

PLAYAS TRAINING & RESEARCH CENTER



DEPARTMENT OF DEFENSE
UNITED STATES MARINE CORPS

SUPPLEMENTAL ENVIRONMENTAL ANALYSIS
FOR TEMPORARY ACTIVATION OF PLAYAS MILITARY OPERATIONS AREA

IN SUPPORT OF
1st MARINE EXPEDITIONARY FORCE
EXPEDITIONARY OPERATIONS TRAINING GROUP (EOTG)

TO CONDUCT
TACTICAL RECOVERY OF AIRCRAFT & PERSONNEL (TRAP)
CERTIFICATION EXERCISE (CERTEX) (V. 19.1)

11 JULY 2018

(Updated/Revised from 15 June 2018)

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INTRODUCTION

This United States Marine Corps (USMC) PLAYAS TRAP CERTEX (v19.1) SUPPLEMENTAL ENVIRONMENTAL ANALYSIS (11 July 2018) (PLAYAS TRAP CERTEX SUPPLEMENTAL ANALYSIS) has been prepared in accordance with the following guidance/policy documents:

1. National Environmental Policy Act of 1969 (NEPA) (Public Law 91-190, 42 United States Code (U.S.C.) Sections 4321 - 4347), as amended (42 United States Code (U.S.C.) § 4321, et seq.);
2. Council on Environmental Quality (CEQ) *Regulations for Implementing the Procedural Provisions of the NEPA* (40 C.F.R. Parts 1500 -15080);
3. Department of the Navy (DON) *Procedures for Implementing NEPA* (32 CFR Part 775);
4. Marine Corps Order (MCO) P5090.2A. Change 3, dated 26 August 2013, *Environmental compliance and Protection Manual*;
5. Federal Aviation Administration (FAA) Order 1050.1F, *Environmental Impacts: Policies and Procedures Pursuant to the Council on Environmental Quality Regulations* (40 Code of Federal Regulations [CFR] Parts 1500-1508) implementing procedural provisions of the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code §4321-4370h)
6. Federal Aviation Administration (FAA) Order 7400.2L Changes 1 and 2, *Procedures for Handling Airspace Matters*

On 16 April 2018, the Federal Aviation Administration (FAA) accepted the USMCs request to act as a Cooperating Agency in the development of this Supplemental Analysis, in accordance with the guidelines set forth in the *Memorandum of Understanding (MOU) between the FAA and the Department of Defense (DoD) Concerning Special Use Airspace (SUA) Environmental Actions*, dated 4 October 2005 and in accordance with NEPA regulations at 40 CFR Section 1501.6 regarding cooperating agencies, and with FAA Order 7400.2L, Chapter 32, Appendix 8 – FAA Special Use Airspace Environmental Processing Procedures which outlines the process by

which the FAA works with the DOD as a cooperating agency on projects involving Special Use Airspace (SUA) issues.

This PLAYAS TRAP CERTEX SUPPLEMENTAL ANALYSIS (16 July 2018) reviews proposed activities similar to training that has been conducted in the area previously, such as the USMC-USAF *Final Environmental Assessment for the “Tactical Recovery of Air Craft & Personnel (TRAP), Training and Readiness Certification Exercise (CERTEx), Playas Temporary Military Operating Area (PLAYAS TMOA)* dtd. 23 June 2017 (PLAYAS TRAP CERTEX EA), issuing its’ *Finding of No Significant Impact (FONSI)* (4 August 2017) (Appendix B). The analysis of this action incorporates by reference, where appropriate, related NEPA documentation regarding similar military training and readiness activities which includes the Air Force (USAF) “Red Flag-Rescue” Supplemental Analysis (Red Flag SA, dtd 27 February 2018) (Appendix C).

This PLAYAS TRAP CERTEX SUPPLEMENTAL ANALYSIS (16 July 2018) tiers-off of, and supplements, previously prepared NEPA documents, and incorporates by reference, where appropriate, related NEPA documentation regarding similar military training and readiness activities.

PROPOSED ACTION, BACKGROUND AND LOCATION

The Proposed Action is the establishment (activation) of a Temporary Military Operations Area (TMOA), a type of Special Use Airspace, by the FAA, which would be centered over the Playas Training and Research Center (PTRC) in Playas, New Mexico (Figures 1 and 2). Activation of the Playas TMOA by the FAA would be in response to the USMC-USAF request to conduct joint military training and readiness activities at the PTRC during a 5-hour event window (between 1200 and 2345) on a single day between 27 and 31 August 2018. Activation of the Playas TMOA would enable the USMC-USAF air crews to practice effective integration of each other and ground forces conducting personnel search and rescue operations; what the USMC calls a ‘TRAP’, or *Tactical Recovery of Aircraft and Personnel*.

The USMC-USAF proposal is to conduct a TRAP *Certification Exercise (CERTEx)*(or TRAP CERTEx). The TRAP CERTEx is a USMC Special Purpose Marine Air-Ground Task Force-Crisis Response-Central Command (SPMAGTF-CR- CC) mission essential task performed by assigned and briefed aircrews for the specific purpose of recovery of personnel, equipment and/or aircraft in a tactical situation when survivors and the location have been confirmed. Commonly known as a simulated rescue of a downed pilot, the TRAP CERTEx requires use of aircraft and ground forces in a closely coordinated set of actions to execute the rescue of personnel on the ground.

The Proposed Action (activation of the Playas TMOA) is needed to ensure the SPMAGTF-CR-CC TRAP CERTEx can be conducted with minimal risk to the operating forces, while managing risk to public health and safety, particularly public aviation. The main focus of this Supplemental Analysis supports the aerial activities to be conducted within the Playas TMOA,

Figure 1
Regional and Vicinity Map

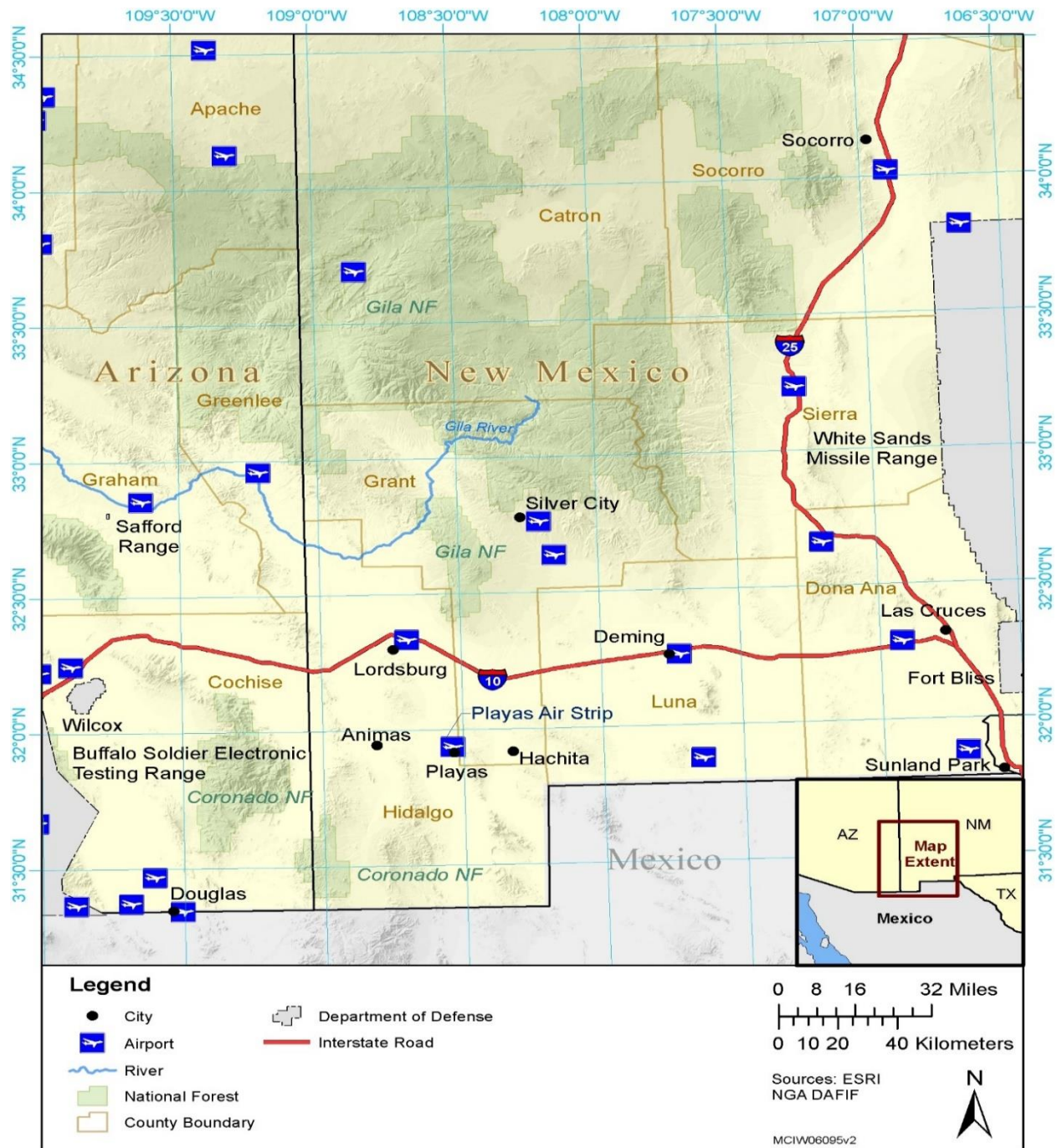


Figure 2
Playas Temporary Military Operations Area



★ ANIMAS ★ PTRC ★ HACHITA ★ SETTLEMENTS (Windmill and White Place)

including tactical combat maneuvering by fixed and rotary-wing fighter aircraft involving changes in altitude, attitude and directions of flight. Activation of TMOA is the decision to be made by the FAA.

The purpose of the TRAP CERTEX is to practice integrating both air and ground forces in conducting a joint services exercise. During execution of TRAP CERTEX, select members of the SPMAGTF-CR-CC are required to fully plan and execute all components of the TRAP by performing a series of challenging and realistic training events to test its ability to conduct conventional and specialized missions.

Playas TMOA Location - The Playas TMOA is located above the PTRC training facility in Playas, New Mexico, as shown in Figures 1 and 2. It 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) defined by the following coordinates:

- Latitude. 32°10'43"N., Longitude 108°42'48"W.
- Latitude 32°09'20"N., Longitude 108°19'29"W.
- Latitude 31°49'27"N., Longitude 108°21'03"W.
- Latitude 31°50'48"N., Longitude 108°44'28"W.

The Playas TMOA is located approximately 1.5 miles (2.5 km) south of I-10, and approximately 31 miles (50 km) north of the US/Mexico border. The closest, populated urban center is Las Cruces, NM, which lies ~86 miles (~138 km) to the East. Tucson, AZ lies ~118 miles (~190 km) to the West. The closest small communities are Animas, NM and Hachita, NM, which lie to the west and east of the Playas TMOA, approximately 3 miles (5 km) and 1 miles (1.6 km), respectively (Table 1, Figure 1).

Table 1
POPULATION CENTERS NEAR PLAYAS, NM

LOCATION	DIRECTION (from Playas)	DISTANCE Miles (kilometers)	POPULATION (2010 CENSUS)	SENSITIVE RECEPTORS
HACHITA, NM	E	~1 (1.6 km)	<50	2
ANIMAS, NM	W	~3 (5 km)	<250	1, 2, 3
RODEO, NM	WSW	~16 (26 km)	~100	2
LORDSBURG, NM	NNW	~11 (17 km)	~4,500	1, 2, 3
DEMING, NM	ENE	~31 (49 km)	~14,860	1, 2, 3
LAS CRUCES, NM	ENE	~86 (138 km)	101, 640	1, 2, 3
EL PASO, TX	ESE	~103 (166 km)	649,135	1, 2, 3
TUCSON, AZ	WNW	~118 (190 km)	1,010,025	1, 2, 3

Source – Wikipedia (as of 18 May 2018)

(1) school, (2) church, (3) medical

The PTRC facility was selected to conduct this type of pre-deployment military training and readiness (“Realistic Urban/Military Training” or RUT/RMT) exercise due to its remote location (boot heel of New Mexico) and its’ distance (450+ miles) from MCB Camp Pendleton, home of the 1st Marine Expeditionary Force (1MEF), Expeditionary Operations Training Group (EOTG). Conducting the TRAP CERTEX at the PTRC facility enables the Special Purpose Marine Air-Ground Task Force (SPMAGTF) an opportunity to conduct training in an unfamiliar environment during the final phase of its pre-deployment program.

The PTRC training facility is to be used by the USMC as the ground component of the exercise is owned, operated, and managed by the Energetic Materials Research and Testing Center of New Mexico Tech, a public university located in Socorro, New Mexico. The PTRC provides realistic military training immersion in a simulated environment. It was established as a primary training and readiness support facility for the Department of Homeland Security (DHS), local and State law enforcement agencies, as well as Department of Defense (DoD) military and associated national defense/security forces. To conduct this type of combat search and rescue operation, a temporary MOA is necessary to ensure a safe airspace environment protecting civilian, commercial and military aircraft.

New Mexico Tech purchased the entire abandoned townsite of Playas, New Mexico, including all buildings and supporting infrastructure, in 2003/4, from the Phelps-Dodge Mining Company after the copper smelter (built in 1971) was closed due to falling copper prices. PTRC began operations at PTRC with the initial mission of establishing a training venue for first responders and counter-terrorism related work. This abandoned mining town sits on an approximately one square mile area surrounded by both public and private lands. Since its inception in 2004, the PTRC has become a primary law enforcement and military training and readiness support site for the Department of Homeland Security (DHS), local and state law enforcement agencies, and Department of Defense and related national defense/security forces (e.g., DON/USMC, USAF, etc.) (Figure 3).

Figure 3
Playas Training and Research Center - Townsite



Participating Aircraft - Aircraft expected to participate in the USMC-USAF PLAYAS TRAP CERTEX (August 2018) would include up to: two (2) AV-8Bs or (2) F-18s; four (4) A-10s; one (1) HC-130Js; and two (2) V-22 tilt-rotor Osprey aircraft or two (2) HH-60 G. The HH60 is included in the noise analysis in Appendix E of this Supplemental Analysis because it has been

used in past training events by the USAF (a USAF aircraft). Table 2 provides information regarding aircraft, both type and number, to be used during the exercise, including flight profiles.

Table 2
MODELED TRAP CERTEX FLIGHT OPERATIONS PROFILES

AIRCRAFT TYPE	MODELED AIRCRAFT TYPE (CH-53)	NUMBER OF AIRCRAFT	MODELED ALTITUDE RANGE (ft. AGL)	MODELED POWER SETTING	MODELED AVERAGE SPEED (KNOTS)	TIME IN MOA (MINUTES)
MV-22	CH-53	2	50 - 2,000	N/A	170	120
F/A-18C/D, AV-8B, F-16C/D	F-18A/C	2	300 – 2,000 (50%) 2,000 – 10,000 (50%)	88% NC	350	120
A-10C	A-10C	4	300 – 2,000 (50%) 2,000 – 10,000 (50%)	93% NC	350	120
HC-130J	C-130J	1	300 – 2,000 (50%) 2,000 – 10,000 (50%)	530 MGT	235	120

ALL ALTITUDES EXPRESSED IN TERMS OF ABOVE GROUND LEVEL (AGL)

According to the USMCs Aeronautical Proposal (Appendix D), the Playas TMOA is being requested for a period not-to-exceed five (5) total hours (event window) sometime between 27 and 31 August 2018. The Playas TMOA would be activated by the FAA when publishing a Notice to Airman (NOTAM) in advance of the planned exercise.

Alternatives – The USMC-USAF team considered one Proposed Action alternative for this exercise, which is the preferred alternative, along with the No Action alternative, as required by the NEPA. The No Action alternative, however, does not meet the purpose of and need for the Proposed Action. The USMC determined no other USMC facility offers the unique combination of distance, training facilities, and tactical challenges and amenities as the PTRC.

No Action Alternative – Under the No Action alternative, certain portions of the PLAYAS TRAP CERTEX (August 2018) would be conducted either in a simulated manner, moved to more familiar training environments such as MCAGCC or MCAS Yuma, or the TRAP CERTEX would be canceled altogether, resulting in reduced tactical realism and/or delayed/missed training objectives. The requirement for a 450+-mile flight radius for such an event, in combination with the limited number of training facilities like PTRC, are the driving forces for conducting the Proposed Action at the PTRC. 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. The No Action alternative does not meet mission requirements and/or training objectives (purpose of and need for the Proposed Action).

ENVIRONMENTAL CONSEQUENCES

The following environmental impact (resource) 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; DOT, Section 4(f); 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.

Resource Areas Evaluated - This Supplemental Analysis carries forward the following environmental impact (resource) categories for more detailed discussion: airspace; noise; air quality; cultural resources, and; biological resources.

Airspace

Affected Environment - In order for the USMC to conduct the proposed PLAYAS TRAP CERTEX (August 2018) at Playas, NM, the Playas TMOA would be activated by the FAA above the PTRC, where the ground-based portion of the Proposed Action would take place. As previously noted in the PLAYAS TRAP CERTEX EA (23 June 2017), several Victor Routes (V66, V-16, V16-66 [T 306] and V198) traverse the skies above the PTRC. (Figure 2)

Environmental Consequences/Impacts – Activation of the Playas TMOA by the FAA would be in-effect by *Notice to Airmen* (NOTAM) during the time period that aircraft operations are in direct support of PLAYAS TRAP CERTEX (August 2018) training and readiness operations (pilot search and rescue operations) that will take place on a single day between 1200 and 2345 during the 27 and 31 August 2018 planned exercise window.

Noise

The discussion of noise includes the types or sources of noise and the associated sensitive receptors in the human environment. Noise in relation to biological resources and wildlife species is discussed in the Biological Resources section.

Sound is a physical phenomenon consisting of minute vibrations that travel through a medium, such as air or water, and are sensed by the human ear. Sound is all around us. The perception and evaluation of sound involves three basic physical characteristics:

Intensity – the acoustic energy, which is expressed in terms of sound pressure, in decibels (dB)

Frequency – the number of cycles per second the air vibrates, in Hertz (Hz)

Duration – the length of time the sound can be detected

Noise is defined as unwanted or annoying sound that interferes with or disrupts normal human activities. Although continuous and extended exposure to high noise levels (e.g., through occupational exposure) can cause hearing loss, the principal human response to noise is annoyance. The response of different individuals to similar noise events is diverse and is influenced by the type of noise, perceived importance of the noise, its appropriateness in the setting, time of day, type of activity during which the noise occurs, and sensitivity of the individual.

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 as defined in the Federal Aviation Administration (FAA) Order 1050.1F. The DNL metric is the energy-averaged sound level measured over a 24-hour period, with a 10-dB penalty assigned to noise events occurring between 10 p.m. and 7 a.m. (acoustic night). DNL values are average quantities, mathematically representing the continuous sound level that would be present if all of the variations in sound level that occur over a 24-hour period were averaged to have the same total sound energy. The DNL metric quantifies the total sound energy received and is therefore a cumulative measure, but it does not provide specific information on the number of noise events or the individual sound levels that occur during the 24-hour day. DNL is the standard noise metric used by the US Department of Housing and Urban Development, FAA, USEPA, and DoD. Studies of community annoyance in response to numerous types of environmental noise show that DNL correlates well with impact assessments (e.g., a consistent relationship exists between DNL and the level of public annoyance).

Military aircraft operating in Special Use Airspace (SUA) generate a noise environment differing from that associated with airfield or civil airport operations. Rather than the continuous or regularly patterned noise environments associated with airfields, flight activity at SUA is highly sporadic. Individual military overflight events in SUA include low altitude, high-air-speed flyovers that can generate a rate of increase in sound level (onset rate) of up to 150 dB per second. The onset-rate adjusted monthly day-night average sound level (L_{dnmr}), based upon DNL, adds an onset-rate adjustment of up to 11 dB and assesses the busiest month of operations rather than average day to address these unique and forms the standard DoD metric for SUA noise impact analysis. To address both the FAA and DoD needs, yearly DNL and busiest month L_{dnmr} have been included in this analysis.

The Playas TMOA lies atop very rural, open and undeveloped public and private lands, with few noise sensitive receptors. The closest residence is approximately 6 miles (to the West-Northwest) from the PTRC, but well within the Playas TMOA. The closest populated urban center is Las Cruces, New Mexico, which lies 86 miles to the east. Tucson, Arizona lies 118 miles west. The nearest communities (small towns) are Animas (population 240 residents), located about 35 miles to the west, and Hachita (population 50 residents), approximately 1 mile to the east of the Playas TMOA (Table 1).

Strategy (Methodology) for Analyzing Noise and Air Quality Impacts - The USMC's strategy for assessing noise and air quality impacts that may result from implementing the Proposed Action included modeling from three perspectives:

1. Onset Rate-Adjusted Monthly Day-Night Average Sound Level (L_{dnmr}), for measuring distributed sound levels throughout the TMOA during the exercise;
2. Yearly Day-Night Average Sound Level (DNL), the FAA primary modeling metric (comparable to L_{dnmr} in many respects but without an onset adjustment) for assessing environmental noise impacts;
3. Single-event analysis of overflight levels and landing site operation during USMC-USAF PLAYAS TRAP CERTEX (August 2018)

Each approach provides valuable information regarding anticipated noise within the Playas TMOA, both in the vicinity of the landing site and in areas within the TMOA when aircraft may operate at lower altitudes as a result of the Proposed Action. (Appendix E)

Aircraft operations were modeled at altitudes from 300ft AGL to 18,000 ft. AGL spread evenly throughout the lateral airspace boundaries of the TMOA. Table 2 above details the modeled airspace flight profiles that are based upon the altitude distributions in the U.S. Air Force (USAF) Playas TMOA and Red Flag-Rescue Supplemental Analysis (USAF, 27 February 2018). Fixed-wing aircraft are modeled primarily between 300ft AGL and 10,000ft AGL while the MV-22 tilt-rotor would operate between 50ft AGL and 2,000ft AGL. Additionally, the MV-22 would operate down to the ground to land and takeoff within the PRTC. The 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. KC-130J would serve as an aerial refueler during the exercise. Speeds and power settings selected represent typical or average values for each aircraft type for operating in Playas TMOA during the USMC-USAF PLAYAS TRAP CERTEX (August 2018) during the 5-hour exercise event window. (Appendix E)

The USMC-USAF PLAYAS TRAP CERTEX (August 2018) would begin shortly after the FAA activates the Playas TMOA, and search and rescue team(s) would leave Marine Corps Base (MCB) Camp Pendleton, transiting the approximate 630 miles to the PRTC. Upon arrival in the Playas TMOA, and following a tactical insertion (one landing and take-off by two aircraft) of the search and rescue team(s) that typically lasts approximately 5 minutes, in total (90 seconds to approach and land in the LZ; 120 seconds on the ground to insert the search and rescue team(s), and; another 90 seconds for the aircraft to exit the LZ and leave the TMOA). Thereafter, the search and rescue team(s) would spend up to three hours locating the staged pilot(s), perform a rescue (apply simulated medical care, as necessary), then call for extraction from the PRTC, and ultimately, the TMOA. Typically, on-the-ground activities lasts between 1-2 hours, depending. For the purposes of this analysis, a worst-case scenario has been assumed and is modeled, as summarized below, and described in detail in Appendix E.

Aircraft were modeled flying within the Playas TMOA for up to 3 hours, assuming a “worse-case” scenario (50% more time on the ground by the search and rescue team(s)), therefore 50% more time participating aircraft would operate within the Playas TMOA. Approximately two (2)

hours of the 5-hour TMOA activation would comprise aircraft transiting from MCB Camp Pendleton (or MCAS Miramar, depending) to the PTRC, all of this transit time is outside the Playas TMOA, therefore these two hours are not included in this analysis. Exercise operations typically conclude prior to 10 p.m. and therefore occur only during the Onset Rate-Adjusted Monthly Day-Night Average Sound Level L_{dnmr} or yearly Day-Night Average Sound Level (DNL) daytime period. However, 20 percent of the flight duration was modeled during the nighttime period (after 10 p.m.) to account for the possibility that flight operations could continue beyond the daytime period, if necessary. (Appendix E)

In addition to the aircraft profiles detailed in Table 2, the MV-22 approach and departure operation at the landing site was modeled with the Rotary Noise Model to compute L_{dnmr} , DNL and single-event metrics. The MV-22 yearly DNL component was combined with the distributed area operations to account for all aircraft noise activity.

Affected Environment - Typical ambient DNL for ‘rural’ environments, such as this location, is normally (typically) less than 49 dB (American National Standards Institute 2013). (Table 3)

Table 3
ESTIMATED BACKGROUND NOISE LEVELS (Examples)*

Land Use Category	Average Residential Intensity (people/acre)	DNL (dBA)
Rural or remote areas	< 2	< 49
Quiet suburban residential	2	49
	4	52
	4.5	52
Quiet urban residential	9	55
Quiet commercial, industrial, and normal urban residential	16	58
	20	59

**FOOTNOTE* - Source: ANSI 2013. *Quantities and Procedures for Description and Measurement of Environmental Sound*.

Environmental Consequences/Impacts – Utilizing the modeling conditions described in Tables 2-1 and 2-2 of Appendix E, the resulting average distributed L_{dnmr} and DNL would be 44 and 33 decibel (dB), respectively, as presented in (Table 4). After the MV-22 landing site operation noise is combined, a 35 dB DNL contour, but no 40 dB DNL or greater, would occur in the vicinity of the landing site as shown in Figure 4-6 of Appendix E. The closest residences are approximately 6 miles northwest of the PTRC and would be exposed to DNL between 30 and 35 dB. The L_{dnmr} and yearly DNL results would be below all land use guidelines established by both the DoD and all screening criteria for noise impacts, which begins at 45 dB DNL and greater (Navy 2008) and FAA (Appendix E). As Tables 3 and 4 demonstrate, the Proposed Action would not cause distributed L_{dnmr} or DNL to exceed estimated existing ambient levels by any substantial amount.

The FAA refers to noise changes meeting these criteria below as “reportable.”

For DNL 60 dB to <65 dB: +3 dB

For DNL 45 dB to <60 dB: +5 dB

No reportable DNL would exist due to this Proposed Action because DNL would not reach or exceed 45 dB DNL.

Over-flight Sound Levels - Table 3-2 of Appendix E presents computed Sound Exposure Level (SEL) and maximum sound level (L_{MAX}) for typical aircraft overflights modeled at 1,000ft AGL for six aircraft types identified above in Table 3. L_{MAX} is the loudest instantaneous sound level resulting from this overflight and the SEL represents the total sound energy for that single overflight (one-time event). These data are presented for comparison and to describe the effect of a direct overflight by one of these aircraft.

Table 4
PLAYAS TMOA – DISTRIBUTED SOUND LEVELS

L_{dnmr}	DNL
44 dB	33 dB

Notes: L_{dnmr} = Onset Rate-Adjusted Monthly Day-Night Average Sound Level; DNL = Day-Night Average Sound Level; $Leq(24hr)$ = Equivalent Sound Level over 24 hour period. L_{dnmr} is defined as DNL with a rise-time adjustment to account for sudden and quick increases in sound level that occur while aircraft operate at high speeds and low altitudes. In this instance, the rise-time adjustment would be small (<1 dB) so both DNL and L_{dnmr} round to the same values.

The data presented in Table 2-3 of Appendix E represent the expected lower altitude that could be expected for transit through the TMOA (a worst-case scenario). The F-18C/D would generate the greatest SEL of 100 dB and L_{max} of 92 dB; however, typical altitudes for this and/or similar fixed-wing aircraft would be much greater (often over 10,000 ft. AGL) the majority of the time within the TMOA. Of the five (5) modeled aircraft in Table 2 above, the MV-22 is expected to operate at lower altitudes the largest percentage of the time and generate SEL and L_{max} values of 89 and 82 dB, respectively (Appendix E).

Because the land area beneath the Playas TMOA is rural and undeveloped, with the closest residence being more than 6 miles (to the west-northwest) from PTRC, and few, if any, noise sensitive receptors (the closest schools, churches and hospitals/medical are located in Animas), exist within the TMOA itself, and given the single-event sound levels identified are of short duration and transitory in nature, the Proposed Action will not result in a significant noise impact, although anyone on the ground in the immediate vicinity of the flight path (ingress-egress) would be exposed to short duration (seconds) noise levels identified in Appendix E as participating aircraft pass overhead.

Mitigation for Noise - No mitigation measures are proposed, as significant noise impacts are not expected. The yearly DNLs modeled are considered below both the DoD and FAA thresholds of significance. FAA Order 1050.1F defines the threshold of significance for noise as, “The action 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 DNL 65 dB level due to a DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe. For example, an increase from DNL 65.5 dB to 67 dB is considered a significant impact, as is an increase from DNL 63.5 dB to 65 B.

Add the definition of reportable noise. The FAA refers to noise changes meeting these criteria below as “reportable.”

For DNL 60 dB to <65 dB: +3 dB

For DNL 45 dB to <60 dB: +5 dB

No location would reach or exceed 45 dB yearly DNL due to the proposed action. The buildings exposed to the greatest sound levels in the PRTC are government owned and uninhabited so no non-participated people would be affected. The closest residential buildings in the TMOA are approximately 6 miles northwest of the PRTC.

The DoD generally considers increases which expose new noise sensitive areas (residential, schools, and places of worship) to 65 dB DNL to be significant because such an increase would change the land use guideline recommendations potentially resulting in adverse effects. The DoD further analyzes other factors which include changes in speech interference, sleep disturbance, and classroom learning as applicable. No new areas would be exposed to 65 dB DNL due to the Proposed Action and few or no noise sensitive receptors are present within the Action Area (defined as the TMOA), as described in Table 1.

Because the Proposed Action would not meet either the FAA or DoD thresholds of significance, no significant noise impacts are anticipated so no mitigation measures are proposed.

Air Quality.

Affected Environment – The U.S. Environmental Protection Agency (EPA) has designated eight (8) Air Quality Control Regions (AQCR) in New Mexico. The New Mexico Southern Border Intrastate Air Quality Control Region (40 Code of Federal Regulations §81.99) is located in the southwestern part of the state and covers an area of 10,374 square miles. The counties within the AQCR include Grant, Hidalgo, and Luna. Grant County was previously nonattainment for sulfur dioxide (SO₂) and was re-designated as a maintenance area in 2003 by the EPA.

The main source of SO₂ emissions which caused this area of Grant County to be in nonattainment were mining-related emission sources. The SO₂ nonattainment area was located within a 3.5-mile radius and an 8-mile radius of any land above 6,470 ft. around the Phelps Dodge Corporation Hurley Smelter/Concentrator located in Hurley, New Mexico (EPA 2003).

This smelter was dismantled in 2006 (EPA 2014). Hidalgo and Luna counties are in attainment for all criteria pollutants. (Appendix E)

The Playas TMOA, as well as the PTRC facility itself, is situated within a portion of the AQCR 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. (Appendix E)

Environmental Consequences – Aircraft emissions 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 Proposed Action was performed in accordance with Marine Corps Order 5090.2a, Chapter 12, *Environmental Planning and Review*. Air emissions calculations were performed for one TRAP CERTEX (one day). The results are provided in Table 5-1 of Appendix E.

