

Final

**ENVIRONMENTAL ASSESSMENT
ESTABLISHMENT OF RESTRICTED AREA R-2511
AT NAVAL AIR WEAPONS STATION CHINA LAKE, CALIFORNIA**

September 2021

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NAWCWD PR21-0133.

Acronyms and Abbreviations

AGL	above ground level	MRTFB	Major Range and Test Facility Base
AICUZ	Air Installations Compatible Use Zones	MR_NMAP	MOA-Range NoiseMap
AMRAAM	Advanced Medium Range Air-to-Air Missile	MSL	mean sea level
ARTCC	Air Route Traffic Control Center	NAAQS	National Ambient Air Quality Standards
ATC	air traffic control	NAS	National Airspace System
ATCAA	Air Traffic Control Assigned Airspace	NATOPS	Naval Air Training and Operating Procedures Standardization
CEQ	Council on Environmental Quality	NAWCWD	Naval Air Warfare Center Weapons Division
CFA	Controlled Firing Area	NAWSCL	Naval Air Weapons Station China Lake
CFR	Code of Federal Regulations	NEPA	National Environmental Policy Act
CNEL	Community Noise Equivalent Level	NO₂	nitrogen dioxide
CO	carbon monoxide	NO_x	oxides of nitrogen
dB	decibel	NOTAM	Notice to Airmen
DNL	Day-Night Average Sound Level	O₃	ozone
DoD	U.S Department of Defense	ORD	Operational Requirements Document
EA	Environmental Assessment	PM_{2.5}	particulate matter with an aerodynamic diameter of 2.5 microns or less
EIS	Environmental Impact Statement	PM₁₀	particulate matter with an aerodynamic diameter of 10 microns or less
ESA	Endangered Species Act	ppm	parts per million
FAA	Federal Aviation Administration	OPNAV	Chief of Naval Operations
FEIS	Final Environmental Impact Statement	RA	Restricted Area
FL	flight level	RCC	Range Control Center
FONSI	Finding of No Significant Impact	RDAT&E	research, development, acquisition, testing, and evaluation
ft	feet	RF	radiofrequency
FTO	Flight Termination Officer	ROD	Record of Decision
FTS	Flight Termination System	ROI	region of influence
FY	fiscal year	SFC	surface
GIS	Global Information System	SHPO	State Historic Preservation Officer
GPS	Global Positioning System	SLAM	Standoff Land Attack Missile
HARM	High-Speed Anti-Radiation Missile	SO_x	oxides of sulfur
H₂S	hydrogen sulfide	SO₂	sulfur dioxide
IFR	Instrument Flight Rules	SUA	Special Use Airspace
INRMP	Integrated Natural Resources Management Plan	TCFA	Trona Controlled Firing Area
JSOW	Joint Standoff Weapon	TSPI	Time Space Position Information
km	kilometer	U.S.	United States
LEIS	Legislative Environmental Impact Statement	U.S.C.	United States Code
m	meter	USEPA	U.S. Environmental Protection Agency
MBTA	Migratory Bird Treaty Act	USFWS	U.S. Fish and Wildlife Service
mi	mile	VFR	Visual Flight Rules
MOA	Military Operations Area	VOC	volatile organic carbon

ENVIRONMENTAL ASSESSMENT

Lead Agency for the EA: Naval Air Warfare Center Weapons Division, Naval Air Systems Command, U.S. Department of the Navy.
Cooperating Agency: Federal Aviation Administration.
Title of Proposed Action: Establishment of Restricted Area R-2511
Designation: Environmental Assessment

Abstract

This Environmental Assessment (EA) has been prepared in accordance with the National Environmental Policy Act of 1969, 42 United States Code §§4321-4370h, as implemented by the Council on Environmental Quality (CEQ) Regulations; Chief of Naval Operations Order 5090.1E, *Environmental Readiness Program*; and 40 Code of Federal Regulations §§1500-1508¹. Naval Air Warfare Center Weapons Division (NAWCWD) is the primary tenant at Naval Air Weapons Station China Lake (NAWSCL) and is the using agency of airspace considered in this EA. The Navy, serving as lead agency, prepared this EA. The Federal Aviation Administration (FAA) served as a cooperating agency and provided applicable guidance in its preparation. The Proposed Action is to establish Special Use Airspace (SUA), consisting of a Restricted Area (RA) – R-2511 – adjacent to NAWSCL land ranges connecting two existing RAs.

The purpose of the Proposed Action is to allow safe and realistic research, development, acquisition, test, and evaluation (RDAT&E) and training activities on and between the NAWSCL North and South ranges. The Proposed Action is needed to continue RDAT&E and training activities on the NAWSCL Ranges, including aircraft flights and weapons launches between the North and South ranges. This EA analyzes the potential environmental consequences associated with the Proposed Action, an Increased Operations Alternative, and the No-Action Alternative. The following resource areas were evaluated for environmental impacts: airspace management and air traffic; air quality; biological resources; land use and visual resources; noise; public health and safety; and socioeconomics and environmental justice.

Prepared By: United States Navy
Point of Contact: Department of the Navy
Naval Air Warfare Center Weapons Division
China Lake Ranges Sustainability Office
Attention: Mr. Steve Pennix, Branch Head
130 Easy Road, Building 31633
China Lake, California 93555
Telephone: (760) 939-6026
Email: steve.pennix@navy.mil
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¹ The Council on Environmental Quality (CEQ) amended its regulations implementing NEPA effective September 14, 2020. Under section 1506.13 of the amended regulations, agencies have discretion to apply the amended regulations to NEPA processes that were begun before September 14, 2020. The Navy and FAA initiated the NEPA process for this action in December 2019 and have decided not to apply the amended regulations. Therefore, the prior CEQ regulations continue to apply to this NEPA process.

EXECUTIVE SUMMARY

This Environmental Assessment (EA) has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, 42 United States Code §§4321-4370h, as implemented by the Council on Environmental Quality Regulations; Chief of Naval Operations Order 5090.1E, *Environmental Readiness Program*; and 40 Code of Federal Regulations §§1500-1508. Naval Air Warfare Center Weapons Division (NAWCWD) is the primary tenant at Naval Air Weapons Station China Lake (NAWSCL) and is the using agency of airspace considered in this EA. The Navy, serving as the lead agency, prepared this EA. The Federal Aviation Administration (FAA) served as a cooperating agency and provided applicable guidance in its preparation.

For the Navy, the purpose of this EA is to provide an environmental analysis of the Proposed Action in sufficient detail to determine whether it is necessary to prepare an Environmental Impact Statement (EIS), or to prepare a Finding of No Significant Impact (FONSI) for the Proposed Action. As a result of the FAA's status as a cooperating agency, the EA is also being prepared following FAA NEPA criteria as contained in FAA Joint Order 7400.2M and FAA Order 1051.1F. The FAA will utilize the analysis in this EA to make their own agency NEPA decision on the Proposed Action.

PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose of the Proposed Action is to allow safe and realistic research, development, acquisition, test, and evaluation (RDAT&E) and training activities on and between the NAWSCL North and South ranges. The Proposed Action is needed to continue RDAT&E and training activities on the NAWSCL ranges, including aircraft flights and weapons launches between the North and South ranges. The Proposed Action would not change or modify existing NAWCWD military flight activities occurring within an existing Controlled Firing Area. NAWCWD aircraft activities would continue to be consistent with activities currently occurring in the existing airspace. No new NAWCWD military flight activities are being introduced as part of this Proposed Action.

PROPOSED ACTION

The Proposed Action would be entirely airspace-based and would establish a Special Use Airspace (SUA), consisting of one Restricted Area (RA). The new SUA would connect the existing R-2505 and R-2524 RAs. The new RA would be titled R-2511 and would have the same dimensions as the existing Trona Controlled Firing Area (TCFA). The Proposed Action would not change or modify existing military flight activities or weapons testing occurring within the SUA. Aircraft activities would be consistent with those already occurring in the airspace.

The proposed RA would help notify, advise, and alert other pilots of where military training activity could be occurring. The proposed RA would be established when determined necessary to confine or segregate activities considered hazardous to nonparticipating aircraft, which is defined as any aircraft (military or civilian) that is not actively involved in the RDAT&E activities within the RA when activated. Itinerant (non-local) or other aircraft not familiar with NAWCWD RDAT&E activities would now be made aware of the military flight activity more formally, by the existence of the proposed RA on the Sectional Aeronautical Chart. The existence of a RA will be mapped on the FAA Los Angeles Sectional Chart and knowledge of its activation would prompt all pilots to take notice of existing military flight activity,

resulting in better awareness and coordination. Non-participating aircraft would not be allowed in the RA when activated.

The FAA and the Navy would establish a Letter of Agreement to ensure that radio communications provide adequate coverage to provide service to both participants and nonparticipants; publish area navigation waypoints for use in circumnavigating the special use airspace; establish recall procedures for weather, emergencies, and medivac aircraft; and codify Joint Use requirements.

The establishment of the proposed RA would improve flight safety for all pilots (civilian, commercial, and military) while improving the capability of the NAWCWD to conduct RDATE and training activities. The proposed R-2511 would create a linkage between R-2505 and R-2524, covering an area of approximately 87 square mi (225 square kilometers [km]). The proposed RA would be located in San Bernardino County, California.

Designated Altitudes: 6,000 feet (ft) above mean sea level (MSL) to, but not including, Flight Level (FL) 200.

Times of Use: Activated by Notice to Airmen (NOTAM) at least seven (7) days in advance, between 0700-1700 Monday through Friday.

Controlling Agency: Joshua Approach.

Using Agency: NAWCWD, China Lake, California.

Annual operations would be conducted within the proposed R-2511 up to 36 days per year, which is the current operations tempo for this airspace. Operations would be scheduled for two-hour blocks, with a maximum of two blocks authorized per day. The airspace will be activated 15 minutes prior (with Joshua Approach) to transition between R-2505 and R-2524. While the airspace would be scheduled for a two-hour block, operations generally last 10 to 15 minutes, for a total activation time of 25 to 30 minutes. Once transition is complete, the airspace will be returned to the controlling agency (Joshua Approach). The RA must be coordinated five working days in advance with the R-2508 Central Coordinating Facility, as per Letter of Agreement.

Mission scenarios for aircraft utilizing the proposed R-2511 would include launch platforms for free flight weapon systems, simulated close air support, and reconnaissance operations.

INCREASED OPERATIONS ALTERNATIVE

The Record of Decision for the NAWSCL Final Environmental Impact Statement/Legislative Environmental Impact Statement (FEIS/LEIS ROD), dated 03 February 2016 (Appendix A), allowed for an increase of up to 25 percent in “RDATE and training tempos within current land use areas approved for designated uses, expansion of unmanned aerial and surface systems, and expansion of existing and introduction of evolving directed energy weapons development.” The former operational increase pertained to withdrawn areas of the North and South ranges. The increase did not apply to off-station areas like the TCFA. The current Increased Operations Alternative would include an increased allowable land use to maximize the operations tempo on NAWSCL.

The Increased Operations Alternative would incorporate the same 25 percent increase in tempo detailed in the NAWSCL FEIS/LEIS ROD. Annual operations would increase from a maximum of 36 days per year to 45 days per year. Operations would be conducted within two-hour blocks, with a maximum of two blocks authorized per day. All other program details for Proposed Action would be implemented under this alternative.

THE NO-ACTION ALTERNATIVE

Under the No-Action Alternative the proposed RA would not be established. The current Letter of Authorization for the TCFA would expire in May 2022, and no new application for renewal of the TCFA would occur. Free flight weapons tests between the NAWSCL North and South ranges would cease upon expiration of the TCFA Level of Authorization.

The No-Action Alternative is not considered a reasonable alternative because it does not meet the purpose of and need for the Proposed Action, nor does it meet the screening criteria provided in Section 2.1. However, as required under CEQ regulations (40 CFR §1502.14[d]), the No-Action Alternative does provide a description of the current baseline conditions up to May 2022 against which the impacts of the Proposed Action can be compared.

PUBLIC INVOLVEMENT

As part of the NEPA process, the Draft EA was released for a 15-day public review period. A Notice of Availability announced the review period and was published in a local newspaper and the Federal Register. The Notice was also mailed to federal, state, local agencies, and interested members of the public. Federal, state, local agencies, and members of the public were encouraged to review and comment on the Draft EA during a 15-day public review period. Electronic copies of the Draft EA were posted to a project website (<https://R2511EA.com>). Members of the public could request a hardcopy or electronic copy on compact disc of the Draft EA through the project website.

The Draft EA review period began on June 17, 2021 and ended on July 2, 2021. Comments could be delivered by U.S. mail or email at:

Public Comments – R-2511 EA
T&E Technologies
901 N. Heritage Dr., Suite 204
Ridgecrest, CA 93555
Email: Comments@R2511EA.com

All comments were to be postmarked or received online by July 2, 2021, for consideration in the Final EA. Federal, state, and local agencies and officials, and other interested organizations and individuals were encouraged to provide substantive comments on the Draft EA during the 15-day public comment period. Appendix B includes a copy of the Notice of Availability and other public involvement materials. The Notice of Availability was also published in the Federal Register, dated June 17, 2021.

No comments on the Draft EA were received from the members of the public.

ENVIRONMENTAL CONSEQUENCES

The Proposed Action would not involve land acquisition, physical disturbance, or construction activities. The following NEPA resource areas were assessed and were considered to have potentially negligible or non-existent effects, and in accordance with CEQ regulations, did not warrant further analysis in the EA: climate, coastal resources, Department of Transportation Act 4(f), farmlands, hazardous materials/solid waste/pollution prevention, natural resources and energy supply, and water resources. Table ES-1 provides a summary of anticipated impacts for resource areas eliminated from detailed analysis.

The following resource areas were evaluated for environmental impacts: airspace management and air traffic; air quality; biological resources; land use and visual resources; noise; public health and safety; and socioeconomics and environmental justice. Table ES-2 provides a summary of anticipated impacts for resource areas analyzed in detail. For a detailed description and analysis, refer to Chapter 3, *Affected Environment, Environmental Consequences, and Cumulative Effects*. No significant impacts would occur to any resource area with the implementation of the Proposed Action, the Increased Operations Alternative, or the No-Action Alternative.

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Table ES-1 Resource Areas Not Requiring Further Review

Resource Area	Proposed Action	No-Action Alternative
Climate	No change from existing conditions would occur under the Proposed Action, and its implementation would not be impacted by potential effects from climate change. <i>Conclusion: No impact.</i>	No change from existing conditions. <i>Conclusion: No impact.</i>
Coastal Resources	The Proposed Action would be entirely airspace-based and would not involve construction or other ground-disturbing activities near coastal resources. <i>Conclusion: No impact.</i>	No change from existing conditions. <i>Conclusion: No impact.</i>
Cultural Resources	The Proposed Action involves airspace use only, occurring entirely above 6,000 ft MSL (i.e., greater than 3,000 feet above ground level), with no potential for ground disturbing impacts or modifications to current use of the airspace. Therefore, this undertaking is a type of activity that does not have the potential to cause effects on historic properties, assuming such historic properties were present on the surface below the proposed R-2511. In accordance with Section 800.3 (a)(1), the Navy has no further obligations under Section 106 of the National Historic Preservation Act. <i>Conclusion: No potential to cause effects.</i>	No change from existing conditions. <i>Conclusion: No potential to cause effects.</i>
Department of Transportation Act, Section 4(f)	Per FAA Order 1051.1F, SUA actions are exempt from the requirements of Section 4(f). <i>Conclusion: No impact.</i>	No change from existing conditions. <i>Conclusion: No impact.</i>
Geological Resources and Farmlands	There are no mapped Prime Farmland, Unique Farmland, or Farmland of Statewide Importance below the proposed airspace. The Proposed Action would be limited to the establishment of airspace only and would not include any project components that would directly disturb soils. <i>Conclusion: No impact.</i>	No change from existing conditions. <i>Conclusion: No impact.</i>
Hazardous Materials, Solid Waste, and Pollution Prevention	No ground disturbing activities would occur as a part of the Proposed Action. There would be no change in the use of aircraft, missiles, or ordnance as studied in the NAWSCL FEIS/LEIS. <i>Conclusion: No impact.</i>	No change from existing conditions. <i>Conclusion: No impact.</i>
Natural Resources and Energy Supply	The Proposed Action would not involve extractive activities or changes in the energy supply. <i>Conclusion: No impact.</i>	No change from existing conditions. <i>Conclusion: No impact.</i>
Water Resources	No construction activities or other ground-based activities would occur under the Proposed Action, and its implementation would not cause any disturbance of water resources. <i>Conclusion: No impact.</i>	No change from existing conditions. <i>Conclusion: No impact.</i>

Table ES-2 Summary of Anticipated Effects for Resource Areas Analyzed in Detail

Resource Area	Proposed Action	Increased Operations Alternative	No-Action Alternative
Airspace Management and Air Traffic ¹	The Proposed Action would not introduce new or modify existing NAWCWD RDAT&E flight or training activities but instead establishes a RA to improve airspace management, coordination, and flight safety for all aircraft operating in the area. No change from existing conditions and no change to existing flight activities (e.g., flight tempo or aircraft type) is expected to occur under the Proposed Action. All Navy aircraft activities under the Proposed Action would be consistent with activities that currently occur in the existing airspace. <i>Conclusion: Beneficial effects, no significant impact.</i>	There would be up to nine additional annual activations of the proposed R-2511. This would not represent a significant number of operations in the area. This alternative would establish a RA, which would represent a beneficial effect. <i>Conclusion: No significant impact.</i>	No change from existing conditions. <i>Conclusion: No significant impact.</i>
Air Quality	Minor changes in emissions from non-participating aircraft may occur when the R-2511 is activated. Small increases in emissions could occur as aircraft are diverted around the R-2511; however, these changes would likely be above the mixing layer elevation of 3,000 ft (914 meters [m]) above ground level (AGL) and would not be included in the regional air emissions inventory. <i>Conclusion: No significant impact.</i>	There is a potential for slightly more air pollutant emissions as compared to the Proposed Action. However, this is not expected to lead to significant impacts. <i>Conclusion: No significant impact.</i>	No change from existing conditions. <i>Conclusion: No significant impact.</i>
Biological Resources	As there would be no change in the level of aircraft activities and no shift from current operations, there would be no impact on wildlife, including special status wildlife species, beyond current conditions in the region of influence (ROI). The Proposed Action would not result in significant impacts on biological resources when compared to the No-Action Alternative. <i>Conclusion: No significant impact.</i>	This alternative would result in slightly higher noise levels under the proposed R-2511 than compared to the Proposed Action. However, the increase is not expected to lead to significant impacts to wildlife populations. <i>Conclusion: No significant impact.</i>	No change from existing conditions. <i>Conclusion: No significant impact.</i>
Land Use and Visual Resources	Activation of the R-2511 may result in aircraft transiting around the airspace. However, the potential noise and visual impact associated with aircraft transiting around or through the proposed RA would not be significantly different from existing conditions. Few visual receptors would be affected by the Proposed Action. Activities within the airspace would be limited to short-term discrete effects resulting in aircraft overflights. Visual impacts to recreational users would be temporary and minor as the aircraft would only be within viewing range for a short time, and there would be no significant impact.	Implementation of this alternative would lead to a negligible increase in potential noise or visual impacts to the land users within the underlying area. <i>Conclusion: No significant impact.</i>	There would be no change from existing conditions. <i>Conclusion: No significant impact.</i>

Resource Area	Proposed Action	Increased Operations Alternative	No-Action Alternative
	<i>Conclusion: No significant impact.</i>		
Noise	No change in noise levels would be anticipated from the existing to the projected environment within the vicinity of the proposed R-2511, including the Trona National Natural Landmark and any residential areas. No sensitive receptors would be subject to noise levels of 45 dB Community Noise Level (CNEL) or greater, and there would be no increases of 5.0 DB CNEL or greater as compared to the No-Action Alternative. <i>Conclusion: No significant impact.</i>	There is potential for a minor increase in potential noise to the receptors within the ROI. <i>Conclusion: No significant impact.</i>	The current noise levels would not change from existing conditions. <i>Conclusion: No significant impact.</i>
Public Health and Safety	The establishment of the R-2511 would require commercial and GA aircraft to exit the airspace when activated, increasing safety by segregating military aircraft from non-participating aircraft. Air traffic control (ATC) oversight would continue to be administered by Joshua Control, and the more stringent requirements of a RA versus a CFA would lessen the potential for aircraft mishaps within the airspace. <i>Conclusion: Beneficial effects, no significant impact.</i>	There would be up to nine additional annual activations of the proposed R-2511. This would not represent a significant increase in the number of operations in the area. Implementation of this alternative would establish a RA, improving airspace management, coordination, and flight safety. <i>Conclusion: Beneficial effects, no significant impact.</i>	The No-Action Alternative would not result in a change to existing conditions and would not have a significant impact on public health and safety. However, there would be no improvement to airspace management and, therefore, no opportunity to reduce the potential risks to public health and safety. <i>Conclusion: No significant impact.</i>
Socioeconomics and Environmental Justice	The ROI and surrounding communities do not have a disproportionately high minority or low-income population. In addition, there are no significant impacts on the human environment (e.g., noise, air quality, air traffic) resulting from the implementation of the Proposed Action that would affect an environmental justice population in a way that is unique or significant to that population. In addition, there are no specific impacts on the general health or quality of life that would adversely or disproportionately impact the ROI population, including no increased environmental health risks or safety risks to children. <i>Conclusion: No significant impact.</i>	Operations would be consistent with activities that currently occur in the airspace and, as with the Proposed Action, are not expected to generate disproportionate impacts to low-income or minority populations. No increased environmental health risks or safety risks to children would occur. <i>Conclusion: No significant impact.</i>	There would be no change to the socioeconomic and environmental justice conditions within the ROI. The No-Action Alternative would have no disproportionately high or adverse effect on minority or low-income populations and would pose no disproportionate risks to children. <i>Conclusion: No significant impact.</i>

1. Airspace Management and Air Traffic is not an impact area listed in FAA 1051.1F. As the Proposed Action involves modification of special use airspace, the category was added to assess potential impacts to military and civilian users of the airspace.

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CHAPTER 1 INTRODUCTION

The United States (U.S.) Navy (the Navy) has prepared this Environmental Assessment (EA) to evaluate the potential environmental impacts from the establishment of additional Restricted Area (RA) airspace in the vicinity of Naval Air Weapons Station China Lake (NAWSCL), California. This EA has been prepared in accordance with the National Environmental Policy Act (NEPA), as amended (Title 42 of the United States Code [U.S.C.] §§ 4321–4347); the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (40 Code of Federal Regulations [CFR] 1500–1508); Chief of Naval Operations (OPNAV) Instruction 5090.1E, *Environmental Readiness Program*; OPNAV Manual M-5090.1, *Environmental Readiness Program Manual* (Navy 2019); and Federal Aviation Administration (FAA) Order 1051.1F, *Environmental Impacts: Policies and Procedures*.

1.1 COOPERATING AGENCY

The Navy is the proponent of this Aeronautical Proposal and is the lead agency for the preparation of this EA. Congress has charged the FAA with administering all navigable airspace in the public interest as necessary to ensure the safety of aircraft and the efficient use of such airspace. The FAA is the agency with jurisdiction by law and special expertise with respect to changes in the configuration of the National Airspace System (NAS). In accordance with the Memorandum of Understanding between the FAA and Department of Defense (DoD), *Memorandum of Understanding Between the Federal Aviation Administration and the Department of Defense for Environmental Review of Special Use Airspace Actions*, dated September 23, 2019, the FAA is serving as a Cooperating Agency for this EA. This EA has been prepared to satisfy the procedural requirements of NEPA for both the Navy and the FAA. Copies of the cooperating agency correspondence are provided in Appendix C.

As a Cooperating Agency, the FAA will independently review the environmental documents prepared by the Navy and assess whether they meet the agency’s standards for adequacy under NEPA. If the FAA determines that this EA meets its standards, it will adopt the document in whole or in part to fulfill its NEPA obligations for the proposed airspace action.

1.2 SPECIAL USE AIRSPACE

The NAS is the airspace, navigation facilities, and airports of the U.S., along with their associated information, services, rules, regulations, policies, procedures, personnel, and equipment. It includes components shared jointly with the military.

The primary purpose of the FAA Special Use Airspace (SUA) program is to establish/designate airspace in the interest of national defense, security, and/or welfare. Charted SUA identifies to other airspace users where these activities occur. SUA is airspace of defined dimensions wherein activities must be confined because of their nature or wherein limitations may be imposed upon aircraft operations that are not a part of those activities. Types of SUA include Prohibited Areas, RAs, Military Operations Areas (MOAs), Warning Areas, Alert Areas, Controlled Firing Areas (CFAs), and National Security Areas (FAA 2019). The following sections describe RAs, MOAs, and CFAs as they are the primary types of SUA discussed and analyzed in this EA.

A RA (denoted with an “R”) is a type of SUA established under 14 CFR Part 73 provisions, within which the flight of aircraft, while not wholly prohibited, is subject to restriction. Penetration of RAs by nonparticipating aircraft without authorization from the using or controlling agency may be extremely hazardous to the aircraft and its occupants and is prohibited. RAs are established when deemed necessary to confine or segregate activities considered hazardous to nonparticipating aircraft. Examples of hazardous activities include firing of aircraft cannons, rockets, or missiles; aircraft delivery of aerial bombs; firing artillery; surface-to-air or surface-to-surface missile launches; or training aircrews at night in the use of night vision goggles with the external lights of the participating aircraft turned off (FAA 2019).

A MOA is 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 designated to contain nonhazardous military flight activities including, but not limited to, air combat maneuvers, air intercepts, low altitude tactics, etc. (FAA 2019).

A CFA is airspace designated to contain activities that would be hazardous to nonparticipating aircraft if not conducted in a controlled environment. The distinguishing feature of a CFA, compared to other SUA, is that the FAA does not chart CFAs, and activities are suspended immediately when a nonparticipating aircraft approaches the area. The responsibility lies completely with the CFA user to terminate activities so that there is no impact on aviation. Nonparticipating aircraft are not required to avoid the airspace and communications or air traffic control (ATC) separation requirements are not imposed (FAA 2019).

