species List

Attachment 4: No Effects Determination

Attachment 5: Email from USFWS regarding Mexican Wolf

Enclosure 3: USAF Playas Military Operating Area and Red Flag Rescue Supplemental Environmental Analysis, February 2018

Enclosure 4: FAA February 2018 FONSI/ROD for USAF May 2018 exercise and FAA May 2019 FONSI/ROD for USAF August 2019 exercise

Enclosure 5: FAA July 2018 FONSI/ROD for USAF August 2018 exercise

Enclosure 6: US Navy Aeronautical Proposal (AP), October 9, 2018

Enclosure 7: FAA Office of Environment and Energy Approval for Noise Model, July 16, 2018

Enclosure 8: New Mexico SHPO Concurrence, May 2019