Emissions were added so they reflect total emissions for all aircraft involved in the exercise (i.e., MV-22, F-18 A/C, A-10, C-130J, and HH-60) for one day (one training event). Based on the attainment status of the location (Playas, NM) where the training will occur, the requirements of the General Conformity Rule are not applicable. (Appendix E)

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

Cultural Resources.

Affected Environment – No historic properties are known to occur within the Action Area. However, the USMC coordinated with the State of New Mexico, Office of Historic Preservation (NM-SHPO) upon making its initial determination for the Proposed Action; no discernable impact/effect to/on any known sensitive cultural resources/historic properties within the Action Area (TMOA).

Environmental Consequences – Consistent with our initial determination, NM-SHPO concluded no historic properties would be affected by the Proposed Action (Appendix G). As a result, no mitigation measures are proposed.

Biological Resources.

Affected Environment – The USMC revisited the biological resource issues potentially affected by the Proposed Action, per FAA Order 1050.1F, and as requested by the FAA.

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. (Appendix H)

During the review and coordination process the USFWS's New Mexico Ecological Services Field Office was consulted. The proximity of the Playas TMOA to the closest known breeding locations for southwestern willow flycatcher and yellow-billed cuckoo (two of the reviewed bird species) are the middle fork of the Rio Grande River and the Gila River; both riparian systems being more than 20 miles from the Playas TMOA and the PTRC itself (middle fork of the Rio Grande River, above Las Cruces, NM, which is more than 80 miles away. Because the MV-22 aircraft would operate above 9,000 feet until within approximately 10 nautical miles of the PTRC, and upon entering the Playas TMOA before beginning to descend, USFWS concluded the Proposed Action would not affect southwestern willow flycatcher and/or yellow-billed cuckoo. (Appendix H)

Environmental Consequences – No impacts to threatened or endangered species are expected as a result of implementation of the Proposed Action for the following reasons:

- There is no riparian or aquatic habitat within the Action Area, including the PTRC; therefore, no impacts are anticipated to the 13 species associated with this habitat type.
- There is no forested habitat within the Action Area, including the PTRC; therefore no impacts are anticipated to the 3 species associated with this habitat type.
- One of the 18 species is a bat, which would not be active during daylight hours when all activities are planned. Since night activities are not planned, no impacts are expected. The likelihood of harm to individual bats from this exercise is insignificant and discountable.
- 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.
- There is no designated critical habitat (CH) on, adjacent to or in proximity to the PTRC, therefore no CH would be affected, and
- Ground activities (pilot search and rescue) planned as part of the TRAP CERTEX (August 2018) would be confined to the PTRC facility itself. This commercial training and readiness facility (urban development) does not support much in the way of native

vegetation or habitat, and therefore, would not likely support foraging, breeding or juvenile rearing by any federally listed species known from the region. 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 Effects

A cumulative impact is defined as the following:

The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Cumulative impacts are most likely to arise when a relationship exists between a Proposed Action and other actions expected to occur in a similar location or during a similar time period. Actions overlapping with or in proximity to a Proposed Action would be expected to have more potential for a relationship than those more geographically separated. Additionally, the geographic region of influence (ROI) is an important consideration when discussing cumulative effects. For the purposes of this analysis, the ROI is the Playas TMOA, which is also the Action Area, and it represents the area in the immediate vicinity of the training site location; the PTRC itself.

When impacts of similar biannual training events scheduled by the USAF and USMC, both individually and collectively, are considered in the context of past, present, and future similar activities within the ROI/Action Area, impacts to resources from the Proposed Action are considered negligible to minor because such training activities are typically conducted at a frequency (biannually), intensity (small, squad- sized units with a limited number aircraft), and duration (hours and days per year) that would not be expected to generate substantive impacts, even when combined. This action would generate levels between 30 and 35 dB DNL, which is typical of ambient conditions and not sufficient to have a measureable effect if combined with other actions within the Playas TMOA. Multiple TRAP CERTEX's might occur at the same location within the same year and two training actions would generate approximately 3 dB greater total DNL than the single action ($35 \text{ dB} + 35 \text{ dB} \approx 38 \text{ dB}$). Ten (10) TRAP CERTEX events per year, assuming maximum DNL of 35 dB, would generate a cumulative DNL of only 45 dB. With no foreseeable actions causing DNL close to the significance thresholds of either the FAA or DoD in the vicinity of the PTRC, and within the Playas TMOA more specifically, the Proposed Action would not create a significant cumulative impact.

For example, the USAF conducts its' "Red Flag-Rescue" pilot rescue training twice yearly for up to approximately 22 days per year. These USAF pilot rescue exercises have been determined to

have minor to negligible noise and air quality. By comparison, the USMC conducts its similar pilot rescue training (TRAP CERTEX) twice per year, on a single day for each event, and each event within a 5-hour exercise window, for a total impact of less than ten (10) operational hours within the Playas TMOA. When combined with similar USAF activities being conducted biannually within the Playas TMOA, cumulative effects are not expected to be significant for the following reasons:

- *Surrounding land uses* – Private and public (Bureau of Land Management) lands dominate the landscape beneath the Playas TMOA. These lands are principally rural, in nature, and isolated from surrounding population centers by distance and the landscape itself, both of which attenuate noise effectively.
- *Future development* - With much of the land being rural, and having been historically used for cattle grazing, ranching and similar activities, including open space, public lands, little in the way of development is anticipated that could or would generate any substantive noise beyond background levels into the future;
- *Existing PTRC activities* – Much of the activities conducted at the PTRC are ground based (pers. Comm. Josh Carrillo, PTRC Facility Mgr.), though use of the PTRC has fallen over the last few years due largely to its remoteness. The USAF Red Flag - Rescue uses the PTRC annually for several days per event, as much as twice per year. These training events are separated by several months. The USAF activities, which are larger in scale (more aircraft and personnel) and longer in duration (days vs hours) within have previously been determined to have little to no impact (Appendix C).

The Playas TMOA has been activated several times per year over the last few years by the USAF. and USMC, there is little record of persistent airspace use beyond that which is already occurring from private and commercial aviation that would add or change the baseline conditions in any substantive way, now or into the future unless either the USMC operational tempo changes substantially, and this is not/cannot be anticipated. For past several year USMC and USAF events are conducted as discrete, and of short duration, separated by weeks and months, so they do not combine;

Both USMC and USAF activities, individually, create negligible to momentary noise and/or air quality impacts within the Playas TMOA, both at the PTRC itself and in surrounding public and private lands beneath the TMOA, but do not add substantially to form cumulative impact given their infrequent conduct.

Should the USMC and USAF actions increase into future years, cumulative impacts are unlikely given the rural, undeveloped and isolated nature of the training site and undeveloped, open nature of surrounding public and private lands, and temporary, sporadic nature of these activities, particularly in light of the lack of sensitive receptors ROI/Action Area.

- As noted in Appendix E, and cited on Page 16 of this Supplemental Analysis, ten (10) TRAP CERTEX events per year, assuming maximum DNL of 35 dB, would generate a cumulative DNL of only 45 dB. With no foreseeable future USMC or USAF actions causing DNL close to the significance thresholds of either the FAA or DoD in the vicinity of the PTRC, and within the Playas TMOA more specifically, the Proposed Action would not create a significant cumulative impact.

After determining the effects of the Proposed Action, as indicated above, and when taking into account the combined historic and existing baseline conditions (rural, undeveloped lands with few noise generating sources, including little air traffic within the Playas TMOA), and when taken into consideration with the other past, present and future similar actions at the PTRC, given the limited frequency, intensity and duration of these similar activities, potential impacts to noise and air quality are considered less than significant, both individually and cumulatively.

Similarly, for cultural resources/historic properties and biological resource categories, no cumulative impacts are expected because none exist within the ROI/Action Area at this time.

Public Involvement

On 10 January 2018, the FAA sent out 56 notices to local governments and other aviation stakeholders near the PTRC. The FAA received one comment from the City of Las Cruces, New Mexico, supporting the exercise. The FAA will publish the information in the “Notices to Airmen Publication” (aka “NTAP”). The USMC (e.g., operating unit involved in the exercise) will issue a press release to announce the exercise, as well as notify the public of the final FAA and USMC determinations.

APPENDIX A

COOPERATING AGENCY COORDINATION

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UNITED STATES MARINE CORPS
MARINE CORPS INSTALLATIONS WEST-MARINE CORPS BASE
BOX 555010
CAMP PENDLETON, CALIFORNIA 92055-5010

Mr. Rodger A. Dean
Manager, AJV-11
Airspace Policy Group
FAA National Headquarters
800 Independence Ave, SW
Washington, DC 20591

Dear Mr. Dean:

The Department of the Navy (DON), U.S. Marine Corps (USMC), requests the FAA's formal participation as a cooperating agency in the preparation of the Playas Temporary Military Operating Area (TMOA) Environmental Assessment (EA).

The proposal to activate the Playas TMOA is in support of a joint USMC-USAF training and readiness Certification Exercise (CERTEX) known as a "Tactical Recovery of Aircraft and Personnel" (or TRAP), to be conducted at the Playas Training and Research Center (PTRC) located in SW New Mexico in Grant and Hidalgo Counties, New Mexico. The Playas TMOA is a 20NM x 20NM block of special use airspace that sits atop the PTRC. The TRAP CERTEX EA will evaluate the potential environmental impacts of the temporary activation of the Playas MOA for a period not-to-exceed five (5) total hours (1100-1600) sometime between 27 and 31 August 2018.

The PTRC facility provides realistic military training immersion in a simulated environment. The facility is managed by the Energetic Materials Research and Testing Center (EMRTC) of New Mexico Tech, a public university located in Socorro, NM. Founded in 1947, the EMRTC contains over 30 test sites, gun ranges, other research facilities, and storage areas, allowing for a complete spectrum of research and testing activities. The PTRC was established as a primary training and readiness support facility for Homeland Security, local and State law enforcement agencies, as well as Department of Defense military and associated defense/security forces. The Playas TMOA is a key component in the effective use of the PTRC facility for military training events. The Playas TMOA has been activated on several occasions since the establishment of the PTRC in 2006.

The USMC is requesting FAA participation in the NEPA process, as required by law, and described in the Council on Environmental Quality (CEQ) regulations for implementing the National Environmental Policy Act (NEPA); Title 40 Code of Federal Regulations (CFR) 1501.6, Cooperating Agencies, and; for your expertise in the management of the public airways within southwestern New Mexico.

As the lead agency, the USMC has prepared the Playas TMOA EA, including but not limited to the following tasks:

- Gathering necessary background information and preparing the EA
- Identifying the scope of the EA, including any alternatives



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

Mission Support Services
800 Independence Avenue, SW.
Washington, DC 20591

APR 16 2018

J.L. Meeker
U.S. Marine Corps
Marine Corps Installations West-Marine Corps Base
Box 555010
Camp Pendelton, California 92055-5010

Dear J.L. Meeker,

Thank you for your letter, received on April 9, 2018, requesting that the Federal Aviation Administration (FAA) participate as a cooperating agency in the U.S. Marine Corps' Environmental Assessment (EA) for the Proposed training and readiness Certification Exercise (CERTEX) known as a "Tactical Recovery of Aircraft and Personnel (TRAP), to be conducted at the Playas Training and Research Center (PTRC) located in SW New Mexico in Grant and Hidalgo Counties, New Mexico, and for continuing to partner with the FAA on the analysis of special use airspace (SUA) and the review of airspace impacts in accordance with the National Environmental Policy Act (NEPA) and its implementing regulations at 40 C.F.R. Part 1500.

Since this USMC proposal involves the use of SUA, the FAA accepts the USMC's request to act as a cooperating agency in accordance with the guidelines set forth in the Memorandum of Understanding (MOU) between the FAA and the Department of Defense (DoD) Concerning SUA Environmental Actions, dated October 4, 2005, and in accordance with the NEPA regulations at 40 C.F.R. Section 1501.6 regarding cooperating agencies, and with FAA Order 7400.2L, Chapter 32, Appendix 8 – *FAA Special Use Airspace Environmental Processing Procedures* which outlines the process by which FAA works with DoD as a cooperating agency on projects involving SUA.

FAA's participation in the development of the USMC's EA for this proposed action resides under the jurisdiction of FAA's Central Service Center, Operations Support Group, at 10101 Hillwood Parkway, Fort Worth, Texas 76177. The Central Service Center's environmental specialist will be the focal point for matters related to the review of the DoD's NEPA documentation for this project and any related airspace issues which will be tracked and coordinated by FAA Headquarters Environmental Policy Group (AJV-114).

While Appendix 8 of FAA Order 7400.2L indicates that the airspace review and environmental impacts review should be conducted in tandem as much as possible, they are still separate processes. Approval of either the aeronautical portion or the environmental impact analysis



UNITED STATES MARINE CORPS
MARINE CORPS INSTALLATIONS WEST-MARINE CORPS BASE
BOX 555010
CAMP PENDLETON, CALIFORNIA 92055-5010

3700
G-3/5 AVN
7 Nov 2017

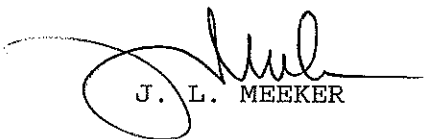
From: Regional Airspace Coordinator, Marine Corps Installations West
To: Manager, Operations Support Group, Federal Aviation Administration
Central Service Center, 10101 Hillwood Parkway, Fort Worth TX
76177

Subj: TEMPORARY MILITARY OPERATIONS AREA PROPOSAL IN SUPPORT OF
FIRST MARINE EXPEDITIONARY FORCE SPECIAL PURPOSE MARINE AIR-
GROUND TASK FORCE CERTIFICATION EXERCISE 19.1

Ref: OPNAVINST 3770.2L

Encl: Playas NM Temporary Special Use Airspace Proposal (Aug 2018)

1. Forwarded in accordance with the reference.
2. The proposal has been reviewed by this office and is in compliance with the reference.
3. Albuquerque Air Route Traffic Control Center has been notified of the Marine Corps intent to submit the enclosed proposal. The airspace requested (SPMAGTF-CR-CC 19.1 CERTEX August 2018) mirrors the previously submitted and executed Playas Temporary Special Use Airspace proposal for the SPMAGTF-CR-CC 18.1 CERTEX.


J. L. MEEKER



UNITED STATES MARINE CORPS
MARINE CORPS INSTALLATIONS WEST-MARINE CORPS BASE
BOX 555010
CAMP PENDLETON, CALIFORNIA 92055-5010

3700
G-3/5 AVN
3 May 18

From: Regional Airspace Coordinator, Marine Corps Installations West

To: Manager, Operations Support Group, Federal Aviation Administration Central Service Center, 10101 Hillwood Parkway, Fort Worth TX 76117

Subj: TEMPORARY MILITARY OPERATIONS AREA PROPOSAL IN SUPPORT OF FIRST MARINE EXPEDITIONARY FORCE SPECIAL PURPOSE MARINE AIR-GROUND TASK FORCE CERTIFICATION EXERCISE 19.1

Ref: OPNAVINST 3770.2L

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A handwritten signature in black ink, appearing to read "J. K. Ledford", is positioned above the printed name.

J. K. LEDFORD

21-3-3. PROPOSAL CONTENT

a. Proponent's Transmittal Letter.

1. Attached

b. Area Description.

1. **Title:** PLAYAS temporary MOA, NM
2. **Boundaries:**
Beginning at lat. 32°10'43"N., long. 108°42'48"W.;
to lat. 32°09'20"N., long. 108°19'29"W.;
to lat. 31°49'27"N., long. 108°21'03"W.;
to lat. 31°50'48"N., long. 108°44'28"W.;
to the point of beginning.
3. **Altitudes:** From 300' AGL to but not including FL180
4. **Times of Use:** 5-hour block between 1200 MST 27 August 2018 to 2345 MST 31 August 2018 (during exercise planning/refinement and NLT 1 June 2018, the five hour event execution block will be determined).
5. **Controlling Agency:** FAA, Albuquerque ARTCC.
6. **Using/Scheduling Agency:** U.S. Marine Corps, Commander, Expeditionary Operations Training Group (EOTG), I Marine Expeditionary Force (MEF), Camp Pendleton, CA.

c. Airspace Statement of Need and Justification.

1. **Describe purpose and need for the proposed airspace:**
Special Purpose Marine Air Ground Task Force Crisis Response Central Command (SPMAGTF-CR-CC) Certification Exercise (CERTEX) 19.1 is a Commanding General, I Marine Expeditionary Force (I MEF) directed exercise to be conducted from 27-31 August 2018 at numerous training locations throughout the South-Western United States. The purpose of the exercise is to provide the SPMAGTF the opportunity to conduct training in unfamiliar environments during the final phase of its pre-deployment program. During CERTEX, the SPMAGTF-CR-CC will be required to conduct a series of challenging and realistic training events to test its ability to conduct conventional and specialized missions.

2. The scheduled CERTEX will require select members of the United States Marine Corps (USMC) and United States Air Force (USAF) to plan and execute a Tactical Recovery of Aircraft and Personnel (TRAP) exercise from 27-31 August 2018 in order to recover downed pilots located at a training site in the MOA. The Playas Training and Research Center (PRTC) will host day and or night recovery force insertion and extraction training, therefore we are requesting to separate nonhazardous military exercise activities from IFR traffic and identifying to VFR traffic where this short term exercise event shall be conducted.
3. **Alternatives:** EOTG I MEF explored the possibility of executing SPMAGTF-CR-CC 19.1 CERTEX operations within Marine Corps base existing training facilities. It was determined that challenging, realistic amenities offered at Playas did not exist on current Marine Corps frequently utilized range facilities.
4. **No Action Alternative:** Under the no action alternative, SPMAGTF-CR-CC 19.1 CERTEX flight operations over Playas may be cancelled resulting in a delay and loss of a valuable training resource for combat air crews expecting to deploy to real world combat zones in support of contingency operations.
5. **Proposed Action:** The Playas temporary MOA is a 20 NM X 20 NM box encompassing the Playas airport which will be closed to non-participating aircraft by airport management during exercise operations.
6. **Joint Use Policy:** The temporary airspace is available for joint-use outside of the five hour activation period.

d. **Air Traffic Control Assigned Airspace.** None to be requested with this proposal.

e. **Activities.**

1. **For Areas that will contain aircraft operations:**

(a) **Number and Type aircraft that will use the area:** Aircraft which may operate in the proposed temporary MOA include (2) MV-22B, (2) AV-8B or (2) F-35B, (4) A-10C, and (1) HC-130J.

(b) **Specific activities and maximum altitudes required for each type activity:** Proposed aerial activities will consist of non-hazardous flight operations to include tactical combat maneuvering (basic fighter maneuvers, simulated air-to-ground ordnance delivery, and tactical assault profiles) by fighter and transport category tilt rotary wing aircraft involving abrupt,

unpredictable changes in altitude, attitude, and direction of flight. Non-standard formation flights are possible. There will be no use of chaff/flares, surface-to-surface or surface-to-air weapons firing, or aerial refueling operations conducted within the proposed MOA.

(c) Supersonic Flight: None

2. Surface to Surface: None

f. Environmental Land Use information.

1. Mr. Zachery Likins
Environmental Security
MCI-West, MCB Camp Pendleton
(760)763-7948

Zachery.likins@usmc.mil

2. Reasonable and timely aerial access below 1,200' AGL to private and public land below the proposed temporary Playas MOA by general aviation aircraft will not be restricted.

g. Communications and Radar.

1. Participating aircraft will monitor a requested dedicated discrete exercise frequency. Exercise UHF (primary) and VHF (backup) frequency will be forwarded when published.
2. Additionally, participants will monitor guard frequencies and the Playas Airport Common Traffic Advisory Frequency. Radar service will not be available.
3. Military ATC and Range Control services will not be available.

h. Safety Considerations.

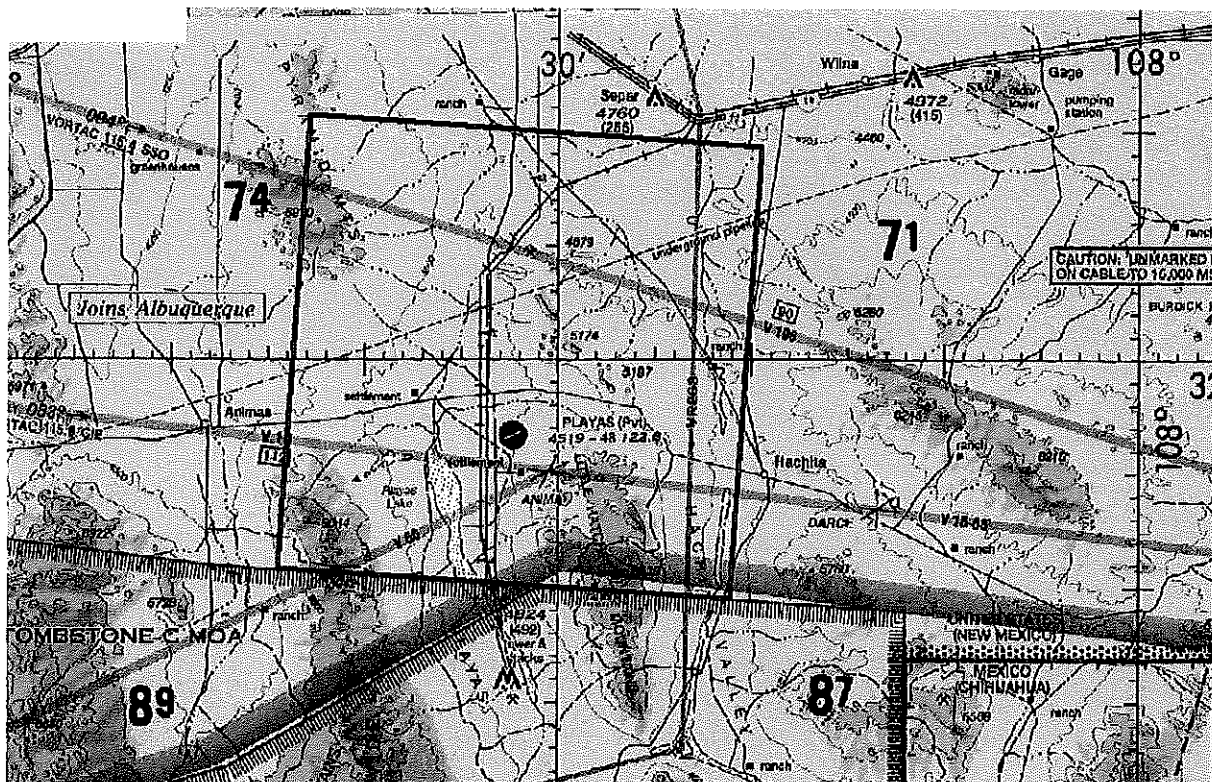
1. Activity will be contained within the MOA using geographic references, inertial navigation, global positioning systems and TACAN radial/DME references.
2. Malfunctions will be handled in accordance with aircraft technical orders, Service Directives, and FARs.
3. Ordnance Trajectory Envelope. Not Applicable.

4. The area below the proposed MOA is open, desolate, sparsely populated, high desert range land with few settlements. Regardless of published MOA altitude, FAR 91.119 minimum safe altitudes will be observed by all aircraft. The Playas airport will be closed to non-participating aircraft by airport management during exercise operations.

i. Coordination Summary.

NAVREP, CDR Arjuna Fields, FAA Central Service Area
FAA Air Traffic Representative, Mr. Michael Rizzo, Central Service Center
Albuquerque ARTCC, Mr. Chris Abeyta, Airspace & Procedures
Playas Training & Research Center, New Mexico Tech
New Mexico Institute of Mining and Technology, Mr. Josh Carrillo
355th Fighter Wing, U.S. Air Force, Gary Pressley
355 OSS/OSOS, Capt Weston Woldt

j. Graphic Depiction of the proposed airspace.



k. Environmental Documents. Documents will be submitted via separate correspondence

I. Graphic notice information

SPECIAL USE AIRSPACE DESCRIPTION:

Playas MOA, NM (Temporary)

Boundaries - Beginning	at lat. 32°10'43"N., long. 108°42'48"W.; to lat. 32°09'20"N., long. 108°19'29"W.; to lat. 31°49'27"N., long. 108°21'03"W.; to lat. 31°50'48"N., long. 108°44'28"W.; to the point of beginning.
Altitudes	300' AGL to but not including FL180.
Times of designation	By NOTAM.
Controlling agency	FAA, Albuquerque ARTCC
Using agency	U.S. Marine Corps, Commander, Expeditionary Operations Training Group (EOTG), I Marine Expeditionary Force (MEF), Camp Pendelton, CA
Scheduling Agency	U.S. Air Force, 355th Wing, Davis-Monthan AFB, AZ

- m. Other:** EOTG will coordinate with the I MEF Public Affairs Office (PAO) to develop a prepared press release if desired that will assist in notifying the local populace of the training exercise and minimize the impact on the communities in which this exercise will take place.

APPENDIX B

FEDERAL AVIATION ADMINISTRATION FINDING OF NO SIGNIFICANT IMPACT (FONSI)

(USMS-USAF PLAYAS TRAP CERTEXT EA 23 JUNE 2017)

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**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: _____

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

Date: _____

07/18/18

APPENDIX C

PLAYAS TEMPORARY MILITARY OPERATIONS AREA USAF RED FLAG-RESCUE SUPPLEMENTAL ANALYSIS (27 FEBRUARY 2018)

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Finding of No Significant Impact

Playas Military Operating Area and Red Flag Rescue

Background

The United States Air Force (USAF) has established Red Flag-Rescue as an USAF level combat search and rescue exercise that is conducted twice a year using the Playas Training and Research Center (PTRC) located in Grant and Hidalgo Counties in southwest New Mexico. PTRC was established as a primary training and readiness support facility for the Department of Homeland Security, state law enforcement agencies, as well as Department of Defense and associated national defense/security forces. The PTRC facility is owned, operated and managed by the Energetic Materials Research and Testing Center (EMRTC) of New Mexico Institute of Mining and Technology, Socorro, New Mexico.

The Red Flag-Rescue training exercise is designed to provide personnel recovery training for U.S. combat aircrews, para-rescue teams, survival specialists, intelligence personnel, air battle managers, and personnel from the Joint Personnel Recovery Center. A Military Operating Area (MOA) is required for military aircraft that support the exercise. As a part of the action, the USAF is requesting the Federal Aviation Administration (FAA) establish a temporary Playas MOA that would be activated during the five days the training is to take place for two four-hour training periods per day.

The U.S. Marine Corps' 2017 Tactical Recover of Aircraft & Personnel (TRAP) Training and Readiness Certification Exercise (CERTEX) Playas Temporary Military Operating Area (Playas TMOA) Environmental Assessment (CERTEX EA) included the operations of USAF aircraft (F-16s, A-10s, HC-130s, and HH 60s). The Red Flag-Rescue training scenario is the same type of training as TRAP/CERTEX with the exception that it will last five days. The USAF conducted supplemental analysis to evaluate the impacts from the longer exercise.

The CERTEX EA and the Red-Flag-Rescue supplemental analysis were both prepared in accordance with the National Environmental Policy Act of 1969 (NEPA) (Public Law 91-190, 42 United States Code (U.S.C.) Sections 4321 - 4347), as amended (42 United States Code (U.S.C.) § 4321, et seq.); the "Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of the NEPA" (40 C.F.R. Parts 1500 -15080), and the USAF "Environmental Impact Analysis Process" (EIAP) (32 C.F.R. Part 989). The USAF incorporated the CERTEX EA by reference, and cited to as necessary in the body of the supplemental analysis. The supplemental analysis for the Red Flag-Rescue training, focused on the potential impacts of the Red-Flag-Rescue activities associated with noise and air quality.

Supplemental Analysis

The noise analysis included one additional one hour training period a day (three vs the planned on two) and included an extra day (six vs planned five) based on three different "aircraft packages" (mixes of different aircraft). The additional training was added to cover any potential changes in the training schedule due to unforeseen circumstances, and to incorporate cumulative

impacts that could arise if the Marine Corps conducted another TRAP/CERTEX exercise. The analysis also covered two USAF training exercises a year. The USAF modeled the aircraft operations in Military Operating Area and Range NOISEMAP (MR_NMAP), the FAA approved model for airspace.

The analysis found that the A-weighted Onset Rate-Adjusted Monthly Day-Night Sound Level ranged from 47.3 to 50.5 decibels, well below 65 decibels.

The air quality analysis was conducted using USAFs Air Conformity Applicability Model. Based on the attainment status of Hildago/Grant counties the requirements of the General Conformity Rule (GCR) are not applicable. None of the estimated emissions associated with the three aircraft packages are above the GCR indicators.

Mitigations

Although the impacts resulting from Red Flag-Rescue are less than significant, there is one mitigation that will be incorporated into the exercise. The FAA received two comments they thought were substantial as a result of their circularization of the aeronautical proposal in 2017. Although the location of the commenters were 90 miles outside the defined Playas MOA, the Central Service Area of the FAA recommended a minimum altitude of 500 feet above ground level would provide an adequate mitigation of their concerns. The USAF has agreed to require the participants to maintain the minimum 500 feet above ground level in this area.

Conclusion

Based on the analysis in the Marine Corps CERTEX EA, and the supplemental analysis for noise and air quality, the Red Flag-Rescue and associated aircraft operations in the proposed temporary Playas MOA will not have a significant impact on the environment.

Lynn Engelman

Lynn Engelman,
GS-14, Senior Planner

27 Feb 2018

UNITED STATES AIR FORCE
PLAYAS MILITARY OPERATING AREA AND RED
FLAG-RESCUE
SUPPLEMENTAL ANALYSIS

Introduction

The United States Air Force ("Air Force") is supplementing the Final Environmental Assessment (EA), "*Tactical Recovery of Air Craft & Personnel (TRAP). Training and Readiness Certification Exercise (CERTEX), Playas Temporary Military Operating Area (PLAYAS TMOA)*" ("CERTEX EA") (Appendix A) and the FAA's Finding of No Significant Impact (FONSI), August 3, 2017 (Appendix B. The Air Force Supplemental Analysis (SA) is entitled, "*Playas Temporary Military Operating Area*" ("*Red Flag-Rescue SA*").

The previous Marine Corps and Air Force prepared CERTEX EA analyzed the potential environmental impacts associated with the temporary activation of Playas MOA, which was primarily focused on the airspace component of the CERTEX. Playas TMOA was centered on the Playas Training and Research Center (PTRC), located in Grant and Hidalgo Counties, southwestern New Mexico and provides realistic military training immersion in a simulated environment.

PTRC was established as a primary training and readiness support facility for the Department of Homeland Security (DHS), state law enforcement agencies, as well as Department of Defense and associated national defense/security forces. The PTRC facility is owned, operated and managed by the Energetic Materials Research and Testing Center (EMRTC) of New Mexico Institute of Mining and Technology, Socorro, New Mexico.

The CERTEX EA and this *Red Flag-Rescue SA*, were both prepared in accordance with the National Environmental Policy Act of 1969 (NEPA) (Public Law 91-190, 42 United States Code (U.S.C.) Sections 4321 - 4347), as amended (42 United States Code (U.S.C.) § 4321, et seq.); the "Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of the NEPA" (40 C.F.R. Parts 1500 -15080), and the Air Force "Environmental Impact Analysis Process" (EIAP) (32 C.F.R. Part 989). As a Cooperating Agency, the Federal Aviation Administration (FAA) has reviewed the CERTEX EA and this supplemental analysis to insure compliance with FAA Order 1050.1F, "Environmental Impacts: Policies and Procedures."