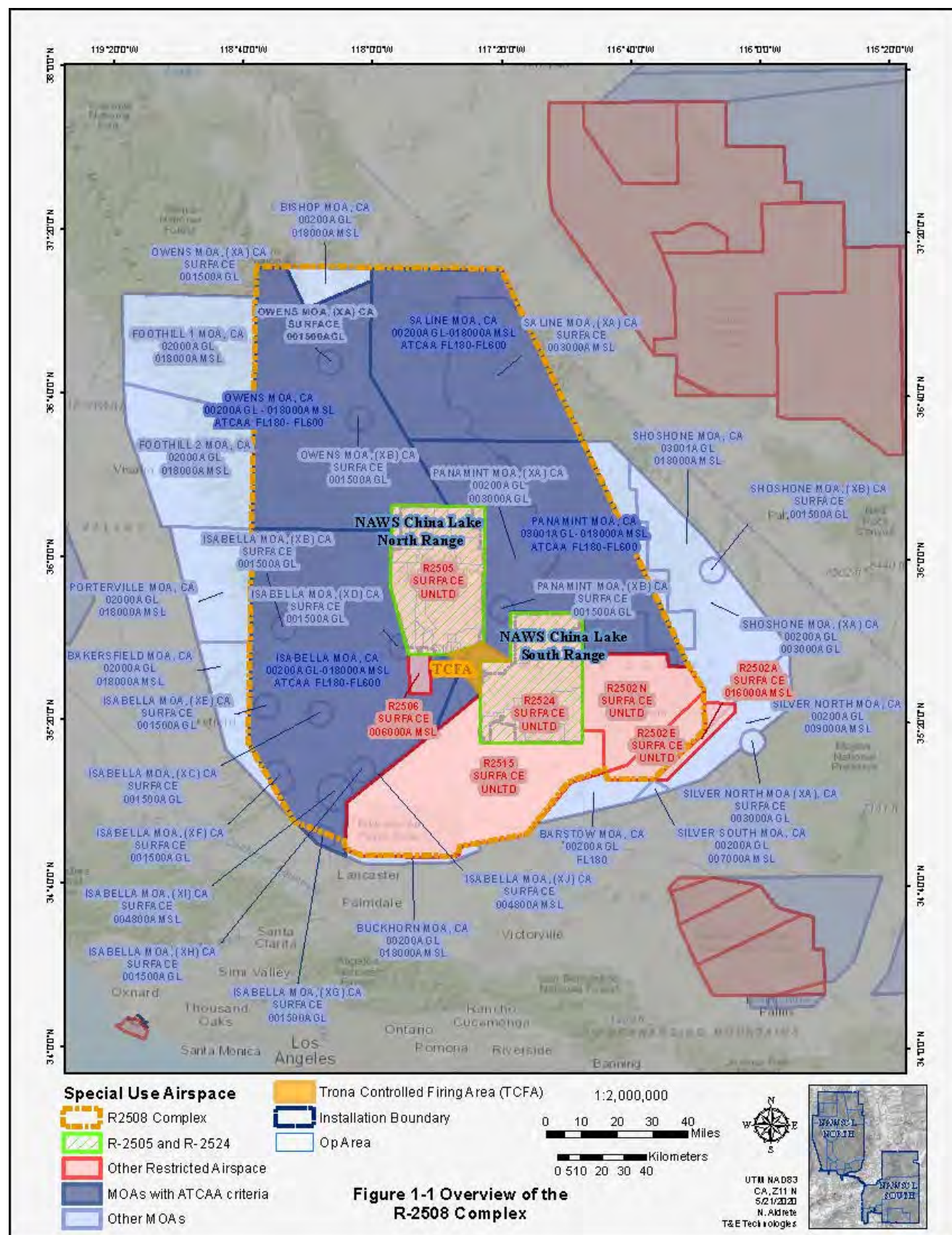
Only those activities that can be immediately suspended when a nonparticipating aircraft is approaching are authorized within a CFA. Examples of such activities include ordnance disposal, blasting, and static testing of large rocket motors. Other activities (e.g., artillery firing, etc.) may be considered, provided they can meet the criteria and comply with the safety precautions. CFAs are not intended to support aircraft ordnance delivery activities. Operation of observer or surveillance aircraft is permitted within a CFA (FAA 2019).

1.3 PROJECT LOCATION

1.3.1 R-2508 Complex

The R-2508 Complex includes airspace presently managed by the three principal military activities in the Upper Mojave Desert region of California: 412th Test Wing, Edwards Air Force Base; National Training Center, Fort Irwin; and Naval Air Warfare Center Weapons Division (NAWCWD), China Lake. The R-2508 Complex is composed of several RAs, MOAs, and Air Traffic Control Assigned Airspace (ATCAAs). The complex includes the existing SUAs R-2505, R-2524, and the Trona Controlled Firing Area (TCFA, Section 1.3.2). The Panamint MOA underlies the TCFA and occupies the elevations of 200 feet (ft) (61 meters [m]) above ground level (AGL), up to, but not including Flight Level (FL) 180. When the TCFA is activated, the Panamint MOA occupies the elevations of 200 ft (61 m) AGL, up to, but not including 6,000 ft (1,830 m) Mean Sea Level (MSL). The R-2508 Complex occupies the area over the TCFA within the elevations of FL 200 to unlimited ceiling.

The R-2508 complex would also include the proposed R-2511 (Section 2.2). Figure 1-1 provides an overview of the R-2508 Complex.



1.3.2 NAWSCL

NAWSCL is located in the western Mojave Desert region of California, approximately 150 miles (241 kilometers [km]) northeast of Los Angeles. NAWCWD is host to NAWCWD and other DoD activities. NAWCWD is the primary tenant command supported at NAWSCL. It is the Department of the Navy Center of Excellence for Weapons and Armaments and has responsibility for research, development, acquisition, test, and evaluation (RDAT&E) for the entire spectrum of naval weapons and armaments (i.e., air, surface, and subsurface).

NAWSCL is separated into two range areas: the North and South ranges, which are overlain by two RAs. R-2505 overlies the North Range, and R-2524 overlies the South Range. NAWCWD, as the NAWSCL Ranges scheduling organization, is the using agency that manages operations conducted within R-2505 and R-2524. The Joshua Control Facility (Joshua Approach) is the Controlling Agency for R-2505 and R-2524. Access to the SUA is governed by FAA regulations.

Command and Control of operations within the North and South ranges, including radar advisory service for R-2505 and R-2524, is provided by China Control. The control center closely monitors the R-2505 and R-2524 airspace during scheduled flight events and ground activities on NAWSCL Ranges that create a hazard more than 500 ft (152 m) AGL. China Control notifies RDAT&E operations conductors whenever non-participating aircraft might intrude into the SUA; RDAT&E activities are not allowed to proceed until the safety of nonparticipants is ensured.

Measures of Elevation or Altitude

Elevation is depicted in multiple conventions. **Mean Sea Level (MSL)** represents true altitude or elevation. It is the average height above standard sea level where the atmospheric pressure is measured to calibrate altitude.

Above Ground Level (AGL) describes the literal height above the ground over which a pilot is flying.

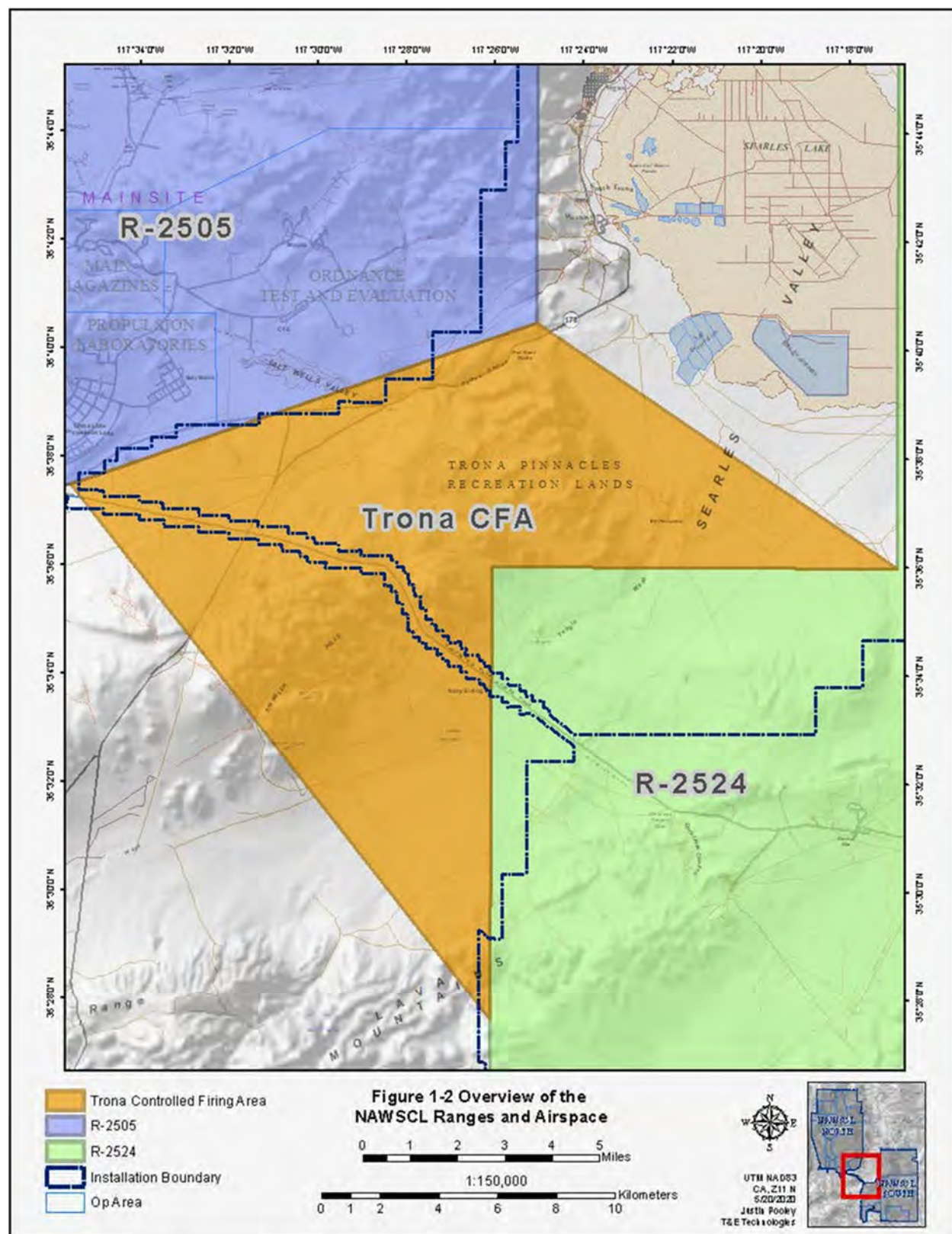
Flight Level (FL) is an aircraft's altitude at standard air pressure, expressed in hundreds of feet.

Sectional charts denote altitudes in MSL, unless AGL elevations are provided in parentheses.

Procedural control oversight of the proposed RA would be provided by the NAWCWD Range Control Center (RCC), which currently has connectivity and an automated interface capability with Joshua Approach for R-2508 operations and the FAA Los Angeles Air Route Traffic Control Center for domestic ATC Operations. Activation of the proposed R-2511 would be controlled by the RCC. Real-time communications currently in place between on-site range safety personnel, actual range users, and the RCC would always continue to be followed during RDAT&E and training activities.

Currently, RDAT&E activities between the North and South ranges can be conducted by activating the TCFA. The TCFA is used for free flight weapon systems transiting from areas within R-2505 to target areas within R-2524 and from launch areas within R-2524 to target areas within R-2505. The TCFA occupies altitudes with a floor of 6,000 ft (1,830 m) MSL and a ceiling up to, but not including, FL 200. Ground elevations under the TCFA range from 1,642 to 3,567 ft MSL (500 to 1,087 m MSL), providing a minimum of 2,433 ft (742 m) between the highest ground level point and the 6,000 ft MSL floor of the TCFA.

Figure 1-2 provides an overview of the NAWSCL ranges and SUA.



1.4 PURPOSE OF THE PROPOSED ACTION

The purpose of the Proposed Action is to establish permanent SUA in the form of a RA, which would allow safe and realistic RDAT&E and training activities on NAWSCL between the North and South ranges. These activities would include aircraft flights between R-2505 and R-2524, free flight weapon launches, and training missions.

1.5 NEED FOR THE PROPOSED ACTION

The Proposed Action is needed to continue RDAT&E and training activities on the NAWSCL Ranges, including aircraft flights and weapons launches between the North and South ranges. The South Range is home to the Electronic Combat Range (ECR), which offers a wide variety of simulated radiofrequency (RF) threats to weapon and aircraft systems. Launches and flights between the two NAWSCL ranges allow the Navy to conduct RDAT&E and training activities in a variety of RF environments that may be encountered in theater. Establishing a RA and replacing the TCFA would create an additional level of segregation from non-participating aircraft not currently provided.

1.6 RELATED ENVIRONMENTAL DOCUMENTATION

Existing NEPA and environmental resource documents were used as the basis for presenting the current operations and existing conditions as described in this EA. The following documents were prepared for actions, including aircraft operations at NAWSCL, and are incorporated by reference into this EA:

- Final Environmental Impact Statement/Legislative Environmental Impact Statement for Renewal of Naval Air Weapons Station China Lake Public Land Withdrawal (NAWSCL FEIS/LEIS, Navy 2015), January 2015,
- NAWCWD Operational Requirements Document for the Legislative Environmental Impact Statement (Navy 2017), May 2017,
- R-2508 Complex Users Handbook (USAF 2020), September 2020, and
- Final Air Installations Compatible Use Zones (AICUZ) Study Naval Air Weapons Station China Lake, California (Navy 2011), April 2011.

1.7 PUBLIC INVOLVEMENT AND AGENCY COORDINATION

NEPA establishes an environmental review process for actions undertaken by federal agencies. The review process is intended to help agency officials make decisions based on an understanding of the environmental consequences and take actions that protect, restore, and enhance the environment (40 CFR §1500.1, 32 CFR Part 775.6(e) and (f), and FAA Order 1051.1F). Further, the NEPA process recognizes the importance of public involvement in the agency decision-making process.

1.7.1 Public Review of the Draft Environmental Assessment

A Notice of Availability of the Draft EA was published in a local newspaper and in the Federal Register. The Notice was also mailed to federal, state, local agencies, and interested members of the public. Federal, state, local agencies, and members of the public were encouraged to review and comment on the Draft EA during the 15-day public review period. Electronic copies of the Draft EA were posted to a project website, <https://R2511EA.com>. Members of the public were able to request a hardcopy or electronic copy on compact disc of the Draft EA through the project website. The Draft EA review period began on June 17,

2021 and ended on July 2, 2021. Appendix B includes a copy of the Notice of Availability and other public involvement materials. No comments on the Draft EA were received from members of the public.

1.7.2 Federal Aviation Administration NEPA Considerations

The Navy has prepared an Aeronautical Proposal (Appendix D) to formally establish the R-2511. In accordance with FAA JO 7400.2M paragraph 21-3-1, the Aeronautical Proposal must:

1. Be based on a specific airspace requirement;
2. Provide the need for the proposed airspace;
3. Be definitive and provide sufficient grounds for establishing the SUA; and
4. Justify any resultant imposition on nonparticipating aircraft and/or to afford priority to the SUA user.

Before proposing the establishment of new SUA, proponents shall consider the use of existing SUA, or the modification of a SUA, to conduct their mission. The FAA considers the establishment or modification of SUA a federal action, which requires environmental review under NEPA.

As a result of the FAA's status as a cooperating agency, the EA is also being prepared following FAA NEPA criteria as contained in FAA JO 7400.2M (FAA 2019), FAA Order 1051.1F (FAA 2015), and the 1051.1F Desk Reference, Version 2 (FAA 2020a).

1.8 NEPA DETERMINATION OF SIGNIFICANCE

The NEPA process consists of an evaluation of the environmental effects of a federal action, including its alternatives. There are three levels of analysis: categorical exclusion, EA/Finding of No Significant Impact (FONSI), and environmental impact statement (EIS)/Record of Decision (ROD).

At the first level, an action may be categorically excluded from a detailed environmental analysis if it meets certain criteria which a federal agency has previously determined as having no significant environmental impact. A number of agencies have developed lists of actions that are normally categorically excluded from environmental evaluation under their NEPA regulations.

At the second level of analysis, a federal agency prepares an EA to determine whether a federal action would significantly affect the environment. If the answer is no, the agency issues a FONSI. The FONSI may address measures which an agency will take to mitigate potentially significant impacts.

If a federal agency determines that the environmental consequences of a proposed federal undertaking may be significant, an EIS is prepared. An EIS is a more detailed evaluation of the proposed action and alternatives. The public, other federal agencies, and outside parties may provide input into the preparation of an EIS and then comment on the draft EIS when it is completed.

If a federal agency anticipates that an undertaking may significantly impact the environment, or if a project is environmentally controversial, a federal agency may choose to prepare an EIS without having to first prepare an EA. After a final EIS is prepared and at the time of its decision, a federal agency will prepare a ROD addressing how the findings of the EIS, including consideration of alternatives, were incorporated into the agency's decision-making process. The Proposed Action does not meet FAA categories for exclusion as provided in FAA Order 1051.1F; therefore, an EA has been prepared.

CHAPTER 2 PROPOSED ACTION AND ALTERNATIVES

NEPA implementing regulations require that a range of reasonable alternatives be evaluated, including a No-Action Alternative. To identify alternatives for the Proposed Action, the Navy rigorously explored and objectively considered other reasonable alternatives to the Proposed Action. Through this process, alternatives were either retained for detailed analysis or eliminated from further consideration. This chapter provides a summary of the process and the alternatives developed.

2.1 SCREENING CRITERIA

Screening criteria were identified to ensure that the alternatives in this EA meet the purpose and need provided in Chapter 1. The following screening criteria were used to develop the alternatives:

1. Tests must be performed between Major Range and Test Facility (MRTFB) ranges.
2. The launch and impact areas must include built infrastructure to properly host RDAT&E events, score tests, and record results.
3. Alternatives considered must allow the testing of radiofrequency (RF) contested scenarios.
4. The SUA must accommodate the flight profile requirements of the NAWSCL RDAT&E mission.
5. Alternatives developed must maintain aviation safety while supporting the military mission needs.

2.2 ALTERNATIVE 1 – PROPOSED ACTION (PREFERRED ALTERNATIVE)

2.2.1 Overview

The Proposed Action would be entirely airspace-based and would establish a SUA, consisting of one RA, connecting the existing R-2505 and R-2524. The new RA would be titled R-2511. The Proposed Action would not change or modify existing military flight activities or weapons testing occurring within the SUA. Aircraft activities would be consistent with those already occurring in the airspace.

The proposed RA would help notify, advise, and alert other pilots of where military training activity could be occurring. The proposed RA would be established when determined necessary to confine or segregate activities considered hazardous to nonparticipating aircraft. Itinerant (non-local) or other aircraft not familiar with NAWCWD RDAT&E activities would now be made aware of the military flight activity more formally by the existence of the proposed RA on the Sectional Aeronautical Chart. The existence of a RA will be mapped on the Los Angeles Sectional Chart and knowledge of its activation would prompt all pilots to take notice of existing military flight activity, resulting in better awareness and coordination. Non-participating aircraft would not be allowed in the RA when activated.

The FAA and the Navy would establish a Letter of Agreement to ensure that radio communications provide adequate coverage to provide service to both participants and nonparticipants; publish area navigation waypoints for use in circumnavigating the SUA; establish recall procedures for weather, emergencies, and medivac aircraft; and codify Joint Use requirements.

The establishment of the proposed RA would improve flight safety for all pilots (civilian, commercial, and military) while improving the capability of the NAWCWD to conduct RDAT&E and training activities.

The proposed R-2511 would create a linkage between R-2505 and R-2524, covering an area of approximately 87 square mi (225 square km). Figure 2-1 provides an overview of the proposed R-2511. The proposed RA would be located in San Bernardino County, California. A description of the proposed R-2511 is provided below.

Designated Altitudes: 6,000 ft MSL to, but not including, FL 200 (20,000 ft MSL).

Times of Use: Activated by Notice to Airmen (NOTAM) at least seven (7) days in advance, between 0700-1700L Monday through Friday.

Controlling Agency: Joshua Approach.

Using Agency: NAWCWD, China Lake, California.

Annual operations would be conducted within the proposed R-2511 up to 36 days per year, which is the current operations tempo for this airspace. Operations would be scheduled for two-hour blocks, with a maximum of two blocks authorized per day. The airspace will be activated 15 minutes prior (with Joshua Approach) to transition between R-2505 and R-2524. While the airspace would be scheduled for a two-hour block, operations generally last 10 to 15 minutes, for a total activation time of 25 to 30 minutes. Once transition is complete, the airspace will be returned to the controlling agency (Joshua Approach). The RA must be coordinated five working days in advance with the R-2508 Central Coordinating Facility, as per the Letter of Agreement.

Free flight weapon systems, their associated aircraft platforms, and chase planes would cross the proposed RA, as they transit from launch areas within R-2505 to target areas within R-2524 and from launch areas within R-2524 to target areas within R-2505. Other unproven or immature weapon systems or aviation platforms in testing and development may also utilize the proposed restricted airspace if they are found to be consistent with weapon systems described in the NAWCWD Operational Requirements Document (ORD). The ORD contains the NAWCWD operations requirements that are considered in the NAWSCL FEIS/LEIS. If the weapon systems are found to be consistent with the ORD, they are then consistent with the NAWSCL FEIS/LEIS. Weapon systems and aviation systems found not to be consistent with the ORD would require further NEPA analysis prior to use on NAWSCL ranges.

Mission scenarios for aircraft utilizing the proposed R-2511 would include launch platforms for free flight weapon systems, simulated close air support, and reconnaissance operations.

2.2.2 Free Flight Weapon Systems Safety Measures

When necessary to meet risk acceptance criteria provided in Range Commanders Council Standard 321-20, *Common Risk Criteria Standards for National Test Ranges*, weapons transiting R-2511 will have a Flight Termination System (FTS) capable of terminating the weapon's flight and ensuring it does not leave a predetermined corridor. The termination criteria provided in the following two paragraphs apply only to test items equipped with FTS.

Weapon termination boundaries would be determined on a case-by-case basis and would take into account the weapon's speed, maneuverability, altitude, and debris propagation following a termination command. Weapon health and status would be evaluated prior to launch and throughout the flight. Prior to entering R-2511, the test execution team would ensure the weapon is functioning nominally and that it is following its

planned trajectory. Weapons transiting R-2511 would be tracked by sources capable of providing real-time Time Space Position Information (TSPI) to the Flight Termination Officer (FTO). If TSPI is unavailable prior to entering R-2511, weapon flight would be terminated. If TSPI indicates that the weapon has deviated from its nominal flight path and crosses the termination boundaries, its flight would be terminated.

Weapon malfunctions occurring prior to launch would be assessed in regards to their impact on the ability to safely transit R-2511. The weapon would not be launched in a known degraded state if the malfunctions could prevent successful transit of R-2511 along the nominal route. Weapon malfunction after launch would not automatically be grounds for terminating its flight. Consideration will be given to the nature of the malfunction and whether it jeopardizes the weapon's safe transit of R-2511. In all cases, the FTO would exercise best judgement to activate the FTS at a time and location that minimizes risk to populated areas (Appendix D).

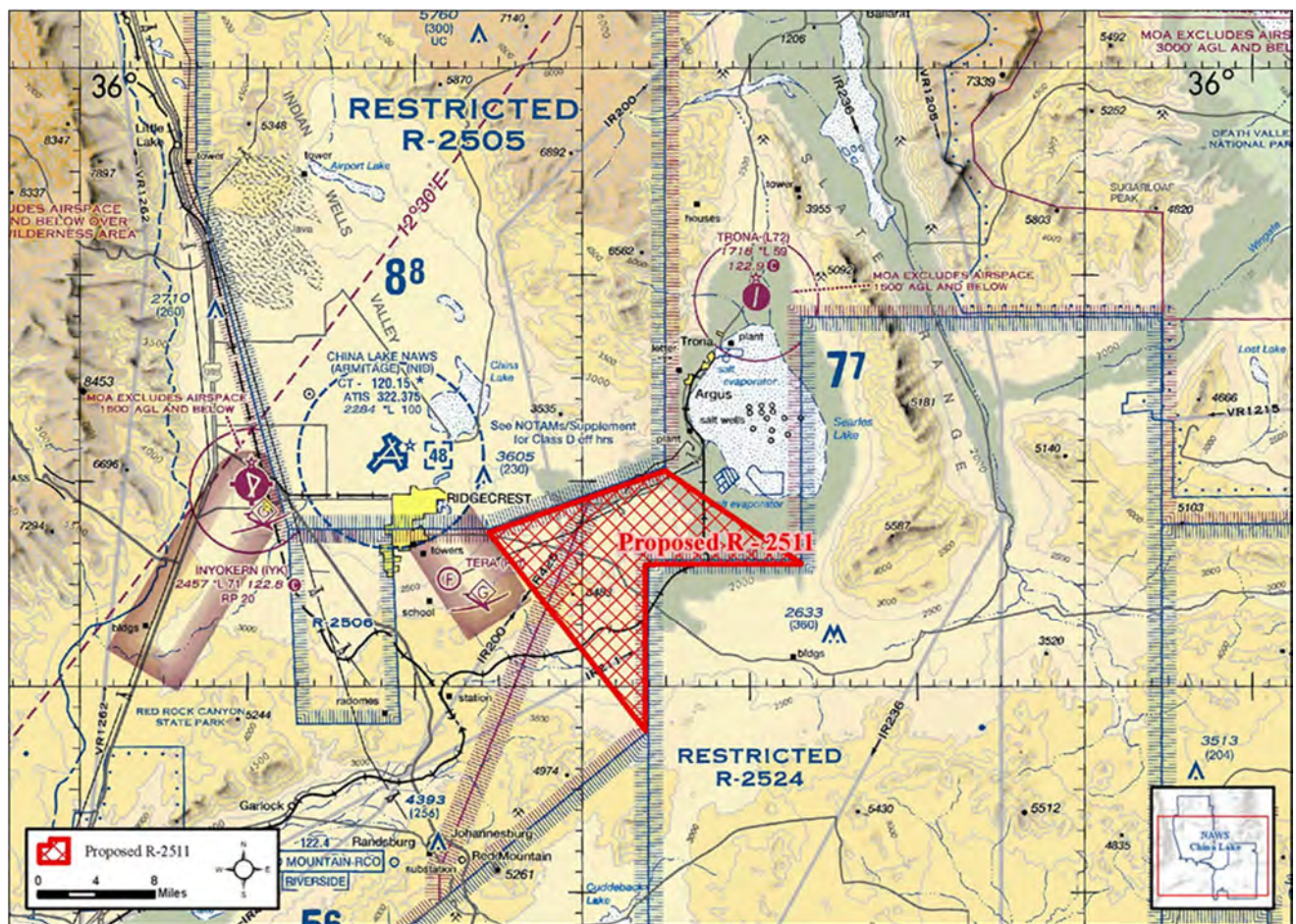


Figure 2-1 Overview of the Proposed R-2511

2.2.3 Access for Emergency Flights

In the event emergency access through the proposed RA is required, participating aircraft would be notified of the situation by the NAWCWD RCC. The RCC would direct non-emergency aircraft to a location or altitude, which would allow for sufficient separation of emergency response aircraft activities and participating RA aircraft. Emergency response aircraft would be expected to make their access requirements

known to the RCC on the appropriate published frequencies/telephone number(s) and communicate with NAWCWD when traversing the proposed RA. In all cases, whether the proposed RA is active or not, emergency aircraft and missions will continue to have priority over routine RDAT&E and training activities. This may apply to medical evacuation, fire suppression, fire spotting, law enforcement activity, or any other emergency situations (e.g., search and rescue).