The CERTEX EA adequately analyzed the potential environmental impacts of the activation of the Playas TMOA, a 20 nautical mile x 20 nautical mile block of special use airspace. See Figure 1.

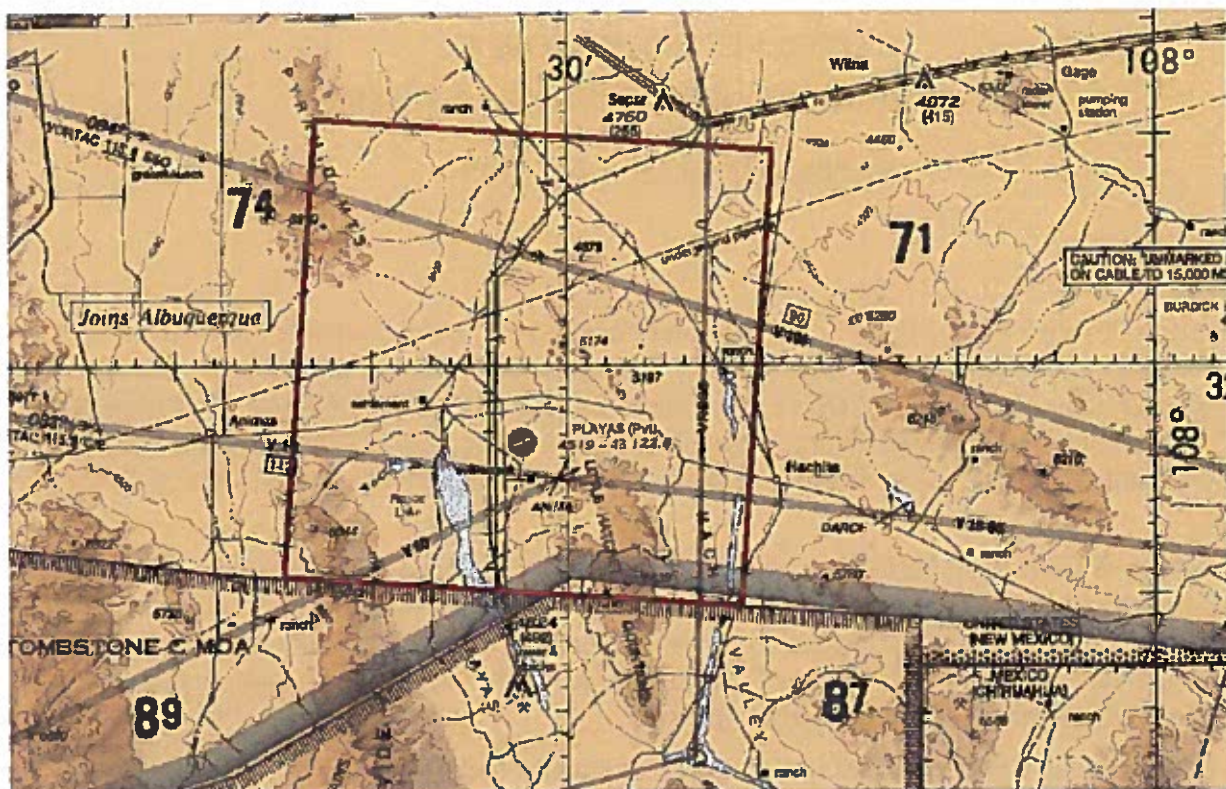


Figure 1 Playas Temporary MOA

The CERTEX EA analyzed the use of the PTRC for combat search and rescue and the use of the Playas MOA for the aircraft portion of the training. The CERTEX EA evaluated 14 environmental impact categories identified in FAA Order 1050 1F to determine if they were relevant to the action. The following were not carried forward for additional analysis: land use, DOT, Section 4(f) issues, 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 CERTEX EA also did not carry forward several resource areas for analysis (CERTEX EA, pg. 10-13). The CERTEX EA did include airspace, noise, air quality, cultural resources and biological resources. The Marine Corps concluded that there were no significant impacts associated CERTEX.

Background

Proposed Action

The Air Force proposed *Red Flag-Rescue*, as set forth and analyzed in this supplemental analysis, would allow combat air forces the opportunity to practice effective integrations with ground forces, which is critical to the success of real-world combat search and rescue missions. *Red Flag-Rescue* is designed to provide personnel recovery training for U.S. combat aircrews, para-rescue teams, survival specialists, intelligence personnel, air battle managers, and personnel from the Joint Personnel Recovery Center.

The central focus of this *Red Flag-Rescue* supplemental analysis supports aerial activities that consist of MOA flight operations that include tactical combat maneuvering by fighter, and rotary wing aircraft involving changes in altitude, attitude, and directions of flight.

Maximum flight ceiling is up to 18,000 feet Mean Sea Level (FL180), approximately 13,500 feet

Above Ground Level (AGL) in the vicinity of PTRC and the floor of the MOA will be 300 feet AGL. Operations include free-fall and static line parachute operations at all altitudes, non-standard formation flights; rescue escort maneuvering above participating rotary wing aircraft; and close air support; all up to FL200. Visual Flight Rules (VFR) aerial helicopter refueling will be accomplished up to 10,000 feet MSL or 5,800 feet AGL, within the Tombstone Military Operating Area MOA.

This Red Flag-Rescue training exercise is proposed to be conducted at the PTRC in New Mexico as it offers the best and most realistic training scenario available using actual houses and other types of buildings to support a variety of training including combat rescue, urban warfare training among other training scenarios, not otherwise available outside a fully populated urban setting. To conduct combat search and rescue, a temporary MOA is necessary to ensure a safe airspace environment protecting both civil and military aircraft during the times, each day that, training will be conducted.

As stated previously, Playas TMOA (as defined by the Air Force Aeronautical Proposal (Appendix C) is above the PTRC training facility, and is located approximately 20 miles (32 Km) south of Interstate-10, and approximately 60 miles (97 Km) north of the United States/Mexico border. The nearest communities (small towns) are Animas (population 240 residents), located approximately 18 miles (29Km) miles west, and Hachita (population 50 residents), and located approximately 14 miles (22.5 Km) east of PTRC (Figure 2).

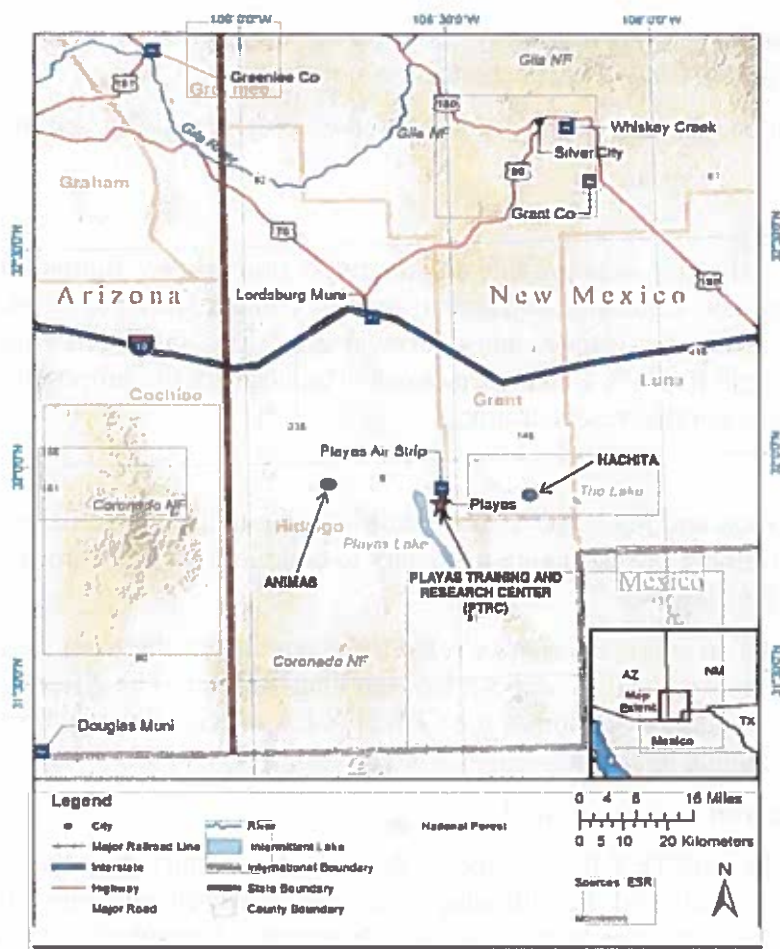


Figure 2 Regional and Vicinity Map

Aircraft participating in the Red-Flag-Rescue training include: F-16s, A-10s, HC-130s, and HH-60 helicopters. According to the Air Force's Aeronautical Proposal, the Playas TMOA will be needed for

only five days during an 18 day window from 2-19 May 2018, to be determined based on immediate, case by case, tasking basis. The Playas TMOA will be activated by publishing a Notice to Airman (NOTAM). Each day of use will consist of up to two a four-hour training periods (known as a “vul”¹ period) and will involve the aircraft associated with either aircraft package 1 or 2 or as listed in Table 1.

Table 1 Aircraft Package Composition

PACKAGE 1		PACKAGE 2	
4	F-16	6	F-16
2	A-10	1	HC-130
1	HC-130	2	HH-60
2	HH-60		

The Aeronautical Proposal listed other aircraft types as participating in the exercise; however, UH-1Y, MV-22 participation in the Red Flag– Rescue exercise is not anticipated.

The Proposed Action will be the same as the ground-based employment discussed in the CERTEX EA (pages 6-8).

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 Recover Center personnel. The need for the proposed action is driven by the need to conduct realistic combat rescue training.

Alternatives

The Tombstone, Ruby, Fuzzy and Sells MOAs were considered but eliminated from consideration because realistic ground training infrastructure necessary to conduct required combat rescue training does not exist under the these MOAs.

No-Action Alternative: The no action alternative reflects the conditions that would exist at the Playas Training Center and the associated MOA without the Red Flag-Rescue. The Affected Environment described in the resource evaluation section of the CERTEX EA reflects the condition for the No-Action Alternative of this supplemental analysis.

Resource Areas Considered and Evaluated

The Air Force reviewed the CERTEX EA to validate the analysis conducted by the Marine Corps (Pg. 10-20). The Air Force also evaluated the following categories in accordance with CEQ regulations, and found that they did not warrant further analysis: Coastal Resources, Construction Impacts, Farmlands, Floodplains, Light Emissions, Hazardous Materials, Hazardous Waste and Solid Waste, Natural Resources and Energy Supply, Water Quality, Wetlands, Wild and Scenic Rivers.

¹ The “vul” period is the period of vulnerable time a search and rescue crew is on alert to be called for an immediate tasking to conduct a rescue.

The Air Force determined that the noise and air quality resource areas required supplemental analysis to support establishing the Playas Temporary MOA. The remainder of the CERTEX EA is incorporated by reference and cited to as necessary in the body of this supplemental analysis.

Airspace Management

In order for Air Force to conduct the proposed Red Flag-Rescue training the Playas TMOA would be activated by the FAA above the PTRC, where the ground portion of the search and rescue training would take place. As noted in the CERTEX EA (Pages 13) several Victor Routes (V66, V-16, V16-66 [T 306] and V198) traverse the Playas MOA (CERTEX EA, Figure 3 Page 5).

Activation of the Playas TMOA by the FAA would be in effect by NOTAM during the time periods that aircraft operations in support of the Red Flag-Rescue training will take place. The activation of the Playas TMOA for two 4 hour periods a day would not measurably affect V66, V16, V198 and T306 flight routes used by the general aviation community, or the general aviation use of the Playas airspace.

Strategy for Analyzing Noise and Air Quality Impacts:

In order to capture cumulative impacts, the number of vul periods and numbers of days are different from what was described in the aeronautical proposal or proposed actions. As discussed in the description of the Proposed Action section, each vul period will consist of either aircraft Package 1 or 2. Each vul time will be activated by NOTAM for a total of no more than 18 vul times during the five days of use. No more than four vul times will occur between the hours of 2200 – 0700 local time.

Aircraft will enter into the Playas TMOA for between 30 to 60 minutes before exiting. The HC-130 will not operate within the Playas TMOA. Mission profiles were developed for each aircraft (including airspeed, power settings, and time in altitude blocks between 300 feet AGL to FL200) except the HH-60 which will operate from ground level to 2000 feet AGL. See Table 2 for altitude distribution.

Table 2 Altitude Distribution and Times for Packages 1 and 2

Package 1				
Aircraft	F-16	F-16	A-10	HH-60
# of Aircraft	2	2	4	2
Altitude Band 1	300' AGL - 2000' AGL	2000' AGL - 10000' MSL	300' AGL - 2000' AGL	SFC - 2000' AGL
Time in Band 1 (Min)	10	6	15	30
Altitude Band 2	2000' AGL - 10000' MSL	10000' MSL - 18000' MSL	2000' AGL - 10000' MSL	
Time in Band 2	10	54	15	
Altitude Band 3	10000' MSL - 18000' MSL			
Time in Band 3	10			

Package 2				
Aircraft	F-16	F-16	F-16	HH-60
# of Aircraft	2	2	2	2
Altitude Band 1	300' AGL - 2000' AGL	2000' AGL - 10000' MSL	300' AGL - 2000' AGL	SFC - 2000' AGL
Time in Band 1 (Min)	10	6	15	30
Altitude Band 2	2000' AGL - 10000' MSL	10000' MSL - 18000' MSL	2000' AGL - 10000' MSL	
Time in Band 2	10	54	15	
Altitude Band 3	10000' MSL - 18000' MSL			
Time in Band 3	10			

Although participation of Marine Corps aircraft are not anticipated, to evaluate the potential cumulative annual impacts (which includes a second Red Flag-Rescue exercise and/or a potential future Marine Corps CERTEX). The analysis for noise and air emissions used 3 vul times per day, during 6 days, over two exercises per year, for a total of 36 vuls per year, with 20 percent planned to occur during the “acoustic” night time period (2200-0700).

The analysis included 36 vuls periods using Package 1 or 36 vul periods of Package 2. Additionally, a third combination consisting of a mix of 18 aircraft of each Package 1 and 2. This is analyzed to allow for flexibility relative to the mix of aircraft used for training.

The third vul per day and the additional day that was analyzed might be needed if conditions (weather, mechanical, etc.) drive the need to conduct more training than originally anticipated during the hours that the MOA is activated, or would need an extra day. If these conditions occur, the Air Force would coordinate with the FAA.

Noise

Affected Environment. As described in the CERTEX EA (Page 13), the normal aircraft activities that occur in the regional airspace and the area defined for the proposed MOA are generally a mix of private (general aviation); local, state or other federal agency; or military aircraft. These existing sources of noise are consistent with known, FAA-approved flight routes and are typical for small, rural, and/or outlying airspace use and resulting in aircraft noise being episodic in nature.

As noted in the description of the Proposed Action, there are no formally recognized towns lying under the proposed TMOA. There may be scattered ranches or agricultural activity but the majority of the area is open undeveloped land.

The American National Standards Institute (ANSI) provides typical background noise levels for various land use categories, as presented in Table 3. The area beneath and surrounding the Playas Temporary MOA most similar to rural or remote areas with estimated ambient DNL less than 49 dBA.

Table 3. Estimated Background Noise Levels

Example Land Use Category	Average Residential Intensity (people per acre)	DNL (dBA)
Rural or remote areas	<2	<49
Quiet suburban residential	2	49
	4	52
	4.5	52
Quiet urban residential	9	55
Quiet commercial, industrial, and normal urban residential	16	58
	20	59

Source: ANSI 2013. *Quantities and Procedures for Description and Measurement of Environmental Sound*.

Environmental Consequences. Military aircraft utilizing Special Use Airspace (SUA) such as MOAs generate a noise environment somewhat different from that associated with airfield operations. As opposed to the patterned or continuous noise environments associated with an airfield, flight activity in SUA is highly sporadic and often seasonal ranging from a few flights per hour to less than one per week. Individual military overflight events also differ from typical airfield noise events in that noise from a low-altitude, high-air-speed flyovers can have a higher onset of noise, exhibiting a rate of increase in sound level.

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 L_{dnmr} . The Onset Rate-Adjusted Monthly Day-Night Sound Level metric is similar to the “day night level represented by the symbols L_{dn} 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 L_{dnmr} 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 (L_{dn} and L_{dnmr}) used for aircraft noise are A-weighted.

The modeling of aircraft operation for Red Flag-Rescue was performed using the Version 3 of the Military Operating Area and Range Noise Model (MR_NMAP) modeling software. The modeling included operations associated with the two Red Flag-Rescue training events that occur at the PTRC to

ensure the cumulative noise impacts of both training exercises were captured.

Based on the modeling results, and the lack of noise sensitive land uses under the MOA, the Proposed Action would not have a significant impact on the environment. The annual average L_{dnmr} for the various packages is shown in Table 3.

Table 3. Results of Noise Analysis

Average annual Day L_{dnmr}	
Package 1	47.3
Package 2	50.5
Package 3 (A mix of 1 and 2)	49.2

Mitigations for Noise. The Central Service Area (CSA) office of the FAA received two comments from the Cascabel Conservation Association for an area outside the proposed during the circularization of the Special Use Airspace proposal for the Red Flag-Rescue (November, 2017)

. The comments pertained to low flying aircraft overflights transiting to and from the PTRC in previous training exercises, as well as local flying from the base disturbing the natural peace and creating a hazard when ranchers are working with live stock, and were not associated with Playas MOA. Although over ninety miles from the proposed temporary MOA, the CSA considers these substantive comments associated with the proposed action. The CSA recommended a 500' AGL minimum altitude over the impacted area to provide adequate mitigation of their concerns. The Air Force will restrict the participants in the Red Flag-Rescue training exercise to be above 500' AGL in this area.

Air Quality

Affected Environment: The EPA has designated eight (8) Air Quality Control Regions (AQCR) in New Mexico. The Arizona-New Mexico Southern Border Intrastate Air Quality Control Region 012 is located in the southwestern part of the state and covers an area of 10,374 square miles. The counties within the region include Grant, Hidalgo and Luna. The Playas TMOA, as well as the PTRC facility itself, is situated within a portion of AQCR-012. AQCR-012 is currently in full attainment status for all monitored criteria pollutants; both gaseous and particulate matter air contaminants. At present, only Particulate Matter-10 (PM_{10}) contaminants are being monitored during and after major storm and wind events.

Environmental Consequences. The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Instruction 32-7040, Air Quality Compliance and Resource Management; and the General Conformity Rule (GCR, 40 CFR 93 Subpart B).

Calculations were done by zeroing out all time in modes except climb out (intermediate or military), and altering climb out to reflect the information provided below. Trim tests were also zeroed out. ACAM does not have rotary aircraft built into its modeling, so emissions calculations were done manually in Microsoft Excel using emission factors from the Air Emissions Guide for Air Force Mobile Sources

September 2017. These totals were added to the ACAM summary report, so the totals annually reflect emissions for the F-16s, A-10s, and UH-60s.

Based on the attainment status of Hidalgo/Grant Counties, the requirements of the General Conformity Rule are not applicable. None of the estimated emissions associated with the three aircraft packages are above the GCR indicators, indicating no significant impact to air quality. The detailed analysis can be found in Appendix D.

Public Involvement

As accomplished for the CERTEX EA and circularization for the Red Flag-Rescue aeronautical proposal (e.g., Playas Temporary MOA).

AIR CONFORMITY APPLICABILITY MODEL REPORT

RECORD OF AIR ANALYSIS (ROAA) (Package 1)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Instruction 32-7040, Air Quality Compliance And Resource Management; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:

Base: DAVIS-MONTHAN AFB
County(s): Hidalgo, Grant (New Mexico)
Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: Playas Temporary MOA

c. Project Number/s (if applicable):

d. Projected Action Start Date: 1 / 2018

e. Action Description:

Calculations were done by zero-ing out all time in modes (TIMs) except climbout (intermediate or military), and altering climbout to reflect the information provided below. Trim tests were also zero-ed out.

*Please note that ACAM does not have rotary aircraft built into its modeling, so emissions calculations were done manually in Microsoft Excel using emission factors from the Air Emissions Guide For Air Force Mobile Sources September 2017. These totals were added to the ACAM summary report, so the totals annually reflect emissions for all 3 types of aircraft.

f. Point of Contact:

Name: Austin Naranjo
Title: Environmental Engineer - Air Quality Specialist
Organization: Solutio Environmental, Inc.
Email: Austin.Naranjo@Solutioenv.com
Phone Number: (210) 749-7000

2. Air Impact Analysis: Based on the attainment status at the action location, the requirements of the General Conformity Rule are:

☐ applicable
☒ not applicable

Total combined direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the "worst-case" and "steady state" (net gain/loss upon action fully implemented) emissions.

"Air Quality Indicators" were used to provide an indication of the significance of potential impacts to air quality. These air quality indicators are EPA General Conformity Rule (GCR) thresholds (de minimis levels) that are applied out of context to their intended use. Therefore, these indicators do not trigger a regulatory requirement; however, they provide a warning that the action is potentially significant. It is important to note that these indicators only provide a clue to the potential impacts to air quality.

Given the GCR de minimis threshold values are the maximum net change an action can acceptably emit in non-attainment and maintenance areas, these threshold values would also conservatively indicate an action's emissions within an attainment would also be acceptable. An air quality indicator value of 100 tons/yr is used based on the

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

GCR de minimis threshold for the least severe non-attainment classification for all criteria pollutants (see 40 CFR 93.153). Therefore, the worst-case year emissions were compared against the GCR Indicator and are summarized below.

Analysis Summary:

Annual Emission Totals

Pollutant	Action Emissions (ton/yr)	AIR QUALITY INDICATOR	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.007	100	No
NOx	1.351	100	No
CO	0.450	100	No
SOx	0.098	100	No
PM 10	0.406	100	No
PM 2.5	0.004	100	No
Pb	0.000	100	No
NH3	0.000	100	No
CO2e	299.0		

None of estimated emissions associated with this action are above the GCR indicators, indicating no significant impact to air quality; therefore, no further air assessment is needed.



Austin Naranjo, Environmental Engineer - Air Quality Specialist

2/20/18

DATE

AIR CONFORMITY APPLICABILITY MODEL REPORT

RECORD OF AIR ANALYSIS (ROAA) (Package 2)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Instruction 32-7040, Air Quality Compliance And Resource Management; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:

Base: DAVIS-MONTHAN AFB
County(s): Hidalgo, Grant (New Mexico)
Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: Playas Temporary MOA

c. Project Number/s (if applicable):

d. Projected Action Start Date: 1 / 2018

e. Action Description:

Calculations were done by zero-ing out all time in modes (TIMs) except climbout (intermediate or military), and altering climbout to reflect the information provided below. Trim tests were also zero-ed out.

*Please note that ACAM does not have rotary aircraft built into its modeling, so emissions calculations were done manually in Microsoft Excel using emission factors from the Air Emissions Guide For Air Force Mobile Sources September 2017. These totals were added to the ACAM summary report, so the totals annually reflect emissions for all 3 types of aircraft.

f. Point of Contact:

Name: Austin Naranjo
Title: Environmental Engineer - Air Quality Specialist
Organization: Solutio Environmental, Inc.
Email: Austin.Naranjo@Solutioenv.com
Phone Number: (210) 749-7000

2. Air Impact Analysis: Based on the attainment status at the action location, the requirements of the General Conformity Rule are:

☐ applicable
☒ not applicable

Total combined direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the "worst-case" and "steady state" (net gain/loss upon action fully implemented) emissions.

"Air Quality Indicators" were used to provide an indication of the significance of potential impacts to air quality. These air quality indicators are EPA General Conformity Rule (GCR) thresholds (de minimis levels) that are applied out of context to their intended use. Therefore, these indicators do not trigger a regulatory requirement; however, they provide a warning that the action is potentially significant. It is important to note that these indicators only provide a clue to the potential impacts to air quality.

Given the GCR de minimis threshold values are the maximum net change an action can acceptably emit in non-attainment and maintenance areas, these threshold values would also conservatively indicate an action's emissions within an attainment would also be acceptable. An air quality indicator value of 100 tons/yr is used based on the

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

GCR de minimis threshold for the least severe non-attainment classification for all criteria pollutants (see 40 CFR 93.153). Therefore, the worst-case year emissions were compared against the GCR Indicator and are summarized below.

Analysis Summary:

Annual Emission Totals

Pollutant	Action Emissions (ton/yr)	AIR QUALITY INDICATOR	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.007	100	No
NOx	2.947	100	No
CO	0.505	100	No
SOx	0.132	100	No
PM 10	0.161	100	No
PM 2.5	0.146	100	No
Pb	0.000	100	No
NH3	0.000	100	No
CO2e	401.7		

None of estimated emissions associated with this action are above the GCR indicators, indicating no significant impact to air quality; therefore, no further air assessment is needed.



2/20/18

Austin Naranjo, Environmental Engineer - Air Quality Specialist

DATE

AIR CONFORMITY APPLICABILITY MODEL REPORT

RECORD OF AIR ANALYSIS (ROAA) (Mixture of packages 1 and 2)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Instruction 32-7040, Air Quality Compliance And Resource Management; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:

Base: DAVIS-MONTHAN AFB
County(s): Hidalgo, Grant (New Mexico)
Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: Playas Temporary MOA

c. Project Number/s (if applicable):

d. Projected Action Start Date: 1 / 2018

e. Action Description:

Calculations were done by zero-ing out all time in modes (TIMs) except climbout (intermediate or military), and altering climbout to reflect the information provided below. Trim tests were also zero-ed out.

*Please note that ACAM does not have rotary aircraft built into its modeling, so emissions calculations were done manually in Microsoft Excel using emission factors from the Air Emissions Guide For Air Force Mobile Sources September 2017. These totals were added to the ACAM summary report, so the totals annually reflect emissions for all 3 types of aircraft.

f. Point of Contact:

Name: Austin Naranjo
Title: Environmental Engineer - Air Quality Specialist
Organization: Solutio Environmental, Inc.
Email: Austin.Naranjo@Solutioenv.com
Phone Number: (210) 749-7000

2. Air Impact Analysis: Based on the attainment status at the action location, the requirements of the General Conformity Rule are:

☐ applicable
☒ not applicable

Total combined direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the "worst-case" and "steady state" (net gain/loss upon action fully implemented) emissions.

"Air Quality Indicators" were used to provide an indication of the significance of potential impacts to air quality. These air quality indicators are EPA General Conformity Rule (GCR) thresholds (de minimis levels) that are applied out of context to their intended use. Therefore, these indicators do not trigger a regulatory requirement; however, they provide a warning that the action is potentially significant. It is important to note that these indicators only provide a clue to the potential impacts to air quality.

Given the GCR de minimis threshold values are the maximum net change an action can acceptably emit in non-attainment and maintenance areas, these threshold values would also conservatively indicate an action's emissions within an attainment would also be acceptable. An air quality indicator value of 100 tons/yr is used based on the

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

GCR de minimis threshold for the least severe non-attainment classification for all criteria pollutants (see 40 CFR 93.153). Therefore, the worst-case year emissions were compared against the GCR Indicator and are summarized below.

Analysis Summary:

Annual Emission Totals

Pollutant	Action Emissions (ton/yr)	AIR QUALITY INDICATOR	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.055	100	No
NOx	3.499	100	No
CO	1.548	100	No
SOx	0.235	100	No
PM 10	0.841	100	No
PM 2.5	0.576	100	No
Pb	0.000	100	No
NH3	0.000	100	No
CO2e	716.5		

None of estimated emissions associated with this action are above the GCR indicators, indicating no significant impact to air quality; therefore, no further air assessment is needed.



Austin Naranjo, Environmental Engineer - Air Quality Specialist

2/20/18

DATE



U.S. Department
of Transportation

Federal Aviation
Administration

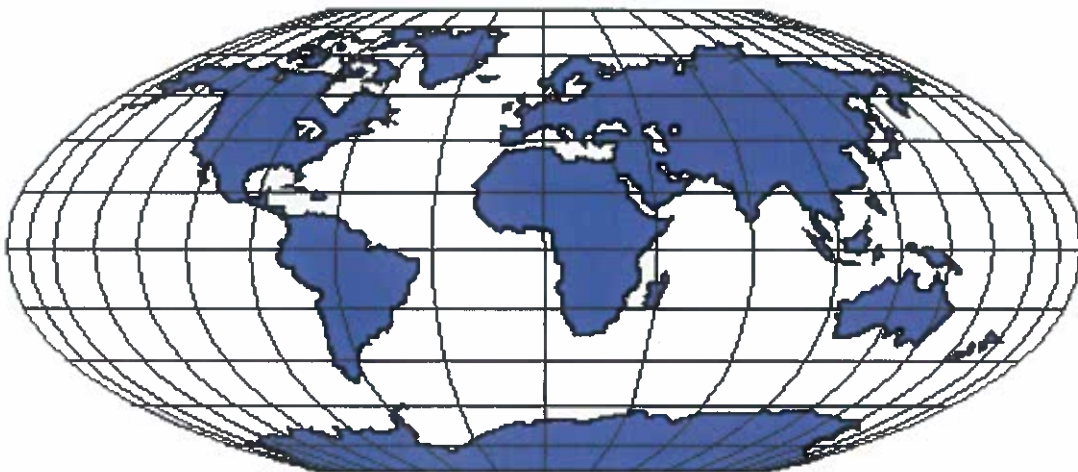
NOTICES TO AIRMEN

Domestic/International

March 29, 2018

Next Issue

April 26, 2018



Notices to Airmen included in this publication are NOT given during pilot briefings unless specifically requested by the pilot. An electronic version of this publication is on the internet at http://www.faa.gov/air_traffic/publications/notices

SPECIAL USE AIRSPACE

Playas Temporary Military Operations Area (MOA), Playas, NM

Effective Dates: May 2–19, 2018.

The Playas Temporary Military Operations Area (MOA), is located over the Playas, New Mexico, training and research center, and supports Exercise ANGEL THUNDER. The exercise, staging from Davis–Monthan Air Force Base (AFB), AZ, is designed to provide Combat Search and Rescue (CSAR) training for U.S. and allied aircrews, para–rescue personnel, intelligence personnel, battle managers, and Joint Personnel Recovery Center personnel. The execution of Exercise ANGEL THUNDER allows combat air forces to practice effective integration and application of air and space power in the search and rescue mission. Various rescue training scenarios could run day or night.

The Playas Temporary MOA will be activated for aircraft and parachute operations participating in the Exercise ANGEL THUNDER CSAR exercise. Aerial activities will consist of MV–22, F–16, A–10, EC–725, HC–130, and HH–60 aircraft conducting typical MOA flight operations to include tactical combat maneuvering by fighter, transport, and rotary wing aircraft, non–standard formation flights, rescue escort maneuvering above participating rotary wing aircraft, Close Air Support (CAS), freefall and static line parachute operations, and VFR aerial helicopter refueling. During periods when the temporary MOA is not needed for training, the airspace will be returned to the FAA controlling agency (Albuquerque Air Route Traffic Control Center).

The following is the description and chart depiction of the Playas Temporary MOA airspace:

Playas Temporary MOA, NM

Boundaries: Beginning at lat. 32°10'43"N., long. 108°42'48"W.;
to lat. 32°09'20"N., long. 108°19'29"W.;
to lat. 31°49'27"N., long. 108°21'03"W.;
to lat. 31°50'48"N., long. 108°44'28"W.;
to the point of beginning.

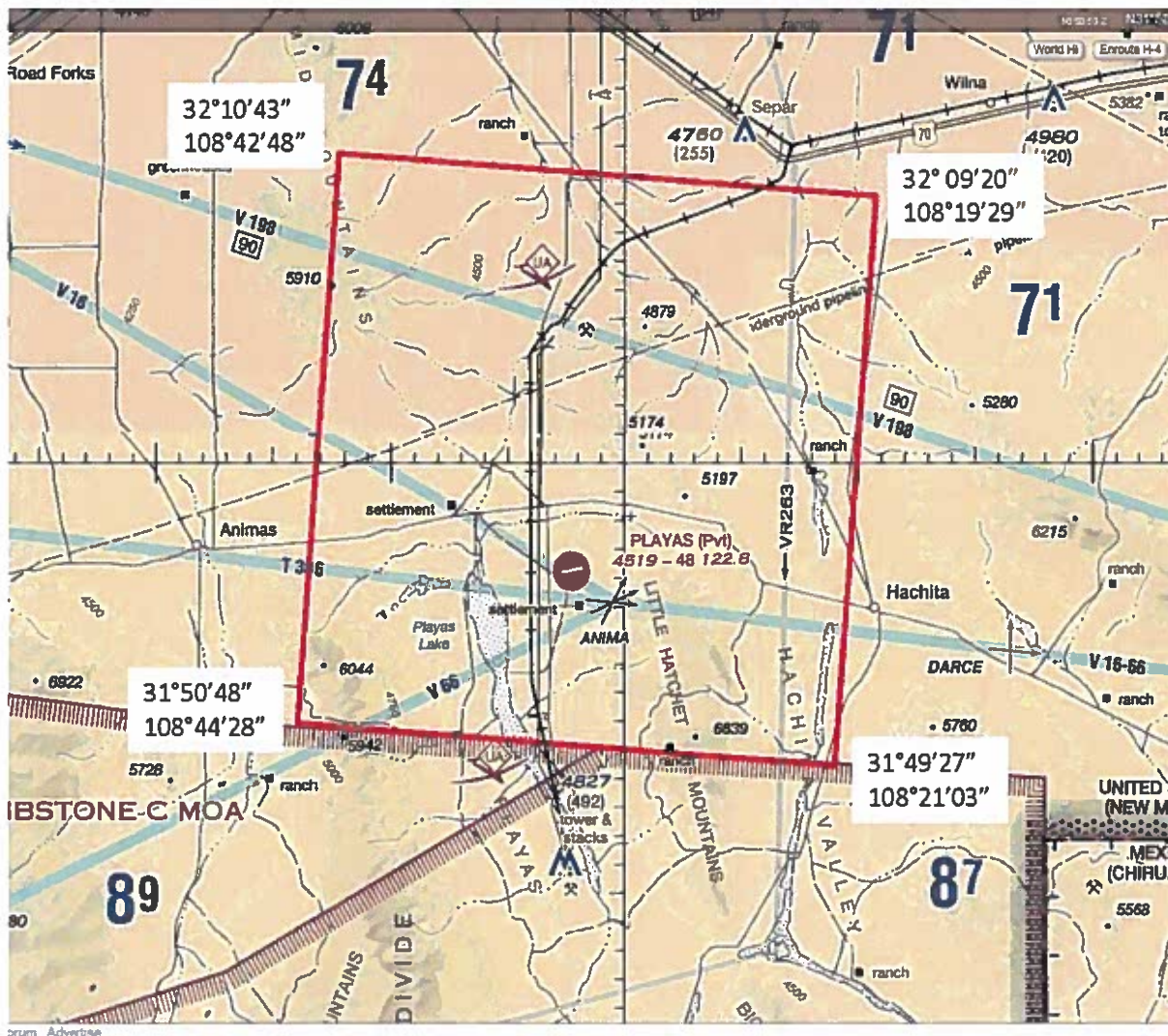
Altitudes: 300 feet AGL to, but not including, FL180.

Times of Use: By NOTAM, May 2–19, 2018.

Controlling Agency: FAA, Albuquerque ARTCC.

Using Agency: U.S. Air Force, Det 1, 414 Combat Training Squadron, Davis–Monthan AFB, AZ.

EL PASO SECTIONAL



Playas Temporary MOA, NM

2-19 May 2018

Times of Use: By NOTAM

Altitudes: From 300' AGL to but not including FL180

NOT FOR NAVIGATION

ENVIRONMENTAL ASSESSMENT



Tactical Recovery of Aircraft & Personnel (TRAP)

Training and Readiness Certification Exercise (CERTEX)

Playas Temporary Military Operating Area (PLAYAS TMOA)



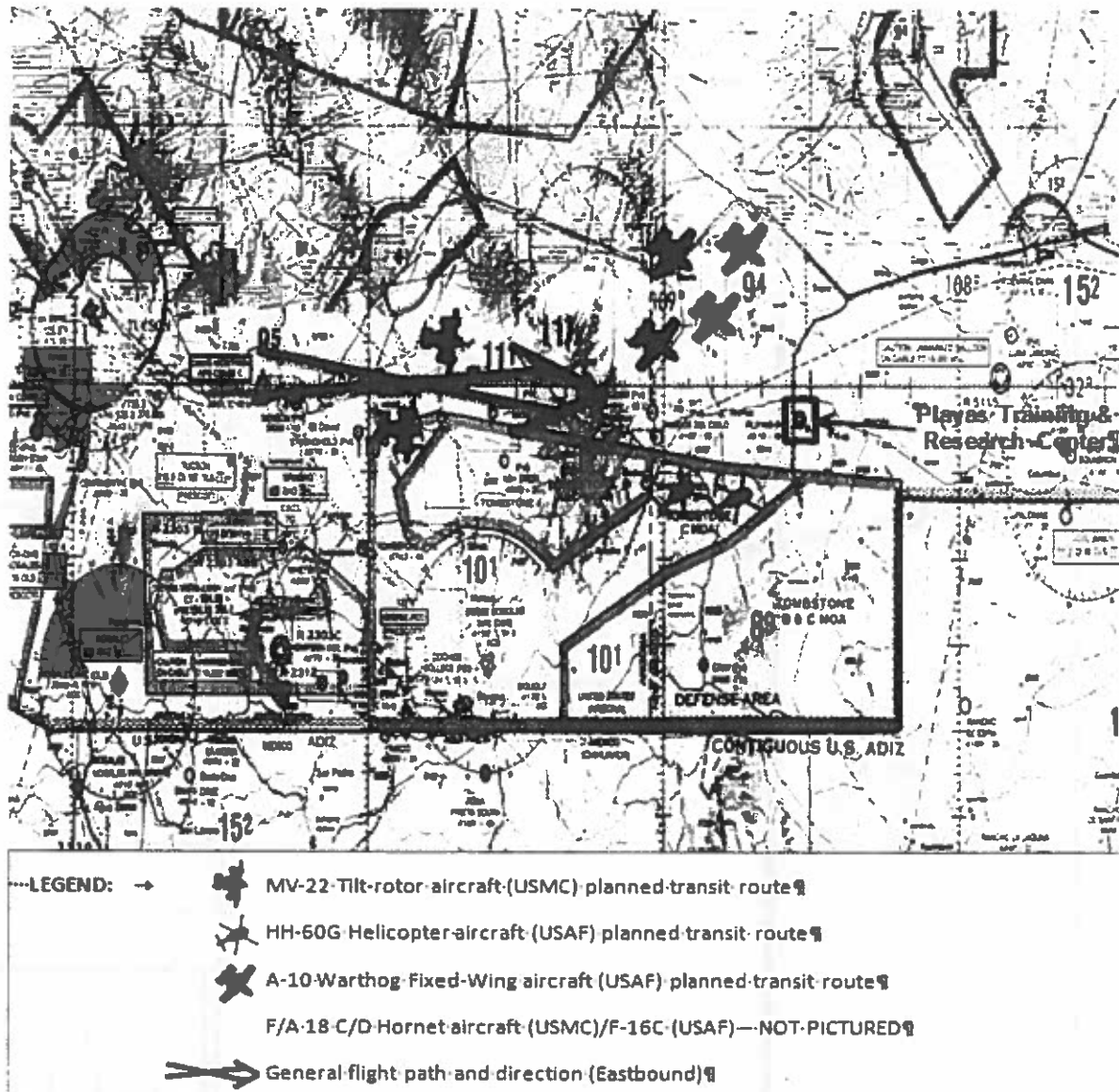
Playas, NM

23 June 2017

Figure 1:



FIGURE 2:--PLAYAS-TEMPORARY-MOA---AIRSPACE-VICINITY-MAP



Purpose and Need

The purpose of the TRAP CERTEX is to provide realistic training to integrate air and ground forces in a joint USAF and USMC exercise. The TRAP CERTEX will provide the Special Purpose Marine Air Ground Task Force (SPMAGTF) an opportunity to conduct training in an unfamiliar environment during the final phase of its pre-deployment program. During CERTEX, the Special Purpose Marine Air Ground Task Force Crisis Response Central Command (SPMAGTF-CR-CC) will be required to perform a series

of challenging and realistic training events to test its ability to conduct conventional and specialized missions, both in the air and on the ground. The TRAP CERTEX is one of the planned training events requiring select members of the USMC and USAF to fully plan and execute the (TRAP) during a 5-hour time block between 09 and 10 August 2017.

The need for the USMC's Proposed Action is to meet the pre-deployment training and readiness requirements of the SPMAGTF-CR-CC CERTEX for Marine Expeditionary Unit (MEU) deployment. The activation of the Playas TMOA ensures the SPMAGTF-CR-CC CERTEX can be conducted with minimal risk to the operating forces, while managing risk to public health and safety (general aviation community).

Alternatives

The NEPA, Council on Environmental Quality (CEQ), and FAA regulations (40 CFR 1502.14) 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.

Based on the results of the *Playas EA*, the Proposed Action alternative was chosen as the preferred alternative.

Environmental Impacts

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

Noise:

The *Playas EA* states that existing sources of noise at the PTRC are background or ambient noise associated with a small, rural town with a limited population, except when in use by a variety of end user groups (i.e., DOD, DHS, ICE, local law enforcement, etc.). When not in use, noise levels typically range from 48 to 60 dBA in the daytime and 42 to 54 dBA at night (USAF, Angel Thunder EA, May 2017, Table 3-3). When in use, aircraft operations make up much of the noise, as would be the case during the proposed action. Rotary wing and/or tilt-rotor aircraft would be audible to individuals under the flight path and within several hundred to a few thousand feet of the activities being conducted on/near the ground, particularly upon approach to and departure from a helicopter landing zone (HLZ). This would be particularly so at night, and in remote areas, where ambient noise levels are generally lower than in larger, more populated areas, especially daytime. That said, there are no night aviation operations (other than the "staging" of a downed pilot the evening before CSAR activities) are planned for the proposed action. Any audible noise would be temporary and transient, however, lasting only a few to several minutes at a given time. Ground activities would be limited to not more than two hours, being restricted to search and rescue operations by small, squad-sized units, with only two actual landings (one tactical insertion and one tactical extraction) by two MV-22 aircraft. While an increase is anticipated during landings and take-off, this would be a short-term, transitory effect that is consistent with the baseline conditions of a commercial training and research facility such as the PTRC.

Playas Temporary Military Operating Area (TMOA): Existing aircraft activities in the airspace above the PTRC facility are a mix of private (general aviation); local, state, or other federal agency; and/or military aircraft. These existing sources of noise are consistent with known, FAA-approved flight routes, and

often associated with small, rural, and/or outlying airfields, private airstrips, and auxiliary fields that see little activities, therefore noise is isolated and episodic, in nature.

Existing sources of noise within southern New Mexico, in general, consist of flight activities primarily involving occasional fixed-wing military aircraft (i.e., F-16s, A-10s and similar) flying at a range of altitudes and speeds. Examples of specific flight activities often include air combat maneuvering above 25,000 feet above ground level (AGL); flights of two or four aircraft flying low-altitude (200 to 5,000 feet AGL) transiting from one military installation to another, conducting a variety of military flight activities enroute, and helicopters performing periodic, low-altitude flight training.

Although individual overflights by all aircraft within the area can be loud, they are relatively infrequent, transient and not concentrated at any single location or time of day/night. For instance, the highest noise level on the Barry M. Goldwater Range (East) (BMGR-E) is 62 dBA DNL under R-2301E (the East Tactical Range), and the lowest noise level is less than 45 dBA DNL under the MOAs (USAF Angel Thunder EA, May 2017).

Military Operations in Urban Terrain, or MOUT, (simulated combat towns) training areas at the PTRC also has no appreciable continuous sources of noise (USAF, 2017).

Environmental Consequences - Due to the infrequent number of air activities overhead at the PTRC, their relative altitudes, and the limited number of sorties and actual landings planned for the Proposed Action, aircraft are not expected to generate noise greater than 65 dBA DNL beyond the Action Area; in this case, the PTRC facility itself. Also, with few people living near the PTRC, the closest community (a small town) (population of ~240 residents) is ~6-10 miles away. As a result, aircraft activities within the Action Area are expected to be compatible with existing, baseline land and airspace conditions.

Noise levels, both on-the-ground and in the airspace (Playas TMOA) above the PTRC, are not expected to be significant, for the following reasons: 1) no sensitive receptors are present, or nearby (closest population center is 6-10 miles away [Animas, NM], with ~ 88 families (~240 total residents), a school and a medical facility; 2) event frequency - a single training event conducted with only two sorties [one insertion and one extraction] by up to 4 helicopters; 3) duration - one 5-hour airspace event window (Playas TMOA activation) at normal operating elevations up to 18,000 feet, or one 2-hour on-the-ground event window (for search / rescue / recovery operation), and; 4) intensity - two small, squad-sized military units would conduct pilot(s) rescue and recovery activities, with no live-fire activities.

As a result, the Proposed Action would not generate significant noise impacts to the human environment outside the Action Area (PTRC facility and lands immediately surrounding the facility) that are substantially above ambient, background levels for more than a few minutes *on or near the ground* or up to only a few hours *in the air*, with most aerial activities occurring above 5,000' - 10,000' AGL.

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 65DNL 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.

Per the *Playas EA* (pg. 13), the temporary nature (NTE 5-hours) and limited number aircraft involved in the Proposed Action would not result in any significant noise increases and would not trigger a significant noise threshold per FAA Order 1050.1F.

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.”

The Proposed Action does not include construction and there are very limited aircraft operations planned. Most all aircraft involved in the TRAP CERTEX event would be operating at elevations well above 3,000 feet AGC. Aircraft operations, and therefore emissions, below 3,000 feet would be limited to two tactical landing/take-offs (insertion and then extraction), therefore the impacts to local air quality would be temporary and transitory in nature, and not expected to generate any offsite effects. The amount of emissions generated by the joint exercise would be *de minimis*. The Proposed Action would not significantly affect air quality (*Playas EA*, pg. 14).

As stated in the EA, the area around Playas, New Mexico is designated as an attainment area. Therefore, EPA’s General Conformity Regulations do not apply.

Biological Resources (including Fish, Wildlife, and Plants):

Under FAA Order 1050.1F, an action would have a significant impact in this category if it is determined that the action would be likely to jeopardize the continued existence of a federally listed threatened or endangered species or would result in the destruction or adverse modification of federally designated critical habitat. The FAA has not established a significance threshold for non-listed species, but Exhibit 4-1 in Order 1050.1F lists several factors to consider.

The *Playas EA* (pg. 15) indicates there are 20 listed species that may occur within the Greater Boot Heel Region of New Mexico; however, the affected habitat of these species is not found within the Action Area. Of the two potential bat species within that same Boot Heel Region, neither should be present during activities as they will take place during daylight hours.

Historic Architectural, Archeological, and Cultural Resources:

The FAA has reviewed the documentation prepared by the USMC within the EA including consultation with the New Mexico State Historic Preservation Office (SHPO). The New Mexico SHPO issued a Letter of No-Effect on May 23, 2017, which can be found in Appendix A of the EA.

Extensive tribal outreach was conducted by the USAF (*Playas EA*, pg. 14).

Environmental Justice

As seen on page 13 of the EA, there are no Census block groups that exist near the PTRC facility or under the TMOA. The U.S. Census Bureau collects, maintains and published demographics data for the populations within each block group. According to the USAF, there are no low-income and/or minority populations within the vicinity of the PTRC, resulting in no disproportionately high or adverse human health or environmental effects on low income and minority populations.

Cumulative Impacts:

The proposed action will not result in a significant cumulative impact as a result of the establishment of the additional TMOA. When taking the temporary activities addressed in the USAF Angel Thunder EA into consideration, the temporary nature of 5 hour exercise for the TRAP CERTEX Playas will present any cumulative impacts. 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, the FAA has determined there would be no significant cumulative impacts as a result of the establishment of the TMOA.

Additional Impact Categories:

As described on pg. 9 of the EA, the following NEPA impact categories were assessed and in accordance with CEQ regulations and FAA Order 1050.1F did not warrant further analysis in the EA: Land Use, Socioeconomics, Environmental Justice, Climate, Coastal Resources, Construction Impacts, Farmlands, Floodplains, Light Emissions, Hazardous Materials, Hazardous and Solid Waste, Natural Resources and Energy Supply, Water Quality, Wetlands, and Wild and Scenic Rivers.

Impact Analysis

Based on documentation contained in the EA, no significant adverse environmental impacts are associated with the Proposed Action. The attached EA addresses the effects of the Proposed Action on the human and natural environment and is made a part of this FONSI.

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 EA 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 EA. Based on its independent evaluation, the FAA has determined that the EA adequately assesses and discloses the environmental impacts of the TRAP CERTEX Playas TMOA and that adoption of the EA by the FAA is authorized under 40 C.F.R. § 1506.3 and FAA Order 1050.1F, paragraph 8-2.c.

1.0 INTRODUCTION

Project Overview

The Proposed Action described herein is the temporary activation the Playas MOA (hereinafter referred to as the Playas TMOA) by the Federal Aviation Administration (FAA), in support of a joint USMC-USAF training and readiness Certification Exercise (CERTEX) known as a "Tactical Recovery of Aircraft and Personnel" (or TRAP). The TRAP CERTEX includes use of both airspace and ground environments.

For the purpose of detailed discussion and analysis, this EA is focused on the use of the airspace component primarily, as the use of the ground component is limited to an existing, developed commercial facility known at the Playas Training and Research Center (PTRC), located in Grant and Hidalgo Counties, in the southwestern corner of the State New Mexico. The PTRC facility provides realistic military training immersion in a simulated environment. It was established as a primary training and readiness support facility for Home Land Security, local and State law enforcement agencies, as well as Department of Defense military and associated national defense/security forces. The PTRC facility is owned, operated and managed by the Energetic Materials Research and Testing Center (EMRTC) of New Mexico Tech, a public university located in Socorro, NM. (Figure 1)

The Playas TMOA is a key component in the effective use of the PTRC facility for military and related training events. The Playas TMOA has been activated on many occasions since its establishment in 2006. The Playas TMOA is a 20NM x 20NM block of special use airspace centered on Playas, New Mexico.

This TRAP CERTEX EA evaluates the potential environmental impacts of the temporary activation of the Playas MOA for a period not-to-exceed 5 total hours (1100-1600) sometime between 9 and 10 August 2017.

Proposed Action Location and Action Area

The Playas TMOA sits atop the PTRC training facility, which is located in Playas, New Mexico. The PTRC is located approximately 20 miles (~32 Km) south of I-10, and approx. 60 miles (~97 Km) north of the US/Mexico border. The closest, populated urban center is Las Cruces, NM, which lies ~130 miles (~210 Km) to the East. Tucson, AZ lies ~180 miles (~290 Km) west. The nearest communities (small towns) are Animas (population of ~240 residents), and Hachita (population of ~50 residents), located ~ 20 miles (~32 Km) to the West and East, respectively (Figures 1 and 2).

FIGURE 1: REGIONAL & VICINITY MAP

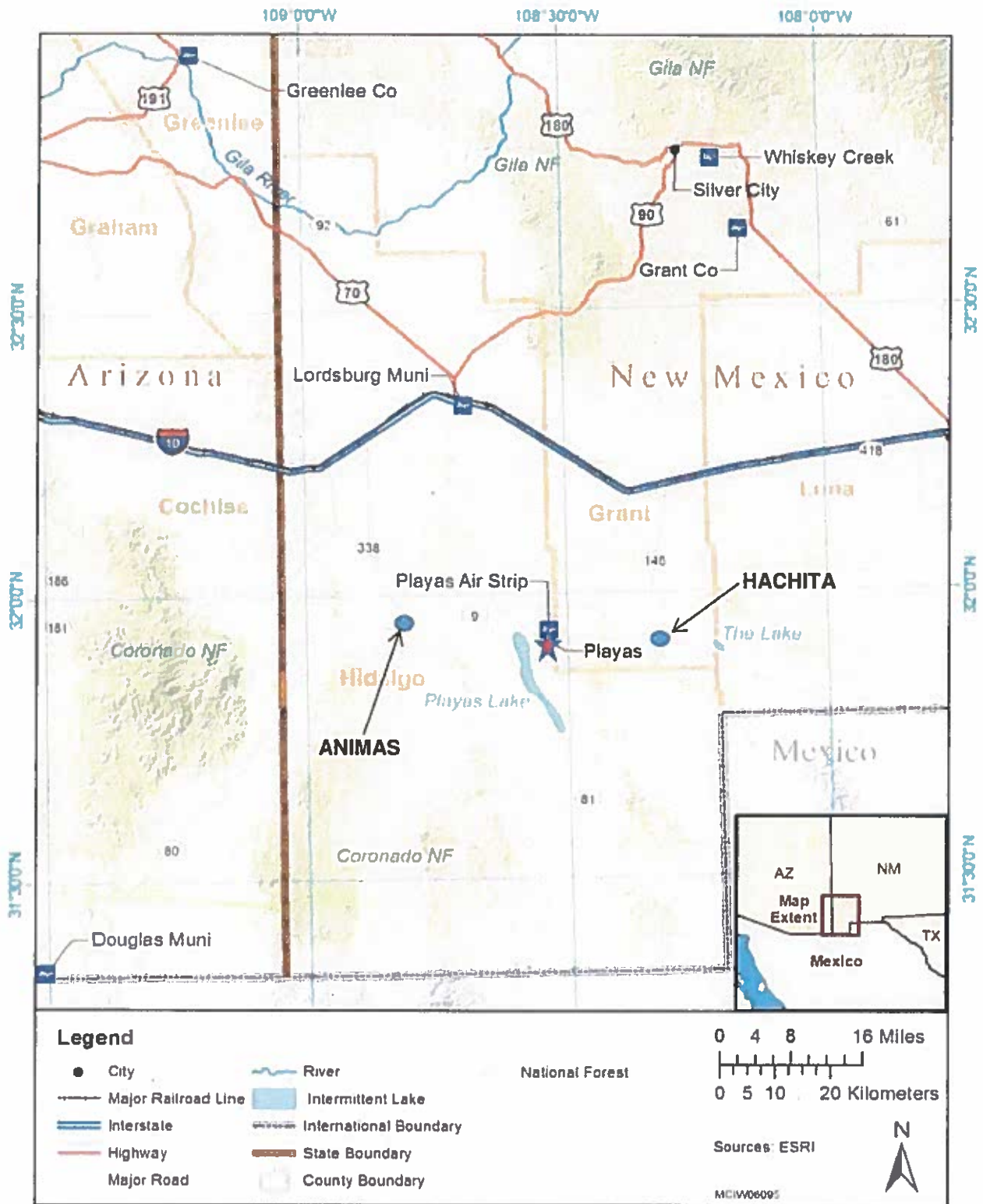
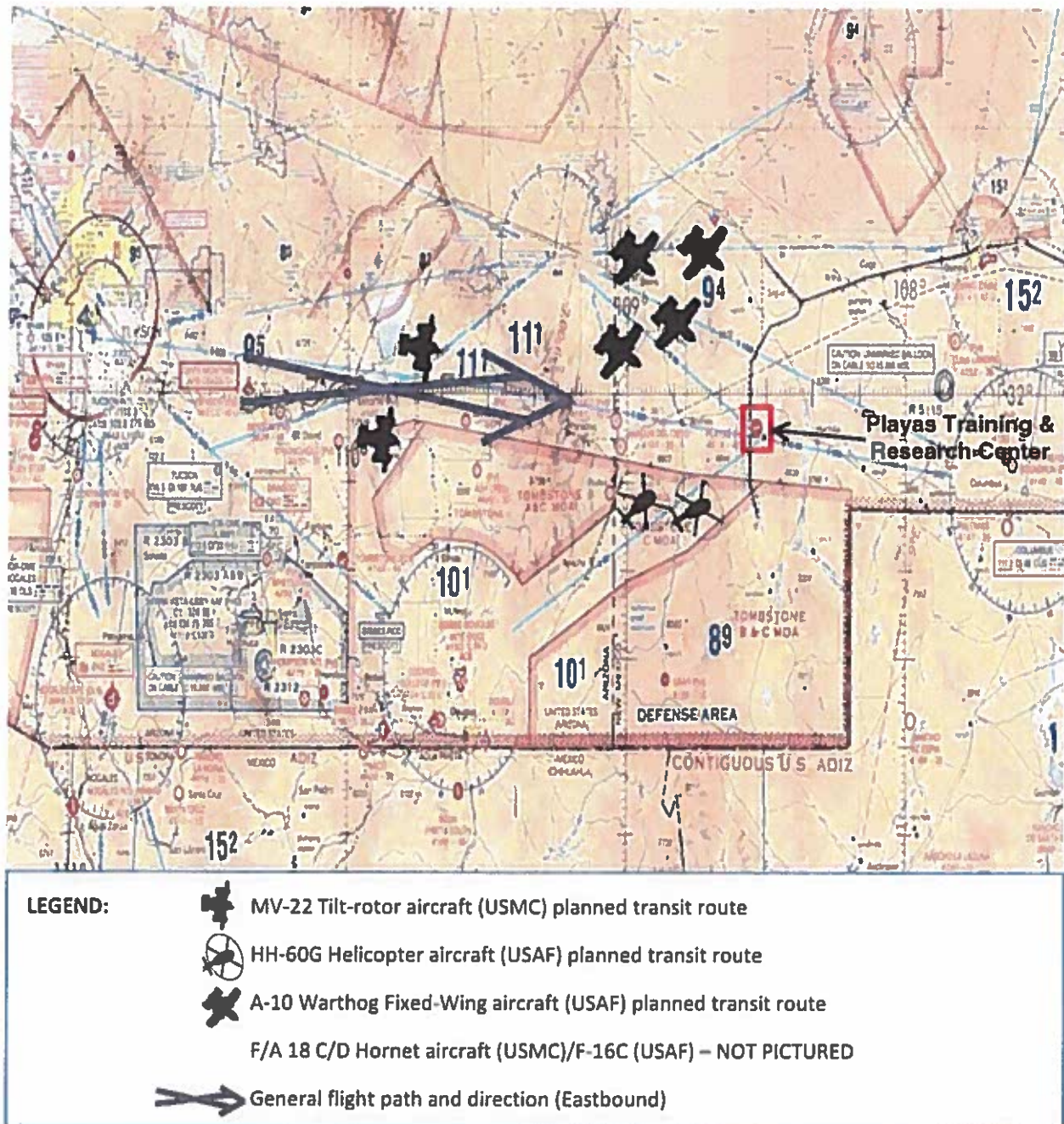


FIGURE 2: PLAYAS TEMPORARY MOA - AIRSPACE VICINITY MAP



For the purposes of this EA, the Action Area is defined herein as the three dimensional airspace lying within the Playas TMOA itself, from ground level up 18,000' AGL immediately above the PTRC facility. As indicated above, the Playas TMOA is a 20NM x 20NM block of special use airspace that sits atop the PTRC (Figure 3). With the exception of the PTRC and associated facilities, much of the land below the Playas TMOA is open and sparsely populated, with few settlements and no urban areas within 20+ miles. The Playas TMOA would only be activated for aircraft participating in exercises, and only for the 5-hour time block identified above.

Environmental Requirement

The Proposed Action is subject to environmental review under the National Environmental Policy Act (NEPA) of 1969 as amended (42 United States Code [U.S.C.] §4321, et seq.). The FAA is preparing this Environmental Assessment (EA) in accordance with NEPA, Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and FAA Order 1050.1F, Environmental Impacts: Policies and Procedures. In coordination with the FAA, the U.S. Marine Corps, through its relevant guidance under MCO 5090.2 considered preparing a Categorical Exclusion (CATEX)(a CATEX-25), however, the FAA determined no CATEX class existed within their respective guidance for activation of a temporary MOA, thus an EA to document the environmental review was prepared.

Purpose and Need/Public Involvement

Purpose of and Need for the Proposed Action

The purpose of the TRAP CERTEX is to practice integrating both air and ground forces in conducting a joint services exercise. This requires additional, temporary military special use airspace atop the PTRC training and readiness facility to support training objectives. The TRAP CERTEX will provide the Special Purpose Marine Air Ground Task Force (SPMAGTF) an opportunity to conduct training in an unfamiliar environment during the final phase of its pre-deployment program. During CERTEX, the Special Purpose Marine Air Ground Task Force Crisis Response Central Command (SPMAGTF-CR-CC) will be required to perform a series of challenging and realistic training events to test its ability to conduct conventional and specialized missions, both in the air and on the ground. The TRAP CERTEX is but one of the planned training events requiring select members of the USMC and USAF to fully plan and execute the (TRAP) during a 5-hour time block between 09 and 10 August 2017.

The need for the Proposed Action is to meet the pre-deployment training and readiness requirements of the SPMAGTF-CR-CC CERTEX for Marine Expeditionary Unit (MEU) deployment. The activation of the Playas TMOA ensures the SPMAGTF-CR-CC CERTEX can be conducted with

minimal risk to the operating forces, while managing risk to public health and safety (general aviation community).

FIGURE 3: PLAYAS MILITARY OPERATING AREA (MOA)



(The requested Playas TMOA is a 20 NM X 20 NM box extending from 300 feet above the surface (AGL) up to but not including FL180 18000' AGL. Beginning at lat. 32°10'43"N., long. 108°42'48"W.; to lat. 32°09'20"N., long. 108°19'29"W.; to lat. 31°49'27"N., long. 108°21'03"W.; to lat. 31°50'48"N., long. 108°44'28"W.; to the point of beginning)

In order to conduct TRAP CERTEX operations, which includes both air and ground (use of the PTRC facility for combat search and rescue operations) components, the USMC-USAF team must secure the airspace above the (PTRC) facility where the ground activities would be conducted. To that end, the USMC-USAF is requesting from the FAA a short-term, temporary activation (5-hours) of the Playas TMOA.