2.2.4 Communications and Radar Surveillance

Under the Proposed Action, no major changes to the existing communications and radar surveillance at the NAWSCL ranges would occur. Existing equipment used for real-time communications between on-site range users, on-site range safety personnel, and the RCC would continue to be sufficient under the Proposed Action. Existing radar surveillance and communications capabilities would continue to provide the control capabilities for observing aircraft that overfly training areas and to maintain the ability to direct an immediate cessation of operations to ensure the safety of any non-participating aircraft.

2.3 ALTERNATIVE 2 – INCREASED OPERATIONS

The ROD for the NAWSCL FEIS/LEIS, dated 3 February 2016, allowed for an increase of up to 25 percent in “RDAT&E and training tempos within current land use areas approved for designated uses, expansion of unmanned aerial and surface systems, and expansion of existing and introduction of evolving directed energy weapons development.” This increase in operations pertained to the land withdrawal areas of the North and South ranges and did not apply to off-station areas like the TCFA. This alternative would include increased use of the proposed RA to accommodate the maximum operations tempo allowed on NAWSCL land use areas.

Alternative 2 would incorporate the same 25 percent increase in tempo detailed in the NAWSCL FEIS/LEIS ROD. Annual operations would increase from a maximum of 36 days per year to 45 days per year. Operations would be conducted within two-hour blocks, with a maximum of two blocks authorized per day. All other program details for Alternative 1 would be implemented under this alternative (see Sections 2.2 through 2.2.4).

2.4 THE NO-ACTION ALTERNATIVE

Under the No-Action Alternative, the proposed RA would not be established. The current Letter of Authorization for the TCFA would expire in May 2022, and no new application for renewal of the CFA would occur. Free flight weapons tests between the NAWSCL North and South ranges would cease upon expiration of the TCFA Level of Authorization.

The No-Action Alternative is not considered a reasonable alternative because it does not meet the purpose of and need for the Proposed Action, nor does it meet the screening criteria provided in Section 2.1. However, as required under CEQ regulations (40 CFR §1502.14[d]), the No-Action Alternative does provide a description of the current baseline conditions up to May 2022 against which the impacts of the Proposed Action can be compared.

2.5 COMPARISON OF ALTERNATIVES

Table 2-1 provides a summary of the alternatives analyzed in this EA.

Table 2-1 Comparison of Alternatives

Screening Criterion	Does Alternative Meet Screening Criteria?		
	Alternative 1	Alternative 2	No-Action Alternative ¹
1. Tests between MRTFB ranges	Yes	Yes	No
2. Sufficient built infrastructure	Yes	Yes	Yes
3. Testing of RF-contested scenarios	Yes	Yes	No
4. Meets NAWCWD RDAT&E mission requirements	Yes	Yes	No
5. Maintains aviation safety	Yes	Yes	Yes ²

Notes:

1. Under the No-Action Alternative, transits of the TCFA would continue until May 2022. Afterward, free-flight weapons tests between R-2505 and R-2524 would cease.
2. Aviation safety would be maintained by use of the TCFA until May 2022. After this TCFA transits would cease, removing the risk associated with these operations.

2.6 ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD

The following alternatives were considered during project planning and scoping but were eliminated from further detailed analysis based on the reasons provided below.

2.6.1 Changing Dimensions of the Current Restricted Areas

This alternative would involve modification of the boundaries of either R-2505 or R-2524 in a manner that would connect the two RAs. This alternative was determined to be infeasible, as both existing RAs extend from ground level to an unlimited ceiling, and the Navy does not own or manage the land under the needed airspace expansion.

2.6.2 Testing between Different Restricted Areas

Under this alternative, free flight weapons tests would be conducted between RAs other than R-2505 and R-2524 within the R-2508 Complex. This was determined not to meet the screening criteria of requiring 1) appropriate built infrastructure and 2) performing RDAT&E activities within a RF-contested environment. As such, this alternative was not carried forward for further analysis.

2.6.3 Stratification of R-2511

This alternative would allow the floor of the proposed RA to be lifted so that non-participating aircraft could fly under the activated airspace during some testing activities. The Navy conducted a thorough safety analysis of this proposed alternative and determined that the narrow altitude band of the proposed RA would provide insufficient standoff distance between the weapons being tested and non-participating aircraft to justify conducting live-fire events within a stratified R-2511. As such, this alternative was not carried forward for further analysis.

CHAPTER 3 AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND CUMULATIVE EFFECTS

This chapter describes the affected environment and evaluates the potential direct, indirect, short-term, and long-term impacts for each relevant environmental resource potentially affected by the Proposed Action. An evaluation of the potential cumulative impacts resulting from the Proposed Action, when added to other past, present, and reasonably foreseeable future projects and actions, is also included in this chapter.

Under NEPA, the federal agency proposing an action must evaluate the environmental effects (impacts) that can reasonably be anticipated to be caused by or result from the Proposed Action and alternatives. The Proposed Action will be required to comply with federal, state, and local laws and regulations. The potential environmental impacts that have been evaluated are those impacts that can reasonably be expected to result from the implementation of the Proposed Action. In identifying direct impacts and reasonably foreseeable indirect impacts, the Navy has taken into account all applicable measures and restrictions protective of human health and the environment that are required by existing laws and regulations.

Each environmental resource area potentially impacted by the Proposed Action is addressed in its own section, numbered as follows:

- Section 3.2, *Airspace Management and Air Traffic*;
- Section 3.3, *Air Quality*;
- Section 3.4, *Biological Resources*;
- Section 3.5, *Land Use and Visual Resources*;
- Section 3.6, *Noise*;
- Section 3.7, *Public Health and Safety*; and
- Section 3.7, *Socioeconomics and Environmental Justice*.

Cumulative impacts result from incremental impacts of an action when combined with other past, present, and reasonably foreseeable projects and actions. Cumulative impacts can result from individually minor but collectively significant actions over a period of time. Cumulative impacts would occur if incremental impacts of the Proposed Action, added to the environmental impacts of past, present, and reasonably foreseeable similar projects and actions would result in an adverse effect to resources in the region. A list of other known cumulative projects and the ROI for each resource area examined in detail is included in Appendix E.

For each resource area, the potential direct, indirect, and cumulative impacts are identified, if applicable, and the methodology, ROI, and general assumptions used in the impact analysis are presented. Each identified impact is characterized according to its significance. Although the focus of this analysis is on identifying potential adverse impacts, some beneficial effects also are identified by the analysis.

3.1 RESOURCE AREAS NOT CONSIDERED IN DETAIL

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

3.1.1 Climate

No change from existing conditions would occur under the Proposed Action, and its implementation would not be impacted by potential effects from climate change. Therefore, this resource was eliminated from further consideration. However, a qualitative greenhouse gases (GHG) emissions assessment is provided in Section 3.3.3.

3.1.2 Coastal Resources

The Proposed Action would be entirely airspace-based and would not involve construction or other ground-disturbing activities near coastal resources. Consequently, there would be no impact on coastal resources associated with the Proposed Action.

3.1.3 Cultural Resources

The Proposed Action involves airspace use only, occurring entirely above 6,000 ft MSL (i.e. greater than 3,000 ft AGL), with no potential for ground disturbing impacts or modifications to current use of the airspace. Therefore, this undertaking is a type of activity that does not have the potential to cause effects on historic properties, assuming such historic properties were present on the surface below the proposed R-2511. In accordance with Section 800.3 (a)(1) the Navy has no further obligations under Section 106 of the National Historic Preservation Act. However, coordination with the California State Historic Preservation Office (SHPO) has been conducted. The FAA has requested SHPO concurrence that no effects on historic properties are anticipated. No response was received from SHPO, and concurrence that no effects on cultural resources is assumed. Correspondence with the SHPO is provided in Appendix C.

3.1.4 Department of Transportation Act, Section 4(f)

A Section 4(f) analysis is not required for this action pursuant to the DoD Reauthorization Act of 1997, which provided that “[n]o military flight operations (including a military training flight), or designation of airspace for such an operation, may be treated as a transportation program or project for purposes of Section 303(c) of Title 49, U.S. Code (Public Law 105-85).” As described in the FAA Order 1051.1F Desk Reference, this language “[e]xempts military flight operations and designation of airspace for such operations from Section 4(f).” The proposed action falls under the exemption, and therefore this resource was eliminated from further consideration.

3.1.5 Geological Resources and Farmlands

There are no mapped Prime Farmland, Unique Farmland, or Farmland of Statewide Importance below the proposed airspace. The Proposed Action would be limited to the establishment of airspace only and would not include any project components that would directly disturb soils. Therefore, geological resources, including any unmapped farmland soils, were eliminated from further consideration.

3.1.6 Hazardous Materials, Solid Waste, and Pollution Prevention

No ground disturbing activities would occur as a part of the Proposed Action. There would be no change in the use of aircraft, missiles, or ordnance as studied in the NAWSCL FEIS/LEIS (Navy 2015). Therefore, this resource was eliminated from further consideration.

3.1.7 Natural Resources and Energy Supply

The Proposed Action would not involve extractive activities or changes in the energy supply. Consequently, there would be no impact on natural resources and energy supply associated with the Proposed Action.

3.1.8 Water Resources

No construction activities or other ground-based activities would occur under the Proposed Action, and its implementation would not cause any disturbance of water resources. There are no wild or scenic rivers within the vicinity of the project area. Therefore, this resource was eliminated from further consideration.

3.2 AIRSPACE MANAGEMENT AND AIR TRAFFIC

3.2.1 Definition of Resource

Airspace is a three-dimensional resource defined by latitude, longitude, and altitude. The FAA has the responsibility for developing plans and policies for the use of all navigable airspace and for assigning (by regulation or order) the use of the airspace necessary to ensure both the safety and efficient use of all airspace (49 U.S.C. §40103[b]). FAA JO 7400.2M, *Procedures for Handling Airspace Matters*, describes specific rules and regulations concerning airspace designation and management (FAA 2019). The DoD requests airspace from the FAA and schedules and uses airspace in accordance with processes and procedures detailed in DoD Directive 5030.19, *DoD Responsibilities of Federal Aviation*, and FAA regulations.

Airspace management is necessary to ensure that all users of the NAS can operate in “navigable airspace” in a safe, secure, and efficient manner. Airspace management considers airspace designation, usage, and administration to best accommodate the individual and common needs of military, commercial, general aviation, and private citizens by controlling airspace allocation and utilization, obstruction evaluations and markings, and the control of air traffic and handling of flight operations. The FAA defines airspace management as the direction, control, and handling of flight operations in the “navigable airspace” that overlies the geopolitical borders of the U.S. and its territories. Navigable airspace means airspace at or above the minimum altitudes of flight defined by regulations and includes the airspace needed to ensure safety in the takeoff and landing of aircraft (49 USC §40102) and the airspace needed for military training and other special uses.

The FAA identifies SUA for military and other governmental activities charted and published by the National Aeronautical Charting Office in accordance with FAA JO 7400.2M, *Procedures for Handling Airspace Matters* (FAA 2019), and other applicable regulations. The FAA administers “navigable airspace” in the public interest as necessary to ensure its efficient use and the safety of aircraft. The FAA considers multiple and sometimes competing demands for aviation airspace in relation to airport operations, Air Traffic Service Routes [Jet (J), Q, Victor (V) and Tango (T) routes], military flight training activities, and other special needs to determine how the NAS can best be structured to address all user requirements. FAA JO 7400.10B, *Special Use Airspace*, describes approved SUA compiled once a year, with the exception of temporary and controlled firing areas (FAA 2020b). Similarly, descriptions of the terminal and enroute airspace area designations and reporting points are published once a year in FAA JO 7400.11E, *Airspace Designations and Reporting Points* (FAA 2020c).

Air traffic refers to the movement of aircraft through airspace. Airspace and the control of air traffic are tightly regulated for safety and security reasons. As such, the FAA regulates all aircraft to define permissible uses of designated airspace and to control use within the airspace. A RA is airspace established under 14 CFR Part 73 provisions, within which the flight of aircraft, while not wholly prohibited, is subject to restriction. Penetration of RA by nonparticipating aircraft without authorization from the using or controlling agency may be extremely hazardous to the aircraft and its occupants. The Proposed Action would establish a new RA, designated as R-2511.

3.2.2 Existing Conditions

The existing airspace is managed as a Controlled Firing Area ([CFA], known as the Trona CFA or TCFA) and is used for free flight weapon systems and associated aircraft transiting from areas within R-2505 to target areas within R-2524 and from launch areas within R-2524 to target areas within R-2505. The TCFA occupies altitudes with a floor of 6,000 ft (1,830 m) MSL and a ceiling up to, but not including FL 200. The R-2508 overlies the TCFA to an unlimited ceiling. The proposed R-2511 would have the same dimensions as the TCFA

3.2.2.1 Existing NAWCWD Flight Activities

The Proposed Action would not change or modify existing NAWCWD military flight activities occurring within existing training areas. NAWCWD aircraft activities would continue to be consistent with activities that currently occur in the existing airspace. No new NAWCWD military flight activities are being introduced as part of this Proposed Action.

Annual operations are conducted within the proposed R-2511 up to 36 days per year, which is the current operations tempo for this airspace. Operations would be scheduled for two-hour blocks, with a maximum of two blocks authorized per day. The airspace will be activated 15 minutes prior (with Joshua Approach) to transition between R-2505 and R-2524. While the airspace would be scheduled for a two-hour block, operations generally last 10 to 15 minutes, for a total activation time of 25 to 30 minutes. Once transition is complete, the airspace would be returned to the controlling agency (Joshua Approach). The RA must be coordinated five working days in advance with the R-2508 Central Coordinating Facility, as per the Letter of Agreement.

NAWCWD must provide an activation notice to the following airports, at least 24 hours in advance of intended operations within the TCFA: China Lake Naval Air Weapons Station (Armitage Field), Inyokern Airport, Tera Ultralight Flightpark, and the Trona Airport.

Trained observers are required in sufficient quantity to continuously monitor the entire perimeter of the TCFA and an additional radius of 5 miles (8 km) beyond the perimeter. The observers should be positioned in a manner to observe possible penetration of the TCFA by nonparticipating aircraft. Radar surveillance may augment but shall not replace human observance. The establishment of R-2511 would eliminate the requirements for local airport notification and the placement of observers stationed around the TCFA, as NOTAM would be published seven days in advance of activation, alerting pilots of planned activities.

3.2.2.2 Civilian Airports

No civilian airports are located under the proposed R-2511. The closest civilian airport is the Tera Ultralight Flightpark, which is approximately 1.2 miles (1.9 km) west of the proposed R-2511 and approximately 2

miles (3.2 km) east of Ridgecrest, California. The privately-owned airport does not have a control tower and is utilized by ultralight and sailplane aircraft (SkyVector 2021a).

The Inyokern Airport is open to the public and is located approximately 12.6 miles (20.2 km) west northwest of the proposed R-2511, in the community of Inyokern, California. The airport does not have an operational control tower and reported 1,374 commercial operations, 3,000 military operations, and 26,700 GA operations during the 12-month period ending February 19, 2019 (SkyVector 2021b).

The Trona Airport is located approximately 12 miles (19.3 km) northeast of the proposed R-2511. The airport is open to the public and has no control tower. For the 12-month period ending December 26, 2018, the airport reported 4,500 GA operations to the FAA (SkyVector 2021c).

3.2.2.3 Non-Participating Air Traffic

An Airspace Traffic Analysis has been conducted to support this EA, providing an analysis of air traffic operations within and in close proximity to the proposed R-2511 and is provided as Appendix F. The analysis focused on characteristics of recent traffic operations from fiscal year (FY) 2019 transiting the proposed airspace. The purpose of this analysis was to provide an inventory of both civilian and military usage of the proposed airspace.

A total of 3,118 flight tracks crossed proposed R-2511 airspace during FY2019, of which 27 percent (842 crossings) were made by aircraft classified as civilian, 12.6 percent (394 crossings) were made by military aircraft, and 60.4 percent (1,882 crossings) were made by flights of unknown origin. These 1,882 crossings were uncategorized due to limitations in the radar data. Of the 1,236 known flights categorized as either civilian or military, 69.1 percent (854 crossings) were made by an aircraft on an instrument flight plan, and 30.1 percent (382 crossings) were VFR (ATAC 2020).

The majority of aircraft (96.9 percent) crossed R-2511 airspace below FL180. Of the aircraft that crossed above FL180, 5.8 percent (6 crossings) were civilian, 61.5 percent (64 crossings) were military, and 32.4 percent (34 crossings) were uncategorized (ATAC 2020).

Approximately half of the civilian flights crossing the proposed R-2511 did not have origin or destination airport information due to lack of data captured by the ATC system. Of those flights with airport information, most aircraft were traveling to or from airports located in the Las Vegas area, as well as Bakersfield and Trona. The most prevalent origin and destination airports for military aircraft crossing R-2511 were Edwards Air Force Base and China Lake Naval Air Weapons Station. There are no Air Traffic Service Routes within the vicinity of the proposed R-2511 (ATAC 2020).

On average, there were 9.0 crossings per day through the proposed R-2511 airspace. There are no published airways located within the boundaries of the proposed airspace. However, this area, commonly referred to as the Trona Gap, is a known corridor for GA aircraft flying to Death Valley or as a shortcut to Las Vegas from the west. In addition, military aircraft not participating in activities in R-2524 and R-2505 must also transit using this gap. In order to avoid the proposed R-2511 airspace when active, these aircraft would either need to fly below the floor of the RA (below 6,000 ft [1,830 m] MSL) or plan flights around the activation times published by NOTAM.

3.2.3 Approach to Analysis

Analysis of the potential effects of the Proposed Action on the existing airports and airspace environment considers the changes in airspace utilization that would result from the establishment of the proposed R-2511. The Navy and FAA have no prescribed methodology for assessing impacts to airspace management and air traffic, as neither is considered an impact category for analysis in their NEPA implementation guidance. For the purposes of this EA, the significance of potential impacts to airspace management depends on the degree to which the establishment of the proposed RA would affect the regional airspace environment. Significant impacts could potentially result if the Proposed Action: (1) substantially affected the movement of other air traffic in the area; (2) compromised ATC systems or facilities; or (3) caused an increase in potential midair collision between military and non-participating civilian aircraft. These impact criteria are similar to those used in other SUA modification EAs conducted over the past few years.

3.2.4 Environmental Consequences

3.2.4.1 Alternative 1 – Proposed Action (Preferred Alternative)

The Proposed Action would not introduce new or modify existing NAWCWD RDAT&E flight or training activities but instead establishes a RA to improve airspace management, coordination, and flight safety for all aircraft operating in the area. No change from existing conditions and no change to existing flight activities (e.g., flight tempo or aircraft type) is expected to occur under the Proposed Action. All Navy aircraft activities under the Proposed Action would be consistent with activities that currently occur in the existing airspace.

The Proposed Action would require a Letter of Agreement between FAA Los Angeles Air Route Traffic Control Center ([ARTCC], the controlling agency) and NAWCWD (the using agency) to establish and document the detailed procedures for communication and coordination. Letters of Agreement such as these are routinely used for this type of coordination, and the procedures to be followed would be fully vetted by the FAA and the Navy and would be consistent with all applicable Federal Aviation Regulations.

Following the establishment of the proposed RAs, non-participating aircraft would be required to avoid the R-2511 when activated, resulting in a temporary reduction in total available NAS. However, this would be temporary (on average, between 25 to 30 minutes per activation) and would occur up to 36 times per year.

Emergency Access

In the event that emergency access through the proposed RA is required, participating aircraft would be notified of the emergency response aircraft by the NAWCWD RCC. The NAWCWD RCC would direct non-emergency aircraft to a location or altitude, which would allow for sufficient separation of emergency response aircraft activities and participating aircraft. Emergency response aircraft would be expected to make their access requirements known to the NAWCWD RCC on the appropriate published frequencies/telephone number(s) and communicate with NAWCWD when traversing the proposed RA.

The establishment of the proposed RA has been developed in coordination and consultation with the FAA. The Proposed Action was developed by the Navy to improve flight safety; accommodate joint use for reasonable and timely access to underlying public or private land; not impede public safety access for firefighting and other emergency services; support Los Angeles ARTCC's computer system, and meet all FAA requirements; and not impact existing ATCAA.

Based on the improvements to airspace management defined above, the Proposed Action would not result in a significant impact on airspace management. Implementation of the Proposed Action would result in an overall improvement to airspace management and coordination within the proposed RA by clearly designating airspace for its intended use (i.e., RDAT&E and training activities). Therefore, the Proposed Action would have a beneficial effect on airspace management.

Air Traffic

The existing airspace is used for free flight weapon systems and associated aircraft transiting from areas within R-2505 to target areas within R-2524 and from launch areas within R-2524 to target areas within R-2505.

When the R-2511 is activated, non-participating aircraft would have to avoid the proposed RA. Non-military aircraft currently operating under VFR could fly under the R-2511 when activated. Aircraft operating under IFR would transit around or above the R-2511 when active. Often aircraft operating in the area would avoid the airspace altogether, having received the NOTAM prior to activation.

With a total 3,118 flights crossing the proposed R-2511 in FY2019, an average of 9.0 aircraft per day could be impacted up to 36 times per year. Considering that activations would last between 25 and 35 minutes per event, impacts to regional air traffic would be minimal as the activation time would be short and pilots would be given adequate time to adjust flight times or routes.

Flight Safety

As described above, the improvement in airspace management and coordination would minimize the potential for midair collisions and other airspace mishaps because non-participating aircraft would fly around or avoid the RA when activated. As a result, from the improvement to airspace management and coordination, a decrease in the potential for aircraft accidents and improvement to flight safety for all pilots (e.g., civilian, commercial, and military) would be expected.

Conclusion

Based on the criteria developed for this EA, the Proposed Action would not result in significant impacts on airspace management and air traffic. Implementation of the Proposed Action would result in an overall increase in flight safety by clearly designating airspace for its intended use (i.e., RDAT&E and training activities). Therefore, implementation would improve airspace management, coordination, and flight safety, resulting in a beneficial effect.

3.2.4.2 Alternative 2 – Increased Operations

Under Alternative 2, there would be up to nine additional annual activations of the proposed R-2511. This would not represent a significant number of operations in the area. As with the Proposed Action, implementation of Alternative 2 would establish a RA, improving airspace management, coordination, and flight safety. Therefore, implementation of Alternative 2 would have a beneficial effect on regional airspace management.

3.2.4.3 Alternative 3 – The No-Action Alternative

Under the No-Action Alternative, the proposed R-2511 would not be established and the Navy would cease operations within the existing airspace in May 2022. Prior to that, improvements to airspace management and coordination would not occur. Non-participating flight activities would continue to enter the airspace without the safety benefits afforded to RA activation. Therefore, expected improvements to flight safety would not occur. To mitigate potential safety risks (e.g., midair collisions), the NAWCWD RCC would continue to monitor training areas to determine whether non-participating aircraft are present and suspend military activities, if necessary, as a safety precaution.

Until the May 2022 cessation of operations within the TCFA, the No-Action Alternative would not result in a change to existing conditions and, with continuation of existing monitoring by the NAWCWD RCC, would not have a significant impact on airspace management. However, there would be no improvement to airspace management and, therefore, no opportunity to reduce the potential for midair collisions between military and non-participating civilian aircraft.

3.2.5 Cumulative Effects

In addition to the direct environmental consequences already discussed, additional considerations required by NEPA include the potential cumulative effects of the Proposed Action. Potential cumulative effects could occur when the effects of the Proposed Action are combined with other past, present, and reasonably foreseeable projects and actions (Appendix E).

The Proposed Action would result in a beneficial effect on public health and safety in the ROI. Other projects from Appendix E considered for cumulative impacts involving safety include the Southern California Optimization of Airspace and Procedures in the Metroplex and the Las Vegas Metroplex projects. The purpose of each Metroplex project is to optimize air traffic procedures and use of airspace on a regional scale by using technological advances in navigation (e.g., Global Positioning System [GPS] versus navigational aid routing) while allowing aircraft not equipped with the more modern technology to access the NAS. These projects increase the efficiency of scheduling flights, and therefore increase public safety in the areas covered by the Metroplexes.

The NAWSCL area is not included in a Metroplex implementation area, and no changes to airspace usage would occur as a result of the Metroplex projects, but the establishment of the R-2511 would provide a beneficial effect to safety in the area. Therefore, a beneficial effect to airspace management would occur with the implementation of the Proposed Action when considered along with past, present, and reasonably foreseeable projects and actions in the ROI.

3.3 AIR QUALITY

3.3.1 Definition of Resource

Air quality in a given location is defined by pollutant concentrations in the atmosphere and is generally expressed in units of parts per million (ppm) or micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). One aspect of significance is a pollutant's concentration in comparison to a national and/or state ambient air quality standard. These standards represent the maximum allowable atmospheric concentrations that may occur while still protecting public health and welfare with a reasonable margin of safety. The national standards, established by the U.S. Environmental Protection Agency (USEPA), are termed the National Ambient Air Quality Standards (NAAQS) (Table 3-1). The NAAQS for criteria pollutants other than for ozone, particulates, and those based on annual averages are not to be exceeded more than once a year. Some NAAQS also have annual arithmetic mean requirements, which represents the arithmetic average of all of the reported 1-hour values. State standards established by the California Air Resources Board (CARB) are termed the California Ambient Air Quality Standards (CAAQS). The CAAQS are at least as restrictive as the NAAQS and include pollutants for which national standards do not exist.

Areas that violate ambient air quality standards are designated as nonattainment areas. Nonattainment designations for ozone (O_3) and carbon monoxide (CO) include subcategories indicating the severity of the air quality problem (e.g., the classifications range from *basic* to *severe* for O_3). Areas that comply with federal air quality standards are designated as attainment areas. Areas that have been re-designated from nonattainment to attainment are designated as maintenance areas. Areas that lack monitoring data to demonstrate attainment or nonattainment status are designated as unclassified and are considered to be in attainment for regulatory purposes.

The air pollutants that are considered in this analysis include volatile organic compounds (VOCs), O_3 , CO , nitrogen oxides (NO_x), particulate matter less than or equal to 10 microns in diameter but greater than 2.5 microns in diameter (PM_{10}), and particulate matter less than or equal to 2.5 microns in diameter ($\text{PM}_{2.5}$). Emissions are often characterized as being “primary” or “secondary” pollutants. Primary pollutants are those emitted directly into the atmosphere such as CO , sulfur dioxide (SO_2), PM_{10} and $\text{PM}_{2.5}$. Secondary pollutants are those formed through chemical reactions in the atmosphere such as O_3 and nitrogen dioxide (NO_2). SO_2 and NO_2 are commonly referred to and reported as generic oxides of sulfur (SO_x) and nitrogen (NO_x), respectively, since SO_2 and NO_2 constitute the majority of their respective oxides. Although VOCs (also referred to as hydrocarbons or reactive organic gases) and NO_x (other than nitrogen dioxide) have no established ambient standards, they are important as precursors to O_3 formation.

3.3.1 Existing Conditions

The Mojave Desert Air Quality Management District is responsible for implementing and enforcing state and federal air quality regulations for the portion of NAWSCL located in San Bernardino County, including the proposed R-2511 area.

Regional air quality is generally defined by geographical areas, designated air basins, or planning areas. Attainment with federal and state air quality standards in the portion of the air basin that a project site lies within is determined from recent data from air quality monitoring stations in the region. The project area is located within the Trona Planning Area, which is designated as moderate nonattainment for PM_{10} and in attainment or unclassified for all other federal criteria pollutants (USEPA 2020a).

The primary air emission sources at NAWSCL are associated with range flight events, airfield flight events, and range ground activities including stationary source operations and unpaved road dust. Table 3-2 provides a summary of the emission sources at NAWSCL.

Table 3-1 California and National Ambient Air Quality Standards

Pollutant	Averaging Time	CAAQS ¹	NAAQS ²	
			Primary	Secondary
Ozone (O ₃)	8 hours	0.07 ppm (137 µg/m ³)	0.070 ppm (147 µg/m ³)	Same as primary standard
	1 hour	0.09 ppm (180 µg/m ³)	†	
Carbon Monoxide (CO)	8 hours	9 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	†
	1 hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	
Nitrogen Dioxide (NO ₂)	Annual arithmetic mean	0.03 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	Same as primary standard
	1 hour	0.18 ppm (339 µg/m ³)	0.100 ppm (188 µg/m ³)	†
Sulfur Dioxide (SO ₂)	Annual arithmetic mean	†	†	†
	24 hours	0.04 ppm (105 µg/m ³)		†
	3 hours	†	†	0.5 ppm (1,300 µg/m ³)
	1 hour	0.25 ppm (655 µg/m ³)	0.075 ppm (196 µg/m ³)	†
PM ₁₀	Annual arithmetic mean	20 µg/m ³	†	Same as primary standard
	24 hours	50 µg/m ³	150 µg/m ³	
PM _{2.5}	Annual arithmetic mean	12 µg/m ³	12 µg/m ³	Same as primary standard
	24 hours	No separate standard	35 µg/m ³	
Sulfates	24 hours	25 µg/m ³	†	†
Lead	30-day average	1.5 µg/m ³	†	†
	Calendar quarter	†	1.5 µg/m ³	Same as primary standard
	Rolling 3-month average	†	0.15 µg/m ³	
Hydrogen Sulfide (H ₂ S)	1 hour	0.03 ppm (42 µg/m ³)	†	†
Vinyl Chloride (chloroethene)	24 hours	0.01 ppm (26 µg/m ³)	†	†

Notes: ¹CAAQS for CO, SO₂, NO₂, O₃, and PM₁₀ are not to be exceeded. All other CAAQS are not to be equaled or exceeded.

²NAAQS are not to be exceeded more than once per year except for annual standards.

ppm = parts per million; µg/m³ = micrograms per cubic meter; mg/m³ = milligram per cubic meter; † = no standard established

Sources: CARB 2020; USEPA 2020b.

3.3.2 Approach to Analysis

Effects on air quality are based on estimated emissions associated with the action alternatives. The study area for assessing air quality impacts is the air basin in which the Proposed Action is located, the Mojave Desert Air Basin.

Table 3-2 Baseline Emissions Estimates for NAWSCL Operations

Emissions Source Category	Annual Emissions (ton/year)						
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	CO ₂
Airfield Flight Events and Aircraft Maintenance	321	125	1,028	4.8	82.6	82.6	31,763
Range Test and Evaluation Flight Events	0.9	8.8	5.9	0.6	6.8	6.8	3,163
Munitions and Energetics Use	0	0.3	2.7	0	4.8	0.1	287
Ground Vehicle Use	0	0.1	0.6	0	64.9	6.5	93.4
Boilers, Generators, Tanks, Paint Booths, etc.	16.1	44.4	31.7	0.7	10.3	10.3	1,997
Totals ¹	337.6	178.2	1,069	6.0	169.4	106.3	37,304

Note: 1. Due to rounding, totals may differ slightly

Source: Navy 2015.

3.3.3 Environmental Consequences

3.3.3.1 Alternative 1 – Proposed Action (Preferred Alternative)

The new RA, R-2511, would be established under the Proposed Action with no change in operations (e.g., there would be no change in tempo or change in aircraft type). The NAWSCL emissions as provided in Table 3-2 would remain unchanged.

Minor changes in emissions from non-participating aircraft may occur when the R-2511 is activated. As provided in the airspace analysis performed for the Proposed Action (Appendix F), less than 10 percent of the traffic crosses the R-2511 at elevations less than 6,000 ft MSL (approximately 2,700-4,000 ft AGL for the area under the R-2511). It is anticipated that the number of flights flying under the R-2511 would not increase; therefore, no increases in emissions at altitudes lower than the mixing level of 3,000 ft (914 m) AGL. Small increases in emissions could occur as aircraft are diverted around the R-2511. These changes would likely be above the mixing layer elevation of 3,000 ft (914 m) AGL and would not be included in the regional air emissions inventory. These small increases in emissions would include GHGs; however, the increase in GHG emissions would be minor when compared to the baseline CO₂ emissions provided in Table 3-2. Slight decreases in emissions would occur should pilots of non-participating aircraft decide not to fly when the R-2511 is activated. Neither of these scenarios is expected to significantly impact regional air quality. Therefore, implementation of the Proposed Action would not result in significant air quality impacts.

3.3.3.2 Alternative 2 – Increased Operations

Under Alternative 2, the R-2511 would be activated up to nine times more per year than under the Proposed Action. The aircraft and free-flight weapon launches transiting the R-2511 would be above the 3,000 ft (914 m) mixing layer and would not be included in the regional air emissions inventory.

Minor changes in emissions from non-participating aircraft may occur when the R-2511 is activated. Small increases in emissions could occur as aircraft are diverted around the R-2511. These changes would likely be above the mixing layer elevation of 3,000 ft (914 m) AGL and would not be included in the regional air emissions inventory. These small increases in emissions would include GHGs; however, the increase in GHG emissions would be minor when compared to the baseline CO₂ emissions provided in Table 3-2. Slight decreases in emissions would occur should pilots of non-participating aircraft decide not to fly when

the R-2511 is activated. Neither of these scenarios is expected to significantly impact regional air quality. Therefore, implementation of Alternative 2 would not result in significant air quality impacts.

3.3.3.3 Alternative 3 – The No-Action Alternative

Under the No-Action Alternative, the proposed R-2511 would not be established and the Navy would cease operations within the existing airspace in May 2022. The current aircraft training activities within the airspace would continue unchanged until that time. Therefore, the potential air emissions under the No-Action Alternative would be the same as shown in Table 3-2, and there would be no new direct and indirect impacts on air quality.

3.3.4 Cumulative Effects

The ROI for cumulative impact analysis would be the Mojave Desert Air Quality Management District of California. The other projects considered for cumulative effects (Appendix E) would not create significant amounts of air pollutant emissions that could result in a temporary or long-term impact on air quality within the ROI.

The Proposed Action would not result in significant impacts to air quality in the ROI. Current RDATE and training aircraft activities would continue unchanged under the Proposed Action, and emissions would not increase from baseline emissions provided in Table 3-2. These emissions, when considered with the other cumulative projects, would result in a less than significant cumulative air quality impact.

3.4 BIOLOGICAL RESOURCES

3.4.1 Definition of Resource

Biological resources include living, native, or naturalized plant and animal species and the habitats within which they occur. Plant associations are generally referred to as vegetation, and animal species are generally referred to as wildlife. Habitat can be defined as the resources and conditions present in an area that support a plant or animal.

Within this EA, biological resources are divided into two major categories: (1) terrestrial vegetation and (2) terrestrial wildlife. Threatened, endangered, and other special status species are discussed in their respective categories.

Special status species, for the purposes of this assessment, are those species listed as threatened or endangered under the federal Endangered Species Act (ESA) and species afforded special protection under the Migratory Bird Treaty Act (MBTA).

The purpose of the federal ESA is to conserve the ecosystems upon which threatened and endangered species depend and to conserve and recover listed species. Section 7 of the ESA requires action proponents to consult with the U.S. Fish and Wildlife Service (USFWS) or National Oceanic and Atmospheric Administration National Marine Fisheries Service (for marine and anadromous species), as appropriate, to ensure that any action a federal agency (i.e., the Navy or FAA) authorizes, funds, or carries out is not likely to jeopardize the continued existence of any federally-listed threatened or endangered species, or result in the destruction or adverse modification of critical habitat

Birds, both migratory and most native-resident species, are protected under the MBTA, and their conservation by federal agencies is mandated by EO 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*. Under the MBTA, it is unlawful by any means or in any manner to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, [or] possess migratory birds or their nests or eggs at any time, unless permitted by regulation. The 2003 National Defense Authorization Act gave the Secretary of the Interior authority to prescribe regulations to exempt the Armed Forces from the incidental taking of migratory birds during authorized military readiness activities. The final rule authorizing the DoD to take migratory birds in such cases includes a requirement that the Armed Forces must confer with the USFWS to develop and implement appropriate conservation measures to minimize or mitigate adverse effects of the proposed action if the action has a significant negative effect on the sustainability of a population of a migratory bird species.

3.4.2 Existing Conditions

This section provides a description of the existing conditions relative to biological resources within the ROI. Information regarding biological resources is based on the NAWSCL INRMP (Navy 2014) and the NAWSCL FEIS/LEIS (Navy 2015). These documents were used in reference form only, and analyses of potential impacts provided in Section 3.4.4 apply to this EA only. Threatened and endangered species are discussed in each respective section below, with a summary included in Section 3.4.2.3, and a composite list applicable to the Proposed Action is provided in Table 3-3.

3.4.2.1 Terrestrial Vegetation

Vegetation throughout the Proposed Action area is dominated by shrubs. Vegetation communities within the ROI are described below and include creosote bush scrub, desert holly scrub, saltbush scrub, and Mojave wash scrub.

Creosote Bush Scrub

This is the most predominant vegetative community within the ROI. Creosote bush scrub is a sparse scrub of widely spaced shrubs less than 10 ft (3 m) tall; it occurs on well-drained soils up to 3,300 ft (1,000 m) in elevation. Dominant species in this community in the action area include creosote bush (*Larrea tridentata*), white bursage (*Ambrosia dumosa*), Cooper's box thorn (*Lycium cooperi*), rayless goldenhead (*Acamptopappus sphaerocephalus*), spiny senna (*Senna armata*), Johnson's indigobush (*Psoralea argophylla* var. *minutifolius*), desert alyssum (*Lepidium fremontii*), cheesebush (*Ambrosia salsola*), and desert trumpet (*Eriogonum inflatum*). Understory plants include Carrizo fiddleneck (*Amsinckia tessellata* var. *gloriosa*), small-flowered blazing star (*Mentzelia albicaulis*), desert candle (*Caulanthus inflatus*), Mediterranean grass (*Schismus arabicus*), pebble pincushion (*Chaenactis carphoclinia*), Nevada cryptantha (*Cryptantha nevadensis*), devil's spineflower (*Chorizanthe rigida*), and desert dandelion (*Malacothrix glabrata*) (Navy 2014).

Desert Holly Scrub

Desert holly scrub is a sparse scrub of low (less than 3.3 ft [1 m]) shrubs, dominated by desert holly (*Atriplex hymenelytra*). This community typically grows in desert pavement areas, on lava flows, and on limestone deposits (Sawyer et al. 2009). Co-dominants include creosote bush and shadscale (*Atriplex confertifolia*) in the Proposed Action area (Navy 2014).

Saltbush Scrub

Saltbrush scrub is a Mojave Desert community with common species including four-wing saltbrush (*Atriplex canescens*), shadscale, and allscale (*Atriplex polycarpa*) (Holland 1986).

Mojave Wash Scrub

Mojave wash scrub is a low, shrubby, open community with a scattered overstory of trees occurring in washes, arroyos, and canyons of intermittent streams (Holland 1986). Dominant species include catclaw acacia (*Acacia greggii*), desert willow (*Chilopsis linearis*), allscale, smoke tree (*Psoralea argophylla*), honey mesquite (*Prosopis glandulosa*), and cheesebrush (Navy 2014).

3.4.2.2 Terrestrial Wildlife

Because of the region's varied topography and diversified habitats, wildlife in the NAWSCL area is rich and varied. Because of the relative scarcity of water in the desert, riparian areas and other water sources (even temporary seeps and ponds) tend to concentrate wildlife species, creating an oasis effect. Generally, these areas show the highest wildlife diversity for a given region and represent a valuable resource for wildlife. This section provides summaries of the invertebrates, fish, amphibians, reptiles, birds, and mammals that may be present at NAWSCL and within the ROI that connects the two ranges comprising the Installation. More detailed information regarding the wildlife species present on the neighboring

NAWSCL lands can be found in the NAWSCS FEIS/LEIS (Navy 2015) and the NAWSCS INRMP (Navy 2014).

Invertebrates

Invertebrate species are among the most diverse on NAWSCS, yet they are the least studied. Researchers have been conducting annual invertebrate species surveys on NAWSCS estimate that the Installation may support more than 7,000 species of invertebrates. There have been 1,833 species of spiders and insects documented on NAWSCS. The greatest diversity occurs in the Lepidoptera (441 species of moths and butterflies), Diptera (414 species of flies), Hymenoptera (362 species of ants, wasps, and bees), and Coleoptera (263 species of beetles) orders (Navy 2015).

In addition, several invertebrates exist within the playas and can emerge during periods of standing water after rains. While these habitats support many smaller invertebrates, the most obvious are the larger branchiopods, such as several species of fairy shrimp, including giant fairy shrimp (*Branchinecta gigas*), tadpole shrimp (*Lepidurus lemmoni*), and brine shrimp (*Artemia franciscana*) (Navy 2015).

Fish

There are seeps and springs on NAWSCS ranges that host five species of fish. A discussion of fish species is provided, as the seeps may be downstream from the ROI. The federally endangered Mohave tui chub (*Siphateles bicolor mohavensis*) has been present on the Installation since it was introduced into Lark Seep in 1971. The other species, mosquito fish (*Gambusia affinis*), bullhead catfish (*Ameiurus* sp.), goldfish (*Carassius auratus*), and largemouth bass (*Micropterus salmoides*), are introduced non-native species. The Mohave tui chub, mosquito fish, and bullhead catfish are known to exist in the Lark Seep System located on the south-central portion of the North Range. Goldfish are present in the Lark Seep System and in a number of constructed ponds. Largemouth bass occurs in ponds at Area R on the North Range (Navy 2015).

Amphibians

Although the desert is characterized as an arid environment, there is enough moisture associated with naturally and artificially occurring water sources to support amphibious species. Amphibians are generally secretive, remaining underground or beneath debris near water, are often active only at night, and usually are confined to permanent water sources.

Only two species of native amphibians, the western toad (*Bufo boreas*) and the Pacific tree frog (*Pseudacris [Hyla] regilla*), have been observed and identified at NAWSCS. Although the slender salamander (*Batrachoseps* sp.) has not been observed, its habitat is present, and it also may occur at the Installation. During summer 1998, an unsubstantiated report of slender salamanders was made immediately east of the Installation boundary in Great Falls Basin. The red-spotted toad (*Bufo punctatus*) has been documented just east of the NAWSCS boundary in Great Falls Basin. Bullfrogs (*Rana catesbeiana*) have been found in the North Channel of the Lark Seep System as introduced exotic species.

Reptiles

Thirty-four species of reptiles have been identified at NAWSCS, including a variety of lizards and snakes. The federally threatened desert tortoise (*Gopherus agassizii*) occurs on the Installation on both the North and South ranges in high densities in suitable habitat, but with relatively higher densities on the South

Range. Some of the lizard species include the desert iguana (*Dipsosaurus dorsalis*), zebra-tailed lizard (*Callisaurus draconoides*), desert collared lizard (*Crotaphytus insularis*), desert spiny lizard (*Sceloporus magister*), side-blotched lizard (*Uta stansburiana*), long-tailed brush lizard (*Urosaurus graciosus*), desert horned lizard (*Phrynosoma platyrhinos*), and western whiptail (*Cnemidophorus tigris*). Gilbert's skink (*Plestiodon gilberti*) is common in the desert riparian areas. Some of the snake species include the red racer (*Masticophis falgellum*), western patch-nosed snake (*Salvadora hexalepis*), glossy snake (*Arizona elegans*), gopher snake (*Pinesnare melanoleucus*), common kingsnake (*Lampropeltis getulus*), longnosed snake (*Rhinocheilus lecontei*), night snake (*Hypsiglena torquata*), sidewinder (*Crotalus cerastes*), and the Mojave rattlesnake (*C. scutulatus*). Less common species include the chuckwalla (*Sauromalus ater*) and Panamint alligator lizard (*Elgaria* [*Gerrhonotus*] *panamintina*). Two snapping turtles (*Chelydra serpentina*) have been found in the Lark Seep channels as an introduced exotic species (Navy 2015).

Birds

More than 350 bird species have been identified at NAWSCL. The ROI falls within the desert scrub habitat type. Desert scrub habitat covers most of NAWSCL and includes these plant communities: creosote bush scrub, Mojave mixed woody scrub, sagebrush scrub, blackbrush scrub, shadscale scrub, hopsage scrub, Mojave wash scrub, Mojave sand field, and desert holly scrub. Many bird species occurring here can also be found within other habitat types. Species indicative of this habitat include sage sparrow (*Amdhisipiza belli*), Le Conte's thrasher (*Toxostoma lecontei*), greater roadrunner (*Geococcyx californianus*), and loggerhead shrike (*Lanius ludovicianus*) (Navy 2015).

Mammals

NAWSCL ranges support more than 80 mammal species. Fourteen bat species have been identified, including seven species of *Myotis* as well as the western pipistrelle (*Parastrellus hesperus*), big brown bat (*Eptesicus fuscus*), spotted bat (*Euderma maculatum*), Townsend's big-eared bat (*Corynorhinus townsendii*), pallid bat (*Antrozous pallidus*), Mexican free-tailed bat (*Tadarida brasiliensis*), and western mastiff bat (*Eumops perotis*) (Navy 2015).

Many small mammals, such as several species of kangaroo rat (*Dipodomys* spp.), live in the driest portions of the desert, deriving all of the water they need from the seeds they eat. Through much of the desert, Merriam's kangaroo rat (*D. merriami*) is the most abundant small mammal, although the Panamint kangaroo rat (*D. panamintinus*) and the Great Basin or chisel-toothed kangaroo rat (*D. microps*) can also be found in saltbush communities. Other common small mammals include the state listed Mohave ground squirrel (*Xerospermophilus mohavensis*), Botta's pocket gopher (*Thomomys bottae*), several species of pocket mouse (*Perognathus* spp. and *Chaetodipus* spp.), deer mouse (*Peromyscus maniculatus*), canyon mouse (*P. crinitus*), cactus mouse (*P. eremicus*), brush mouse (*P. boylii*), the carnivorous southern grasshopper mouse (*Onychomys torridus*), and a species of vole (*Microtus* sp.). Abundant in somewhat wetter areas is the western harvest mouse (*Reithrodontomys megalotis*). Less common is the desert shrew (*Notiosorex crawfordi*), with only one individual recorded on NAWSCL. Other common mammals in the desert include the desert cottontail (*Sylvilagus audubonii*), black-tailed jackrabbit (*Lepus californicus*), white-tailed antelope squirrel (*Ammospermophilus leucurus*), and California ground squirrel (*Spermophilus beecheyi*). The pinyon pine and other woodlands support an additional mix of small mammals, including the Panamint chipmunk (*Neotamias panamintinus*), pinyon mouse (*Peromyscus truei*), dusky-footed

woodrat (*Neotoma fuscipes*), common porcupine (*Erethizon dorsatum*), and striped skunk (*Mephitis mephitis*) (Navy 2015).

A number of wide-ranging carnivores are also relatively common in the desert, including coyote (*Canis latrans*), desert kit fox (*Vulpes macrotis*), long-tailed weasel (*Mustela frenata*), American badger (*Taxidea taxus*), mountain lion (*Puma concolor*), and bobcat (*Lynx rufus*). The common gray fox (*Urocyon cinereoargenteus*) occurs in the pinyon pine and other woodlands. Larger mammals include mule deer, Nelson's bighorn sheep, feral burros, and feral horses (Navy 2015)

3.4.2.3 Special Status Species

Federally Listed Plant Species

There are no federally listed plant species or critical plant habitats within the ROI (USFWS 2020).

Federally Listed Wildlife Species

Table 3-3 provides a list of the federally listed species with the potential to occur within the ROI. For conservation purposes, the list provides wildlife species with the potential to occur within northern San Bernardino County. The Mohave Tui chub would not occur in the ROI, and the California Condor and Western Snowy Plover would only occur as they transit the area.

Table 3-3 Federally Listed Species within the ROI

Species	USFWS Status	Habitat
<i>Fish</i>		
Mohave Tui Chub <i>Siphateles bicolor mohavensis</i>	Endangered	Extirpated species now only present in three locations: Soda Springs, Camp Cady Wildlife Area, and NAWSCS springs and seeps.
<i>Reptiles</i>		
Desert Tortoise <i>Gopherus agassizii</i>	Threatened	Sandy flats to rocky foothills, including alluvial fans, washes, and canyons.
<i>Birds</i>		
California Condor <i>Gymnogyps californianus</i>	Endangered	Nests in caves or natural cavities on cliff faces.
Western Snowy Plover <i>Charadrius nivosus nivosus</i>	Threatened	Coastal beaches with rocky shorelines.

Source: USFWS 2020.

There are no critical habitats present in the ROI (USFWS 2020).

3.4.3 Approach to Analysis

The significance of potential impacts to biological resources is based on: (1) the importance (i.e., legal, commercial, recreational, ecological, or scientific) of the resource; (2) the proportion of the resource that would be affected relative to its occurrence in the region; (3) the sensitivity of the resource to proposed activities; and (4) the duration or ecological ramifications of the impact(s). Impacts on biological resources would be significant if species or habitats of concern were adversely affected over relatively large areas or if disturbances caused reductions in population size or distribution of a special status species. This section analyzes the potential for direct and indirect impacts on biological resources from implementation of the Proposed Action (i.e., establishment of the proposed R-2511).

Direct impacts to wildlife species from the Proposed Action would potentially occur in two ways: by direct mortality from aircraft strike and by disruption of behavior caused by noise from aircraft overflights.

Indirect impacts are caused by or result from project-related activities, but occur later in time and can extend beyond the immediate project footprint. This EA analyzes the establishment of the proposed R-2511 within airspace that is currently used by aircraft. Indirect impacts associated with establishment of an SUA would be diffuse and unquantifiable beyond current conditions. Therefore, indirect impacts to biological resources are not addressed further in this EA.

3.4.4 Environmental Consequences

3.4.4.1 Alternative 1 – Proposed Action (Preferred Alternative)

Under the Proposed Action, a SUA designation would be approved for the R-2511. The Proposed Action would be limited to airspace establishment and would not include any ground activities, including ground disturbance. The Navy has coordinated with the USFWS, with the determination that the Proposed Action would have no effect on biological resources. The USFWS concurred that this determination was appropriate and that no further formal or informal consultation would be required (Appendix C). Consultation with USFWS does not cover state-listed species; instead impacts to state-listed species are analyzed using context and intensity. As the Proposed Action does not include any change in operational type or tempo and does not include any land-based activities, impacts to state-listed species are not anticipated.

All proposed aircraft activities under the Proposed Action would be consistent with activities that currently occur in the existing TCFA airspace. Given the ongoing aircraft operations in the ROI, wildlife in the proposed ROI is already habituated, to some extent, to aircraft noise levels associated with ongoing aircraft operations.

Noise and visual stimuli from aircraft overflights can disturb wildlife (Bowles et al. 1999, Mancini et al. 1988). Specifically, aircraft noise can compromise predator/prey detection and/or mating signals, alter temporal or movement patterns, and increase physiological stress. However, species differ in their sensitivities to noise exposure and assessing the impacts of noise on wildlife is difficult as there are many potential ecological costs associated with noise exposure that have not been rigorously studied (Francis and Barber 2013). Noise produced under the Proposed Action would not present an increase over existing (baseline) conditions. In addition, noise impacts to wildlife and special status species were analyzed in the NAWSCL FEIS/LEIS (Navy 2015). Therefore, there would be no significant noise impacts to biological resources under the Proposed Action.

The potential exists for bird/bat-aircraft strikes within the proposed R-2511. However, aircraft activities under the Proposed Action would not present a change from existing airspace use. Therefore, there would be no increase in the potential for bird/bat-aircraft strikes under the Proposed Action. As there would be no change in the level of aircraft activities and no shift from current operations, there would be no impact on wildlife, including special status wildlife species, beyond current conditions in the ROI. The Proposed Action would not result in significant impacts on biological resources when compared to the No-Action Alternative.

3.4.4.2 Alternative 2 – Increased Operations

Under Alternative 2, the proposed R-2511 would be activated 45 times per year, as opposed to 36 annual operations under the Preferred Alternative. These operations would be consistent with activities that currently occur in the airspace and, as with the Preferred Alternative, would not present an increase over existing (baseline) conditions. Therefore, there would be no significant noise impacts to biological resources under the Proposed Action.

Alternative 2 would pose a higher risk for bird/bat-aircraft strike than the Proposed Action. However, this increased risk would likely not lead to significant impacts on regional bird and bat populations. Therefore, implementation of Alternative 2 would not have significant impacts on biological resources.

3.4.4.3 Alternative 3 – The No-Action Alternative

Under the No-Action Alternative, the proposed R-2511 would not be established, and the Navy would cease operations within the existing airspace in May 2022. There would be no further NAWCWD operations in the airspace and, therefore, no significant impacts on biological resources.

3.4.5 Cumulative Effects

In addition to the direct environmental consequences already discussed, additional considerations required by NEPA include the potential cumulative effects of the Proposed Action. Potential cumulative effects could occur when the effects of the Proposed Action are combined with other past, present, and reasonably foreseeable projects and actions (Appendix E).

The Proposed Action would not result in significant impacts to biological resources in the ROI. The potential for cumulative impacts to biological resources is further reduced by the development and implementation of the NAWSCL INRMP (Navy 2014) and the continuing management of non-military activities (e.g., recreational land use) by the BLM Ridgecrest Field Office in accordance with its responsibilities. Therefore, no significant cumulative impacts would occur to biological resources with implementation of the Proposed Action along with past, present, and reasonably foreseeable projects and actions in the ROI.

3.5 LAND USE AND VISUAL RESOURCES

3.5.1 Definition of Resource

Land use refers to the various ways in which land might be used or developed (e.g., military training, parks and preserves, agriculture, commercial), the kinds of activities allowed (e.g., factories, mines, rights-of-way), and the type and size of structures permitted (e.g., single-family homes, commercial buildings, transportation infrastructure). Land use is regulated by city-wide comprehensive plans, land use management plans, and policies, ordinances, and regulations that determine the types of uses that are allowable, the density and intensity of development that is permitted, and in some cases, the types of uses that are not allowed. Land use plans may also include regulations intended to protect specially designated areas and environmentally sensitive resources.