Public Involvement

The Marine Corps has conducted the following outreach and research efforts as part of the development of the Proposed Action:

- **U.S. Air Force (USAF):** Coordination with the Air Force in the planning and execution of the TRAP CERTEX and during the development of the EA, as this is a planned, joint USMC-USAF Proposed Action. The USMC also reviewed the USAF Angel Thunder Final EA and FONSI (May 2017).
- **Playas Training and Research Center (PTRC), Playas, New Mexico:** Coordination with the PTRC staff, as well as the New Mexico Tech University Management in Socorro, New Mexico regarding use of the training centers' facilities; operations rules and guidelines, plus existing facility Best Management Practices, as documented in the PTRC Final EA and FONSI (March 2006).
- **Federal Aviation Administration (FAA):** Coordination with the FAA, as a Cooperating Agency, in the planning, review and development of the EA and supporting documentation. On-going coordination with FAA shall occur in issuing the NOTAM for activation/de-activation of the Playas TMOA prior to and during execution of the TRAP CERTEX, a joint USMC-USAF Proposed Action. The FAA will be notified upon completion of TRAP CERTEX airspace activities.
- **State of New Mexico, Historic Preservation Office (NM-SHPO):** Coordination with the NM-SHPO, resulting in a determination of "No Historic Properties Affected" (see attached NM-SHPO response, dated 23 May 2017) (Appendix A).
- **U. S. Fish and Wildlife Service (USFWS):** As the Action Proponent, the USMC made a "No Effects" determination for the Proposed Action (activation of the Playas TMOA), based on the project description (e.g., type, frequency, duration and intensity of the planned activities), and after a careful review of appropriate federal and state natural resource/wildlife databases regarding the potential presence of federally-listed threatened and endangered species within the local and regional area, as well as a review of previously conducted NEPA documentation. (Appendix B)

Alternatives

The Proposed Action

While the planned land use (on-the-ground, combat search and rescue, or CSAR) component of the Proposed Action is a primary training objective, the action proposed by the USMC-USAF team is the temporary activation of the Playas MOA by the FAA, a type of special use airspace located near Playas, New Mexico (Figures 1- 3). In order to conduct TRAP CERTEX operations, the USMC-USAF team must secure the airspace above the (PTRC) facility where the ground activities (CSAR) would be conducted. To that end, the USMC-USAF is requesting from the FAA a short-term, temporary activation (5-hours) of the Playas MOA, in support of military training objectives.

The USMC Expeditionary Operations Training Group (EOTG), I Marine Expeditionary Force (MEF) proposes to conduct a TRAP CERTEX for deployment of the MEU. The Proposed Action has both air and ground elements that would begin 07 AUG 2017 and continue through 11 AUG 2017. In order to conduct the CERTEX, the USMC must secure from the FAA a five (5) hour time block (execution window) somewhere between 1200 MST 9 August 2017 to 2345 MST 10 August 2017 within which to complete its TRAP CERTEX training and readiness objectives. The TRAP CERTEX is a mission essential task as part of the SPMAGTF-CR-CC for deployment of MEU. The exact five (5) hour event (time block) window would be determined during exercise planning work-ups in July 2017, but NLT 1 August 2017.

Under the Proposed Action, the FAA would temporarily activate the airspace above the PTRC, which was established shortly after the sites' purchase in 1999 by New Mexico Tech University, by way of Homeland Security funding, to create a nationally recognized training and readiness center supporting national defense and homeland security demands/requirements. The USMC TRAP training and readiness exercise would originate from MCB Camp Pendleton, CA, home to the I MEF and 1st Marine Division (1st MARDIV), which is made up of three (3) MEUs; the 11th, 13th and 15th MEUs.

Scheme of Maneuver – Using the existing paved road network and trails within the PTRC residential area, stage downed pilot(s) for one night only inside of existing PTRC housing. Thereafter, conduct combat search and rescue insertion operations to identify, locate, secure and then extract downed pilot(s) using rotary wing and/or tilt-rotor aircraft on/near the intersection of Cholla and Lomitas roads/streets). Rotary wing and/or tilt-rotor aircraft landing(s) (2 aircraft, two landing events (insertion and extraction) will be conducted only in approved landing zone(s) (LZs), certified 24 to 48 hours prior to conducting the TRAP exercise.

Number and Types of Aircraft to be Used By the USMC-USAF joint exercise team during MOA Activation and Conduct the CERTEX – Aircraft to be used in the conduct of the CERTEX TRAP operations include the following: two (2) MV-22s; either two (2) F/A-18s C/D or two (2) F-16C; Four (4) A-10C (not both); one (1) HC-130J; and Two (2) HH-60G. (See Appendix C, Pictures of Aircraft to be Used)

Playas TMOA Aircraft Activities and Altitudes – Proposed aviation activities to be conducted in the Playas TMOA airspace within the 5-hour time block implemented by the FAA (Playas MOA activation window) would include typical MOA flight operations such as tactical combat maneuvering (basic fighter maneuvers, simulated air-to-ground ordnance delivery, and tactical assault profiles) by fixed- and rotary-wing aircraft, and abrupt, unpredictable changes in altitude, attitude, and direction of flight by both fighter and transport category that involves. Non-standard formation flights are possible with all aircraft. Aerial training activities may also include aircraft refueling; airdrops of personnel; and landing on unimproved surfaces. No supersonic or surface to surface activities will be conducted. Maximum altitude is up to but not including FL180.

Exercise Execution/timing – Playas MOA activation [by FAA] of a five (5) hour time block sometime between 09 and 10 AUG 2017. In general, TRAP CERTEX operations would proceed as follows:

~11:00 – Temporary MOA Activation (by FAA) goes into effect

~11:15 – MAYDAY call goes out from downed pilot(s) located within the PTRC facility compound (housing area)

~11:30 – TRAP exercise initiated, with aircraft leaving air stations located in CA, AZ and NV, depending

~11:30 - ~1300 – Aircraft respond to MAYDAY call flying to Playas Temporary MOA from their respect air stations

~13:00 – Para-rescue jumper(s)? (PJ) team insertion via MV-22 and/or C-130 fixed wing aircraft

~13:30 – TRAP rescue/recovery ground team is inserted via two rotary/tilt-rotor aircraft and locates and secures downed pilot(s)

~15:30 – Downed pilot(s) is extracted, along with all participating military rescue/recovery personnel via two rotary/tilt-rotor aircraft

~16:00 – Temporary MOA De-activation (by FAA) goes into effect

Training Location/Site – The I MEF (G-7) is tasked with the certification of the SPMAGTF-CC-CR in Tactical Recovery of Aircraft and Personnel (TRAP). To meet existing mission requirements, the TRAP CERTEX must take place in an unfamiliar location a minimum of 450 miles from Camp Pendleton, CA. The distance requirement enables the TRAP operating forces the ability to meet a mission essential task (MET) utilizing realistic distances and varied, unfamiliar terrain to simulate realistic experiences during deployments.

The PTRC facility, which was established to support such an exercise, is well suited because of the distance from MCB Camp Pendleton (~630+ miles), and the number and kind of support facilities and related amenities it offers, including: an authentic, hyper-immersive training environment specifically designed to allow integration of joint tactical enablers supporting distributed operation; airborne insertions (free fall and static line and heavy drop); air assault insertions; close-air support training; long distance communications (Command and Control); Military Operations in Urban Terrain (or MOUT) (simulated combat town operations) in an eastern (Iraq, Afghanistan, and Horn of Africa) environment; role players and key leader engagements replicating the people and cultures of Southwest and Central Asia, and the Horn of Africa. The PTRC is uniquely capable of supporting joint, special operations mission training, as well as mission-specific, pre-deployment training, as is presented in the Proposed Action described herein.

All training and readiness aviation operations (other than transit to and from) would be conducted within Playas TMOA. All ground components of the TRAP CETEX situated beneath the Playas MOA would be conducted within the ~650 acre PTRC facility, primarily located in the housing area near the intersection of Cholla and Lomitas streets. The two Helicopter Landing Zones (HLZs) will be selected within an empty dirt lot adjacent to existing housing (insertion and extraction operations).

No Action

Under the no-action alternative, the training objectives established for the TRAP CERTEX would not be conducted within the Playas TMOA and the PTRC itself. More specifically, SPMAGTF-CR-CC CERTEX TRAP flight operations over the PTRC facility would not occur, resulting in reduced tactical realism and delayed/missed training objectives, and certain portions of the TRAP CERTEX being conducted in a simulated environment, or potentially moved to more familiar training environments where realism is drastically reduced. For other portions of the TRAP CERTEX activities, training objectives would go unattained (i.e., 450 mile distance requirement), as few full-service, top-rated commercial facilities such as the PTRC exist near the West Coast. This would result in both delays in completing the TRAP CERTEX, with potential loss of valuable training venues and resources, primarily for combat air crews expecting to deploy to real world combat zones in support of contingency operations. The No Action Alternative does not meet neither mission objectives, nor the purpose of and need for the Proposed Action.

Affected Environment and Environmental Consequences

There are 14 environmental impact categories identified by FAA Order 1050.1F. Per direction of Chapter 4 of this FAA Order, if an environmental impact category is not relevant to the Proposed Action or any of the reasonable alternatives identified, no further analysis is required. Thus, for the following environmental impact categories, environmental analysis is not required because the resource is either not present within the action area (Proposed Action boundary) or would not be measurably affected by either the Proposed Action or the No Action Alternative:

- Land use
- Department of Transportation Act, Section 4(f)
- Socioeconomics
- Environmental Justice
- Climate
- Coastal Resources
- Farmlands
- Hazardous Materials, Solid Waste, and Pollution Prevention
- Natural Resources and Energy Supply

- Visual Effects and Light Emissions (Aesthetics)
- Water Resources (Including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)

Other NEPA Considerations/Requirements and USMC Resource Areas

Possible Conflicts between the Proposed Action and the Objectives of Federal, State, Regional/Local Land Use Plans, Policies and Controls.

Implementation of the Proposed Action would comply with all applicable federal, state, and regional/local statutes and regulations (refer to Section 1.6, Regulatory Setting), as well as all applicable federal, state, regional, and local policies and programs.

Climate Change and Greenhouse Gas Emissions.

Draft NEPA guidance on consideration of the effects of climate change and Greenhouse Gas Emissions issued by the CEQ on 18 February 2010 recommends incorporating impacts associated with climate change as part of the standard cumulative impact analysis of all NEPA documents. However, the Council on Environmental Quality (CEQ) has recently withdrawn its final guidance for Federal agencies on how to consider greenhouse gas emissions and the effects of climate change in National Environmental Policy Act (NEPA) reviews, with a Notice of Availability published on August 5, 2016 (81 FR 51866). As explained in the Notice of Availability, the withdrawn guidance was not a regulation. Pursuant to Executive Order 13783, "Promoting Energy Independence and Economic Growth," of March 28, 2017, the guidance has been withdrawn for further consideration. (See Section on Air Quality)

Irreversible and Irretrievable Commitment of Resources.

Resources that are irreversibly or irretrievably committed to a project are those used on a long-term or permanent basis. This includes the use of non-renewable resources such as metal and fuel, and other natural or cultural resources. These resources are "irretrievable" when used for one project when another action could have used them for another purpose. Human labor is also an irretrievable resource. Another impact that falls under this category is the unavoidable destruction of natural resources that could limit the range of potential uses of that particular environment.

As this Proposed Action is almost entirely airspace based, with no increase to existing EOTG ground- or aviation-based training operations, there would be a negligible (no measurable) increase in the amount of irreversible or irretrievable resources used. No construction would occur, thus, there would be no consumption of materials typically associated with construction (e.g., metal, fuel, concrete) or irreversible loss of energy.

Relationship between Local, Short-Term Use of the Human Environment and Maintenance and Enhancement of Long-Term Productivity.

NEPA requires an analysis of the relationship between a project's short-term impacts on the environment and the effects that these impacts may have on the maintenance and enhancement of the long-term productivity of the affected environment. Impacts that narrow the range of beneficial uses of

the environment are of particular concern. This refers to the possibility that choosing one development option reduces future flexibility in pursuing other options, or that designate a parcel of land or other resource to a certain use often eliminates the possibility of other uses.

The Proposed Action is almost entirely airspace-based. No changes to existing ground-based training activities within the PTRC would occur, as this training facility was established to support just this type of activity. In addition, there would be no change in existing training activities by the USMC; meaning the TRAP CERTEX will occur, in support of the 15th MEU forces impending deployment. Thus, the Proposed Action would not result in any impacts that would reduce environmental productivity, permanently narrow the range of beneficial uses of the environment, or pose any long-term risks to health, safety, or the welfare of the public.

Energy Requirements and Conservation Potential of Alternatives Including the Proposed Action and All Mitigation Measures Being Considered.

As discussed previously, Alternative 1, the Proposed Action, has been selected as the environmentally preferred alternative, as it would meet all mission requirements and objectives and result in no significant effects to the human environment, including negligible impacts to civilian and commercial aircraft and routes in the Action Area. While the No Project Alternative would realize a greater energy conservation factor, this alternative does not meet the purpose of and need for the Proposed Action. Because no construction is involved with the Proposed Action, established Federal Energy Act compliance criteria for design, development, and construction would not apply. (See Mitigations section below)

Topography, Soils and Geology.

The Proposed Action does not include any ground disturbing activities other than the two rotary wing/tilt-rotor aircraft landings (insertion and extraction) which will create downwash effects resulting in fugitive dust, as described in further detail under the Air Quality section below. No off road driving activities are expected as a result of the Proposed Action. Walking and hiking in relatively small numbers (squad-sized units) may disturb the surface soil slightly, but no below ground disturbance is expected. All military team members using the PTRC facility would comply with existing site rules and regulations, existing facilities uses and no construction would occur. As a result, impacts to Topography, Soils and Geology resources are not expected.

Utilities and Infrastructure.

TRAP CERTEX activities to be conducted under the Proposed Action would not require the use of utilities or infrastructure other than those associated with the PTRC itself; a commercial research, testing, and training and readiness facility owned, operated and managed by the Energetic Materials Research and Testing Center (EMRTC) of New Mexico Tech, a public university located in Socorro, NM.

The PTRC facility is a commercial site used by local, State, regional, and federal national and civil defense force units conducting training and readiness exercises. Users groups include but are not limited to; Homeland Security, Customs and Border Protection (CBP) and Department of Defense (DOD) forces to include the U.S. Marine Corps (USMC), U.S. Air Force (USAF) and U.S. Army (USAR). Because this is only a 5-hour planned activity, only two of which would be on the ground, impacts to public utilities and infrastructure are not expected.

Environmental Justice.

EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, stipulates that "...each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations...". Minority populations are populations identified in census data as Hispanic or Latino, Black or African American, Asian, Native Hawaiian and other Pacific Islander, some other race, or two or more races. Low-income populations are families that are living below the U.S. poverty level.

The environmental justice Region of Influence (ROI) consists of census blocks that do not encompass the proposed PTRC training site. Census block groups represent the broadest areas within which potential effects could occur on minority or low-income populations. To ensure the potential for effects on communities within the Action Area are adequately assessed, available census population and demographics data were reviewed. Details on community demographics for communities surrounding the PTRC were evaluated using federal census tract data (USAF Angel Thunder Final EA, May 2017).

Census block groups are small, uniquely numbered areas that typically encompass between 600 and 3,000 inhabitants, none of which exist near the PTRC facility or under the Playas TMOA. Census block group data may be used to indicate population statistics for each block group, or may be combined to provide population statistics for an entire census tract, county, state or the country. The U.S. Census Bureau collects, maintains and publishes demographics data for the populations within each block group (USAF Angel Thunder Final EA, May 2017).

According to the USAF, there are no low-income and minority populations nearby the PTRC. As a result, no disproportionately high and adverse human health or environmental effects on low-income and minority populations would occur from the Proposed Action.

Resource Areas Considered and Evaluated

AIRSPACE.

Affected Environment - In order for the USMC-USAF project team, both air and ground forces, to conduct the Proposed Action (TRAP CERTEX), the FAA must activate a temporary military operating area (TMOA), in this instance the Playas TMOA, which resides above the PTRC where ground CSAR activities would be conducted. Several Victor routes (V66, V16, V16-66 [T 306] and V198) traverse the proposed Playas TMOA (Figure 3).

Environmental Consequences - Activation of the Playas TMOA by the FAA would be in effect continuously through execution of the TRAP CERTEX, in airspace from 300 feet AGL up to, but not including, Flight Level 180 (18,000 ft. AGL), for a period not-to-exceed 5 hours between 9 August 2017 and 10 August 2017, in coordination/cooperation with the FAA.

As proposed, the activation Playas TMOA for a period of not more than 5-hours would not measurably affect V66, V16, and V198, and T-306 flight route use by the general aviation community, nor would it adversely affect general aviation use of the Playas airspace, in any measurable way.

NOISE.

Affected Environment - Playas Temporary Military Operating Area (TMOA). Normal aircraft activities in the Playas TMOA airspace above (atop of) the PTRC facility are a mix of private (general aviation); local, state, or other federal agency; and/or military aircraft. These existing sources of noise are consistent with known, FAA-approved flight routes, and often associated with small, rural, and/or outlying airfields, private airstrips, and auxiliary fields that see little activities, therefore noise is isolated and episodic, in nature.

Rotary wing and/or tilt-rotor aircraft would be clearly audible to individuals under the flight path and within several hundred to a few thousand feet of the activities being conducted on/near the ground, particularly upon approach to and departure from a helicopter landing zone (HLZ). This would be particularly so at night, and in remote areas, where ambient noise levels are generally lower than in larger, more populated areas, especially daytime. That being said, such audible noise would be temporary and transient, lasting only a few minutes at a time. No night operations are proposed.

Due to the temporary nature (NTE 5-hours) and limited number aircraft involved in the Proposed Action, no significant noise increases are expected that would trigger the threshold in FAAO 1050.1F requiring a noise analysis.

Environmental Consequences - As briefly discussed herein, the lands below the Playas MOA, both within and surrounding the Playas Training and Research Center and the airspace above it

have no appreciable sources of noise that would reach beyond the vicinity of the Action Area (i.e., Playas TMOA and PTRC).

MOUT training areas at the PTRC also have relatively infrequent, transient noise and are not concentrated at any single location or time of day. No night operations are proposed at present. Due to the infrequent number of air activities overhead at the PTRC, their relative altitudes, and the limited number of sorties and actual landings planned for TRAP CERTEX, aircraft are not expected to generate noise greater than 65 dBA DNL beyond the PTRC facility itself when landing and taking-off. Aircraft activities within the Playas TMOA are expected to be compatible with existing land use and airspace conditions.

In conclusion, noise levels, both on-the-ground and in the airspace (Playas MOA) above the PTRC, are not expected to be significant, for the following reasons: 1) no sensitive receptors are present; 2) event frequency - a single training event conducted with only two sorties [one insertion and one extraction] by up to 4 helicopters; 3) event duration - one 5-hour airspace event window (Playas TMOA activation) at normal operating elevations up to 18,000 ft.; one 2-hour on-the-ground event window (for CSAR), and; 4) event intensity - two small, squad-sized military units would conduct pilot(s) rescue and recovery activities, with no live-fire activities.

AIR QUALITY.

Affected Environment - All emissions generated from, by or as a result of TRAP CERTEX activities analyzed in this EA are exclusively mobile source emissions from aircraft and ground vehicles. No stationary sources are included as part of this exercise. Therefore, stationary source air permitting under state and local air quality agencies, including Prevention of Significant Deterioration (PSD) and Title V, are not affected by this Proposed Action and are not discussed further in this EA.

Environmental Consequences - Air pollutant emissions would be generated as a result overhead aircraft activities (NMT 5 hours) and the two landings/take-offs on the PTRC facility, either from the aircraft themselves or the dust produced by the rotor downwash effect. These activities are expected to be short term and temporary in nature, as they involve aircraft operating for only a few hours in the air above the PTRC and at elevations well above 3,000 feet. These emissions would be temporary and not be expected to generate any offsite effects.

Additionally, as there would only be two (insertion and extraction) helicopter landings and take-offs, and aircraft would remain on the ground for less than three (3) minutes, at most; a typical helicopter tactical insertion landing remains on the ground for 60-90 seconds, if they land at all.

CULTURAL RESOURCES/HISTORIC PROPERTIES.

Affected Environment - Consistent with the response from NM-SHPO provided in **Appendix A**, no historic properties would be affected by the Proposed Action, as no historic properties are

present within the Action Area that would be potentially affected. The USMC-USAF project team also reviewed and assessed previously conducted Tribal coordination efforts for similarly situated, appropriately scaled (e.g., type, frequency, duration and intensity) military and similar training operations (i.e., USAF Angel Thunder Draft and Final EA [March/May 2017], and FONSI; PTRC Final EA and FONSI [March 2006]) conducted at the PTRC and within the Playas airspace above it. USAF and PTRC Tribal coordination efforts concluded no Tribal resources within the area or region would be adversely affected, as confirmed by correspondence received previously by the USAF and PTRC from not less than nine Tribal governments in the region, with the understanding that both the USAF and PTRC (NMTU) signed FONSIs for their respective actions upon determining no significant impacts would occur to cultural resources or historic properties. This rationale forms the basis of our “no historic properties affected” determination for the action proposed herein, which is supported by the conclusion reached by NM-SHPO, dtd 25 May, 2017 (Appendix A).

Environmental Consequences - No historic properties would be affected by the Proposed Action.

BIOLOGICAL RESOURCES.

Affected Environment - A records search of the project location on the U.S. Fish and Wildlife web site yielded 20 listed species that may occur within the greater boot heel region of New Mexico. Of the 20 species:

- 14 are primarily associated with aquatic or riparian habitat. There is no riparian or aquatic habitat at the PTRC location;
- Three (3) are primarily associated with forested habitat. There is no forested habitat within the Action Area, Playas TMOA or the PTRC;
- Two (2) are bats. They would not be active (flying) during daylight hours when military training activities are planned/to be executed, and the PTRC facility is not likely to support any roosts, maternity sites, or hibernaculum;
- One (1) species is listed as experimental, non-essential and consultation under Section 7 of the Endangered Species Act is not required, and;
- No designated critical habitat exists within the Playas TMOA, or on or adjacent to the PTRC facility.

Environmental Consequences - No impacts to threatened or endangered species are expected as a result from the Proposed Action (Appendix B).

- There is no riparian or aquatic habitat within the Action Area, including the PTRC; therefore no impacts are anticipated to the 14 species associated with this habitat type.
- There is no forested habitat within the Action Area, including the PTRC; therefore no impacts are anticipated to the 3 species associated with this habitat type.

- Two of the 20 species are bats, which would not be active during daylight hours when all activities are planned. Since no night activities would be conducted, no impacts are expected. The likelihood of harm to individual bats from this exercise is insignificant and discountable.
- The last of the 20 species is listed as experimental and non-essential, therefore consultation under Section 7 of the Endangered Species Act is not required.
- There is no designated critical habitat (CH) at or adjacent to the project location, therefore no CH would be affected, and
 Lastly, ground activities (CSAR) planned as part of the TRAP CERTEX would be confined to the PTRC facility itself. This commercial training and readiness facility (urban development) does not support much in the way of native vegetation or habitat, and therefore would not likely support foraging, breeding or juvenile rearing by any federally listed species known from the region. 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 time window is so low as to be insignificant and discountable.

Cumulative Effects

In addition to the evaluation (above) for potential direct and indirect impacts on the airspace, the Proposed Action was also analyzed for any potential cumulative impacts.

The geographic Region of Influence (ROI) is an important consideration when discussing cumulative effects. For the purposes of this analysis, the ROI is considered the immediate vicinity of the PTRC and overlying Playas MOA.

At the macro level, when impacts of this TRAP CERTEX training event is considered in the context of past, present, and future training activities within the ROI, impacts to resources from the Proposed Action would be negligible when compared to all impacts associated with the military and related training activities, exclusive of the rapid development that continues to occur throughout the Southwest, especially along the coastal environments from which the TRAP CERTEX originates (MCB Camp Pendleton).

A review of known USMC-USAF activities within the macro-ROI was undertaken in order to provide context to the no measurable impact determination. By example, Table 5-1 of the USAF Angel Thunder exercises (USAF Angel Thunder EA, May 2017) displays a series of military actions conducted by the USAF that represent past, present and future actions. The training action (projects) discussed covers a variety of activities from military training events. Within the training events, air operations represent a major portion of the activities. When summarized, the total number of annual sorties that result from past and present operations and are projected to continue into the future is in excess of 200,000 sorties per year.

The Proposed Action would represent only a minor fraction of the past, present and future actions under all projected training scenarios. Additionally, USAF operational activities in and of themselves represent only a minor portion of the overall regional activity, further minimizing the impact of the Proposed Action. For this reason, cumulative impacts of the Proposed Action are considered negligible (no measurable impact) when viewed at the macro level.

Airspace

No measurable cumulative impacts to airspace resources are expected as a result of the Proposed Action, given the 5-hour activation of the Playas TMOA, the limited aircraft operating within the Playas TMOA (action area) and the frequency of this planned event (2x/year).

Noise

No measurable cumulative impacts to noise are expected as a result of the Proposed Action, given the type, frequency, duration and intensity of the 5-hour activation of the Playas TMOA, the limited number and type of aircraft operating within the Playas TMOA, the 2-hour on-the-ground CSAR activities within the PTRC itself, and with no sensitive receptors known to occur within the Action Area, no measurable impacts are expected.

Air Quality

By its very nature, air pollution is largely a cumulative impact. A project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future projects. Ambient air quality standards are violated or approach nonattainment levels when past development and increasing human activity forms the urban fabric of a region, with associated attainment standards jeopardized by increasing emissions generated by that urban activity.

The local and regional attainment status of southern New Mexico is the result of a lack of past and present development, the open, rural nature of the region and its minimal population levels (its' remoteness). As a result, cumulative impacts of the Proposed Action would add minimally (incrementally) to the regions' excellent air quality, but the Proposed Action would not result in a cumulatively considerable net increase of any criteria pollutants.

No measurable cumulative impacts to air quality are expected as a result of the Proposed Action, given the 5-hour activation of the Playas TMOA, the limited aircraft operating within the Playas TMOA and the frequency of this planned event (up to 4x/year).

Biological Resources

No impacts to threatened or endangered species are expected as a result from the Proposed Action, therefore no cumulative impacts would occur.

Cultural Resources/Historic Properties

No impacts to cultural resources /historic properties are expected as a result from the Proposed Action, therefore no cumulative impacts would occur.

MITIGATIONS

Standard Operating Procedures / Best Management Practices would be employed during activation of the Playas TMOA and conduct of the TRAP CERTEX, including the following:

- A dedicated, discrete exercise frequency (both UHF [primary] and VHF [backup]) will be established in cooperation with the USAF and FAA, and all participating aircraft will use that frequency during execution of the TRAP CERTEX.
- Exercise participants will monitor guard frequencies, as well as the Playas Airport Common Traffic Advisory Frequency.
- All activities will be contained within the Playas MOA using geographic references, inertial navigation, global positioning systems and TACAN radial/DME references.
- Malfunctions will be handled in accordance with aircraft technical orders, Service Directives, and FARs.
- Ordnance Trajectory Envelope is not applicable, as no live ordnance will be used.
- The land area below much of the Playas MOA is open, desolate, sparsely populated, high desert and range land, with very few developed areas and no urban centers or settlements. Isolated ranches, farms and residences dot the landscape. Regardless of published MOA altitude, FAR 91.119 minimum safe altitudes will be observed by all aircraft.
- The Playas airport will be closed to non-participating aircraft by airport management during exercise operations.

AGENCIES CONSULTED AND PERSONS CONTACTED

- FAA Central Service Area - CDR Arjuna Fields, NAVREP
- FAA Air Traffic Representative - Mr. Michael Rizzo, Central Service Center
- Karen L. Everitt - Contract Support (NISC III), AJV-C2, Fort Worth, TX
- Josh Carrillo, Playas Training & Research Center, New Mexico Tech
- Kevin Wakefield, Davis-Monthan AFB, AZ. EIAP Program Manager
- Dr. Robert Abernathy, New Mexico Tech, Socorro, NM
- Dr. Bob Estes, New Mexico – SHPO, Albuquerque, NM

APPENDICES

Appendix A: New Mexico SHPO Letter – “No Historic Properties Affected” Determination

**Appendix B: Endangered Species Act, Section 7, Threatened and Endangered Species
Assessment, USMC “No Effect” Determination**

Appendix C: Military Aircraft Photos

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APPENDIX D

USMC AERONAUTICAL PROPOSAL (USMS-USAF PLAYAS TRAP CERTEX EA AUGUST 2018)

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UNITED STATES MARINE CORPS
MARINE CORPS INSTALLATIONS WEST-MARINE CORPS BASE
BOX 555010
CAMP PENDLETON, CALIFORNIA 92055-5010

3700
G-3/5 AVN
7 Nov 2017

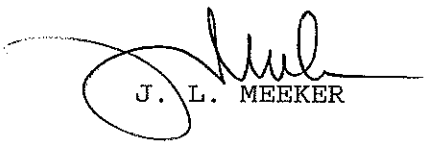
From: Regional Airspace Coordinator, Marine Corps Installations West
To: Manager, Operations Support Group, Federal Aviation Administration
Central Service Center, 10101 Hillwood Parkway, Fort Worth TX
76177

Subj: TEMPORARY MILITARY OPERATIONS AREA PROPOSAL IN SUPPORT OF
FIRST MARINE EXPEDITIONARY FORCE SPECIAL PURPOSE MARINE AIR-
GROUND TASK FORCE CERTIFICATION EXERCISE 19.1

Ref: OPNAVINST 3770.2L

Encl: Playas NM Temporary Special Use Airspace Proposal (Aug 2018)

1. Forwarded in accordance with the reference.
2. The proposal has been reviewed by this office and is in compliance with the reference.
3. Albuquerque Air Route Traffic Control Center has been notified of the Marine Corps intent to submit the enclosed proposal. The airspace requested (SPMAGTF-CR-CC 19.1 CERTEX August 2018) mirrors the previously submitted and executed Playas Temporary Special Use Airspace proposal for the SPMAGTF-CR-CC 18.1 CERTEX.


J. L. MEEKER

21-3-3. PROPOSAL CONTENT

a. Proponent's Transmittal Letter.

1. Attached

b. Area Description.

1. **Title:** PLAYAS temporary MOA, NM

2. **Boundaries:**

Beginning at lat. 32°10'43"N., long. 108°42'48"W.;
to lat. 32°09'20"N., long. 108°19'29"W.;
to lat. 31°49'27"N., long. 108°21'03"W.;
to lat. 31°50'48"N., long. 108°44'28"W.;
to the point of beginning.

3. **Altitudes:** From 300' AGL to but not including FL180

4. **Times of Use:** 5-hour block between 1200 MST 27 August 2018 to 2345 MST 30 August 2018 (during exercise planning/refinement and NLT 1 June 2018, the five hour event execution block will be determined).

5. **Controlling Agency:** FAA, Albuquerque ARTCC.

6. **Using/Scheduling Agency:** U.S. Marine Corps, Commander, Expeditionary Operations Training Group (EOTG), I Marine Expeditionary Force (MEF), Camp Pendleton, CA.

c. Airspace Statement of Need and Justification.

1. **Describe purpose and need for the proposed airspace:**

Special Purpose Marine Air Ground Task Force Crisis Response Central Command (SPMAGTF-CR-CC) Certification Exercise (CERTX) 19.1 is a Commanding General, I Marine Expeditionary Force (I MEF) directed exercise to be conducted from 27-31 August 2018 at numerous training locations throughout the South-Western United States. The purpose of the exercise is to provide the SPMAGTF the opportunity to conduct training in unfamiliar environments during the final phase of its pre-deployment program. During CERTX, the SPMAGTF-CR-CC will be required to conduct a series of challenging and realistic training events to test its ability to conduct conventional and specialized missions.