Recreational land use refers to the use of public or private lands that provide relaxation, rest, physical activity, education, or other opportunities for leisure services and community support that lead to an enhanced quality of life. Recreational land use may include any type of activity in which area residents, visitors, or tourists may participate.

Visual resources are defined as, “the visible physical features on a landscape (e.g., land, water, vegetation, animals, structures, and other features)” (BLM 1984). These features form the overall impressions that an observer receives of an area or its landscape character. Landforms, water surfaces, vegetation, and manufactured features are considered characteristic of an area if they are inherent to the structure and function of a landscape.

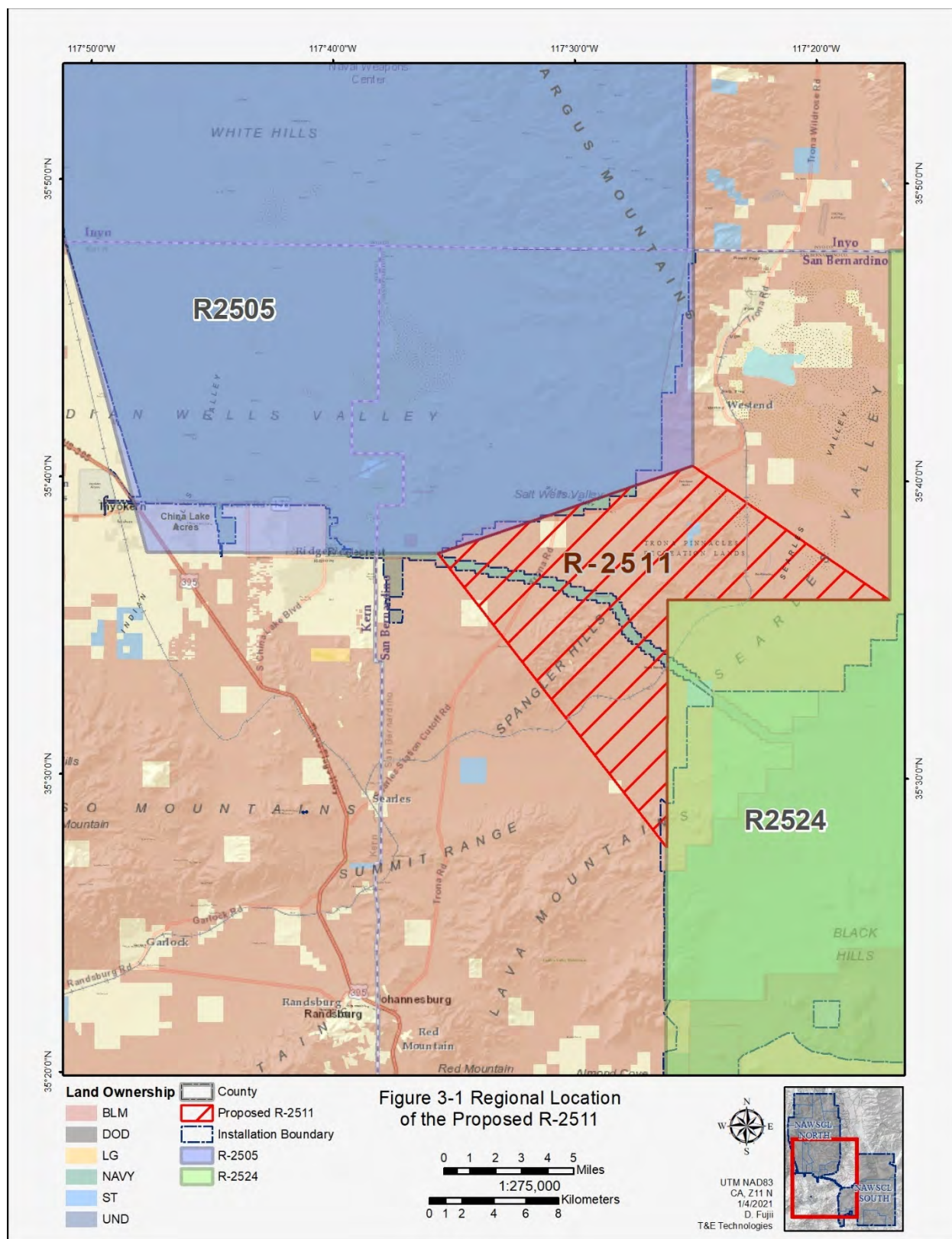
For this EA, the ROI includes all land under the proposed R-2511 and its immediate area.

3.5.2 Existing Condition

Figure 3-1 provides an overview of land ownership under the proposed R-2511 and its vicinity. Nearly all the land under the R-2511 is owned and managed by the BLM with some privately- and state-owned parcels. The Navy maintains and manages the road corridor connecting the NAWSCL North and South ranges. There are some single-family residences near the northern edge of the sparsely populated ROI, adjacent to the NAWSCL North Range. The ROI is within a San Bernardino Census Tract with a population density of 1.4 persons/square mile (3.6 persons/square km) (USCB 2020a).

The ROI is within the southern portion of Searles Valley and is made up of mostly gravel to silty lakebed sediments. Recreational land uses in the area include gem and mineral collecting, star gazing, photography, off-highway vehicle (OHV) driving, motorcycle racing, commercial 4-wheel drive tours, and equestrian tours. Popular destinations within the ROI include the Trona Pinnacles National Natural Landmark, Spangler Hills OHV Area, and Searles Lake when it is opened to guided gem mining field trips (BLM 2019). There are no other national or state parks, forests, or monuments within the ROI.

There are no churches, libraries, hospitals, or schools within the ROI.



3.5.3 Approach to Analysis

For the purposes of this analysis, impacts would be potentially significant if the Proposed Action were to be substantially incompatible with existing land uses. Incompatibility may arise as a result of substantial noise increases (e.g., increases in flight activities and training exercise tempo, introduction of new aircraft, introduction of supersonic flight) and/or impacts to visual resources (such as aircraft contrails). Noise and/or visual impacts would be most pronounced with respect to recreational land uses, such as at national parks, and other types of land uses that are sensitive to noise, such as libraries, cemeteries, classrooms, and churches.

3.5.4 Environmental Consequences

3.5.4.1 Alternative 1 – Proposed Action (Preferred Alternative)

The Proposed Action would not introduce new or modify existing flight or training activities. No change from existing conditions and no change to existing military flight activities (e.g., flight tempo or aircraft type) would occur under the Proposed Action. All proposed aircraft activities under the Proposed Action would be consistent with activities that currently occur in the existing airspace.

Additionally, the Proposed Action would not involve any ground activities. As a result, there would be no shifts in patterns of population movement and growth, public service demands, or changes in business and economic activity resulting from the Proposed Action; therefore, no activities considered incompatible with surrounding land uses would be introduced. Consequently, the only potential for effects on land use and recreational resources underlying and near the proposed R-2511 would result from noise or the visual impact of military flights within the affected airspace or other non-participating aircraft.

Any potential for noise or visual impacts under the Proposed Action would be minimal and would not represent a change over existing (baseline) conditions sufficient to cause adverse effects to land use or recreational resources (refer to Section 3.7, *Noise*). Overflight activity would not change relative to the No-Action Alternative; therefore, noise and visual impacts would not increase relative to existing conditions.

Activation of the R-2511 may result in aircraft transiting around the airspace. However, the potential noise and visual impact associated with aircraft transiting around or through the proposed RA would not be significantly different from existing conditions.

Few visual receptors would be affected by the Proposed Action. Activities within the airspace would be limited to short-term discrete effects resulting in aircraft overflights. Visual impacts to recreational users would be temporary and minor as the aircraft would only be within viewing range for a short time, and there would be no significant impact. In addition, the use of pyrotechnics, flares, and chaff by aircraft is not permitted within this airspace, and establishment of the R-2511 would not change this restriction, so there would be no effect relative to visual resources. Therefore, the Proposed Action would have no significant impact on land use and visual resources.

3.5.4.2 Alternative 2 – Increased Operations

Implementation of Alternative 2 would result in 45 annual activations of the proposed R-2511, as compared to 36 activations under the Proposed Action. This increase would lead to a negligible increase in potential

noise or visual impacts to the land users within the underlying area. Therefore, implementation of Alternative 2 would result in no significant impact on land use and visual resources.

3.5.4.3 Alternative 3 – The No-Action Alternative

Under the No-Action Alternative, the proposed R-2511 would not be established, and the Navy would cease operations within the existing airspace in May 2022. Consequently, there would be no change from existing conditions and, therefore, no significant impact on land use and visual resources.

3.5.5 Cumulative Effects

In addition to the direct environmental consequences already discussed, additional considerations required by NEPA include the potential cumulative effects of the Proposed Action. Potential cumulative effects could occur when the effects of the Proposed Action are combined with other past, present, and reasonably foreseeable projects and actions (Appendix E).

Under the Proposed Action, the overall level of Navy airspace activity would not be altered; there would be no change from existing conditions, and the Proposed Action would not result in significant impacts to land use and visual resources in the ROI. Therefore, no significant cumulative impacts would occur to land use and visual resources with implementation of the Proposed Action along with past, present, and reasonably foreseeable projects and actions in the ROI.

3.6 NOISE

3.6.1 Definition of Resource

Noise is measured in terms of decibels (dB), a logarithmic unit that represents the intensity of a sound. A sound level of 0 dB is approximately the threshold of human hearing and is barely audible under extremely quiet listening conditions. Normal speech has a sound level of approximately 60 dB; sound levels above 120 dB begin to be felt inside the human ear as discomfort. The minimum change in the sound level of individual events that an average human ear can detect is about 1 dB (Gray 2000). On average, a person perceives a change in sound level of about 10 dB as a doubling (or halving) of the sound's loudness, and this relation holds true for both loud and quiet sounds.

In California, Community Noise Equivalent Level (CNEL) is typically used for the evaluation of community noise effects (i.e., long-term annoyance and compatible land uses). CNEL is a composite metric that accounts for all noise events over a 24-hour period. To account for increased human sensitivity to noise at night, a 10-dB penalty is applied to nighttime events (10:00 P.M. to 7:00 A.M.), and a 5-dB penalty is applied to flights occurring from 7:00 P.M. to 10:00 P.M.

The FAA guidelines state that 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). DNL is similar to CNEL, except events occurring during the CNEL evening period are treated as day operations with no penalty. The FAA guidelines allow usage of CNEL in lieu of DNL for actions requiring approval in California (FAA 2015).

3.6.2 Existing Conditions

The area under the proposed R-2511 is sparsely populated and is predominately managed by BLM. Ambient noise within this area is typical of a rural environment. The airspace is used by a mix of military, commercial, and GA aircraft with an average of nine crossings per day. These flights are at times perceivable to receptors but at low noise levels.

The ROI for noise includes the land under the proposed R-2511 and neighboring areas. The ROI contains the Trona Pinnacles National Natural Landmark, industrial areas near Trona, and the outskirts of the city of Ridgecrest. Recreational visitors to the Trona Pinnacles would represent sensitive receptors. No religious, educational, or health-related sites are within the ROI. The great majority of the area is considered rural. Typical ambient CNEL for "quite suburban residential areas" range from 49 to 52 dB, and rural land is usually less than 49 dB (ANSI 1992, 2013).

3.6.3 Approach to Analysis

FAA actions are subject to FAA Order 1051.1F, *Environmental Impacts: Policies and Procedures*, which states that special consideration needs to be given to the evaluation of the significance of noise impacts on noise sensitive areas. A noise sensitive area is defined by the FAA as 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, parks, recreational areas (including areas with wilderness characteristics), wildlife refuges, and cultural and historical sites. FAA Order 1051.1F adds guidance that gives special consideration to the evaluation of the significance of noise impacts on noise-sensitive areas within national parks, national wildlife refuges, and historic sites, including traditional cultural properties.

For air traffic airspace and procedure actions (i.e., changes in airspace management procedures), the FAA identifies three significance metrics for noise impacts analysis:

- For existing noise environments 65 dB CNEL and higher, with an increase of 1.5 dB or more;
- For existing noise environments between 60 and 65 dB CNEL, with an increase of 3 dB or more;
- For existing noise environments between 45 and 60 dB CNEL, with an increase of 5 dB or more.

As defined by FAA Order 1051.1F, an action resulting in an increase over the levels of the first bullet, a “significant” impact is anticipated. The second and third bullets represent “reportable” levels (FAA 2020a).

In May 2021, the Navy utilized the NoiseMap suite of computer programs, including the MOA-Range NoiseMap (MR_NMAP) version 3.0, to estimate the anticipated noise levels associated with each alternative analyzed in this EA (Wasmer 2006). A summary of the methodologies used and modeling results is provided in Appendix G.

An airspace traffic analysis has been performed to determine the number and type of aircraft that cross the proposed R-2511 over a defined period of time (ATAC 2020, Appendix F). A total of 3,118 crossings were documented for the R-2511 airspace in FY2019. These aircraft were determined to be 87.4 percent civilian, and 12.6 percent were military. Table 3-4 breaks these flight data into altitude strata.

Table 3-4 Annual Flights per Altitude Strata

Altitude Strata	Civilian Aircraft		Military Aircraft	
	Number	Percentage	Number	Percentage
SFC-6,000 ft MSL	269	9.86	44	11.2
6,000-12,500 ft MSL	1,176	43.2	40	10.2
12,500 ft MSL-FL180	1,245	45.7	66	16.8
FL180-FL200	34	1.24	244	61.8
TOTAL	2,724	100	394	100

The airspace traffic analysis indicates that the busiest months of the year for the airspace are April and August, with approximately 13 flights per day or 390 flights for the month. To assess the most conservative case, the traffic across the proposed R-2511 was conducted at this level. Table 3-5 provides the number of aircraft crossings included in the cases modeled for this EA, and Table 3-6 provides the number of flights by time of day (i.e., day, evening, night) as estimated for the month of April to determine the CNEL penalty applied for evening and night flights.

Table 3-5 Modeled Flights by Altitude Strata

Altitude Strata	Civilian	Military
SFC-6,000 ft MSL	34	5
6,000-12,500 ft MSL	148	5
12,500 ft MSL-FL180	156	8
FL180-FL200	4	30
TOTAL	342	48

Table 3-6 Modeled Time of Day

Time of Day ¹	Civilian	Military
Day	317	41
Evening	14	4
Night	11	3
TOTAL	342	48

Note: 1. All Proposed Action R-2511 transits would be conducted during daytime hours.

GA aircraft, comprised primarily of single or double engine turboprop aircraft, are the most frequent overflight aircraft in the proposed airspace. The aircraft types modeled represents the aircraft that most frequently used the airspace. The Beechcraft Baron 58 was selected to represent GA aircraft transiting the R-2511, and the F-18A/C was chosen to represent military aircraft.

Overflight activity not associated with the airspace is not typically included in noise analysis. However, the activation of the proposed R-2511 may result in some VFR and IFR non-participating aircraft avoiding the area altogether or, when active, IFR aircraft transiting around or through the proposed R-2511, and those potential effects are considered.

3.6.4 Environmental Consequences

3.6.4.1 Alternative 1 – Proposed Action (Preferred Alternative)

The Proposed Action would not introduce new or modify existing flight or training activities. No change from existing conditions and no change to existing military flight activities (e.g., flight tempo or aircraft type) would occur under the Proposed Action, as compared to the No-Action Alternative. Therefore, no change in noise levels would be anticipated from the existing to the projected environment within the vicinity of the proposed R-2511, including the Trona National Natural Landmark and any residential areas. Diverted GA aircraft may fly above, under, or around the R-2511.

For the Proposed Action, the calculated maximum CNEL under the R-2511 would be 43.5 dB. A modeled receptor at the Trona National Natural Landmark would experience noise levels of 32 dB CNEL (Appendix G).

The Proposed Action would involve an existing noise environment less than 45 dB with no observed increase in noise levels, as compared to the No-Action Alternative. As indicated in the May 2021 analysis, no reportable noise levels or increases in noise level, as defined by FAA Order 1051.1F, would be associated with the Proposed Action. Therefore, there would be no significant noise impacts as a result of the Proposed Action.

3.6.4.2 Alternative 2 – Increased Operations

Implementation of Alternative 2 would result in 45 annual activations of the proposed R-2511, as compared to 36 activations under the Proposed Action. When the R-2511 is activated, non-participating aircraft would have to avoid the proposed RA. Aircraft operating under IFR would transit around or above the R-2511 when active. Non-military aircraft currently operating under VFR could fly under, over, or around the R-2511 when activated, potentially increasing noise levels at ground level.

For Alternative 2, the calculated maximum CNEL under the R-2511 would be 43.5 dB. A modeled receptor at the Trona National Natural Landmark would experience noise levels of 32 dB CNEL (Appendix G). These results indicate no perceivable change in noise levels when compared to the No-Action Alternative.

Alternative 2 would involve an existing noise environment less than 45 dB CNEL with an increase less than 5 dB, as compared to the No-Action Alternative. No reportable noise levels or increases in noise levels, as defined by FAA Order 1051.1F, would be associated with this alternative. Therefore, there would be no significant noise impacts as a result of implementation of Alternative 2.

3.6.4.3 Alternative 3 – The No-Action Alternative

Under the No-Action Alternative, the proposed R-2511 would not be established, and the Navy would cease operations within the existing airspace in May 2022. There would be no further NAWCWD operations in the airspace; therefore, implementation of the No-Action Alternative would result in no significant noise impact.

3.6.5 Cumulative Effects

In addition to the direct environmental consequences already discussed, additional considerations required by NEPA include the potential cumulative effects of the Proposed Action. Potential cumulative effects could occur when the effects of the Proposed Action are combined with other past, present, and reasonably foreseeable projects and actions (Appendix E).

Under the Proposed Action the overall level of NAWCWD airspace activity would not increase, and there would be no change from existing (baseline) conditions in the ROI. The Proposed Action is not anticipated to contribute to cumulative noise impacts. Therefore, no significant cumulative noise impacts would occur with implementation of the Proposed Action along with past, present, and reasonably foreseeable projects and actions in the ROI.

3.7 PUBLIC HEALTH AND SAFETY

3.7.1 Definition of Resource

Public health and safety issues addressed in this EA are primarily focused on flight safety and the potential for aircraft accidents. Such mishaps may occur because of midair collisions, collisions with manmade structures or terrain, weather-related accidents, mechanical failure, or pilot error. It should be noted that Public Health and Safety is not an FAA-recognized impact category for NEPA analysis. The analysis in this section has been conducted in accordance with NEPA implementation guidance provided in OPNAV-M 5090.1, *Environmental Readiness Program Manual* (Navy 2019).

The FAA is responsible for ensuring safe and efficient use of airspace by military and civilian aircraft and supporting National Defense requirements. To meet these requirements, the FAA has established regulations for airspace safety, developed airspace management guidelines, implemented a civil-military common system, and coordinated cooperative activities between the FAA and the DoD. Concerns related to public health additionally include air quality and noise, which are addressed in Section 3.3, *Air Quality* and Section 3.7, *Noise* of this EA.

3.7.2 Existing Conditions

NAWCWD airspace operations and coordination with surrounding ATC facilities are conducted according to FAA and Navy regulations. Navy aircraft flight activity at NAWSCL is conducted in accordance with the Naval Air Training and Operating Procedures Standardization (NATOPS) program, which prescribes general flight and operating instructions and procedures applicable to the operation of all U.S. naval aircraft and related activities. Comprehensive operating procedures are employed at NAWSCL to reduce the potential for aircraft accidents. These procedures include holding routine briefings for pilots and range personnel to review established safety practices and procedures and conducting frequent ground inspections on equipment related to any RDAT&E or training event. Pilots are also required to exercise caution to remain within approved flight routes and holding patterns.

Requests for use of the China Lake Range Complex for RDAT&E and training events are made through the Test Management Office. Each request is assigned to a test manager who is responsible for scheduling use of airspace and range assets with the range's test scheduler and for organizing briefings on airspace, range, and course rules. Aircrews scheduled to operate in the China Lake Range Complex must receive a range briefing before their activities. The test scheduler compiles test schedules for the North Range to ensure that test events do not conflict with one another. Test and training requests are assigned to a test manager, who is responsible for scheduling airspace and range assets with the test scheduler and organizing briefings.

Use of military airspace outside of Installation boundaries is scheduled through the R-2508 Central Coordinating Facility located at Edwards Air Force Base. The R-2508 Complex includes airspace presently managed by the three principal military activities in the upper Mojave Desert region: 412th Test Wing, Edwards Air Force Base; National Training Center, Fort Irwin; and NAWCWD, China Lake. The R-2508 Complex is composed of a number of RAs, MOAs, ATCAA areas, and the TCFA.

The TCFA exists within the R-2508 Complex and coexists with currently defined MOAs and ATCAA. RDAT&E activities in the TCFA undergo a thorough safety review. Ground and/or airborne radar and

experienced range personnel acting as visual observers monitor each RDAT&E event through the TCFA. Radar systems are used to ensure that the airspace is clear of non-participating aircraft. The standard protocol of publishing a NOTAM and the use of military radio channels for communicating would ensure that aircraft avoid these areas while RDAT&E activities are underway (Navy 2015).

To prevent an impact off-range, an FTS is generally required for missiles or air vehicles that have the capability to exceed designated impact limits. An FTS may be required for other test items to prevent impact in protected areas on-range and to prevent any test item from extending beyond Installation boundaries. Flight termination may be achieved by any number of means, including parachute recovery, controlled flight into the ground, intentional departure from controlled flight with subsequent ground impact, thrust termination, and air vehicle destruction using onboard explosive devices.

3.7.3 Approach to Analysis

The following analysis assesses the potential impacts to public health and safety associated with implementation of the alternatives. Potential impacts to safety are focused on aircraft operations and potential public health and safety concerns related to potential aircraft accidents (e.g., falling debris). A potential impact would occur if an alternative decreased safety within the ROI.

3.7.4 Environmental Consequences

3.7.4.1 Alternative 1 – Proposed Action (Preferred Alternative)

Under the Proposed Action, the establishment of the R-2511 would require commercial and GA aircraft to exit the airspace when activated, increasing safety by segregating military aircraft from non-participating aircraft. ATC oversight would continue to be administered by Joshua Control, and the more stringent requirements of a RA versus a CFA would lessen the potential for aircraft mishaps within the airspace. Implementation of the Proposed Action would result in an overall increase in safety in the area by clearly designating the airspace for its intended use (i.e., RDAT&E and training activities). Therefore, implementation of the Proposed Action would improve safety, resulting in a beneficial effect.

3.7.4.2 Alternative 2 – Increased Operations

Under Alternative 2, there would be up to nine additional annual activations of the proposed R-2511. This would not represent a significant increase in the number of operations in the area. As with the Proposed Action, implementation of Alternative 2 would establish a RA, improving airspace management, coordination, and flight safety. Therefore, implementation of Alternative 2 would have a beneficial effect on public health and safety.

3.7.4.3 Alternative 3 – The No-Action Alternative

Under the No-Action Alternative, the proposed R-2511 would not be established, and NAWCWD would continue operating within the existing TFCA until May 2022. Consequently, improvements to airspace management and coordination would not occur, and there would be no change from existing conditions. Non-participating flight activities would continue to enter the airspace, unaware of where and when military activities are occurring. Therefore, expected improvements to flight safety would not occur. To mitigate potential safety risks (e.g., midair collisions), the NAWCWD RCC would continue to monitor training areas to determine whether non-participating aircraft are present and suspend military activities, if necessary, as a safety precaution.

The No-Action Alternative would not result in a change to existing conditions and would not have a significant impact on public health and safety. However, there would be no improvement to airspace management and, therefore, no opportunity to reduce the potential risks to public health and safety (e.g., falling debris as the result of a mid-air collision) that would be expected with improved flight safety.

3.7.5 Cumulative Effects

In addition to the direct environmental consequences already discussed, additional considerations required by NEPA include the potential cumulative effects of the Proposed Action. Potential cumulative effects could occur when the effects of the Proposed Action are combined with other past, present, and reasonably foreseeable projects and actions (Appendix E).

The Proposed Action would result in a beneficial effect on public health and safety in the ROI. Other projects from Appendix E considered for cumulative impacts involving safety include the Southern California Optimization of Airspace and Procedures in the Metroplex and the Las Vegas Metroplex projects. The purpose of each Metroplex project is to optimize air traffic procedures and use of airspace on a regional scale by using technological advances in navigation (e.g., GPS versus navigational aid routing) while allowing aircraft not equipped with the more modern technology to access the NAS. These projects increase efficiency of scheduling flights, and therefore increase public safety in the areas covered by the Metroplexes.

The NAWSCL area is not included in a Metroplex implementation area, and no changes to airspace safety would occur as a result of the Metroplex projects, but the establishment of the R-2511 would provide a beneficial effect to safety in the area. Therefore, a beneficial effect to public health and safety would occur with the implementation of the Proposed Action when considered along with past, present, and reasonably foreseeable projects and actions in the ROI.

3.8 SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE

3.8.1 Definition of Resource

Socioeconomics considers the attributes of human social and economic interactions within an area. The Proposed Action would be entirely airspace-based and would not involve the construction of physical improvements or modifications to the existing number of NAWCWD personnel or training activities. No impacts to the general population, housing, income, and employment are expected from the Proposed Action and are not analyzed further in this EA.

By contrast, environmental justice is defined as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations, and policies. Fair treatment means no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies. There are three major EOs regarding consideration of environmental justice in federal actions:

- EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, requires each federal agency to make achieving environmental justice part of its mission. Specifically, the agency must identify and address, as appropriate, the disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.
- EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, requires that each federal agency (a) shall make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children, and (b) shall ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risk or safety risks.
- EO 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, directs (a) federal agencies to immediately review, and take action to address, federal regulations promulgated and other actions taken during the four-year period of 2017-2020 that conflict with national objectives to improve public health and the environment; (b) ensure access to clean air and water; limit exposure to dangerous chemicals and pesticides; hold polluters accountable, including those who disproportionately harm communities of color and low-income communities; reduce greenhouse gas emissions; (c) bolster resilience to the impacts of climate change; restore and expand our national treasures and monuments; and (d) prioritize both environmental justice and employment.

The U.S. Department of Transportation issued Environmental Justice Order 5610.2(a) to describe Department-wide actions for addressing environmental justice in minority and low-income populations during all phases of a project. The updated Order clarifies certain aspects of the EO 12898 of 1994 including the definitions of “minority” populations. It affirms the importance of considering environmental justice principles as part of early project planning activities to avoid disproportionately high and adverse impacts to minority and low-income populations.

3.8.2 Existing Condition

The proposed R-2511 is currently used for free flight weapon system tests, their associated aircraft platforms, and chase planes. The underlying land is mostly BLM-administered with some state-owned and privately-owned properties. The sparsely developed land is within San Bernardino County, with boundaries with Kern and Inyo counties nearby.

The following communities are within the vicinity of the proposed R-2511:

- Ridgecrest, with a population of 28,940, is located approximately 4 mi (6.4 km) west of the ROI;
- China Lake Acres, a census-designated place with a population of 1,947, is approximately 10 mi (1.6 km) west-northwest of the ROI;
- Inyokern, a census-designated place with a population of 740, is approximately 12.5 mi (20 km) west-northwest of the ROI; and
- Searles Valley, a census-designated place with a population of 1,511, is approximately 8 mi (13 km) northeast of the ROI.

The ROI falls within San Bernardino County census tract 89.01, which covers 1,359 square mi with a population of 1,949. The population density for the census tract is 1.4 people per square mi (3.6 people per square km). Table 3-7 provides a summary of the population demographics for the ROI and its vicinity.

Table 3-7 Regional Population Demographics

Geographic Area	Total Population	Minority Population (percent)	Population Below Poverty Level (percent)	Population Under Age of 18 (percent)	Population Density (persons /square mile)
State of California	39,512,223	63.8	11.8	22.5	254
San Bernardino County	2,180,085	72.7	13.3	26.1	106
Kern County	900,202	67.2	19.0	28.8	109
Inyo County	18,039	39.2	11.7	20.7	1.8
ROI	1,949	26.0	28.7	28.0	1.4

Sources: USCB 2020a & 2020b

3.8.3 Approach to Analysis

The significance of socioeconomic impacts is determined by the magnitude and duration of the impacts, whether beneficial or adverse. Additionally, an environmental justice analysis considers the potential of federal actions to cause disproportionately high and adverse effects on low-income or minority populations. Adverse effects mean the totality of significant individual or cumulative human health or environmental effects, including interrelated social and economic effects. When determining whether human health effects are disproportionately high and adverse, the following three factors were considered:

1. Whether the health effects, which may be measured in risks and rates, are significant, or above generally accepted norms;
2. Whether the risk or rate of hazard exposure to a minority population, low-income population, or Indian tribe to an environmental hazard is significant and appreciably exceeds or is likely to appreciably exceed the risk or rate to the general population or other appropriate comparison group; and

3. Whether health effects occur in a minority population, low-income population, or Indian tribe affected by cumulative or multiple adverse exposure to environmental hazards (CEQ 1997).

As provided in EO 13045, federal agencies are directed to make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children. Environmental health risks and safety risks include risks to health or to safety that are attributable to products or substances that a child is likely to come in contact with or ingest, such as air, food, drinking water, recreational waters, soil, or products they might use or be exposed to. Impacts to children are considered separately in NEPA reviews because children may experience a different intensity of impact as compared to an adult exposed to the same event.

3.8.4 Environmental Consequences

3.8.4.1 Alternative 1 – Proposed Action (Preferred Alternative)

The Proposed Action involves the establishment of a RA that will allow the continuation of RDAT&E and training activities on the NAWSCL Ranges, including aircraft flights and weapons launches between the North and South ranges. The Proposed Action would not introduce new or modify existing flight or training activities. There would be no change from existing conditions, and all proposed aircraft activities under the Proposed Action would be consistent with activities that currently occur in the existing airspace.

There are no significant impacts on the human environment (e.g., noise, air quality, air traffic) resulting from implementation of the Proposed Action that would affect an environmental justice population in a way that is unique or significant to that population. In addition, there are no specific impacts on the general health or quality of life that would adversely or disproportionately impact the ROI population, including no increased environmental health risks or safety risks to children.

The Proposed Action would not disproportionately affect minority or low-income populations adversely. No increased environmental health risks or safety risks to children would occur. Therefore, no significant socioeconomic or environmental justice impacts would result from implementation of the Proposed Action.

3.8.4.2 Alternative 2 – Increased Operations

Under Alternative 2, R-2511 would be activated 45 times per year, as opposed to 36 annual operations under the Preferred Alternative. These operations would be consistent with activities that currently occur in the airspace and, as with the Preferred Alternative, are not expected to generate disproportionate impacts to low-income or minority populations. No increased environmental health risks or safety risks to children would occur. Therefore, no significant socioeconomic or environmental justice impacts would result from implementation of Alternative 2.

3.8.4.3 Alternative 3 – The No-Action Alternative

Under the No-Action Alternative, the proposed R-2511 would not be established, and NAWCWD operations in the airspace would cease by May 2022. There would be no change to the socioeconomic and environmental justice conditions within the ROI. The No-Action Alternative would have no disproportionately high or adverse effect on minority or low-income populations and would pose no disproportionate risks to children. Therefore, no significant socioeconomic or environmental justice impacts would result from implementation of the No-Action Alternative.

3.8.5 Cumulative Effects

The Proposed Action would not result in significant impacts to socioeconomics or environmental justice in the ROI. No change from existing conditions and no change to existing military flight activities is expected to occur.

After review of the direct and indirect effects of the Proposed Action, there would be no significant adverse cumulative impacts (e.g., noise, air quality) to socioeconomic resources. The Proposed Action, when combined with other past, present or future actions, would not result in a disproportionately high or adverse effect on minority and low-income populations or result in a disproportionate risk to children that would result from environmental health or safety risks resulting from the Proposed Action and other known actions within the ROI.

There are no specific impacts on general health or quality of life that would adversely or disproportionately impact the surrounding population. Therefore, there would be no disproportionately high or adverse effect on minority and low-income populations, no disproportionate risks to children from environmental health or safety risks, and no increased environmental health risks or safety risks to children would occur.

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CHAPTER 5 AGENCIES AND PERSONS CONSULTED

Appendices B and C contain correspondence conducted during the development of this EA. Federal and state agencies contacted in the course of preparing this EA include:

- FAA
- USFWS
- BLM, and
- California SHPO

CHAPTER 6 PREPARERS AND CONTRIBUTORS

This EA was prepared for, and under the direction of, NAWCWD and FAA by T&E Technologies Joint Venture and subcontractor ATAC. Contributors to the EA include:

NAWCWD

Steve Pennix, Division Head, Range Sustainability Office, NEPA/Socioeconomic & Social Justice/Natural Resources/Cultural Resources Management Specialist

Matthew Boggs, Chief Engineer, China Lake Ranges

Corey Bouvier, Associate Counsel

Kimberly Brown, Public Affairs Officer

Brent Cannon, Range Safety Officer, China Lake Ranges, Public Safety Specialist

Sandy Ciriaco, Aeronautical Study Subject Matter Expert, Airspace Management Specialist

Robin Hoffman, Command Environmental Program Manager, Air Quality/Air Permitting CAA Specialist

Lynn Tawney, Head, China Lake Ranges Operations, Airspace Management Specialist

Susan Williams, Environmental Coordinator, Biologist

Navy Region Southwest

LCDR Audrey Nichols, Deputy Region Environmental Counsel

Melanie Ravan, Senior Associate Counsel

FAA

Ryan Weller, Environmental Protection Specialist

Lonnie Covalt, Environmental Protection Specialist

Chris Cozart, Environmental Protection Specialist

Laura Dell'Olio, Environmental Protection Specialist

Karen Everitt, Environmental Protection Specialist

Richard Farnsworth, SUA Specialist

Steve Haga, Air Traffic Representative

Elizabeth Healy, Environmental Protection Specialist

Mark Kuck, Air Traffic Representative

Greg Nairn, Aviation Technical Systems Specialist

Matt van der Wal, Aeronautical Specialist

Jack Williams, Attorney-Adviser

BLM Ridgecrest Field Office

Tom Bickauskas, Associate Field Manager

Paul Rodriguez, Real Estate Specialist

Donald Storm, Senior Archaeologist

Carrie Woods, Planning and Environmental Coordinator

T&E Technologies

Mark Dimsha, NEPA Specialist

Brad Beacham, Archaeologist

David Fujii, Global Information Systems (GIS) Specialist

Becki Graham, Quality Assurance Specialist

Greg Halsey, Program Manager

David Little, GIS Team Lead

Jacob Richards, Biologist, NEPA Specialist

Daniel Zelko, GIS Program Manager

ATAC

Dwight Deakin, Director Military Programs

Laura Del Favero, Senior Aviation Systems Analyst Lead

APPENDIX A NAWSCL FEIS/LEIS RECORD OF DECISION

Distribution Statement A: Approved for public release; distribution is unlimited.
NAWCWD PR21-0133.

SUMMARY: The Servicemembers Civil Relief Act, as codified at 50 U.S.C. App. § 3951, prohibits a landlord from evicting a Service member (or the Service member's family) from a residence during a period of military service except by court order. The law as originally passed by Congress applied to dwellings with monthly rents of \$2,400 or less. The law requires the Department of Defense to adjust this amount annually to reflect inflation and to publish the new amount in the **Federal Register**. We have applied the inflation index required by the statute. The maximum monthly rental amount for 50 U.S.C. App. § 3951 (a)(1)(A)(ii) as of January 1, 2016, will be \$3,451.20.

DATES: *Effective Date:* January 1, 2016.

FOR FURTHER INFORMATION CONTACT: Lt Col Reggie D. Yager, Office of the Under Secretary of Defense for Personnel and Readiness, (703) 571-9301.

Dated: February 3, 2016.

Aaron Siegel,
Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 2016-02445 Filed 2-8-16; 8:45 am]

BILLING CODE 5001-06-P

DEPARTMENT OF DEFENSE

Department of the Navy

Meeting of the U.S. Naval Academy Board of Visitors

AGENCY: Department of the Navy, DoD.

ACTION: Notice of partially closed meeting.

SUMMARY: The U.S. Naval Academy Board of Visitors will meet to make such inquiry, as the Board shall deem necessary, into the state of morale and discipline, the curriculum, instruction, physical equipment, fiscal affairs, and academic methods of the Naval Academy. The executive session of this meeting from 11:00 a.m. to 12:00 p.m. on March 21, 2016, will include discussions of new and pending administrative/minor disciplinary infractions and non-judicial punishment proceedings involving midshipmen attending the Naval Academy to include but not limited to individual honor/conduct violations within the Brigade; the disclosure of which would constitute a clearly unwarranted invasion of personal privacy. For this reason, the executive session of this meeting will be closed to the public.

DATES: The open session of the meeting will be held on March 21, 2016, from 9:00 a.m. to 11:00 a.m. The executive session held from 11:00 a.m. to 12:00

p.m. will be the closed portion of the meeting.

ADDRESSES: The meeting will be held at the U.S. Naval Academy, Annapolis, MD. The meeting will be handicap accessible.

FOR FURTHER INFORMATION CONTACT:

Lieutenant Commander Eric Madonia, USN, Executive Secretary to the Board of Visitors, Office of the Superintendent, U.S. Naval Academy, Annapolis, MD 21402-5000, 410 293-1503.

SUPPLEMENTARY INFORMATION: This notice of meeting is provided per the Federal Advisory Committee Act, as amended (5 U.S.C. App.). The executive session of the meeting from 11:00 a.m. to 12:00 p.m. on March 21, 2016, will consist of discussions of new and pending administrative/minor disciplinary infractions and non-judicial punishments involving midshipmen attending the Naval Academy to include but not limited to, individual honor/conduct violations within the Brigade. The discussion of such information cannot be adequately segregated from other topics, which precludes opening the executive session of this meeting to the public. Accordingly, the Department of the Navy/Assistant for Administration has determined in writing that the meeting shall be partially closed to the public because the discussions during the executive session from 11:00 a.m. to 12:00 p.m. will be concerned with matters protected under sections 552b(c)(5), (6), and (7) of title 5, United States Code.

(Authority: 5 U.S.C. 552b)

Dated: February 3, 2016.

N.A. Hagerty-Ford,
Commander, Judge Advocate General's Corps, U.S. Navy, Federal Register Liaison Officer.

[FR Doc. 2016-02513 Filed 2-8-16; 8:45 am]

BILLING CODE 3810-FF-P

DEPARTMENT OF DEFENSE

Department of the Navy

Notice of Intent To Grant Exclusive Patent License; NCP Coatings, Inc.

AGENCY: Department of the Navy, DoD.

ACTION: Notice; correction.

SUMMARY: The Department of the Navy published a document in the **Federal Register** on July 31, 2014, announcing an intent to grant to NCP Coatings, Inc. a revocable, nonassignable, exclusive license. The scope of the intent to license has been revised.

FOR FURTHER INFORMATION CONTACT: Rita Manak, Head, Technology Transfer Office, NRL Code 1004, 4555 Overlook

Avenue SW., Washington, DC 20375-5320, telephone 202 767-3083. Due to U.S. Postal delays, please fax 202 404-7920, email: rita.manak@nrl.navy.mil or use courier delivery to expedite response.

Correction

In the **Federal Register** of July 31, 2014, make the following revision:

1. In the first and second column, on page 44428, revise the **SUMMARY** caption to read as follows:

“**SUMMARY:** The Department of the Navy hereby gives notice of its intent to grant to NCP Coatings, Inc., a revocable, nonassignable, exclusive license to practice in the field of use of manufacture and sale of single-component moisture-curable coatings for commercial marine, architectural, industrial OEM, automotive refinish, aerospace, and amusement park structural applications to metallic surfaces which require abrasion and oil/grease resistance in the United States, the Government-owned inventions described in U.S. Patent No. 9,139,753: Single-Component Moisture-Curable Coatings Based on N-Substituted Urea Polymers with Extended Chains and Terminal Alkoxysilanes, Navy Case No. 102,270 and any continuations, divisionals or re-issues thereof.”

DATES: Anyone wishing to object to the grant of this license must file written objections along with supporting evidence, if any, not later than February 24, 2016.

Dated: February 3, 2016.

N.A. Hagerty-Ford,
Commander, Judge Advocate General's Corps, U.S. Navy, Federal Register Liaison Officer.

[FR Doc. 2016-02514 Filed 2-8-16; 8:45 am]

BILLING CODE 3810-FF-P

DEPARTMENT OF DEFENSE

Department of the Navy

Notice of Availability of Record of Decision for the Final Environmental Impact Statement/Legislative Environmental Impact Statement for Renewal of the Naval Air Weapons Station China Lake Public Land Withdrawal, California

AGENCY: Department of the Navy, DoD.

ACTION: Notice.

SUMMARY: The Department of the Navy (DoN), after carefully weighing the strategic, operational, and environmental consequences of the proposed action, announces its decision to both accommodate future military operational increases and implement

and complete a revised Comprehensive Land Use Management Plan (CLUMP) at Naval Air Weapons Station China Lake (NAWSCL), California as set out in Alternative 1 of the Final Environmental Impact Statement/Legislative Environmental Impact Statement (Final EIS/LEIS) for Renewal of Naval Air Weapons Station China Lake Public Land Withdrawal. Implementation of this alternative includes Congressional renewal of the public land withdrawal (25-year renewal), accommodation of an increase in Research, Development, Acquisition, Test, and Evaluation and training tempo (up to 25 percent) within current land use areas approved for designated uses, expansion of unmanned aerial and surface systems, and expansion of existing and introduction of evolving directed energy weapons development. Nonmilitary activities would continue according to current patterns of use. Proposed land use changes would be accommodated in accordance with the CLUMP and applicable NAWSCL approval processes. Natural and cultural resources would continue to be conserved with implementation of the CLUMP management process.

SUPPLEMENTARY INFORMATION: The complete text of the Record of Decision is available at <http://www.chinalakeeis.com>. Single copies of the Record of Decision are available upon request by contacting: Naval Facilities Engineering Command Southwest, Attn: Teresa Bresler, 1220 Pacific Highway, San Diego, CA 92132.

Dated: February 3, 2016.

N.A. Hagerty-Ford,
Commander, Judge Advocate General's Corps,
U.S. Navy, Federal Register Liaison Officer.

[FR Doc. 2016-02512 Filed 2-8-16; 8:45 am]

BILLING CODE 3810-FF-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. IC16-4-000]

Commission Information Collection Activities (FERC-500, FERC-542); Consolidated Comment Request; Extension; Errata Notice

On December 14, 2015, the Commission published a "60-day Public Notice" in the above-captioned proceeding, *Commission Information Collection Activities (FERC-500, FERC-542); Consolidated Comment Request; Extension*.¹

This errata notice serves to correct the section and associated table for the FERC-542 (Gas Pipeline Rates: Rate Tracking, OMB Control No. 1902-0070).

The Abstract should indicate that the FERC-542 also includes the reporting requirements in 18 CFR 154.401 (research, development, and demonstration [RD&D] expenditures) and 18 CFR 154.403 (Periodic rate adjustments). In the table for FERC-542, the correct number of respondents is 87, with an average of 2.13 responses per respondent and a total of 185 responses.

With the updates stated above, the correct total annual burden hours is 370, and the correct total annual cost is \$26,640.

Dated: February 3, 2016.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2016-02508 Filed 2-8-16; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings #1

Take notice that the Commission received the following electric corporate filings:

Docket Numbers: EC16-67-000.

Applicants: Astoria Generating Company, L.P., Crete Energy Venture, LLC, Lincoln Generating Facility, LLC, New Covert Generating Company, LLC, Rolling Hills Generating, L.L.C.

Description: Application for authorization for disposition of jurisdictional facilities of Astoria Generating Company, L.P., et al.

Filed Date: 2/1/16.

Accession Number: 20160201-5590.

Comments Due: 5 p.m. ET 2/22/16.

Take notice that the Commission received the following electric rate filings:

Docket Numbers: ER10-2201-002; ER10-2212-002; ER12-1997-003; ER12-1998-003; ER13-1931-003; ER13-2043-003; ER13-2044-003; ER15-1176-002; ER15-1177-002; ER15-1178-002; ER16-237-002; ER16-238-002; ER13-291-002.

Applicants: Marina Energy, LLC, South Jersey Energy Company, South Jersey Energy ISO1, LLC, South Jersey Energy ISO2, LLC, South Jersey Energy ISO3, LLC, South Jersey Energy ISO4, LLC, South Jersey Energy ISO5, LLC, South Jersey Energy ISO6, LLC, South Jersey Energy ISO7, LLC, South Jersey Energy ISO8, LLC, South Jersey Energy ISO9, LLC, South Jersey Energy ISO10, LLC, EnergyMark, LLC.

Description: Notice of Change in Status of the South Jersey MBR sellers.

Filed Date: 2/1/16.

Accession Number: 20160201-5635.

Comments Due: 5 p.m. ET 2/22/16.

Docket Numbers: ER16-444-001.

Applicants: Wabash Valley Power Association, Inc.

Description: Tariff Amendment: Wabash Valley Power Association, Inc. Reactive Rate Schedule Volume No—Clone to be effective 2/1/2016.

Filed Date: 2/1/16.

Accession Number: 20160201-5570.

Comments Due: 5 p.m. ET 2/22/16.

Docket Numbers: ER16-845-000.

Applicants: PJM Interconnection, L.L.C., Commonwealth Edison Company.

Description: Section 205(d) Rate Filing: ComEd submits Transmission Upgrade Agreement No. 4405 among ComEd and Ameren to be effective 2/1/2016.

Filed Date: 2/1/16.

Accession Number: 20160201-5506.

Comments Due: 5 p.m. ET 2/22/16.

Docket Numbers: ER16-846-000.

Applicants: Southwest Power Pool, Inc.

Description: Section 205(d) Rate Filing: 3165 Otter Tail Power Company NITSA and NOA to be effective 1/1/2016.

Filed Date: 2/1/16.

Accession Number: 20160201-5532.

Comments Due: 5 p.m. ET 2/22/16.

Docket Numbers: ER16-847-000.

Applicants: Nevada Power Company.

Description: Tariff Cancellation: Rate Schedule No. 121 NPC and Boulder City Interim Ancillary Services Agreement to be effective 4/1/2013.

Filed Date: 2/1/16.

Accession Number: 20160201-5537.

Comments Due: 5 p.m. ET 2/22/16.

Docket Numbers: ER16-848-000.

Applicants: Nevada Power Company.

Description: Tariff Cancellation: Rate Schedule No. 127 NPC and SDG&E Agreement—Cancellation to be effective 7/1/2012.

Filed Date: 2/1/16.

Accession Number: 20160201-5538.

Comments Due: 5 p.m. ET 2/22/16.

Docket Numbers: ER16-849-000.

Applicants: Nevada Power Company.

Description: Tariff Cancellation: Rate Schedule No. 131 NPC & CRC Cost Reimb. Ltr Agr.—Cancellation to be effective 4/1/2013.

Filed Date: 2/1/16.

Accession Number: 20160201-5539.

Comments Due: 5 p.m. ET 2/22/16.

Docket Numbers: ER16-850-000.

Applicants: Nevada Power Company.

Description: Tariff Cancellation: Rate Schedule No. 134 NPC & Valley Electric

¹ 80 FR 79322, December 21, 2015.

APPENDIX B PUBLIC INVOLVMENT

Distribution Statement A: Approved for public release; distribution is unlimited.
NAWCWD PR21-0133.

NOTICE OF AVAILABILITY
DEPARTMENT OF DEFENSE
DEPARTMENT OF THE NAVY
DRAFT ENVIRONMENTAL ASSESSMENT
FOR
ESTABLISHMENT OF RESTRICTED AREA R-2511
AT NAVAL AIR WEAPONS STATION CHINA LAKE, CALIFORNIA

SUMMARY:

Pursuant to Section 102(2)(C) of the National Environmental Policy Act (NEPA) of 1969, as implemented by the Council on Environmental Quality (CEQ), the Department of the Navy (DON) has prepared and filed the Draft Environmental Assessment – Establishment of Restricted Area R-2511 at Naval Air Weapons Station China Lake, California with the United States Environmental Protection Agency (EPA). The Draft Environmental Assessment (DEA) evaluates the potential environmental consequences associated with establishment of a Special Use Airspace (SUA), consisting of one Restricted Area (RA). The new SUA would connect the existing R-2505 and R-2524 RAs. The new RA would now be titled R-2511 and would have the same dimensions of the existing Trona Controlled Firing Area (TCFA).

The proposed RA would help notify, advise, and alert other pilots of where military training activity could be occurring. The proposed RA would be established when determined necessary to confine or segregate activities considered hazardous to nonparticipating aircraft, which is defined as any aircraft (military or civilian) that is not actively involved in the research, development, acquisition, testing, and evaluation (RDAT&E) activities within the RA when activated. Itinerant (non-local) or other aircraft not familiar with NAWCWD RDAT&E activities would now be made aware of the military flight activity more formally, by the existence of the proposed RA on the Sectional Aeronautical Chart. The existence of a RA will be mapped on the Federal Aviation Administration (FAA) Los Angeles Sectional Chart and knowledge of its activation would prompt all pilots to take notice of existing military flight activity, resulting in better awareness and coordination. Non-participating aircraft would not be allowed in the RA when activated.

DATES:

The 15-day public comment period starts June 17, 2021 and ends July 2, 2021. All public comments are due by July 2, 2021. Due to current federal and state guidance on social distancing in response to COVID-19, the Navy will not hold public meetings during the DEA public comment period.

ADDRESSES:

Written comments may be submitted by mail to the address in the **FOR FURTHER INFORMATION CONTACT** section or submitted electronically via the project website at: <https://www.R2511EA.com>. All comments submitted during the 15-day public comment period will become part of the public record, and will be considered in the Final EA. All comments must be postmarked or received online by July 2, 2021, for consideration in the Final EA. Federal, state, and local agencies and officials, and other interested organizations and individuals are encouraged to provide substantive comments on the Draft EA during the 15-day public comment period.

FOR FURTHER INFORMATION CONTACT:

R-2511 Establishment EA – Public Comments, 901 North Heritage Drive, Suite 204, Ridgecrest, California 93555, Comments@R2511EA.com, or the project website at <https://www.R2511EA.com>.

SUPPLEMENTAL INFORMATION:

The DON action proponent is Naval Air Warfare Center Weapons Division (NAWCWD), and the FAA is a cooperating agency. Naval Air Weapons Station China Lake (NAWSCL) is located in the western Mojave Desert region of California, approximately 150 miles (241 kilometers [km]) northeast of Los Angeles. NAWSCL is host to NAWCWD and other DoD activities. NAWCWD is the primary tenant command supported at NAWSCL. It is the Department of the Navy Center of Excellence for Weapons and Armaments, and has responsibility for RDAT&E for the entire spectrum of naval weapons and armaments (i.e., air, surface, and subsurface).

NAWSCL is separated into two range areas: the North and South ranges, which are overlain by two RAs. R-2505 overlies the North Range, and R-2524 overlies the South Range. NAWCWD, as the NAWSCL Ranges scheduling organization, is the using agency that manages operations conducted within R-2505 and R-2524. The Joshua Control Facility (Joshua Approach) is the Controlling Agency for R-2505 and R-2524. Access to the SUA is governed by FAA regulations.

Currently, RDAT&E activities between the North and South ranges can be conducted by activating the TCFA. The TCFA is used for free flight weapon systems transiting from areas within R-2505 to target areas within R-2524 and from launch areas within R-2524 to target areas within R-2505. The TCFA occupies altitudes with a floor of 6,000 ft (1,830 m) mean sea level (MSL) and a ceiling up to, but not including, flight level (FL) 200. Ground elevations under the TCFA range from 1,642 to 3,567 ft MSL (500 to 1,087 m MSL), providing a minimum of 2,433 ft (742 m) between the highest ground level point and the 6,000 ft MSL floor of the TCFA. The proposed R-2511 would have the same dimensions of the TCFA.

The purpose of the Proposed Action is to establish permanent SUA in the form of a RA which would allow safe and realistic RDAT&E and training activities on NAWSCL, between the North and South ranges. These activities would include aircraft flights between R-2505 and R-2524, free flight weapon launches, and training missions. The Proposed Action is needed to continue RDAT&E and training activities on the NAWSCL Ranges, including aircraft flights and weapons launches between the North and South ranges. The South Range is home to the Electronic Combat Range, which offers a wide variety of simulated radiofrequency (RF) threats to weapon and aircraft systems. Launches and flights between the two NAWSCL ranges allows the Navy to conduct RDAT&E and training activities in a variety of RF environments that may be encountered in theater. Establishing a RA and replacing the TCFA would create an additional level of segregation from non-participating aircraft not currently provided.

The DON distributed the DEA to federal agencies with which the DON is consulting and to other stakeholders. The DON provided public notice in local newspapers. The R-2511 DEA is available for electronic viewing or download at <https://R2511EA.com>. A hardcopy or electronic copy on compact disc of the DEA will be made available upon written request by contacting: R-2511 Establishment EA – Public Comments, 901 North Heritage Drive, Suite 204, Ridgecrest, California 93555, Comments@R2511EA.com, or the project website: <https://www.R2511EA.com>.

effective date of the exemption (30 days after the verified notice was filed).

Under 49 U.S.C. 10502(g), the Board may not use its exemption authority to relieve a rail carrier of its statutory obligation to protect the interests of its employees. However, 49 U.S.C. 11326(c) does not provide for labor protection for transactions under 49 U.S.C. 11324 and 11325 that involve only Class III rail carriers. Because this transaction involves Class III rail carriers only, the Board, under the statute, may not impose labor protective conditions for this transaction.