2. The scheduled CERTEX will require select members of the United States Marine Corps (USMC) and United States Air Force (USAF) to plan and execute a Tactical Recovery of Aircraft and Personnel (TRAP) exercise from 27-31 August 2018 in order to recover downed pilots located at a training site in the MOA. The Playas Training and Research Center (PRTC) will host day and or night recovery force insertion and extraction training, therefore we are requesting to separate nonhazardous military exercise activities from IFR traffic and identifying to VFR traffic where this short term exercise event shall be conducted.
3. **Alternatives:** EOTG I MEF explored the possibility of executing SPMAGTF-CR-CC 19.1 CERTEX operations within Marine Corps base existing training facilities. It was determined that challenging, realistic amenities offered at Playas did not exist on current Marine Corps frequently utilized range facilities.
4. **No Action Alternative:** Under the no action alternative, SPMAGTF-CR-CC 19.1 CERTEX flight operations over Playas may be cancelled resulting in a delay and loss of a valuable training resource for combat air crews expecting to deploy to real world combat zones in support of contingency operations.
5. **Proposed Action:** The Playas temporary MOA is a 20 NM X 20 NM box encompassing the Playas airport which will be closed to non-participating aircraft by airport management during exercise operations.
6. **Joint Use Policy:** The temporary airspace is available for joint-use outside of the five hour activation period.

d. **Air Traffic Control Assigned Airspace.** None to be requested with this proposal.

e. **Activities.**

1. **For Areas that will contain aircraft operations:**

(a) **Number and Type aircraft that will use the area:** Aircraft which may operate in the proposed temporary MOA include (2) MV-22B, (2) FA-18C/D or (2) F-35B, (4) A-10C, (1) HC-130J, and (2) HH-60G.

(b) **Specific activities and maximum altitudes required for each type activity:** Proposed aerial activities will consist of non-hazardous flight operations to include tactical combat maneuvering (basic fighter maneuvers, simulated air-to-ground ordnance delivery, and tactical assault profiles) by fighter and transport category tilt rotary wing aircraft involving abrupt,

unpredictable changes in altitude, attitude, and direction of flight. Non-standard formation flights are possible. There will be no use of chaff/flares, surface-to-surface or surface-to-air weapons firing, or aerial refueling operations conducted within the proposed MOA.

(c) Supersonic Flight: None

2. Surface to Surface: None

f. Environmental Land Use information.

1. Mr. Zachary Likens
Environmental Security
MCI-West, MCB Camp Pendleton
(760)763-7948
Zachary.likens@usmc.mil
2. Reasonable and timely aerial access below 1,200' AGL to private and public land below the proposed temporary Playas MOA by general aviation aircraft will not be restricted.

g. Communications and Radar.

1. Participating aircraft will monitor a requested dedicated discrete exercise frequency. Exercise UHF (primary) and VHF (backup) frequency will be forwarded when published.
2. Additionally, participants will monitor guard frequencies and the Playas Airport Common Traffic Advisory Frequency. Radar service will not be available.
3. Military ATC and Range Control services will not be available.

h. Safety Considerations.

1. Activity will be contained within the MOA using geographic references, inertial navigation, global positioning systems and TACAN radial/DME references.
2. Malfunctions will be handled in accordance with aircraft technical orders, Service Directives, and FARs.
3. Ordnance Trajectory Envelope. Not Applicable.

4. The area below the proposed MOA is open, desolate, sparsely populated, high desert range land with few settlements. Regardless of published MOA altitude, FAR 91.119 minimum safe altitudes will be observed by all aircraft. The Playas airport will be closed to non-participating aircraft by airport management during exercise operations.

i. Coordination Summary.

NAVREP, CDR Arjuna Fields, FAA Central Service Area
FAA Air Traffic Representative, Mr. Michael Rizzo, Central Service Center
Albuquerque ARTCC, Mr. Chris Abeyta, Airspace & Procedures
Playas Training & Research Center, New Mexico Tech
New Mexico Institute of Mining and Technology, Mr. Josh Carrillo
355th Fighter Wing, U.S. Air Force, Gary Pressley
355 OSS/OSOS, Capt Weston Woldt

j. Graphic Depiction of the proposed airspace.



k. Environmental Documents. Documents will be submitted via separate correspondence

I. Graphic notice information

SPECIAL USE AIRSPACE DESCRIPTION:

Playas MOA, NM (Temporary)

Boundaries - Beginning	at lat. 32°10'43"N., long. 108°42'48"W.; to lat. 32°09'20"N., long. 108°19'29"W.; to lat. 31°49'27"N., long. 108°21'03"W.; to lat. 31°50'48"N., long. 108°44'28"W.; to the point of beginning.
Altitudes	300' AGL to but not including FL180.
Times of designation	By NOTAM.
Controlling agency	FAA, Albuquerque ARTCC
Using agency	U.S. Marine Corps, Commander, Expeditionary Operations Training Group (EOTG), I Marine Expeditionary Force (MEF), Camp Pendelton, CA
Scheduling Agency	U.S. Air Force, 355th Wing, Davis-Monthan AFB, AZ

- m. Other:** EOTG will coordinate with the I MEF Public Affairs Office (PAO) to develop a prepared press release if desired that will assist in notifying the local populace of the training exercise and minimize the impact on the communities in which this exercise will take place.

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APPENDIX E

NOISE AND AIR QUALITY TECHNICAL REPORT (USMS-USAF PLAYAS TRAP CERTEX EA AUGUST 2018)



Appendix E
Noise and Air Quality
Study
In Support of
Temporary Military
Operations Area for
USMC at Playas
Training and Research
Center, New Mexico



Prepared for:

I Marine Expeditionary Force (1MEF)
U.S. Marine Corps Forces, Pacific
Box 555321
Camp Pendleton, CA 92055-5300

July 2018



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ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit	MRNMAP	MOA Range Noise Map software suite
AESO	Aircraft Environmental Support Office	NC	percent speed of compressor stage
AGL	Above Ground Level	NM	nautical miles
AQCR	Air Quality Control Region	NM-9	New Mexico State Road 9
CERTEX	Certification Exercise	NMAP	Module in NOISEMAP software suite
CO	carbon monoxide	NMPLOT	Module in NOISEMAP software suite
dB	Decibel	NO ₂	nitrogen dioxide
dBA	A-weighted Decibels	PM _{2.5}	particulate matter less than or equal to 2.5 microns in diameter
DHS	Department of Homeland Security	PM ₁₀	particulate matter less than or equal to 10 microns in diameter
DNL	Day-Night Average Sound Level	PTRC	Playas Training and Research Center
DoD	Department of Defense	RNM	Rotorcraft Noise Model
EPA	United States Environmental Protection Agency	SEL	Sound Exposure Level
FAA	Federal Aviation Administration	SO ₂	sulfur dioxide
FL	flight level	TMOA	Temporary Military Operations Area
ft	feet	TRAP	Tactical Recovery of Aircraft and Personnel
in Hg	inches mercury	U.S.	United States
kPa-s/m ²	kilopascal-seconds per square meter	USAF	United States Air Force
L _{dnmr}	Onset Rate-Adjusted Monthly Day Night Average Sound Level	USMC	United States Marine Corps
L _{max}	Maximum Sound Level		
MCB	Marine Corps Base		
MGT	Measured Gas Temperature		
MOA	Military Operations Area		

CHAPTER 1 INTRODUCTION

1.1 BACKGROUND

This study analyzes the noise and air quality impacts due to the proposed temporary Military Operations Area (MOA) (Playas Temporary MOA [TMOA]) in Las Playas, New Mexico. The use of Playas TMOA would support a United States (U.S.) Marine Corps (USMC) training and readiness Certification Exercise (CERTEX) known as a “Tactical Recovery of Aircraft and Personnel” (or TRAP). Although the TRAP CERTEX includes use of both airspace and ground environments, this noise study focuses on the aircraft operations within the airspace and a single tilt-rotor or rotary-wing landing site. This is because the ground component is limited to an existing developed commercial facility known as the Playas Training and Research Center (PTRC) located in Grant and Hidalgo counties, in the southwestern corner of the state of New Mexico. The PTRC facility provides realistic military training immersion in a simulated environment. It was established as a primary training and readiness support facility for the Department of Homeland Security (DHS), local and State law enforcement agencies, as well as Department of Defense (DoD) military and associated national defense/security forces. The PTRC training facility to be used by the USMC as the ground component of the exercise is owned, operated, and managed by the Energetic Materials Research and Testing Center of New Mexico Tech, a public university located in Socorro, New Mexico.

1.2 PROPOSED TMOA

The Playas TMOA is located above the PTRC training facility in Playas, New Mexico as shown in Figure 1-1 comprising a 20 nautical mile (NM) by 20 NM box extending from 300 feet (ft) above ground level (AGL) up to, but not including, flight level (FL) 180 (18,000 ft) defined by the following coordinates:

- Latitude 32°10'43"N., Longitude 108°42'48"W.
- Latitude 32°09'20"N., Longitude 108°19'29"W.
- Latitude 31°49'27"N., Longitude 108°21'03"W.
- Latitude 31°50'48"N., Longitude 108°44'28"W.

The PTRC is located approximately 20 miles south of Interstate 10, and approximately 60 miles north of the U.S./Mexico border. The closest populated urban center is Las Cruces, New Mexico, which lies 130 miles to the east. Tucson, Arizona lies 180 miles west. The nearest communities (small towns) are Animas (population 240 residents), located about 17 miles to the west, and Hachita (population 50 residents), and located about 12 miles to the east. Figure 1-1 depicts the location of several residential properties along New Mexico State Road 9 (NM-9) approximately 6 miles north west of the PTRC.

If the Proposed Action does not occur (No Action), the TMOA would not be activated and no additional USMC operations would occur at the PTRC.

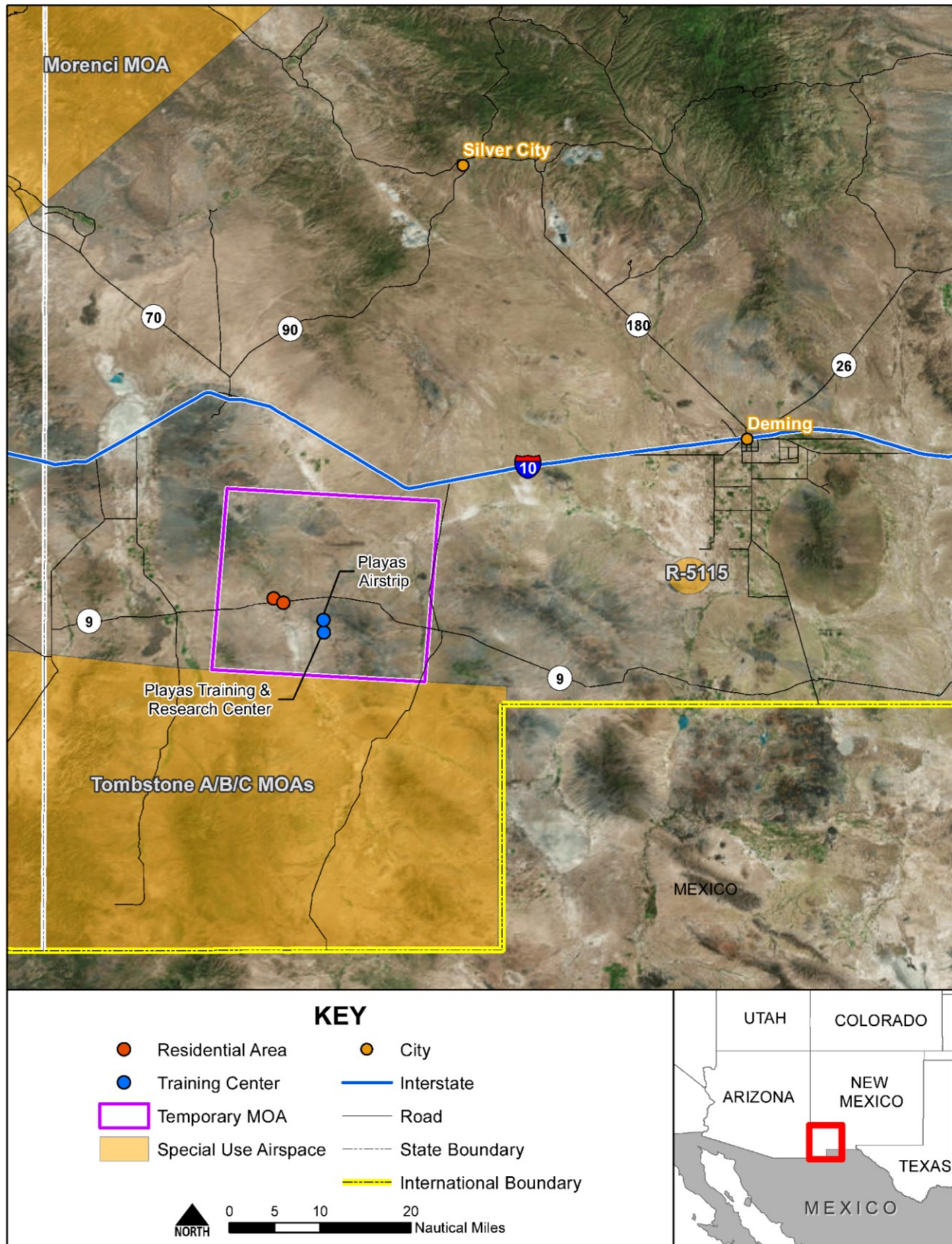


Figure 1-1 Location of Proposed Playas Temporary Military Operations Area

CHAPTER 2 DISTRIBUTED AVERAGE SOUND LEVELS

2.1 METHODOLOGY

Table 2-1 summarizes the noise modeling parameters used in the calculation of distributed sound levels due to aircraft flights in the Playas TMOA. This analysis utilizes the DoD NOISEMAP (NMAP) suite of computer programs (Wasmer Consulting 2006a, 2006b) containing the MOA Range NOISEMAP (MRNMAP) version 3.0.

Table 2-1. Distributed Noise Modeling Parameters

Software	Analysis	Version
NMAP	Fixed-wing aircraft	7.3
MRNMAP	All aircraft	3.0
Parameter	Description	
Receiver Grid Spacing	1000 ft in x and y	
Metric	L_{dnmr} , yearly DNL	
Basis	Busiest-Month and yearly average day (DNL)	
Modeled Weather (Monthly Average August 2017)		
Temperature	78 °F	
Relative Humidity	46 %	
Barometric Pressure	29.91 in Hg	

Notes: NMAP = NOISEMAP software suite; MRNMAP = MOA Range NOISEMAP software suite; ft = feet; L_{dnmr} = Onset Rate-Adjusted Monthly Day-Night Average Sound Level; DNL = Day-Night Average Sound Level, °F = degrees Fahrenheit; in Hg = inches Mercury.

Consistent with the TMOA extents, aircraft operations were modeled at altitudes from 300 ft AGL to 18,000 ft AGL spread evenly throughout the lateral airspace boundaries. Table 2-2 details the modeled airspace flight profiles that are based upon the altitude distributions in the U.S. Air Force (USAF) Playas MOA and Red Flag-Rescue Supplemental (USAF 2017a). Fixed-wing aircraft are modeled primarily between 300 ft AGL and 10,000 ft AGL while the MV-22B tilt-rotor and HH-60G helicopter would operate between 50 ft AGL and 2,000 ft AGL. (Note: the landings are modeled to the surface, and added in separately). The two MV-22 aircraft would conduct the primary rescue role to retrieve a simulated downed-pilot behind enemy lines while other aircraft types would support the training exercise. KC-130J would serve as aerial refuelers during the exercise. Speeds and power settings selected represent typical or average values for each aircraft type for operating in TRAP CERTEX.

The Playas TMOA activation would take place during a 5-hour time block sometime between 12 p.m. and 11:45 p.m. The exercise would begin shortly after the FAA activates the Playas TMOA and a rescue team would leave their home base, Marine Corps Base (MCB) Camp Pendleton, to transit the approximate 630 miles to the PTRC. The rescue team would spend a couple of hours to search for the pilot, perform a rescue, and leave the TMOA. Aircraft are modeled flying within the Playas TMOA for 3 hours because approximately 2 hours of the TMOA activation will comprise aircraft transiting from MCB to the TMOA, which is not modeled for this analysis. Operations would typically conclude prior to 10 p.m. and occur only during the Onset Rate-Adjusted Monthly Day-Night Average Sound Level (L_{dnmr}) or Day-Night Average Sound Level (DNL) daytime period. However, 20 percent of the flight duration was modeled during the nighttime period (after 10 p.m.) to account for the possibility that the flight operations could continue

beyond the daytime period. Noise events occurring during the DNL or L_{dnmr} nighttime period receive a 10 dB adjustment so this assumption represents a conservative approach to assessing potential noise impacts.

The standard noise metric for the DoD to assess TMOA operations is the L_{dnmr} . However, the FAA utilizes the DNL for aircraft impact analysis, so both DNL and L_{dnmr} are included in this noise study. Table 2-2 represents all proposed operations that would occur during a single day in either the month of July or August. L_{dnmr} requires busiest-month operations to be modeled, which accounts for the sporadic activity of airspaces. DNL, as specified by the FAA, is established in terms of Yearly Day-Night Average Sound Level (FAA 2015). For comparison purposes, the two F-18C/D ‘busiest-month’ operations occurring for the exercise listed in Table 2-2 would result in 0.067 operations modeled per day (2 operations / 30 days in a busiest-month). If the same two F-18C/D operations were assessed on an yearly average daily basis, consistent with DNL as defined by the FAA, the operations modeled per day would be 0.0055 (2 operations / 365 days per year). Table 2-2 presents the likely aircraft types to be utilized but different aircraft of a similar type may be substituted (i.e., two fighter jets not listed could be used in place of the F-18C/D). Noise data is not available for all aircraft, so appropriate surrogates were selected. The F-18C/D was selected for noise analysis because it generally creates the greatest sound levels of the three potential fighter aircraft identified by the USMC for TRAP CERTEX, listed in Table 2-2.

Table 2-2. Modeled TRAP CERTEX Flight Operations

Aircraft Type	Modeled Aircraft Type	Number of Aircraft	Modeled Altitude Range (ft AGL)	Modeled Power Setting	Modeled Average Speed (knots)	Time in TMOA (minutes)
MV-22	CH-53E	2	50-2,000	N/A	170	180
F/A-18C/D or AV-8B or F-16C/D	F-18C/D	2	300-2,000 (50%) 2,000-10,000 (50%)	80% ETR	350	180
A-10C	A-10C	4	300-2,000 (50%) 2,000-10,000 (50%)	93% NC	350	180
HC-130J	C-130J	1	300-2,000 (50%) 2,000-10,000 (50%)	530 MGT	235	180
HH-60G	UH-60A	2	50-2,000	N/A	110	180

Notes: ft = feet; AGL = Above Ground Level; ETR = Engine Thrust Request; MGT = Measured Gas Temperature; N/A = not applicable.

2.2 NOISE EXPOSURE

Utilizing the modeling conditions described in Tables 2-1 and 2-2, the resulting busiest-month distributed L_{dnmr} and yearly DNL would be 44 dB and 33, respectively, as listed in Table 2-3.

Table 2-3. Playas Temporary MOA –Distributed Sound Levels for Proposed Action

L_{dnmr} (Busy Month)	DNL (Annual)
44	33

Notes: L_{dnmr} = Onset Rate-Adjusted Monthly Day-Night Average Sound Level; DNL = Day-Night Average Sound Level (Yearly);

L_{dnmr} is defined as DNL with the addition of a rise-time adjustment to account for sudden and quick increases in sound level that occur while aircraft operate at high speeds and low altitudes. In this instance, the rise-time adjustment would be small (<1 dB) so both “busy month” DNL and L_{dnmr} would round to the

same values with the adjustment. However, yearly DNL is approximately 11 dB lesser than the calculated L_{dnmr} due to the use of yearly average daily operations in place of busiest month.

Under the No Action Alternative, the TMOA would not be activated, so sound levels would not change from the current ambient levels. Typical ambient DNL for ‘quiet suburban residential’ range from 49 to 52 dB while rural (such as this location) is typically less than 49 dB (American National Standards Institute 2013). The Proposed Action would not cause distributed L_{dnmr} or DNL to significantly increase beyond the estimated current and No Action levels. The FAA does not define any noise impact criteria for proposed sound levels of DNL below 45 dB so the proposed activity would not cause a significant impact. The DoD provides recommended land use limitation guidelines starting at 65 dB DNL and greater (Navy 2008) and the Proposed Action would not reach these thresholds.

Aircraft landing activity would likely be focused in smaller portions of the TMOA at lower altitude so additional analysis of single-event noise modeling is addressed in Chapters 3 and 4.

CHAPTER 3 OVERFLIGHT SOUND LEVELS

3.1 METHODOLOGY

Aircraft activity would likely concentrate near a specific landing site within the PTRC or transiting to/from the landing site. Given the large area of the TMOA and relatively small number of operations, single-event sound overflight levels have been computed for each aircraft type expected to operate during TRAP CERTEX to better describe the noise environment in the vicinity of activity. Table 3-1 details the single-event modeling parameters. NMAP and Rotorcraft Noise Model (RNM) were both utilized for their ability to accurately model individual flight paths and flight parameters (altitude, speed, power, etc.) (J. Page 2010). The terrain is relatively flat and comprised of primarily dirt and rock with little to no vegetation so flow resistivity was modeled as 6,000 kilopascal-seconds per square meter (kPa-s/m²) and ground elevation modeled as flat. Weather conditions were obtained for Deming, New Mexico, which is approximately 30 miles northeast of the Playas TMOA (Wunderground 2018). The average temperature and pressure conditions for August 2017 are modeled for this analysis. Relative humidity was estimated from average temperature and the recorded dew point.

Table 3-1. Single-Event Noise Modeling Parameters

Software	Analysis	Version
NMAP	Fixed-wing aircraft	7.3
RNM	Rotorcraft	7.2.4
ParameterDescription		
Receiver Grid Spacing	200 ft in x and y	
Metric	L _{max} , SEL	
Basis	Single-Event Operation	
Topography		
Elevation Data Source	Modeled ground as flat	
Elevation Grid Spacing	200 ft in x and y	
Impedance Data Source	Modeled ground as ‘exposed dirt/rock’	
Impedance Grid spacing	200 ft in x and y	
Flow Resistivity of Ground (soft/hard)	6,000 kPa-s/m ²	
Modeled Weather (Monthly Average August 2017)		
Temperature	78 °F	
Relative Humidity	46 %	
Barometric Pressure	29.91 in Hg	

Notes: NMAP = NOISEMAP software suite; RNM = Rotorcraft Noise Model; ft = feet;

L_{max} = Maximum Sound Level; SEL = Sound Exposure Level;

kPa-s/m² = kilopascal-seconds per square meter; °F = degrees Fahrenheit;

in Hg = inches mercury.

3.2 NOISE EXPOSURE

Table 3-2 presents the computed Sound Exposure Level (SEL) and maximum sound level (L_{max}) for typical aircraft overflights modeled at 1,000 ft AGL for five aircraft types, which may operate during a TRAP CERTEX. These represent the expected lower altitude that is anticipated for transit through the TMOA. The F-18C/D (chosen as the loudest of the three possible jet aircraft) would generate the greatest SEL of 112 dB and L_{max} 106 dB; however, typical altitudes would be much greater (often over 10,000 ft AGL) the vast majority of the time. Of the six modeled aircraft in Table 3-2, the MV-22 is expected to operate at lower altitudes the largest percentage of the time and would generate SEL and L_{max} of 89 and 82 dB,

respectively. The area in the These single-event sound levels presented in Table 3-2 would only occur for a short, transitory duration. L_{max} is the loudest instantaneous sound level resulting from an overflight and SEL represents the total noise for a single overflight (one-time event). These are presented for comparison and to describe the effect of a direct overflight of one of these aircraft. Playas TMOA is desolate with two known locations that have a residence (shown in Figure 1-1), which will be discussed specifically. None of these would be considered to cause a significant impact but would be heard by observers on the ground in the vicinity.

Table 3-2. Sound Levels Generated by Aircraft Overflight at 1,000 ft

Aircraft Type	Modeled Aircraft Type	Speed (knots)	Power Setting	SEL (dBA)	L_{max} (dBA)
MV-22B	MV-22B	170	N/A	89	82
A-10	A-10C	300	88% NC	95	91
F/A-18C/D	F-18/C	350	88% NC	100	92
K-130J	C-130J	235	530 MGT	94	88
HH-60G	SH-60B	120	N/A	86	77

Notes: dBA = A-weighted decibels; L_{max} = Maximum Sound Level; SEL = Sound Exposure Level;
 N/A = not applicable; NC = percent speed of compressor stage; MGT = Measured Gas Temperature

CHAPTER 4 LANDING AND TAKEOFF OPERATIONS

4.1 METHODOLOGY

In addition to the transit activity in the Playas TMOA, each of the two MV-22s would conduct two landings and takeoffs within the PTRC as part of the TRAP CERTEX. MV-22 pilots will take one of many possible approaches to the landing site during TRAP CERTEX, which could include approach straight-in, offset by 90 degrees, and a hasty approach over the landing site to circle and land. For the purposes of this noise study, the ‘Hasty Approach’ was modeled because it includes the longest duration of time an aircraft would spend at low altitudes generating the greatest sound levels on the ground in the vicinity of the landing site. Figure 4-1 depicts the tactical MV-22 approach and Figure 4-2 depicts a typical vertical takeoff with a quick climb to 500 ft, consistent with USMC training modeled at Kaneohe Bay landing zones (Navy 2012).

The software modeling parameters are the same detailed in Table 3-1 for the overflight activity except only RNM was utilized because NMAP is primarily for fixed-wing aircraft and RNM is best suited for the MV-22 tilt-rotor. The approach and departure profiles were modeled separately in RNM creating two output grids with SEL values every 200 ft in each direction. Both grids were combined with NMPLLOT logarithmically. The L_{\max} grids were combined with NMPLLOT by selecting the highest value from each of the component grids rather than adding.

4.2 NOISE EXPOSURE

Figure 4-3 presents a plot of L_{\max} contours from 80 to 110 dB, in 5 dB increments, in the vicinity of the MV-22 landing and departure. The horizontal dimension of the study area is approximately 4 NM, the red crosses are located every 1,000 ft in both directions, and the landing site is shown with a gray square. The background shading represents the relative L_{\max} values, which are greatest directly under the flight track and at the landing site. L_{\max} of 100 dB would extend up to 3,000 ft from the landing site under the final approach path for this type of approach. The 80 dB L_{\max} contour would extend up to 500 ft along each side of the MV-22’s flight path while approaching or departing the landing site for the profile type modeled.

Figure 4-4 depicts a plot of SEL contours from 80 to 120 dB, in 5 dB increments at the same scale and extent as Figure 4-3. The 100 dB SEL contour would extend up to 5,000 ft from the landing site under the final approach path to the west. The 80 dB SEL contour would roughly follow the aircraft flight path and extend to each side approximately 800 ft for the approach and circle to land portion. Along the departure portion to the east, the 80 dB contour width would extend approximately 4,000 ft to each side of the flight path while the aircraft is below 1,500 ft.

The MV-22 landing site could be anywhere within the PTRC and the exact flight path will be up to the pilot. To show the scale of the noise exposure, the L_{\max} contours for the example hasty approach and departure are depicted in Figure 4-5 for one possible landing site. L_{\max} of 80 dB would occur under the flight path and levels greater than 100 dB are expected to occur only within a mile or less from the landing site. All structures depicted are part of the PTRC, and were houses abandoned when local mining activity ceased in 1999. There are no sensitive noise receptors on the PTRC. An examination of aerial imagery found that the closest residential areas are located 2 to 3 miles beyond the extent of Figures 4-3 and 4-4 and not affected by the MV-22 landing or departure profile at the PTRC but potentially by transit through the TMOA.

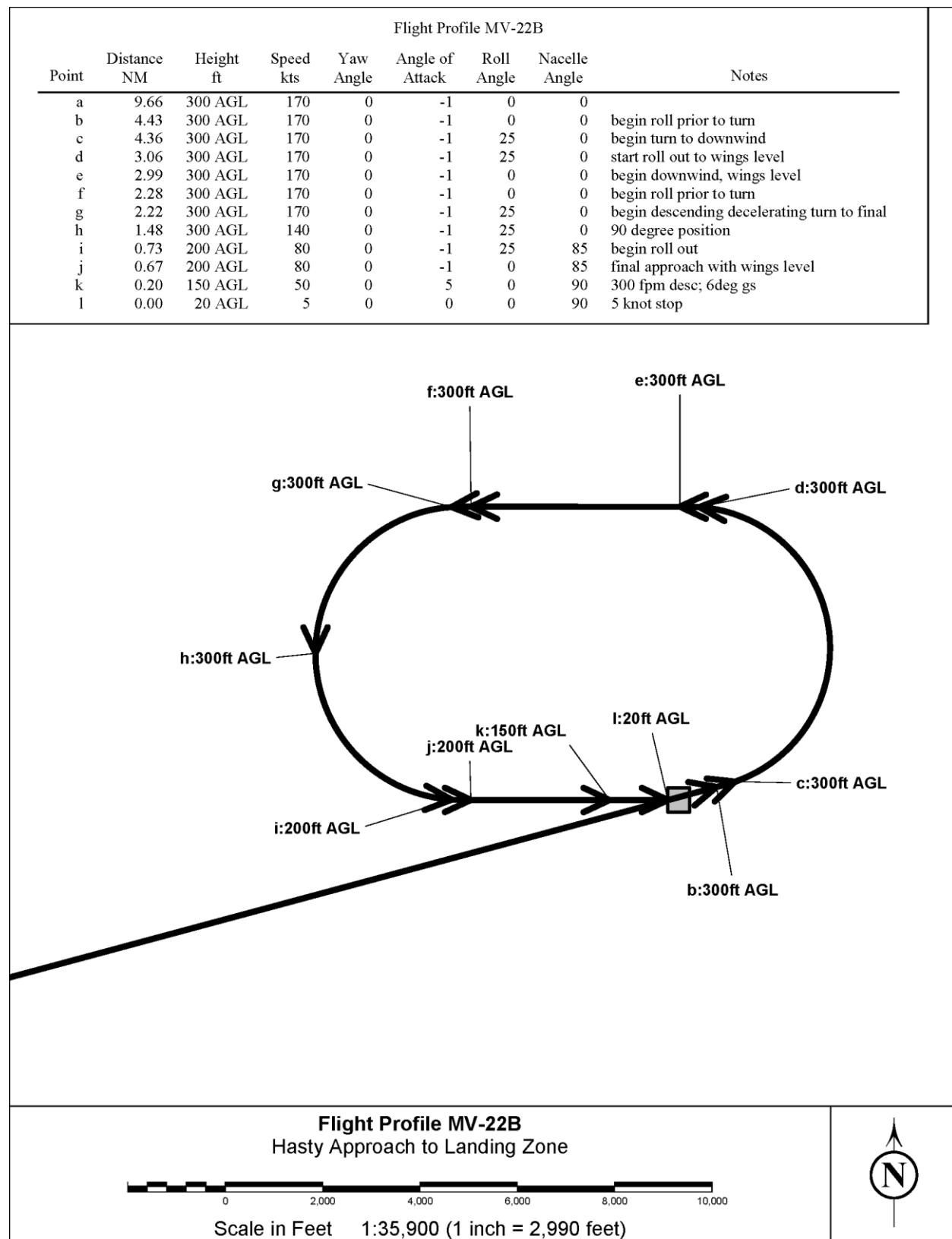


Figure 4-1 Modeled MV-22 Approach to Landing Site

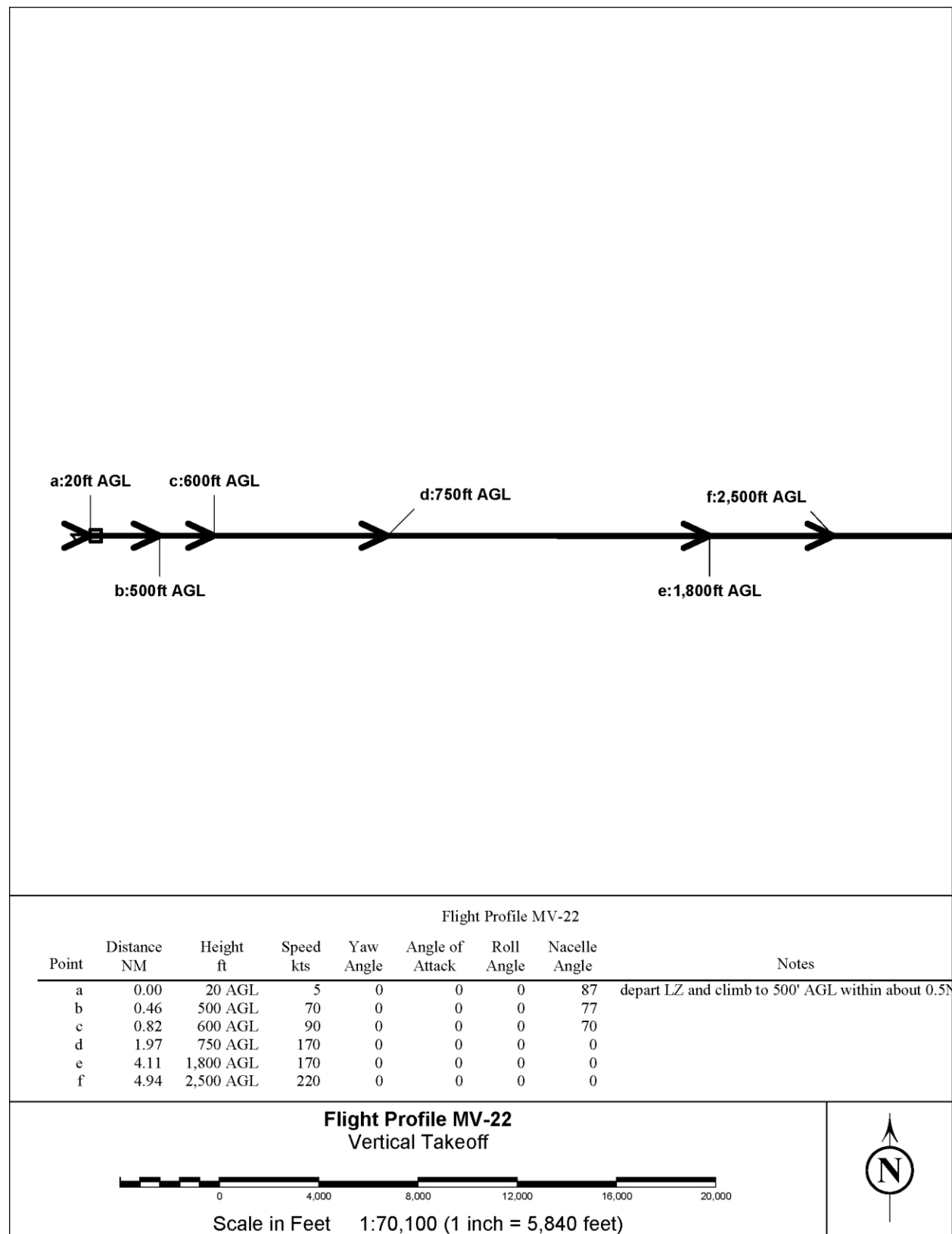


Figure 4-2 Modeled MV-22 Departure from Landing Site

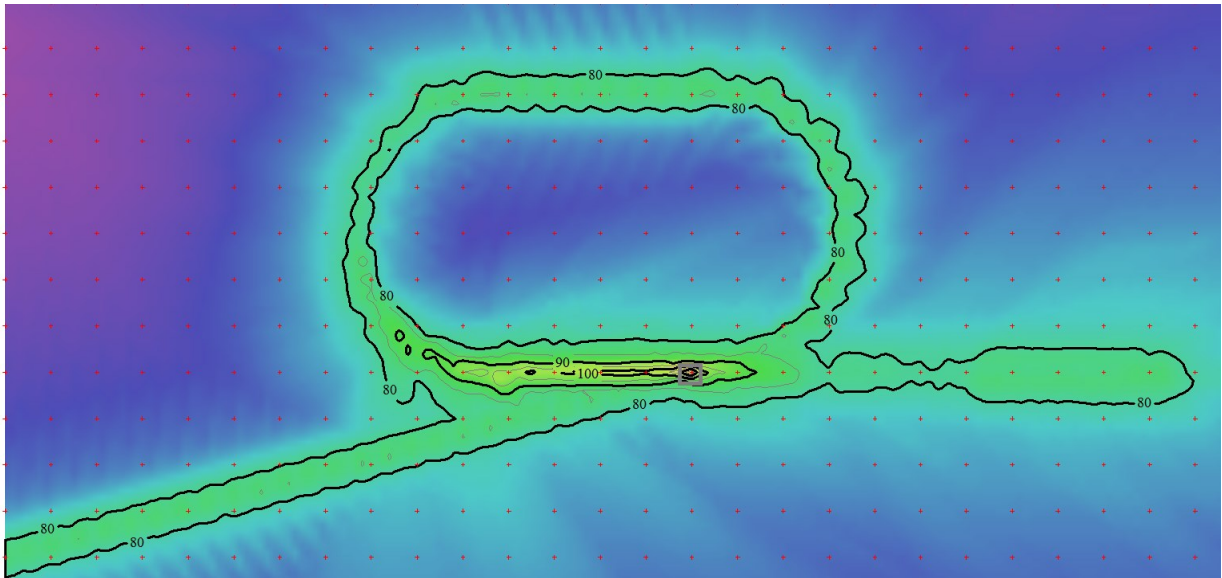


Figure 4-3 Maximum Sound Level due to MV-22 Landing Site Operation

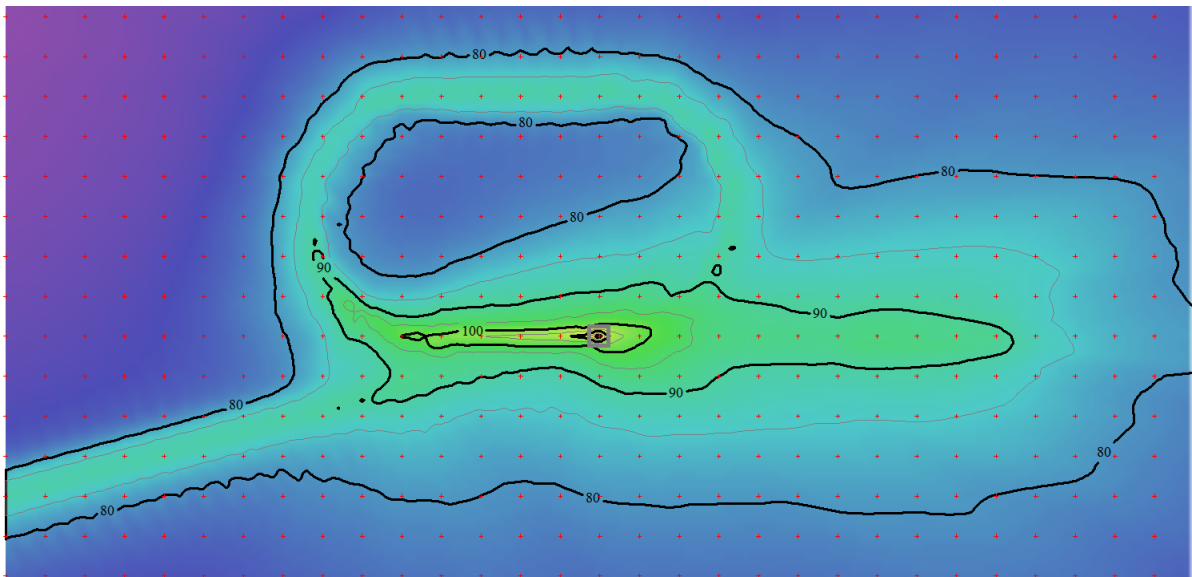


Figure 4-4 Sound Exposure Level due to MV-22 Landing Site Operation

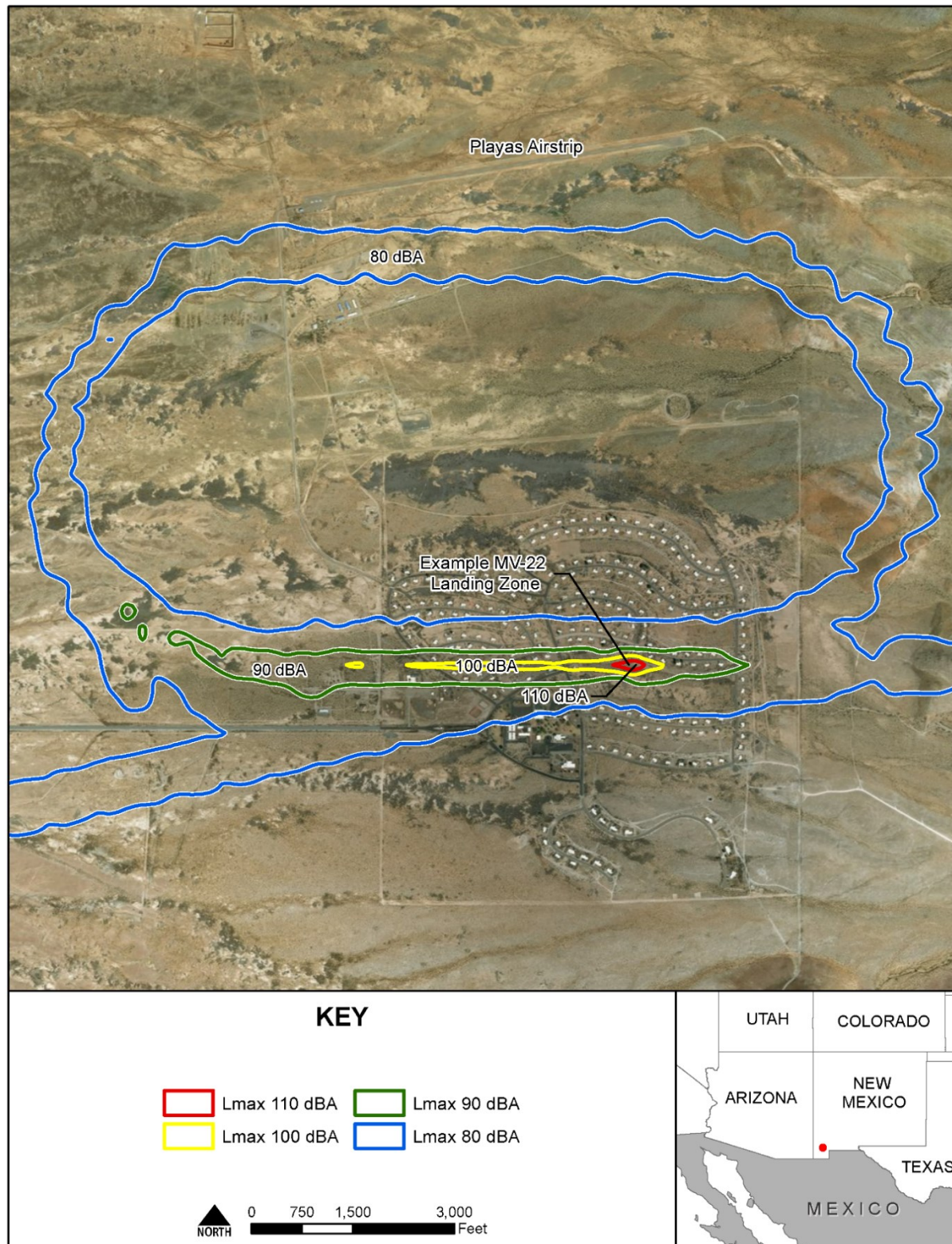


Figure 4-5 Example MV-22 Flight Path and Maximum Sound Level Contours

In addition to the single-event L_{\max} and SEL, the MV-22 landing and departure profile was used to compute a grid of yearly DNL to combine with the results of the distributed TMOA noise level yearly DNL presented in Section 2.2. Figure 4-6 presents the total yearly DNL for all aircraft noise anticipated for the TRAP CERTEX. No 60 or 65 dB contours would exist due to the proposed activity, so the plotting threshold was lowered to 30 dB. Generally, DoD does not plot DNL or L_{dnmr} contours to such low levels because existing noise due to non-military sources (i.e. road traffic, wind, etc.) may exceed levels predicted for the aircraft activity, such as is likely the case for this action. The 30 dB DNL contour would cover all of the TMOA and extend no more than 1,000 ft beyond the TMOA boundary. The residential area along NM-9 would be exposed to DNL between 30 and 35 dB due to the proposed transit through the TMOA. There would also exist a 35 dB DNL contour less than 2,000 ft in size located at the landing site in the PRTC. The DNL that would be generated by the Proposed Action, and depicted in Figure 4-6, would likely be less than the existing ambient levels. Therefore, the Proposed Action would cause a negligible change to the existing yearly DNL environment.

The proposed TRAP CERTEX would only occur during a single day in a remote area and the landing and takeoff activity would occur at an area with no noise sensitive receptors. The calculated DNL would not reach 45 dB required for additional grid point analysis per FAA guidelines nor exceed the DoD land use guidelines thresholds of 65 dB within the TMOA as depicted in Figure 4-6. The highest single-event levels would primarily exist within the PRTC and extending approximately 2 miles beyond with the closest residential area 6 miles away, as shown in 4-5. The overflight levels computed for aircraft transiting the TMOA, listed in Table 3-2, could create elevated sound levels at the residential areas along NM 9 but the noise generated would be similar to a residential power lawnmower and not last more than a few minutes. Therefore, the Proposed Action would not cause significant noise impacts.

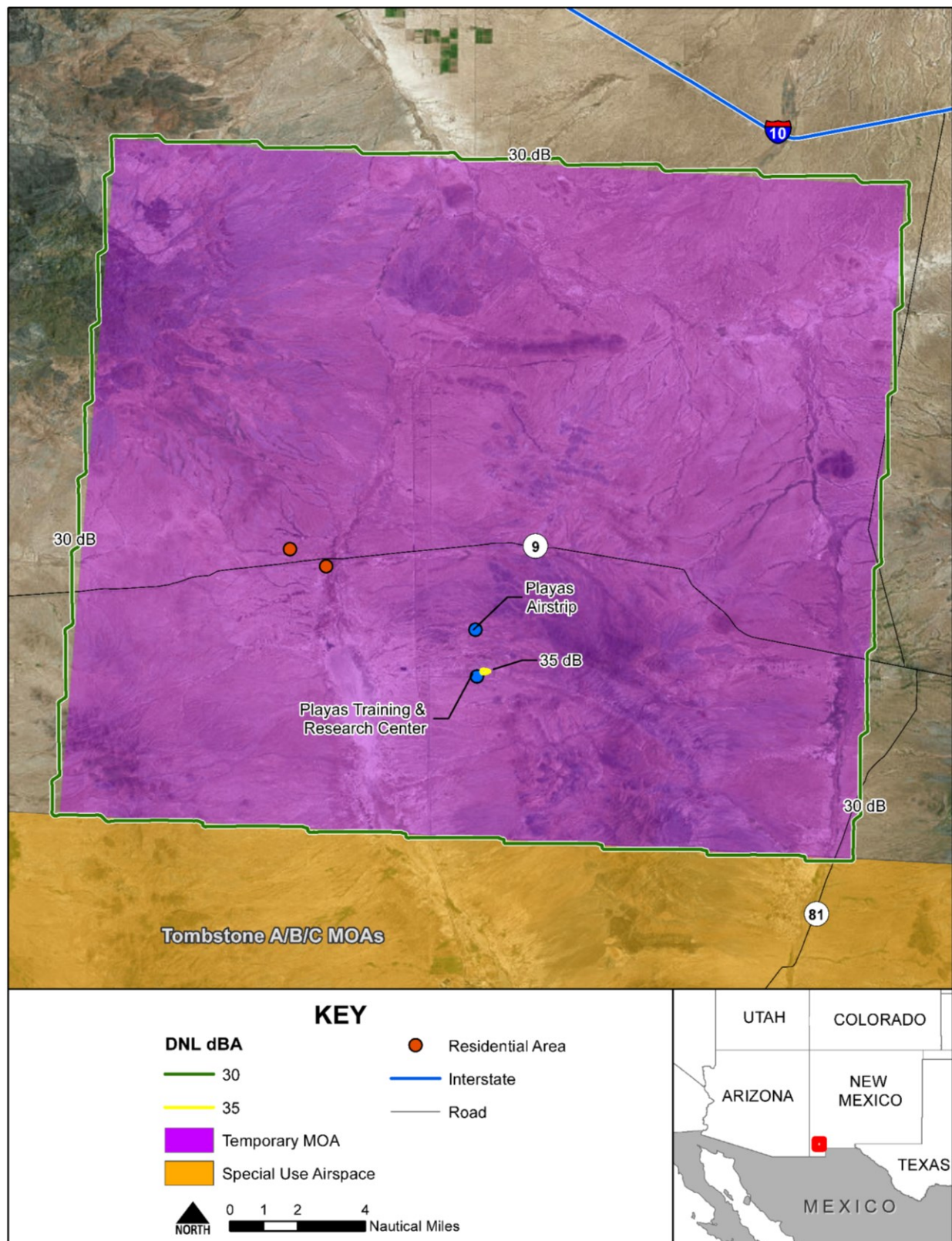


Figure 4-6 Yearly Day-Night Average Sound Level Contours for TRAP CERTEX Aircraft Activity

CHAPTER 5 AIR QUALITY

5.1 AFFECTED ENVIRONMENT

The U.S. Environmental Protection Agency (EPA) has designated eight (8) Air Quality Control Regions (AQCR) in New Mexico. The New Mexico Southern Border Intrastate Air Quality Control Region (40 Code of Federal Regulations §81.99) is located in the southwestern part of the state and covers an area of 10,374 square miles. The counties within the AQCR include Grant, Hidalgo, and Luna. Grant County was previously nonattainment for sulfur dioxide (SO₂) and was redesignated as a maintenance area in 2003 by the EPA. The main source of SO₂ emissions which caused this area of Grant County to be in nonattainment were mining-related emission sources. The SO₂ nonattainment area was located within a 3.5-mile radius and an 8-mile radius of any land above 6,470 ft around the Phelps Dodge Corporation Hurley Smelter/Concentrator located in Hurley, New Mexico (EPA 2003). This smelter was dismantled in 2006 (EPA 2014). Hidalgo and Luna counties are in attainment for all criteria pollutants.

The Playas TMOA, as well as the PTRC facility itself, is situated within a portion of the AQCR 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.

5.2 ENVIRONMENTAL CONSEQUENCES

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).

Based on the attainment status of the location where the training will occur in Hidalgo/Grant counties, the requirements of the General Conformity Rule are not applicable. None of the estimated emissions exceed the General Conformity Rule indicators, indicating no significant impact to air quality.

Table 5-1. Estimated Emissions for One TRAP CERTEX

				lb/1000 lb fuel							lb/op						
Aircraft	TIM (hr)	# Engines	Fuel Used lb	THC	CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	CO ₂	VOC	CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
MV-22	2	2	6120	0.01	0.79	11.64	2.22	4.8	4.8	3,212	0.06	4.83	71.24	13.59	29.38	29.38	19,659
Helo Cruise Model																	
2 Aircraft											0.12	9.67	142.47	27.17	58.75	58.75	39,317
F-18 C/D	2	2	13272	0.51	2.44	6.74	2.22	6.36	6.36	3,154	6.77	32.38	89.45	29.46	84.41	84.41	41,860
Terrain Following																	
2 Aircraft											13.54	64.77	178.91	58.93	168.82	168.82	83,720
A-10C	2	2	1840	23.35	78	2.6	2.22	6.95	8.93	3,234	42.96	143.52	4.78	4.08	12.79	16.43	5,950
Low Flight Pattern																	
4 Aircraft											171.86	574.08	19.14	16.34	51.15	65.72	23,801
C-130	2	4	9000	0.47	2.07	8.16	2.22	3.97	3.97	3,213	4.23	18.63	73.44	19.98	35.73	35.73	28,917
Circle																	
1 Aircraft											4.23	18.63	73.44	19.98	35.73	35.73	28,917
HH-60	2	2	2399.4	0.55	6.25	6.4	2.22	4.2	4.2	3,221	1.32	15.00	15.36	5.33	10.08	10.08	7,729
Cruise																	
2 Aircraft											2.64	29.99	30.71	10.65	20.15	20.15	15,459
Grand Total for One Exercise in Tons											0.10	0.35	0.22	0.07	0.17	0.17	95.61
Comparative Threshold in tons											100	100	100	100	100	100	100
Greater than Comparative Threshold?											No	No	No	No	No	No	No

CHAPTER 6 REFERENCES

- American National Standards Institute. 2013. American National Standards Institute, Quantities and Procedures for Description and Measurement of Environmental Sound, 2013.
- EPA. 2003. Approval and Promulgation of Implementation Plans; New Mexico; Redesignation of Grant County to Attainment for Sulfur Dioxide, Direct Final Rule. Federal Register Vol. 68, No. 181. 18 September.
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- Navy. 2008. Air Installations Compatible Use Zones (AICUZ) Program. OPNAVINST 11010.36C. October.
- Navy. 2012. Environmental Impact Statement for the Basing of MV-22 and H-1 Aircraft in Support of III MEF Elements in Hawaii, June.
- Page, J.A., C. Wilmer, and K.J. Plotkin. 2010. Rotorcraft Noise Model Technical Reference and User Manual (Version 7.1). Wyle Report WR 08-04, Wyle Laboratories Inc. February.
- USAF. 2017a. USAF Playas Military Operating Area and Red Flag-Rescue Supplemental Analysis.
- USAF. 2017b. U.S. Air Force Air Emissions Guide for Air Force Mobile Sources.
- Wasmer Consulting. 2006a. BaseOps 7.3 User's Guide, Fred Wasmer and Fiona Maunsell, Wasmer Consulting.
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APPENDIX F

AIR QUALITY DETERMINATION – RECORD OF NON-APPLICABILITY

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RECORD OF NON-APPLICABILITY (RONA) FOR GENERAL CONFORMITY

NAME OF PROJECT: ETOG TRAP CERTEX / PLAYAS TRAINING & RESEARCH CENTER, PLAYAS, NEW MEXICO

PROJECT ID NUMBER: REIR (NEPA PAMS) PE20180025-MCIW

POINT OF CONTACT: ZACHERY H. LIKINS

PHONE/EMAIL: 760.763.7948 / zachery.likins@usmc.mil

START DATE: 27 AUGUST - 31 AUGUST 2018

General Conformity under the Clean Air Act, Section 176(c) has been evaluated for the project described above according to the requirements of Title 40 Code of Federal Regulations (CFR) Part 93 and the applicable State Implementation Plan. The requirement of a conformity determination under this rule is not applicable to this project/action because total direct, indirect and/or cumulative emissions from this project/action have been determined to be below the *de minimus* threshold for conformity purposes estimated at:

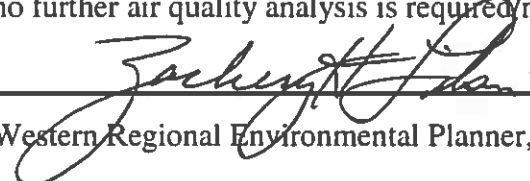
POLLUTANT	ACTION EMISSIONS (tons/yr)	AIR QUALITY INDICATORS	
		Threshold (tons/yr)	Exceedance (Y/N)
VOC	$0.1 \times 2 = 0.2$	100	N
CO	$0.35 \times 2 = 0.7$	100	N
NO _x	$0.22 \times 2 = 0.44$	100	N
SO _x	$0.07 \times 2 = 0.14$	100	N
PM ₁₀	$0.17 \times 2 = 0.34$	100	N
PM _{2.5}	$0.17 \times 2 = 0.34$	100	N
CO ₂	$95.61 \times 2 = 191.22$	-	-

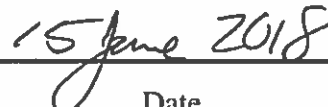
Estimates assume ALL aircraft involved (assumes worst-case scenario) in Proposed Action for up to 3 hours.

These levels are below the conformity threshold values, as indicated, which are established at 40 CFR 93.153 (b). Supporting technical documentation with emission calculations/estimates are:

☒ Attached (Appendix E) ☒ Appears in NEPA Documentation ☐ Other (cite reference)

None of the estimated emissions associated with the Proposed Action are above General Conformity Rule indicators, and no significant impacts to air quality are expected, and therefore no further air quality analysis is required/needed.


Western Regional Environmental Planner, MCIWEST


Date

APPENDIX G

AGENCY COORDINATION NEW MEXICO - STATE HISTORIC PRESERVATION OFFICE (ARCHAEOLOGICAL RESOURCES / HISTORIC PROPERTIES)

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Susana Martinez
Governor

STATE OF NEW MEXICO
DEPARTMENT OF CULTURAL AFFAIRS
HISTORIC PRESERVATION DIVISION

BATAAN MEMORIAL BUILDING
407 GALISTEO STREET, SUITE 236
SANTA FE, NEW MEXICO 87501
PHONE (505) 827-6320 FAX (505) 827-6338

June 6, 2018

William Berry
Marine Corps Installations West-Marine Corps Base
Box 555010
Camp Pendleton, California 92055-5010

RE: Playas TMOA, Hidalgo County, New Mexico (HPD logs 107911, 107938)

Dear Mr. Berry,

On behalf of the New Mexico State Historic Preservation Officer (SHPO), I have completed a review of the documentation concerning the Temporary Military Operations Area (TMOA) at Playas, Hidalgo County, New Mexico.

Based on the information provided, it is SHPOs' opinion that the undertaking will have no adverse effect to historic properties.

If you have any questions or comments, please feel free to call me directly at 505-827-4225 or email me.

Sincerely,

A handwritten signature in blue ink that reads "Bob Estes".

Bob Estes Ph.D.
HPD Staff Archaeologist



UNITED STATES MARINE CORPS
MARINE CORPS INSTALLATIONS WEST-MARINE CORPS BASE
BOX 555010
CAMP PENDLETON, CALIFORNIA 92055-5010

Bob Estes, Ph.D.
Staff Archaeologist
Department of Cultural Affairs
Historic Preservation Division
Bataan Memorial Bldg., Suite 236
Santa Fe, New Mexico 87501

Dear Dr. Estes,

The purpose of this correspondence is to provide you a description of the Marine Corps' planned activities within the proposed Playas Temporary Military Operations Area (TMOA, an airspace designation) from 27 - 31 August 2018.

The proposed TMOA purpose and need is in support of the Special Purpose Marine Air Ground Task Force (SPMAGTF) Crisis Response (CR) Central Command (or SPMAGTF-CR-CC) Certification Exercise (CERTEX). The CERTEX is a Commanding General, I Marine Expeditionary Force (I MEF) directed exercise to be conducted at several locations across the southwestern U.S. The purpose of the CERTEX is to provide the SPMAGTF the opportunity to conduct training in an unfamiliar environment during the final phase of its pre-deployment program. During CERTEX, the SPMAGTF-CR-CC will be required to conduct a series of challenging and realistic training events to test its ability to conduct conventional and specialized missions. More specifically, the scheduled CERTEX will require select members of the United States Marine Corps (USMC) and United States Air Force (USAF) to plan and execute a Tactical Recovery of Aircraft and Personnel (TRAP) exercise from 27 to 31 August 2018, in order to recover downed pilots.

The USMC TRAP mission very closely resembles the U.S. Air Force (USAF) most recently completed "Red Flag Rescue" pilot recovery exercise (May 2017), albeit smaller in duration and scale. The USMC's proposed action is also a much smaller version of the individual actions described and analyzed in the USAF's "Angel Thunder" Environmental Assessment (EA) (May 2017). The USMC proposal is for a single, short-term (5-hours or less) action at an existing training facility known as the Playas Training and Research Center (PTRC), located near Playas, New Mexico (Figure 1). This training facility is situated immediately beneath the

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proposed Playas TMOA.

The PTRC training facility was established shortly after the site's purchase in 1999 by New Mexico Technical University (NMTU), in cooperation with the Department of Homeland Security, to support training actions by federal, state, and local law enforcement agencies, including but not limited to, the Department of Homeland Security and Department of Defense (DOD) military forces.

The Federal Aviation Administration (FAA) establishes MOAs in the National Airspace System to provide commercial and general aviation knowledge of high-density military activity in a specific area in order to provide a greater degree of separation from the activity, thus enhancing everyone's safety. Typical MOA flight operations include tactical combat maneuvering (basic fighter maneuvers, simulated air-to-ground ordnance delivery, and tactical assault profiles) by fighter, transport, and tilt-rotor, aircraft involving abrupt, unpredictable changes in altitude, attitude, and direction of flight.

The Playas TMOA is a 20 nautical mile (NM) X 20 nautical mile box of airspace situated above the PTRC facility extending from 300 feet above the surface up to, but not including, FL 180.

The proposed Playas TMOA boundary is:

Beginning at lat. 32°10'43"N, long. 108°42'48"W;
to lat. 32°09'20"N, long. 108°19'29"W;
to lat. 31°49'27"N, long. 108°21'03"W;
to lat. 31°50'48"N, long. 108°44'28"W;
to the point of beginning.
(Figures 2 and 3)

The overall Scheme of Maneuver for the TRAP CERTEX is to use the existing paved and unpaved road network within the complex to emplace a *simulated* downed pilot(s) for one night only inside the existing PTRC abandoned residential housing area (Figure 4). Once the pilot(s) contact the exercise force and relay their situation, up to two (2) squad-sized Marine Corps search and rescue teams (approximately 15 persons each) will be flown to, and tactically inserted into, the PTRC by tilt-rotor aircraft landing into the pre-approved landing zone(s) (LZ) on/near the intersection of Cholla and Lomitas streets. One or two LZ locations will be selected, surveyed and approved (certified) as safe for operations by the USMC 24-48 hours prior to conducting the exercise.

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Upon insertion into the LZ(s), each military search and rescue team will secure the area, then search for, locate, medically treat (simulated), and extract the downed pilot(s). No digging or other ground disturbing activities are planned or expected.

The following is a summary of the planned actions on the ground within the PTRC and in the proposed Playas TMOA.