If the verified notice contains false or misleading information, the exemption is void ab initio. Petitions to revoke the exemption under 49 U.S.C. 10502(d) may be filed at any time. The filing of a petition to revoke will not automatically stay the effectiveness of the exemption. Petitions to stay must be filed no later than June 24, 2021 (at least seven days before the exemption becomes effective).

All pleadings, referring to Docket No FD 36465, should be filed with the Surface Transportation Board via e-filing on the Board's website. In addition, a copy of each pleading must be served on Holdings' representative, Bradon J. Smith, Fletcher & Sippel LLC, 29 North Wacker Drive, Suite 800, Chicago, IL 60606-3208.

According to Holdings, this action is categorically excluded from environmental review under 49 CFR 1105.6(c) and from historic preservation reporting requirements under 49 CFR 1105.8(b).

Board decisions and notices are available at www.stb.gov.

Decided: June 14, 2021.

By the Board, Scott M. Zimmerman, Acting Director, Office of Proceedings.

Kenyatta Clay,
Clearance Clerk.

[FR Doc. 2021-12834 Filed 6-16-21; 8:45 am]

BILLING CODE 4915-01-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Draft Environmental Assessment; Establishment of Restricted Area R- 2511 at Naval Air Weapons Station China Lake, CA

AGENCY: Federal Aviation Administration (FAA), DOT; Department of the Navy, DoD.

ACTION: Notice of availability.

SUMMARY: The Department of the Navy (DON) has prepared and filed the *Draft Environmental Assessment*—

Establishment of Restricted Area R-2511 at Naval Air Weapons Station China Lake, California with the United States Environmental Protection Agency (EPA). The Draft Environmental Assessment (Draft EA) evaluates the potential environmental consequences associated with the establishment of a special use airspace (SUA) consisting of one restricted area (RA). The new SUA would connect the existing R-2505 and R-2524 RAs. The new RA would be titled R-2511 and have the same dimensions as the existing Trona Controlled Firing Area (TCFA).

DATES: The 15-day public comment period starts June 17, 2021, and ends July 2, 2021. All public comments are due by July 2, 2021. Due to current federal and state guidance on social distancing in response to COVID-19, the DON will not hold public meetings during the Draft EA public comment period.

ADDRESSES: Submit written comments with the subject line "R-2511 Draft EA—Public Comments" by mail at 901 North Heritage Drive, Suite 204, Ridgecrest, California 93555, email Comments@R2511EA.com, or electronically via the project website at <https://www.R2511EA.com>.

All comments submitted during the 15-day public comment period will become part of the public record and will be considered in the Final Environmental Assessment (Final EA). All comments must be postmarked or received online by July 2, 2021, for consideration in the Final EA. Federal, state, and local agencies (including their respective officials) and other interested organizations and individuals are encouraged to provide substantive comments on the Draft EA during the 15-day public comment period.

FOR FURTHER INFORMATION CONTACT:

Contact: Lonnie D. Covalt, 206-231-3998, Lonnie.d.covalt@faa.gov.

SUPPLEMENTARY INFORMATION: The DON action proponent is NAWCWD, and the FAA is a cooperating agency. Naval Air Weapons Station China Lake (NAWSCL) is located in the western Mojave Desert region of California, approximately 150 miles (241 kilometers) northeast of Los Angeles. NAWCWD is host to NAWCWD and other Department of Defense activities. NAWCWD is the primary tenant command supported at NAWSCL. The Department of the Navy Center of Excellence for Weapons and Armaments has responsibility for RDAT&E for the entire spectrum of naval weapons and armaments (*i.e.*, air, surface, and subsurface).

NAWSCL is separated into two range areas: The North and South ranges,

which are overlain by two RAs. R-2505 overlies the North Range, and R-2524 overlies the South Range. NAWCWD, as the NAWSCL ranges' scheduling organization, is the using agency that manages operations conducted within R-2505 and R-2524. The Joshua Control Facility (Joshua Approach) is the controlling agency for R-2505 and R-2524. Access to the SUA is governed by FAA regulations.

Currently, RDAT&E activities between the North and South ranges can be conducted by activating the TCFA. The TCFA is used for free flight weapon systems transiting from areas within R-2505 to target areas within R-2524 and from launch areas within R-2524 to target areas within R-2505. The TCFA occupies altitudes with a floor of 6,000 feet (ft) (1,830 meters [m]) mean sea level (MSL) and a ceiling up to, but not including, Floor Level 200. Ground elevations under the TCFA range from 1,642 to 3,567 ft MSL (500 to 1,087 m MSL), providing a minimum of 2,433 ft (742 m) between the highest ground level point and the 6,000 ft MSL floor of the TCFA. The proposed R-2511 would have the same dimensions as the TCFA.

The DON distributed the Draft EA to federal agencies with which the DON is consulting and other stakeholders. The DON provided public notice in local newspapers. The R-2511 Draft EA is available for electronic viewing or download at <https://R2511EA.com>. A hard copy or electronic copy (on compact disc) of the Draft EA will be made available upon written request by contacting "R-2511 Establishment EA—Public Comments" at 901 North Heritage Drive, Suite 204, Ridgecrest, California 93555, Comments@R2511EA.com, or the project website at <https://www.R2511EA.com>.

Lonnie Covalt,
Environmental Protection Specialist,
Operations Support Group, Western Service Center.

[FR Doc. 2021-12360 Filed 6-16-21; 8:45 am]

BILLING CODE P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

[Summary Notice No. -2022-2082]

Petition for Exemption; Summary of Petition Received; Wittman Regional Airport

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Notice.

SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF KERN

EPSILON Systems
Draft Enviro.
Assess. R-2511

Case Number _____

DECLARATION
OF PUBLICATION
(2015.5 C.C.P.)

State of California, County of Kern, ss:

Declarant says:

That at all times, herein mentioned declarant is and was a citizen of the United States, over the age of twenty-one years, and not a party to nor interested in the within matter; that declarant is the principal clerk of the printer and the publisher of THE DAILY INDEPENDENT, a newspaper of general circulation printed and published daily in the City of Ridgecrest, Indian Wells Judicial District, County of Kern, State of California, which newspaper has been adjudged a newspaper of general circulation by the said Superior Court by order made and renewed July 8, 1952, in Civil Proceeding No. 58584 of said Court; that the instrument of which the annexed in a printed copy has been published in each regular and like issue of said newspaper (and not any supplement thereof) on the following dates, to-wit:

06-18-2021

06-19-2021

06-23-2021

I declare under penalty of perjury that the foregoing is true and correct.

EXECUTED ON June 23, 2021, at
Ridgecrest California.

Declarant

NOTICE OF
AVAILABILITY
DEPARTMENT OF
DEFENSE
DEPARTMENT OF
THE NAVY
DRAFT ENVIRON-
MENTAL
ASSESSMENT
FOR
ESTABLISHMENT
OF RESTRICTED
AREA R-2511
AT NAVAL AIR
WEAPONS STA-
TION CHINA
LAKE, CALIFOR-
NIA

SUMMARY:

Pursuant to Section 102(2)(C) of the National Environmental Policy Act (NEPA) of 1969, as implemented by the Council on Environmental Quality (CEQ), the Department of the Navy (DON) has prepared and filed the Draft Environmental Assessment - Establishment of Restricted Area R-2511 at Naval Air Weapons Station China Lake, California with the United States Environmental Protection Agency (EPA). The Draft Environmental Assessment (Draft EA) evaluates the potential environmental consequences associated with the establishment of a special use airspace (SUA) consisting of one restricted area (RA). The new SUA would connect the existing R-2505 and R-2524 RAs. The new RA would be titled R-2511 and have the same dimensions as the existing Trona Controlled Firing Area (TCFA).

The proposed RA would help notify, advise, and alert other pilots of where military training activity could be occurring. The proposed RA would be established when it is determined necessary to confine or segregate activities considered hazardous to nonparticipating aircraft, which is defined as any aircraft (military or civilian) that is not actively in-

volved in the research, development, acquisition, testing, and evaluation (RDAT&E) activities within the RA when activated. Itinerant (non-local) or other aircraft not familiar with Naval Air Warfare Center Weapons Division (NAWCWD) RDAT&E activities would be made aware of the military flight activity more formally by the existence of the proposed RA on the Sectional Aeronautical Chart. The existence of an RA will be mapped on the Federal Aviation Administration (FAA) Los Angeles Sectional Chart, and knowledge of its activation would prompt all pilots to take notice of existing military flight activity, resulting in better awareness and coordination. Nonparticipating aircraft would not be allowed in the RA when activated.

DATES:

The 15-day public comment period starts June 17, 2021, and ends July 2, 2021. All public comments are due by July 2, 2021. Due to current federal and state guidance on social distancing in response to COVID-19, the DON will not hold public meetings during the Draft EA public comment period.

ADDRESSES:

Written comments may be submitted by mail to the address in the FOR FURTHER INFORMATION CONTACT section or submitted electronically via the project website at <https://www.R2511EA.com>. All comments submitted during the 15-day public comment period will become part of the public record and will be considered in the Final Environmental Assessment (Final EA). All comments must be postmarked

received on or before July 2, 2021, for consideration in the Final EA. Federal, state, and local agencies (including their respective officials) and other interested organizations and individuals are encouraged to provide substantive comments on the Draft EA during the 15-day public comment period.

FOR FURTHER INFORMATION CONTACT:

"R-2511 Draft EA - Public Comments" at 901 North Heritage Drive, Suite 204, Ridgecrest, California 93555, Comments@R2511EA.com, or the project website at <https://www.R2511EA.com>.

SUPPLEMENTAL INFORMATION:

The DON action proponent is NAWCWD and the FAA is a co-operating agency Naval Air Weapon Station China Lake

(NAWSCL) is located in the western Mojave Desert region of California, approximately 150 miles (241 kilometers) northeast of Los Angeles. NAWCWD is host to NAWCWD and other Department of Defense activities. NAWCWD is the primary tenant command supported at NAWCWD. The Department of the Navy Center of Excellence for Weapons and Armaments has responsibility for RDAT&E for the entire spectrum of naval weapons and armaments (i.e., air, surface, and subsurface).

NAWSCL is separated into two range areas: the North and South ranges, which are overlain by two RAs. R-2505 overlies the North Range, and R-2524 overlies the South Range. NAWCWD, as the NAWCWD ranges' scheduling organization, is the using agency that manages operations conducted within R-2505 and R-2524.

The Joshua Control Facility (Joshua Approach) is the controlling agency to R-2505 and R-2524. Access to the SUA is governed by FAA regulations.

Currently, RDAT&E activities between the North and South ranges can be conducted by activating the TCFA. The TCFA is used for free flight weapon systems transitioning from areas within R-2505 to target areas within R-2524 and from launch areas within R-2524 to target areas within R-2505. The TCFA occupies altitudes with a floor of 6,000 feet (ft) (1,830 meters [m]) mean sea level (MSL) and a ceiling up to, but not including, Floor Level 200. Ground elevations under the TCFA range from 1,642 to 3,567 ft MSL (500 to 1,087 m MSL), providing a minimum of 2,433 ft (742 m) be-

tween the highest ground level point and the 6,000 ft MSL floor of the TCFA. The proposed R-2511 would have the same dimensions as the TCFA.

The purpose of the proposed action is to establish a permanent SUA in the form of an RA that would allow safe and realistic RDAT&E and training activities on NAWCWD between the North and South ranges. These activities would include aircraft flights between R-2505 and R-2524, free flight weapon launches, and training missions. The proposed action is needed to continue RDAT&E and training activities on the NAWCWD ranges, including aircraft flights and weapons launches between the North and South ranges. The South Range is home to the Electronic Combat Range, which offers a wide variety of simulated radiofrequency (RF) threats to weapon and air-

SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF KERN

EPsiLan Systems
Draft Enord
Assess R-2511

Case Number _____

DECLARATION
OF PUBLICATION
(2015.5 C.C.P.)

State of California, County of Kern, ss:

Declarant says:

That at all times, herein mentioned declarant is and was a citizen of the United States, over the age of twenty-one years, and not a party to nor interested in the within matter; that declarant is the principal clerk of the printer and the publisher of THE DAILY INDEPENDENT, a newspaper of general circulation printed and published daily in the City of Ridgecrest, Indian Wells Judicial District, County of Kern, State of California, which newspaper has been adjudged a newspaper of general circulation by the said Superior Court by order made and renewed July 8, 1952, in Civil Proceeding No. 58584 of said Court: that the instrument of which the annexed in a printed copy has been published in each regular and like issue of said newspaper (and not any supplement thereof) on the following dates, to-wit:

06-18-2021
06-19-2021
06-23-2021

I declare under penalty of perjury that the foregoing is true and correct.

EXECUTED ON June 23, 2021, at
Ridgecrest California.

Declarant

craft systems. Launches and flights between the two NAWSC ranges allow the DON to conduct RDAT&E and training activities in a variety of RF environments that may be encountered in theater. Establishing an RA and replacing the TCFA would create an additional level of segregation from nonparticipating aircraft not currently provided.

The DON distributed the Draft EA to federal agencies with which the DON is consulting and other stakeholders. The DON provided public notice in local newspapers. The R-2511 Draft EA is available for electronic viewing or download at <https://www.R2511EA.com>. A hard copy or electronic copy (on compact disc) of the Draft EA will be made available upon written request by contacting "R-2511 Establishment EA - Public Comments" at 901 North Heritage Drive, Suite 204, Ridgecrest, California 93555, Comments@R2511EA.com, or the project website at <https://www.R2511EA.com>.

(6/18, 6/19, 6/23/2021)



Naval Air Warfare Center Weapons Division

Environmental Assessment – Establishment of Restricted Area R-2511 at Naval Air
Weapons Station China Lake, California

[Home](#)[Proposed Action](#)[Provide Input](#)[Special Use Airspace](#)[NEPA](#)

Provide Input

Draft EA Review

Public and agency involvement is a key component of the NEPA process, which allows decision makers to benefit from local knowledge and to consider community concerns as it evaluates potential impacts. Public participation in the process is accommodated by making the Draft EA readily available to members of

the public and allowing their comments to be considered and documented in the Final EA.

The Draft EA and its appendices can be accessed by the links below

[Draft EA](#)

[Appendix A - NAWSCL FEIS/LEIS Record of Decision](#)

[Appendix B - Public Involvement](#)

[Appendix C - Agency Correspondence](#)

[Appendix D - Special Use Airspace Proposal](#)

[Appendix E - Cumulative Impacts Projects](#)

[Appendix F - Airspace Traffic Analysis](#)

[Appendix G - Noise Assessment Methodology](#)

Members of the public can request a hardcopy or **CD-ROM copy** of the Draft EA and the appendices by using the email address Comments@R2511EA.com

The Navy invites you to participate in the NEPA process for the Environmental Assessment – Establishment of Restricted Area R-2511 at Naval Air Weapons Station China Lake. The Navy is requesting your comments on the scope of analysis, the alternatives and resources considered during preparation of the Draft EA, and related issues.

The 15-day public comment period for this EA will be open on June 17, 2021 and will close on July 2, 2021.

To submit comments via mail or email, please contact:

R-2511 Establishment EA - Public Comments

901 North Heritage Drive, Suite 204

Ridgecrest, CA 93555

Comments@R2511EA.com



Links

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[No Fear Act](#)

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APPENDIX C AGENCY CORRESPONDENCE

Distribution Statement A: Approved for public release; distribution is unlimited.
NAWCWD PR21-0133.

Cooperating Agency Correspondence with FAA

Appendix 7. FAA/DOD Memorandum of Understanding

MEMORANDUM OF UNDERSTANDING BETWEEN
THE FEDERAL AVIATION ADMINISTRATION AND
THE DEPARTMENT OF DEFENSE
FOR
ENVIRONMENTAL REVIEW OF SPECIAL USE AIRSPACE ACTIONS

I. Definitions.¹

In addition to definitions in the Council on Environmental Quality (CEQ) regulations implementing the National Environmental Policy Act (NEPA) (40 CFR Part 1508), the following definitions also apply to this Memorandum of Understanding (MOU):

“DoD” means the Department of Defense or one or more components thereof, depending on the context.

“SUA” means “special use airspace,” as defined in FAA Order JO 7400.2.

“DoD SUA Action” means a DoD activity for which the FAA determines an FAA SUA Action is required or otherwise warranted.

“Environmental Review Process” means all activities that are necessary for compliance with the following and must be completed before DoD and FAA SUA Actions can be implemented: the National Environmental Policy Act (NEPA); the CEQ Regulations; DoD and FAA NEPA-implementing procedures; and other federal environmental laws, regulations, executive orders, and administrative directives.

“Proponent” means: (1) DoD for FAA SUA Actions for which the FAA requires submission of a proposal by DoD; and (2) the FAA for other FAA SUA Actions.

“FAA SUA Action” means the FAA’s establishment, designation, or modification of SUA for which a component of DoD is the “using agency,” as defined in FAA Order JO 7400.2.

II. Purpose and Scope.

The purpose of this MOU is to describe guidelines for efficiently conducting the Environmental Review Process for DoD and FAA SUA Actions by avoiding unnecessary duplication of effort and reducing delay through effective coordination and cooperation between the agencies.

¹ Terms defined in this section are capitalized throughout the document.

This MOU applies “lead agency” (40 CFR §1501.5) and “cooperating agency” (40 CFR §1501.6) concepts and requirements to Categorical Exclusions (CATEXs), Environmental Assessments (EA), Environmental Impact Statements (EIS), and other related or supporting documents for DoD and FAA SUA Actions.

III. Designation of Lead and Cooperating Agencies (40 CFR §1508.16 and §1508.5).

A. Introduction. DoD and FAA SUA Actions can be subject to different levels and scope of environmental impact analyses pursuant to NEPA, as implemented by the CEQ regulations and by the DoD’s and the FAA’s agency-specific NEPA-implementing procedures. The CEQ regulations encourage designation of a lead agency where related actions by several Federal agencies are involved.

Either the DoD or the FAA may be the lead or cooperating agency for a NEPA review addressing both DoD and FAA SUA Actions. The lead agency, in such instances, is responsible for consultation with other agencies, for early and continuing coordination of appropriate environmental evaluations and analyses, and, in coordination with the cooperating agency, for making and documenting determinations under other applicable environmental laws and regulations (e.g., the Endangered Species Act and the National Historic Preservation Act) and incorporating such documentation into the appropriate NEPA document. The lead agency will invite other federal agencies having jurisdiction by law or special expertise with respect to any environmental issue that should be addressed in the NEPA process to become a cooperating agency (40 CFR §§1501.6, 1508.5).

Both the FAA and the DoD acknowledge the purposes of NEPA (40 CFR §1500.1), and the need to both eliminate unnecessary duplication and reduce delay. Accordingly, the FAA and the DoD will integrate NEPA considerations and requirements of both agencies into the SUA project planning process as early as possible in their respective project planning schedules. The agencies will also strive cooperatively to coordinate development of environmental documents that meet the standards for adequacy in accordance with both agencies’ NEPA implementing procedures, thereby expediting completion of the Environmental Review Process.

B. Designation of lead agency. The Proponent will serve as the lead agency (40 CFR §1501.5).

C. Designation of cooperating agency. The DoD and the FAA will ensure designation of the cooperating agency early in the NEPA process (40 CFR §1501.6). Upon request of the lead agency, the DoD or the FAA will serve as a cooperating agency.

Written requests by the FAA and the DoD will be directed to:

Federal Aviation Administration	
Airspace Regulations and Policy Group (AJV-11)	OSG Manager of the applicable FAA Service Center
Air Force	
Deputy Assistant Secretary of the Air Force for Installations (SAF/IEI) 1665 Air Force Pentagon	cc: AF/A3TI - Airspace Policy Rm 5D756 1480 AF Pentagon

Rm 4B941 Washington, DC 20330-1665	Washington, DC 20330-1480 (703) 692-7752 HQ AF/A4CP Installation Strategy and Plans Division Rm 4D950 1260 Air Force Pentagon Washington DC, 20330-1260 (703) 614-0237
Navy	
Director Chief of Naval Operations (N45) 2000 Navy Pentagon (Rm 2E259) Washington, DC 20350-2000	cc: Chief of Naval Operations will direct to appropriate code
Marine Corps	
MCICOM (Attn: NEPA) Headquarters Marine Corps 3000 Marine Corps Pentagon Room 2D153A Washington, DC 20350-3000	
Army	
Asst. Chief of Staff for Installation Management Installation Services, Environmental (DAIM-ISE) 600 Army Pentagon (5A120-1) Washington, DC 20310-0600	cc: Deputy Assistant Secretary of Army, Environmental Safety and Environmental Health (DASA(ESOH)) Headquarters, U.S. Army Aeronautical Services Agency (Attn: Airspace Branch) 9325 Gunston Road, Suite N319, Fort Belvoir, Virginia 22060
Major Range and Test Facility Base (MRTFB)*	
Director, Test Resource Management Center (TRMC) 4800 Mark Center Dr., Suite 07J22 Alexandria, VA 22350	

*The MRTFB is managed by the TRMC and includes Army, Navy, and Air Force test ranges and associated airspace as designated by annual issuance. The TRMC will coordinate with the lead or cooperating agency as necessary

IV. Documentation.

A. General. To eliminate unnecessary duplication, reduce paperwork, and reduce delay, the FAA and the DoD will cooperatively develop necessary environmental documentation. The agencies will share and may use, as allowed by their respective regulations/directives, background data and impact analysis prepared by either agency in support of a DoD or FAA SUA Action. Documentation will be developed and processed in accordance with applicable FAA Orders, DoD directives and regulations, and established cooperating agency relationships (40 C.F.R. §1506.1).

The lead agency will provide, within scope (40 C.F.R. §1508.25), project-specific related data supporting the proposed action, alternatives, and impact analyses to the cooperating agency to facilitate the development of a legally defensible NEPA document and support appropriate determinations.

The lead and/or cooperating agency will independently evaluate any information or analysis before using it to support a NEPA review. The intent of the lead and cooperating agency relationship is to ensure mutually adequate documentation that complies with both the lead and cooperating agencies' NEPA-implementing procedures. Deficiencies in information, analysis, or other issues covered within the scope of the documentation will be addressed and corrected during cooperating agency concurrent review(s).

B. Categorical Exclusions.

The DoD and the FAA will address the availability of CATEXs early in the development of DoD and FAA SUA Actions. CATEXs are not interchangeable between the agencies. If the Proponent decides to rely on a CATEX for its action and the cooperating agency cannot rely on a CATEX for its action, the Proponent will provide information and analysis the cooperating agency identifies as necessary for the cooperating agency's NEPA review. To the extent consistent with the cooperating agency's NEPA-implementing procedures, the cooperating agency may request that the Proponent prepare an EA or fund the preparation of an EA or EIS.

V. General Guidance.

A. Scheduling. To help avoid unnecessary delay in the Environmental Review Process, the DoD and the FAA will establish a mutually agreed-upon schedule that reflects appropriate time limits to ensure that required actions are taken on a timely basis, consistent with the cooperating agency designation (ref. III.C.). The schedule will accommodate both agencies' requirements (e.g., DoD mission requirements, FAA requirements for processing SUA proposals, both agencies' NEPA-implementing procedures). Each agency will promptly notify the other of any difficulty with meeting scheduled deadlines or any need to revise the schedule.

B. Administrative Records. The FAA and the DoD, as either lead or cooperating agency, agree to develop and maintain an administrative record of each SUA project in accordance with their agency's respective administrative record and document retention rules and requirements. In the event either agency's action is timely challenged, the other agency will make its administrative record available to the agency whose action has been challenged.

C. Resolution of disagreements. If the FAA and the DoD fail to reach agreement at the normal working level on any issue relating to environmental processing of proposed SUA Actions, the matter will be referred, in ascending order, as outlined in the table below. At any time, the FAA's Office of the Chief Counsel and the Office of the General Counsel of the Service Department involved shall be consulted for assistance with legal issues.

Equivalent Levels of Responsibility for Resolution of Disagreements	
FAA Administrator	DoD Policy Board on Federal Aviation (PBFA) Chairman
FAA Chief Operating Officer, Air Traffic Organization	DoD PBFA Executive Director Principal Member
FAA VP, Mission Support Services	DoD PBFA Deputy Executive Director
FAA Director, Airspace Services	DoD PBFA Airspace and Procedures Subgroup Chair

D. Funding. Agency budget constraints may delay processing and implementation of DoD and FAA SUA Actions. As part of the lead agency-cooperating agency relationship, the DoD and the FAA will determine responsibilities, consistent with this MOU, for funding the preparation of NEPA documentation (40 CFR §1501.6(b)(5)) and, if appropriate, decision implementation measures (40 CFR §1505.3).

E. Amendments. If either party determines that it is necessary to amend this MOU, it will notify the other party in writing of the specific change(s) desired, with proposed language and the reason(s) for the amendment. The proposed amendment will become effective upon written agreement of both parties.

VI. Effective Date.

This MOU is effective from the last signature date below until rescinded or amended.

SIGNED:

DATE: **30 Sep 2019**

SCHATZ.ROWA
YNE.A.JR.1177
943386

Digitally signed by
SCHATZ.ROWAYNE.A.JR.1
177943386
Date: 2019.09.30 18:45:49
-04'00'

Executive Director, DoD Policy Board
On Federal Aviation

DATE: **OCT 17 2019**

ANGELA RENEE
MCCULLOUGH

Digitally signed by ANGELA
RENEE MCCULLOUGH
Date: 2019.10.17 06:33:25
-04'00'

VP, Mission Support Services
Federal Aviation Administration

000 7 100



DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER WEAPONS DIVISION
1 ADMINISTRATION CIRCLE 575 I AVENUE SUITE 1
CHINA LAKE, CA 93555-0100 POINT MUGU, CA 93042-5049

IN REPLY REFER TO:

3700
Ser 52000MD/2538
8 May 19

Mr. Maurice Hoffman
Director, Airspace Services (AJV-1)
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Dear Mr. Hoffman:

Naval Air Warfare Center Weapons Division (NAWCWD), is initiating the preparation of an Environmental Assessment (EA) for the proposed conversion of the Controlled Firing Area (CFA) known as the Trona CFA into a Restricted Airspace (RA). This CFA is currently a contiguous corridor between R-2505 and R-2524, San Bernardino County, CA. The CFA is currently contained within the R-2508 Special Use Airspace (SUA) Complex. The CFA is in between two RAs and lies within a Military Operating Area. This SUA proposal is designed to de-conflict Department of Defense and non-participating civilian air traffic from hazards associated with military testing.

NAVAIR/NAWCWD requests Federal Aviation Administration's (FAA) formal participation as a cooperating agency in the preparation of the EA for the conversion of the Trona CFA to RA, as prescribed in the Council on Environmental Quality regulations for implementing the National Environmental Policy Act (NEPA), Title 40 Code of Federal Regulations 1501.6, Cooperating Agencies. NAWCWD is requesting FAA participation in the NEPA process as required by law, FAA jurisdiction, and your special expertise applicable in this EA.