Aircraft Mix and Numbers - Aircraft to be used during the TRAP CERTEX include: two (2) MV-22; either two (2) AV-8B or two (2) F-35; four (4) A-10C; and one (1) HC-130J.

Playas TMOA Activities and Altitudes - Proposed aerial activities will consist of typical MOA flight operations as described above. Maximum altitude is up to, but not including, FL180. No supersonic activities will be conducted.

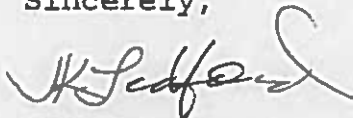
Exercise Execution and Timing (TMOA activation by FAA) -The Playas TMOA will be activated for a five (5) hour time block within a 48-hr. operational window between 27 and 31 AUG 2018.

The following is a notional timeline that is representative of how the CERTEX TRAP would proceed:

- 12:00 - Temporary MOA Activation (by FAA) goes into effect
- 12:15 - MAYDAY call goes out from downed pilot(s) located within the PTRC facility compound (housing area)
- 12:30 - TRAP exercise initiated, with aircraft leaving their respective air stations and responding to Playas Temporary MOA
- 15:00 - TRAP/CSAR teams inserted via two tilt-rotor aircraft
- 16:30 - TRAP/CSAR extraction [with pilot(s)] and all military rescue personnel via two tilt-rotor aircraft
- 17:00 - Temporary MOA de-activation (by FAA) goes into effect

Point(s) of contact: Mr. Michael Saunders, AC/S G-3/5 Deputy Aviation, 760-763-7354, michael.l.saunders@usmc.mil ; Mr. Bill Berry, Regional Conservation Mgr., Environmental Security, 760-763-7947, william.h.berry@usmc.mil and/or Mr. Zak Likins, Regional Planning Mgr. Environmental Security, 760-763-7948, zachery.likins@usmc.mil.

Sincerely,



J.K. LEDFORD

By direction

FOR OFFICIAL USE ONLY

Figures:

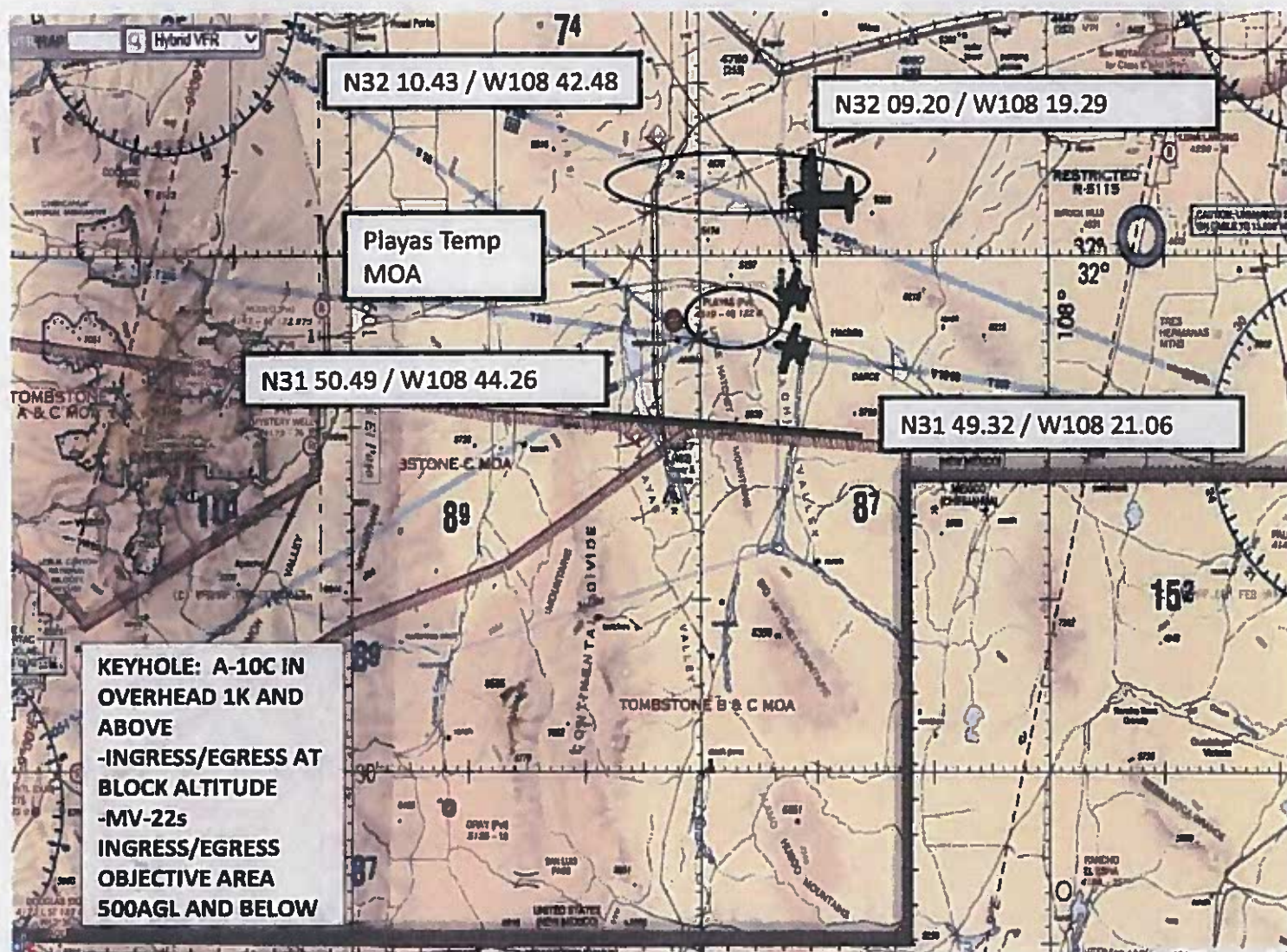
1. Regional-Vicinity
2. Concept of Operations
3. Playas Temporary MOA
4. PTRC Town site LZ

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Figure 1: Regional-Vicinity

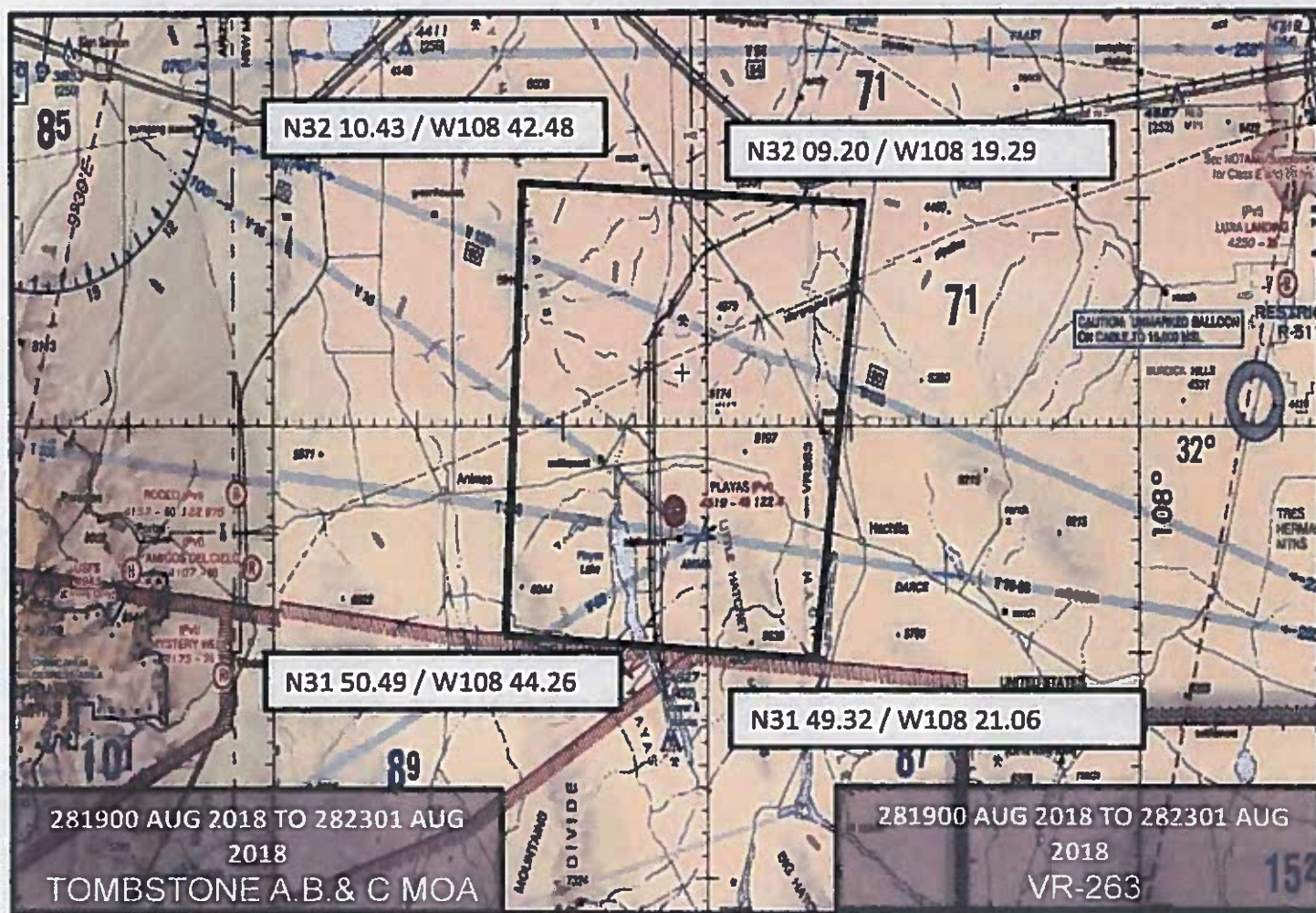


Figure 2: Concept of Operations



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Figure 3: Playas Temporary MOA



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Figure 4: PTRC Town Site LZ





UNITED STATES MARINE CORPS
MARINE CORPS INSTALLATIONS WEST-MARINE CORPS BASE
BOX 555010
CAMP PENDLETON, CALIFORNIA 92055-5010

10585/

5090
ENV
23 May 17

Mr. Bob Estes
Staff Archaeologist
Department of Cultural Affairs
Historic Preservation Division
Bataan Memorial Bldg., Suite 236
Santa Fe, New Mexico 87501

No Historic Properties Affected

John R. Estes May 25, 2017
for NM State Historic Preservation Office

Dear Mr Estes,

SUBJECT: PLAYAS TEMPORARY MILITARY OPERATING AREA PROPOSED USE

The purpose of this correspondence is to provide you a description of the Marine Corps' planned activities in the proposed Playas Temporary Military Operating Area (Temp-MOA) 9 and 10 August 2017.

The proposed Temp-MOA purpose and need is in support of the Special Purpose Marine Air Ground Task Force Crisis Response Central Command (SPMAGTF-CR-CC) Certification Exercise (CERTEX). The CERTEX is a Commanding General, I Marine Expeditionary Force (I MEF) directed exercise to be conducted from 07-11 August 2017 at numerous training locations throughout the South-Western United States. The purpose of the exercise is to provide the SPMAGTF the opportunity to conduct training in unfamiliar environments during the final phase of its pre-deployment program. During CERTEX, the SPMAGTF-CR-CC will be required to conduct a series of challenging and realistic training events to test its ability to conduct conventional and specialized missions. The scheduled CERTEX will require select members of the United States Marine Corps (USMC) and United States Air Force (USAF) to plan and execute a Tactical Recovery of Aircraft and Personnel (TRAP) exercise from 09 to 10 August 2017 in order to recover downed pilots located at a training site in the proposed Playas Temporary MOA.

The USMC TRAP mission/exercise very closely resembles the U.S. Air Force (USAF) Personnel Recovery & Rescue Training exercises known as "Angel Thunder". As such, the USMC's proposed action is a smaller scale version of the individual actions proposed in the recently released "Angel Thunder" Environmental Assessment (EA). The USMC proposal is a single,

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Number and Types of Aircraft operating in the MOA during activation and conduct of the CERTEX. Aircraft to be used include: two (2) MV-22s; either two (2) F/A-18s C/D or two (2) F-16C; Four (4) A-10C; one (1) HC-130J; and Two (2) HH-60G.

Playas MOA Planned Activities and Altitudes. Proposed aerial activities will consist of typical MOA flight operations as described above. Maximum altitude is up to but not including FL180. No supersonic or surface to surface activities will be conducted.

Exercise Execution/timing (MOA activation [by FAA]. The Playas MOA will be temporarily activated for a five (5) hour time block, and w/in a 48-hr. window between 09 and 10 AUG 2017). The following is a notional timeline that is representative of how the CERTEX TRAP would proceed.:

-11:00 - Temporary MOA Activation (by FAA) goes into effect
-11:15 - MAYDAY call goes out from downed pilot(s) located within the PTRC facility compound (housing area)
-11:30 - TRAP exercise initiated, with aircraft leaving air stations located in
-11:30 - ~1300 - Aircraft respond to Playas Temporary MOA from their respect air stations
-13:00 - TRAP/CSAR teams inserted via two rotary/tilt-wing aircraft
-15:30 - TRAP/CSAR extraction [with pilot(s)] and all military rescue personnel via two rotary/tilt-rotor aircraft
-16:00 - Temporary MOA De-activation (by FAA) goes into effect

Point of contact: Mr. Michael Saunders, AC/S G-3/5 Deputy Aviation; 760-763-7354; michael.l.saunders@usmc.mil and Mr. Zachary Likens, Environmental Security; 760-763-7948; zachary.likens@usmc.mil.


J. L. MEEKER
Director Aviation Operations
By direction

Figures: 1. Regional Vicinity Map
2. Playas Temporary MOA and Air Operations Map
3. Playas Temporary MOA MAP
4. Playas Training and Research Center

short-term (5 hours or less) action at an existing training facility known as the Playas Training and Research Center (PTRC), located near Playas, New Mexico (Figure 1). The PTRC training facility was established shortly after the sites' purchase in 1999 by New Mexico Technical University (NMTU), in cooperation with the Department of Homeland Security, to support training actions by federal, state, and local law enforcement agencies, including but not limited to, the Department of Homeland Security and Department of Defense (DOD) military forces.

The FAA establishes MOAs in the National Airspace System to provide commercial and general aviation knowledge of high-density military activity in a specific area in order to provide a greater degree of separation from the activity thus enhancing everyone's safety. Typical MOA flight operations include tactical combat maneuvering (basic fighter maneuvers, simulated air-to-ground ordnance delivery, and tactical assault profiles) by fighter and transport category tilt rotary wing aircraft involving abrupt, unpredictable changes in altitude, attitude, and direction of flight.

The Playas MOA is a 20 NM X 20 NM box of airspace situated above the PTRC facility extending from 300 feet above the surface up to but not including FL 180. The proposed temporary Playas MOA boundary is N 32°10'43"W 108°42'48" to N 32°09'20" W 108°19'29" to N 31°49'27"W 108°21'03" to N 31°50'48"W 108°44'28" to the point of beginning. See (Figures 2 and 3).

The Overall Scheme of Maneuver for the CERTEX is to use the existing paved and unpaved road network and to emplace simulated downed pilot(s) for one night only inside of existing PTRC housing. Once the pilots are able to contact the exercise force and relay their situation, two 12-13 man (squad-sized) TRAP/Combat Search and Rescue (CSAR) military teams will be flown to and inserted into the PTRC by rotary wing and/or tilt-rotor aircraft landing into pre-approved landing zones (LZ) on/near the intersection of Cholla and Lomitas roads/streets (Playas Blvd/Playas Ave). (A site survey of the LZs to certify them as safe for operations will be conducted 24-48 hours prior conducting the exercise). Thereafter, the CSAR (combat search and rescue) teams will identify, locate and medically treat the (simulated) downed pilots and secure the area; no digging or related ground disturbing activities are planned.

The following is a recap of the planned actions on the ground in the PTRC and in the proposed Playas Temp-MOA.

APPENDIX H

AGENCY COORDINATION U.S. FISH & WILDLIFE SERVICE – REGION 2 (BIOLOGICAL / NATURAL RESOURCES)

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
New Mexico Ecological Services Field Office
2105 Osuna Road Ne
Albuquerque, NM 87113-1001

Phone: (505) 346-2525 Fax: (505) 346-2542

<http://www.fws.gov/southwest/es/NewMexico/>

http://www.fws.gov/southwest/es/ES_Lists_Main2.html



In Reply Refer To:

June 13, 2018

Consultation Code: 02ENNM00-2018-SLI-0960

Event Code: 02ENNM00-2018-E-02025

Project Name: USMC IMEF CERTEX TRAP at Playas Training and Research Center

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

Thank you for your recent request for information on federally listed species and important wildlife habitats that may occur in your project area. The U.S. Fish and Wildlife Service (Service) has responsibility for certain species of New Mexico wildlife under the Endangered Species Act (ESA) of 1973 as amended (16 USC 1531 et seq.), the Migratory Bird Treaty Act (MBTA) as amended (16 USC 701-715), and the Bald and Golden Eagle Protection Act (BGEPA) as amended (16 USC 668-668c). We are providing the following guidance to assist you in determining which federally imperiled species may or may not occur within your project area and to recommend some conservation measures that can be included in your project design.

FEDERALLY-LISTED SPECIES AND DESIGNATED CRITICAL HABITAT

Attached is a list of endangered, threatened, and proposed species that may occur in your project area. Your project area may not necessarily include all or any of these species. Under the ESA, it is the responsibility of the Federal action agency or its designated representative to determine if a proposed action "may affect" endangered, threatened, or proposed species, or designated critical habitat, and if so, to consult with the Service further. Similarly, it is the responsibility of the Federal action agency or project proponent, not the Service, to make "no effect" determinations. If you determine that your proposed action will have "no effect" on threatened or endangered species or their respective critical habitat, you do not need to seek concurrence with the Service. Nevertheless, it is a violation of Federal law to harm or harass any federally-listed threatened or endangered fish or wildlife species without the appropriate permit.

If you determine that your proposed action may affect federally-listed species, consultation with the Service will be necessary. Through the consultation process, we will analyze information contained in a biological assessment that you provide. If your proposed action is associated with Federal funding or permitting, consultation will occur with the Federal agency under section 7(a)(2) of the ESA. Otherwise, an incidental take permit pursuant to section 10(a)(1)(B) of the ESA (also known as a habitat conservation plan) is necessary to harm or harass federally listed threatened or endangered fish or wildlife species. In either case, there is no mechanism for authorizing incidental take "after-the-fact." For more information regarding formal consultation and HCPs, please see the Service's Consultation Handbook and Habitat Conservation Plans at www.fws.gov/endangered/esa-library/index.html#consultations.

The scope of federally listed species compliance not only includes direct effects, but also any interrelated or interdependent project activities (e.g., equipment staging areas, offsite borrow material areas, or utility relocations) and any indirect or cumulative effects that may occur in the action area. The action area includes all areas to be affected, not merely the immediate area involved in the action. Large projects may have effects outside the immediate area to species not listed here that should be addressed. If your action area has suitable habitat for any of the attached species, we recommend that species-specific surveys be conducted during the flowering season for plants and at the appropriate time for wildlife to evaluate any possible project-related impacts.

Candidate Species and Other Sensitive Species

A list of candidate and other sensitive species in your area is also attached. Candidate species and other sensitive species are species that have no legal protection under the ESA, although we recommend that candidate and other sensitive species be included in your surveys and considered for planning purposes. The Service monitors the status of these species. If significant declines occur, these species could potentially be listed. Therefore, actions that may contribute to their decline should be avoided.

Lists of sensitive species including State-listed endangered and threatened species are compiled by New Mexico state agencies. These lists, along with species information, can be found at the following websites:

Biota Information System of New Mexico (BISON-M): www.bison-m.org

New Mexico State Forestry. The New Mexico Endangered Plant Program:
www.emnrd.state.nm.us/SFD/ForestMgt/Endangered.html

New Mexico Rare Plant Technical Council, New Mexico Rare Plants: nmrareplants.unm.edu

Natural Heritage New Mexico, online species database: nhnm.unm.edu

WETLANDS AND FLOODPLAINS

Under Executive Orders 11988 and 11990, Federal agencies are required to minimize the destruction, loss, or degradation of wetlands and floodplains, and preserve and enhance their natural and beneficial values. These habitats should be conserved through avoidance, or mitigated to ensure that there would be no net loss of wetlands function and value.

We encourage you to use the National Wetland Inventory (NWI) maps in conjunction with ground-truthing to identify wetlands occurring in your project area. The Service's NWI program website, www.fws.gov/wetlands/Data/Mapper.html integrates digital map data with other resource information. We also recommend you contact the U.S. Army Corps of Engineers for permitting requirements under section 404 of the Clean Water Act if your proposed action could impact floodplains or wetlands.

MIGRATORY BIRDS

The MBTA prohibits the taking of migratory birds, nests, and eggs, except as permitted by the Service's Migratory Bird Office. To minimize the likelihood of adverse impacts to migratory birds, we recommend construction activities occur outside the general bird nesting season from March through August, or that areas proposed for construction during the nesting season be surveyed, and when occupied, avoided until the young have fledged.

We recommend review of Birds of Conservation Concern at website www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BCC.html to fully evaluate the effects to the birds at your site. This list identifies birds that are potentially threatened by disturbance and construction.

BALD AND GOLDEN EAGLES

The bald eagle (*Haliaeetus leucocephalus*) was delisted under the ESA on August 9, 2007. Both the bald eagle and golden eagle (*Aquila chrysaetos*) are still protected under the MBTA and BGEPA. The BGEPA affords both eagles protection in addition to that provided by the MBTA, in particular, by making it unlawful to "disturb" eagles. Under the BGEPA, the Service may issue limited permits to incidentally "take" eagles (e.g., injury, interfering with normal breeding, feeding, or sheltering behavior nest abandonment). For information on bald and golden eagle management guidelines, we recommend you review information provided at www.fws.gov/midwest/eagle/guidelines/bgepa.html.

On our web site www.fws.gov/southwest/es/NewMexico/SBC_intro.cfm, we have included conservation measures that can minimize impacts to federally listed and other sensitive species. These include measures for communication towers, power line safety for raptors, road and highway improvements, spring developments and livestock watering facilities, wastewater facilities, and trenching operations.

We also suggest you contact the New Mexico Department of Game and Fish, and the New Mexico Energy, Minerals, and Natural Resources Department, Forestry Division for information regarding State fish, wildlife, and plants.

Thank you for your concern for endangered and threatened species and New Mexico's wildlife habitats. We appreciate your efforts to identify and avoid impacts to listed and sensitive species in your project area. For further consultation on your proposed activity, please call 505-346-2525 or email nmesfo@fws.gov and reference your Service Consultation Tracking Number.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New Mexico Ecological Services Field Office
2105 Osuna Road Ne
Albuquerque, NM 87113-1001
(505) 346-2525

Project Summary

Consultation Code: 02ENNM00-2018-SLI-0960

Event Code: 02ENNM00-2018-E-02025

Project Name: USMC IMEF CERTEX TRAP at Playas Training and Research Center

Project Type: MILITARY OPERATIONS / MANEUVERS

Project Description: The overall Scheme of Maneuver for the Tactical Recovery of Aircraft and Personnel (TRAP) Certification Exercise (CERTEX) is to use the existing paved and unpaved road network within the complex to emplace a simulated downed pilot(s) for one night only inside the existing Playas Training and Research Center (PTRC) abandoned residential housing area. Once the pilot(s) contact the exercise force and relay their situation, up to two (2) squad-sized Marine Corps search and rescue teams (approximately 15 persons each) will be flown to, and tactically inserted into, the PTRC by tilt-rotor aircraft landing into the pre-approved landing zone(s) (LZ) on/near the intersection of Cholla and Lomitas streets. One or two LZ locations will be selected, surveyed and approved (certified) as safe for operations by the USMC 24-48 hours prior to conducting the exercise.

Upon insertion into the LZ(s), each military search team will secure the area, then search for, locate, treat (simulated), and extract the downed pilot(s).

No digging or other ground disturbing activities are planned or expected.

The following is a summary of the planned actions on the ground within the PTRC and in the proposed Playas Temporary Military Operations Area (an Air Space designation).

Aircraft Mix and Numbers - Aircraft to be used during the TRAP CERTEX include: two (2) MV-22; either two (2) AV-BB or two (2) F-35; four (4) A-10C; and one (1) HC-130J. All fixed wing aircraft are expected to operate at altitudes well above 2,000 ft at all times. The MV-22 tilt-rotor aircraft will remain above 2,000 feet until approximately 9 nautical miles from the PTRC when they will begin their descent to the LZ.

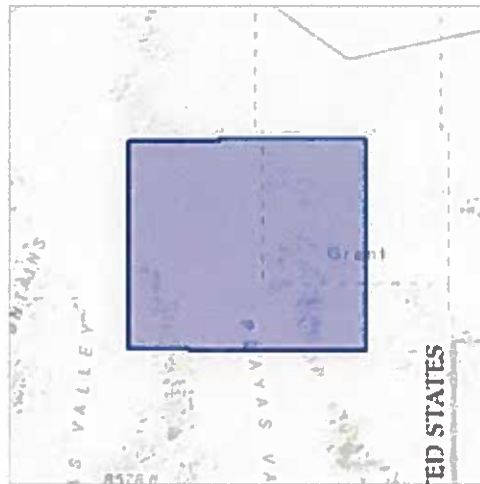
Exercise Execution and Timing (TMOA activation by FAA) -The Playas TMOA will be activated for a five (5) hour time block within a 48-hr. operational window between 27 and 31 AUG 2018.

The following is a notional timeline that is representative of how the CERTEX TRAP would proceed:

- 12:00 - Temporary MOA Activation (by FAA) goes into effect
- 12:15 - MAYDAY call goes out from downed pilot(s) located within the PTRC facility compound (housing area)
- 12:30 - TRAP exercise initiated, with aircraft leaving their respective air stations and responding to Playas Temporary MOA
- 15:00 - TRAP / CSAR teams inserted via two tilt-rotor aircraft
- 16:30 - TRAP/CSAR extraction [with pilot(s)] and all military rescue personnel via two tilt-rotor aircraft
- 17:00 - Temporary MOA de-activation (by FAA) goes into effect

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/31.918536344855177N108.54904107330543W>



Counties: Grant, NM | Hidalgo, NM

Endangered Species Act Species

There is a total of 18 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Jaguar <i>Panthera onca</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3944	Endangered
Mexican Long-nosed Bat <i>Leptonycteris nivalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8203	Endangered
Mexican Wolf <i>Canis lupus baileyi</i> Population: U.S.A. (portions of AZ and NM)see 17.84(k) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3916	Experimental Population, Non- Essential

Birds

NAME	STATUS
Mexican Spotted Owl <i>Strix occidentalis lucida</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8196	Threatened
Northern Aplomado Falcon <i>Falco femoralis septentrionalis</i> Population: U.S.A (AZ, NM) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1923	Experimental Population, Non- Essential
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is proposed critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Reptiles

NAME	STATUS
Narrow-headed Gartersnake <i>Thamnophis rufipunctatus</i> There is proposed critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2204	Threatened
New Mexican Ridge-nosed Rattlesnake <i>Crotalus willardi obscurus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3657	Threatened
Northern Mexican Gartersnake <i>Thamnophis eques megalops</i> There is proposed critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7655	Threatened

Amphibians

NAME	STATUS
Chiricahua Leopard Frog <i>Rana chiricahuensis</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1516	Threatened

Fishes

NAME	STATUS
Beautiful Shiner <i>Cyprinella formosa</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7874	Threatened
Chihuahua Chub <i>Gila nigrescens</i> There is proposed critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/7156	Threatened
Gila Chub <i>Gila intermedia</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/51	Endangered
Gila Topminnow (incl. Yaqui) <i>Poeciliopsis occidentalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1116	Endangered
Gila Trout <i>Oncorhynchus gilae</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/781	Threatened
Loach Minnow <i>Tiaroga cobitis</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6922	Endangered
Spikedace <i>Meda fulgida</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6493	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

13 June 2018

Memorandum for Record

Subject: Determination of No Effects to Federally Listed Species from the IMEF CERTEX at the Playas Training and Research Center (PTRC), New Mexico August 2018

References:

- a. Revised Final Air Force Playas Temporary MOA Supplemental Analysis 27 Feb 2018
- b. Letter from New Mexico State Historic Preservation Office (Dr. Estes) to USMC, MCI WEST dated June 6, 2018
- c. Letter from USMC, MCI WEST (LtCol Ledford) to New Mexico State Historic Preservation Office submitted May 24, 2018
- d. IMEF Playas CERTEX Supplemental Analysis (2018). Prepared by USMC, MCI WEST for FAA
- e. IMEF Playas CERTEX Environmental Assessment (2017). Prepared by USMC, MCI WEST for FAA
- f. Air Force Operation Angel Thunder Environmental Assessment (2017)
- g. Playas Training Center Environmental Assessment (2006)

Enclosures:

1. USFWS Species List for Playas CERTEX project
2. Species Effects Analysis Matrix

The town of Playas was purchased by New Mexico Tech and converted to a security and counterterrorism training center that is used by numerous security, law enforcement and military units throughout the year. As described in the IMEF Playas CERTEX Environmental Assessment (EA), Marine Corps and Air Force personnel are planning to conduct a Tactical Recovery of Aircraft and Pilot (TRAP) exercise at the PTRC in August 2018. The exercise will take place during a 5-hour period within a larger 48-hour block. The FAA has required the preparation of an EA prior to establishing a temporary Military Operations Area (MOA) for the 5-hour exercise. The TRAP scenario exercise is wholly consistent with the types of activities that occur routinely at PTRC. So the subject exercise does not present new or novel stimuli to the existing environmental conditions of the PTRC.

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. 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.

During the review process I spoke with Dr. George D. Dennis III, Collaborative Conservation Services Branch Chief in the USFWS's New Mexico Ecological Services Field Office. We discussed the proximity of the PTRC to closest known breeding locations for southwestern willow flycatcher and yellow-billed cuckoo (two of the reviewed bird species). The closest known breeding sites are at the middle fork of the Rio Grande River and the Gila River. Both of these riparian systems are more than 20 miles from the PTRC. Because the MV-22 aircraft

Subject: Determination of No Effects to Federally Listed Species from the IMEF CERTEX at the Playas Training and Research Center (PTRC), New Mexico August 2018

would operate above 9,000 feet until within 9 nautical miles of the PTRC, Dr. Dennis felt the proposed action would not disturb southwestern willow flycatcher and yellow-billed cuckoo.

Critical habitat has been proposed or designated for 13 of the 18 species. There is no designated or proposed critical habitat at or adjacent to the project location.

Ground activities during the Playas CERTEX will be confined to the Playas urban training facility within the PTRC. The urban facility does not support native habitats and therefore would not support foraging, breeding or juvenile rearing by any federally listed species. The likelihood of encountering a dispersing or migrating individual on the ground or in the air at the project location during the extremely brief exercise time window is so low as to be insignificant and discountable.

It is the determination of Marine Corps Installations West that the IMEF Playas CERTEX, as described in the EA prepared for the FAA, will have no effect on any species listed under the Endangered Species Act. Additionally the CERTEX will have no effect on any designated or proposed critical habitat.

Bill Berry
Regional Conservation Program Manager
Environmental Security Office
Marine Corps Installations West