As the lead agency, NAWCWD will prepare the EA for the conversion of the Trona CFA to RA, via the following tasks:

- a. Gathering all necessary background information supporting the EA;
- b. Identifying the scope of the EA, including the alternatives evaluated;
- c. Working with FAA to evaluate potential impacts of alternative means of managing the RA resources;
- d. Circulating the EA to the general public and any other interested parties
- e. Scheduling and supervising meetings held in support of the NEPA process and compiling any comments received;

3700
Ser 52000MD/2538
8 May 19

f. Maintaining an administrative record for the EA.

As a cooperating agency, NAWCWD requests the following FAA support:

a. Providing timely comments throughout the EA process, to include making staff support available to enhance EA interdisciplinary analysis and review;

b. Providing timely response to NAWCWD requests for information;

c. Participating, as necessary, in meetings hosted by NAWCWD;

d. Developing information and the analysis of subjects germane to FAA expertise

We look forward to forging a solid partnership with the FAA to produce a mutually beneficial EA. Should you or your staff have any questions regarding the technical aspects of this proposed RA, please contact Ms. Sandy Ciriaco at commercial 760-939-5480, e-mail sandra.ciriaco@navy.mil. For environmental and EA documentation questions related to this proposed action, please contact Mr. Steve Penix, commercial 760-939-6026, or e-mail steve.penix@navy.mil.

Sincerely,



ANDY CORZINE
Director, China Lake Ranges
By direction of the Commander

USFWS Communications

Dimsha, Mark

From: Hoffmann, Scott L <scott_hoffmann@fws.gov>
Sent: Tuesday, February 4, 2020 11:23 AM
To: Williams, Susan E CIV USN NAVAIRWARCENWPNDIV (USA); Croft, Brian
Cc: Penix, Steve L CIV USN (US)
Subject: [Non-DoD Source] Re: EA to change airspace designation

Hi Susan,

I think the Navy's no effect determination is appropriate and this would not require formal or informal consultation for the change in airspace designation to proceed. Thanks for following up on our previous conversation and keeping us updated on this.

Scott Hoffmann
Senior Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Palm Springs Fish and Wildlife Office
Mojave Desert Division
777 East Tahquitz Canyon Way
Palm Springs, CA 92262
760.322.2070 x 413

From: Williams, Susan E CIV USN NAVAIRWARCENWPNDIV (USA)
Sent: Tuesday, February 4, 2020 9:26 AM
To: Croft, Brian; Hoffmann, Scott L
Cc: Penix, Steve L CIV USN (US)
Subject: [EXTERNAL] EA to change airspace designation

Brian and Scott,

Under new FAA regulations the Trona Gap Controlled Firing Area (CFA) cannot be reauthorized, and the airspace must be established as Restricted Airspace (RA). NAWCWD is proposing to expand the airspace to protect nonparticipating aircraft from the hazards associated with RDAT&E operations. The proposed action is administrative in nature and would not alter the tempo or types of aircraft and weapons transitioning the airspace. There would be no ground operations associated with the proposed action.

I have enclosed a description of the project area and proposed action as well as a map.

There will be no ground operations or disturbance so there will be no adverse effect – there will be no effect at all - on habitat as a result of this EA. Will USFWS require consultation for this EA? Will you want to participate with this EA?

Please let me know so that we can plan and ensure all required actions are completed.

Thank you,

Susan Williams
Range Environmental Coordinator

Dimsha, Mark

From: Bransfield, Ray <ray_bransfield@fws.gov>
Sent: Tuesday, January 5, 2021 5:24 PM
To: Dimsha, Mark
Subject: FW: IPaC delivered Official Species List for project: R-2511 EA

Mark,
IPaC generates its lists based on county occurrences. I review some of them to check accuracy.

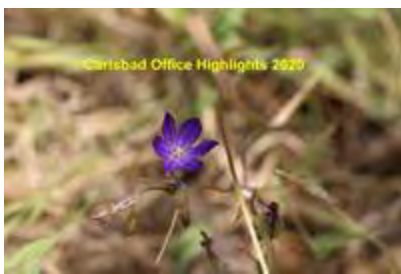
This one is not so accurate.

Western snowy plover – only birds within 50 miles of the Pacific coast are the listed entity.
Mohave tui chub – None in this area. They occur on base in the channels around Lark Seep.
Desert tortoise - present
California condor – This area is way out of the condor's range. It would be possible for one to visit this area but it would be the first memory.

If you have any questions, please contact me at (805) 677-3398 or ray_bransfield@fws.gov.
Ray

From: Croft, Brian <brian_croft@fws.gov>
Sent: Monday, January 04, 2021 9:54 AM
To: Bransfield, Ray <ray_bransfield@fws.gov>
Subject: Fw: IPaC delivered Official Species List for project: R-2511 EA

Brian Croft
Division Supervisor
Mojave Desert Division
U.S. Fish and Wildlife Service
777 East Tahquitz Canyon Way, Suite 208
Palm Springs, California 92262
Office: 760-322-2070 ext. 410
Mobile: 760-953-5494
(he/his/him)



From: Garn, John C <john_garn@fws.gov>
Sent: Monday, January 4, 2021 9:07 AM

To: Croft, Brian <brian_croft@fws.gov>

Subject: FW: IPaC delivered Official Species List for project: R-2511 EA

Good morning,

For your review and action.

Sincerely,

John

(He, Him, His)

-----Original Message-----

From: fwhq_ecos_support@fws.gov <fwhq_ecos_support@fws.gov>

Sent: Thursday, December 31, 2020 9:18 AM

To: Garn, John C <john_garn@fws.gov>; Garn, John C <john_garn@fws.gov>

Subject: IPaC delivered Official Species List for project: R-2511 EA

To: IPaC point(s) of contact for Carlsbad Fish and Wildlife Office -- 81430

Project Location: San Bernardino, CA

IPaC has delivered an official Section 7 species list on behalf of your office to the person indicated below.

Mark Dimsha

-- OTHER: CONSULTANT --

Epsilon Systems

1908 Buffalo Dancer NE

Albuquerque, New Mexico 87112

mdimsha@epsilonsystems.com

Phone: (505) 977-3951

For your convenience, IPaC has created a TAILS species list activity (08ECAR00-2021-SLI-0444) with a new associated event (08ECAR00-2021-E-00978). A PDF file of the species list document is attached to the event.

To open the TAILS activity, click here:

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fecos.fws.gov%2Ftails%2Freport%2FS7ByElementId.do%3FelementId%3D1205900&data=04%7C01%7Cbrian_croft%40fws.gov%7Ce9c68d8f576744fa9d0f08d8b0d329fc%7C0693b5ba4b184d7b9341f32f400a5494%7C0%7C0%7C637453768271631134%7CUnknown%7CTWFpbGZsb3d8eyJWlIjoIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6IjEhaWwiLCJXVCi6Mn0%3D%7C1000&data=Uqpge1HswOSa0ZiYUSX0C7I5WYIck2vvqp%2B343%2BCXtc%3D&reserved=0 (or copy the URL and paste it into your internet browser). If you are not already logged into ECOS, you will be required to do so before getting access to the TAILS record.

On the left side of the TAILS menu, click Event Report by Type. Here you will see all the events associated with this activity, including any requests for updated species lists. Simply click on the event (08ECAR00-2021-E-00978) to open it.

If you have problems opening the TAILS record, please contact the ECOS help desk at

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fecos.fws.gov%2Fec%2Fuser%2Fme%2FhelpTickets%2Fcreate&data=04%7C01%7Cbrian_croft%40fws.gov%7Ce9c68d8f576744fa9d0f08d8b0d329fc%7C0693b5ba4b184d7b9341f32f400a5494%7C0%7C0%7C637453768271631134%7CUnknown%7CTWFpbGZsb3d8eyJWlIjoIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6IjEhaWwiLCJXVCi6Mn0%3D%7C1000&data=pUNT117vDqB15twvUS0Erb6acXj8ooXXLNLUT65x9OM%3D&reserved=0.

The general location of the project can be viewed in google maps by clicking

https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.google.com%2Fmaps%2Fplace%2F35.576028N117.430712W&data=04%7C01%7Cbrian_croft%40fws.gov%7Ce9c68d8f576744fa9d0f08d8b0d329fc%7C0693b5ba4b184d7b9341f32f400a5494%7C0%7C0%7C637453768271631134%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6IklhaWwiLCJXVCI6Mn0%3D%7C1000&sdata=78KFCTXjPrsHGqD3ehURoJyJ6tA54OxBWNHqHny4R3k%3D&reserved=0.

SHPO Communications

September 3, 2020

Tristan Tozer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816
(916) 445-7027
Tristan.tozer@parks.ca.gov

RE: 106 Establishment of R-2511 Special Use Airspace, Naval Air Weapons Station China Lake, California

Dear Mr. Tozer:

In accordance with the Advisory Council on Historic Preservation (ACHP) regulations, 36 CFR Part 800 (Protection of Historic Properties) and the National Environmental Policy Act (NEPA), the U.S. Navy is initiating Section 106 and NEPA consultation for an undertaking, Establishment of R-2511 Special Use Airspace (SUA) at the Naval Air Weapons Station China Lake, California. As this action involves modification of the National Airspace System (NAS), the Federal Aviation Administration is a cooperating agency for the NEPA review. The Section 106 consultation will follow the standard process identified in 36 CFR 800.3 through 800.5.

The proposed action is administrative in nature, would be entirely airspace-based, and would establish a SUA consisting of one Restricted Airspace, R-2511, connecting the existing R-2505 and R-2524. The proposed action would not change or modify existing military flight activities or weapons testing occurring within the SUA. Aircraft activities would be consistent with those already occurring in the airspace. No additional military flight activities or weapon launches would be introduced as part of this proposed action.

Currently, the U.S. Navy is performing an Environmental Assessment (EA) that is investigating the proposed action and the No-Action Alternative. Neither alternative would involve ground disturbance; however, the proposed Area of Potential Effects (APE) would consist of the land under the R-2511 SUA (see attached).

Nearly all the land of the APE is managed by the Bureau of Land Management (BLM). In January 2020, we met with members of the BLM Ridgecrest, California Field Office to scope the project with the agency. In the meeting, BLM decided not to be a cooperating agency and asked only to review the draft EA. We also discussed potential environmental impacts for consideration in the EA, including cultural/archaeological resources. No potential significant impacts were identified in the meeting.

The draft EA will be made available on the Navy Region Southwest Public website, https://www.cnrc.navy.mil/regions/cnrsw/om/environmental_support/Public_Review_of_Navy_Projects.html. The FAA is conducting an Airspace Proposal analysis in parallel with the EA, which involves a public outreach effort separate from the NEPA public comment period. We will provide your office review copies of the documents and other materials, upon request.

We look forward to receiving any comments or questions that you may have. We will consult with you, pursuant to 36 CFR Part 800.3-5, as we develop the EA. If you have any questions or need any additional information, please feel free to contact me.

Sincerely,



Mark Dimsha, AICP

Senior Environmental Engineer/Planner

Tel: 505-977-3951

mdimsha@epsilonsystems.com

www.epsilonsystems.com



Dimsha, Mark

From: Tozer, Tristan@Parks <Tristan.Tozer@parks.ca.gov>
Sent: Wednesday, October 14, 2020 12:14 PM
To: Dimsha, Mark
Subject: Re: 106 U.S. Navy/FAA Establishment of R-2511 Special Use Airspace

Hi Mark,

Thanks for the clarification. I agree with Don: as described, this doesn't seem to be an activity requiring Section 106 consultation. If you need any guidance, I would recommend reaching out to NAVFAC SW in San Diego. The cultural resources/environmental staff there have a good handle on the process and might be able to help you.

Cheers,

Tristan

Tristan Tozer
State Historian II
California Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816
Voicemail: (916) 445-7027
Tristan.Tozer@parks.ca.gov

From: Dimsha, Mark <mdimsha@epsilonsystems.com>
Sent: Wednesday, October 14, 2020 10:52 AM
To: Tozer, Tristan@Parks <Tristan.Tozer@parks.ca.gov>
Subject: RE: 106 U.S. Navy/FAA Establishment of R-2511 Special Use Airspace

Hi Tristan,

Please consider this a notification of intent to consult. We have been in touch with the BLM Ridgecrest Field Office CRM, Don Storm, regarding this project as nearly all the land underlying the proposed airspace is owned by BLM. He saw no need for a full consultation, as the proposed action is administrative in nature and would involve no land disturbance or change in aircraft operations.

The Epsilon team (Navy contractor) has pulled the CHRIS information for the ~85-square mile area to help set the APE for the EA affected environment. I can provide that information if needed.

I am the Epsilon project manager and am not fully aware of the Section 106 process. Should we generate a determination and submit, or are there other steps to be taken?

Thank you for your patience in walking me through the process.

Mark

From: Tozer, Tristan@Parks <Tristan.Tozer@parks.ca.gov>
Sent: Wednesday, October 14, 2020 11:40 AM
To: Dimsha, Mark <mdimsha@epsilonsystems.com>
Subject: Re: 106 U.S. Navy/FAA Establishment of R-2511 Special Use Airspace

Hi Mark,

Sorry for not getting back to you. I am unsure of what the Navy is requesting. Does this documentation serve as a notification of intent to consult or is the Navy initiating consultation?

Cheers,

Tristan

Tristan Tozer
State Historian II
California Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816
Voicemail: (916) 445-7027
Tristan.Tozer@parks.ca.gov

From: Dimsha, Mark <mdimsha@epsilonsystems.com>
Sent: Wednesday, October 14, 2020 9:33 AM
To: Tozer, Tristan@Parks <Tristan.Tozer@parks.ca.gov>
Subject: FW: 106 U.S. Navy/FAA Establishment of R-2511 Special Use Airspace

Mr. Tozer,

I just wanted to touch base with you with regards to the request for coordination initiated early last month. The EA for the proposed establishment of the Restricted Airspace R-2511 is moving forward, and it would be helpful to know the level of analysis needed for the assessment of cultural/historic properties.

Please let me know if more information is needed, or if my team can provide any assistance in this effort.

Thank you for your time and consideration during these unprecedented times. I know that the double whammy of the COVID lockdown and wildfire season are really testing the limits of available resources.

Sincerely,
Mark Dimsha

From: Dimsha, Mark
Sent: Thursday, September 3, 2020 9:43 AM

Project Description – Establishment of R-2511, NAWS China Lake, CA

The purpose of the proposed action is to establish permanent Special Use Airspace (SUA) in the form of a Restricted Airspace (RA) which would allow safe and realistic research, development, acquisition, testing, and evaluation (RDAT&E) and training activities on Naval Air Weapons Station China Lake (NAWSCL), between the North and South ranges. These activities would include aircraft flights between existing RAs R-2505 and R-2524, free flight weapon launches, and training missions.

The proposed action is needed to continue RDAT&E and training activities on the NAWSCL Ranges, including aircraft flights and weapons launches between the North and South ranges. Military aircraft and weapons may be highly modified and often used in nonstandard ways, which are considered hazardous to other aircraft within the airspace. Establishing an RA and replacing the Trona Controlled Firing Area would create an additional level of segregation from non-participating aircraft not currently provided.

The proposed action would be entirely airspace-based and would establish a SUA, consisting of one RA, connecting the existing R-2505 and R-2524. The new RA would be titled R-2511. The proposed action would not change or modify existing military flight activities or weapons testing occurring within the SUA. Aircraft activities would be consistent with those already occurring in the airspace. No additional military flight activities or weapon launches would be introduced as part of this proposed action.

The proposed RA would help notify, advise, and alert other pilots of where military training activity could be occurring. The proposed RA would be established when determined necessary to confine or segregate activities considered hazardous to nonparticipating aircraft. Itinerant (non-local) or other aircraft not familiar with Naval Air Warfare Center Weapons Division (NAWCWD) RDAT&E activities would now be made aware of the military flight activity more formally, by the existence of the proposed RA on the Sectional Aeronautical Chart. The existence of a RA will be mapped on the Los Angeles Sectional Chart, and knowledge of its activation, would prompt all pilots to take notice of existing military flight activity, resulting in better awareness and coordination. Non-participating aircraft would not be allowed in the RA when activated.

The Federal Aviation Administration (FAA) and the Navy would establish a Letter of Agreement to ensure that radio communications provide adequate coverage to provide service to both participants and nonparticipants; publish area navigation waypoints for use in circumnavigating the SUA; establish recall procedures for weather, emergencies and medivac aircraft; and codify Joint Use requirements.

The establishment of the proposed RA would improve flight safety for all pilots (civilian, commercial, and military) while improving the capability of the NAWCWD to conduct RDAT&E and training activities.

The proposed R-2511 would create a linkage between R-2505 and R-2524, covering an area of approximately 87 square miles (225 square km). Figure 1 provides an overview of the proposed R-2511. The proposed RA would be located in San Bernardino County, California. A description of the proposed R-2511 is provided below.

Designated Altitudes: 6,000 ft MSL to, but not including, FL200.

Times of Use: Activated by Notice to Airmen (NOTAM) at least seven (7) days in advance, between 0700-1700 Monday through Friday.

Controlling Agency: Joshua Approach.

Using Agency: NAWCWD, China Lake, California.

Annual operations would be conducted within the proposed R-2511 up to 36 days per year, which is the current operations tempo for this airspace. Operations would be conducted within two-hour blocks, with a maximum of two blocks authorized per day. The airspace will be scheduled for a two-hour block but activated 15 minutes prior (with Joshua Approach) to transition between R-2505 and R-2524. Even though the airspace would be scheduled for a two-hour block, average activation time is only 10-15 minutes. Once transition is complete, the airspace will be returned to the controlling agency (Joshua Approach). The RA must be coordinated five working days in advance with the R-2508 Central Coordinating Facility, as per Letter of Agreement.

Free flight weapon systems, their associated aircraft platforms, and chase planes would cross the proposed RA, as they transit from R-2505 to R-2524 and from R-2524 to R-2505. The weapon systems include: High Speed Anti-Radiation Missile (HARM), Advanced Medium Range Air-to-Air Missile (AMRAAM), Standoff and Attack Missile (SLAM), and Joint Standoff Weapon (JSOW). Other weapon systems could be used, once it is demonstrated that they meet minimum safety standards to be provided in the forthcoming Letter of Agreement.

Mission scenarios for aircraft utilizing the proposed R-2511 would include launch platforms for free flight weapon systems, simulated close air support, and reconnaissance operations. Fixed wing aircraft such as F/A-18, F-35, and AV-8 would participate in R-2511 operations.

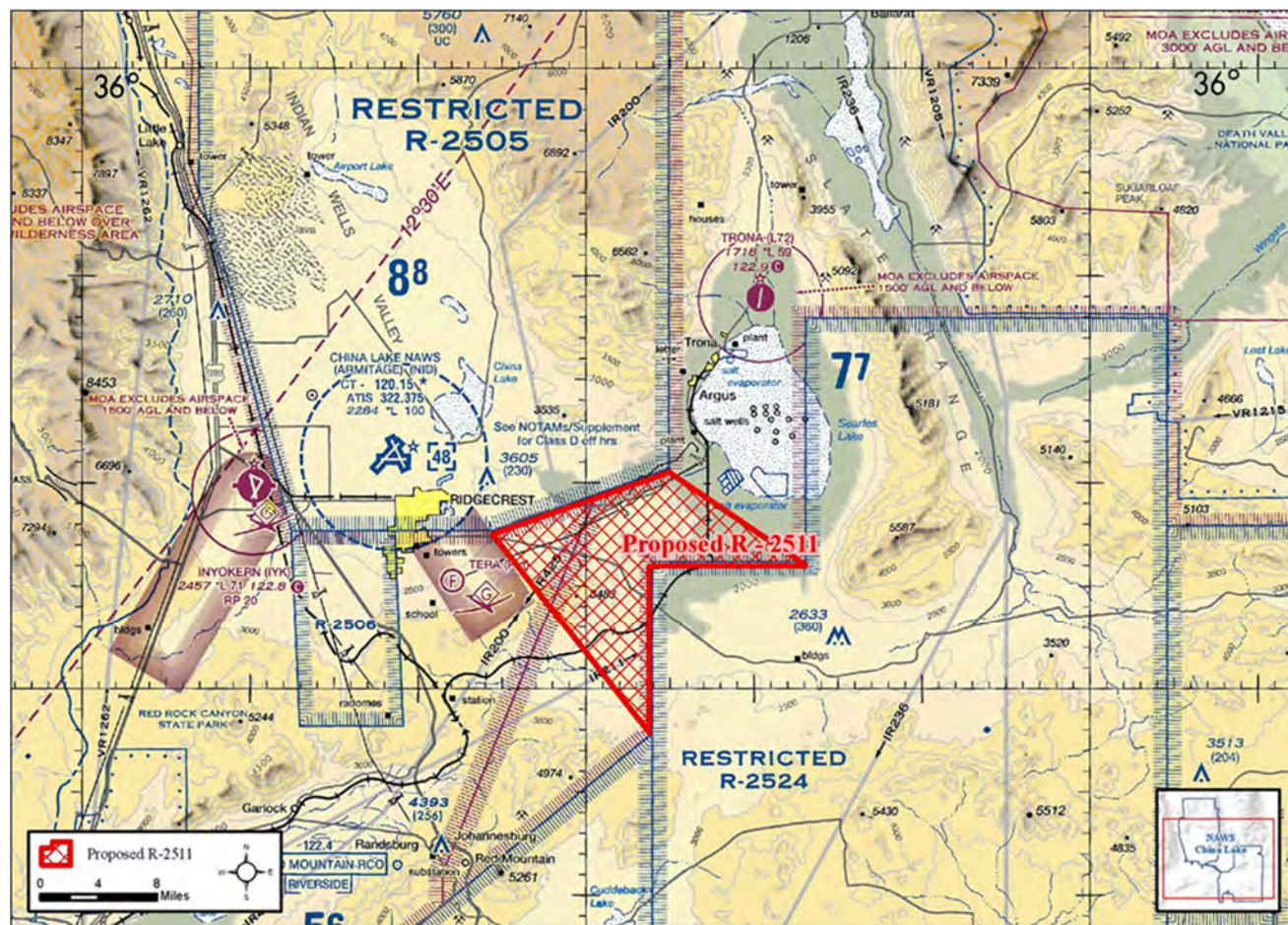


Figure 1 Overview of the Proposed R-2511

To: tristan.tozer@parks.ca.gov; calshpo.ohp@parks.ca.gov

Subject: 106 U.S. Navy/FAA Establishment of R-2511 Special Use Airspace

Good morning Mr. Tozer,

The U.S. Navy proposes to convert Special Use Airspace (SUA) connecting two existing Restricted Areas (RA) from a Controlled Firing Area to a third RA, in the vicinity of Naval Air Weapons Station China Lake, California. This is an administrative action that will provide a greater level of safety to military and non-participating aircraft, as it will provide a greater level of security in the airspace and increase communications. The proposed action includes no change in operational tempo, with no ground activities or ground disturbance.

As this action requires modification of a SUA, the Federal Aviation Administration (FAA) will be a cooperating agency for the projects National Environmental Policy Act (NEPA) review of the project. Nearly all of the land under the airspace is owned and managed by the Bureau of Land Management (BLM). We have held a scoping meeting with the BLM Ridgecrest Field Office to discuss the proposed action and identify any areas of concern to be analyzed in the project's environmental assessment (EA). BLM identified no potential significant impacts, including cultural resources, and has asked not to be a cooperating agency. We will send the draft EA to the BLM field office for review.

Attached are a scoping letter for the project and a brief project description. We look forward to working with the OHP on this project and will provide documents for review upon your request. Our team of archaeologists has requested CHRIS data for the area under the airspace to set the existing environment for the EA. We can provide copy of the literature review report upon request.

Thank you for your time and consideration on this project. If you have any questions please feel free to call or email me at any time.

Sincerely,
Mark

Mark Dimsha, AICP

Senior Environmental Engineer/Planner

Tel: 505-977-3951

mdimsha@epsilonsystems.com

www.epsilonsystems.com



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Weller, Ryan (FAA)

From: Weller, Ryan (FAA)
Sent: Tuesday, July 13, 2021 2:55 PM
To: Tozer, Tristan@Parks
Cc: Williams, Jack F (FAA); Covalt, Lonnie D (FAA)
Subject: FW: Trona R-2511 Special Use Airspace
Attachments: R-2511 Draft EA S106 Correspondence.pdf

Hi Tristan

I wanted to verify you received the 6/10/2021 email from me and see if you have any questions. The project is the R-2511 Special Use Airspace at the Naval Air Weapons Station China Lake, California and the FAA is a cooperating agency. The FAA would like to clarify that no consultation under Section 106 is required.

If we do not hear back from you within 30 days, we will proceed with the determination that no consultation under Section 106 is required. Please let me know if you have any questions. Thank you very much.

Ryan Weller

From: Weller, Ryan (FAA)
Sent: Thursday, June 10, 2021 10:48 AM
To: Tozer, Tristan@Parks <Tristan.Tozer@parks.ca.gov>
Cc: Covalt, Lonnie D (FAA) <Lonnie.D.Covalt@faa.gov>; Williams, Jack F (FAA) <Jack.F.Williams@faa.gov>
Subject: Trona R-2511 Special Use Airspace

Hi Tristan

In accordance with the Advisory Council on Historic Preservation (ACHP) regulations, 36 CFR Part 800 (Protection of Historic Properties) and the National Environmental Policy Act (NEPA), the U.S. Navy initiated Section 106 and NEPA consultation on September 3, 2020 for an undertaking, establishment of R-2511 Special Use Airspace (SUA) at the Naval Air Weapons Station China Lake, California (see attachment). The Federal Aviation Administration is a cooperating agency with regards to this action and thus must also ensure that our NEPA procedures are satisfied for this proposed action, including those under the National Historic Preservation Act (NHPA).

Per the attached, the Navy notified your office of its intent to consult. However, your office determined that the proposed action does not seem to be an activity requiring NHPA Section 106 consultation. While the FAA believes that this type of action does not have the potential to affect historic properties, your statement to the Navy that the proposed action “does not seem to be an activity requiring Section 106 consultation” does not quite fit the “no potential to affect” determination.

Could you clarify your office’s determination with respect to this proposed action, i.e. do you all believe this is a type of action with no potential to affect historic properties under 36 CFR § 800.3(a)(1), such that no consultation under Section 106 is required?

Thank you for your time and consideration of this project.

Ryan Weller
Federal Aviation Administration
Team B EOSH Support Center Manager (Acting)

AJW-W21B
WSA EOSH Support Operations Group (ESOG)
(206) 231-2286 (W)
(206) 304-4255 (C)
<https://ksn2.faa.gov/ajv/W/2/default.aspx>



Communication is not a collateral duty.

September 3, 2020

Tristan Tozer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816
(916) 445-7027
Tristan.tozer@parks.ca.gov

RE: 106 Establishment of R-2511 Special Use Airspace, Naval Air Weapons Station China Lake, California

Dear Mr. Tozer:

In accordance with the Advisory Council on Historic Preservation (ACHP) regulations, 36 CFR Part 800 (Protection of Historic Properties) and the National Environmental Policy Act (NEPA), the U.S. Navy is initiating Section 106 and NEPA consultation for an undertaking, Establishment of R-2511 Special Use Airspace (SUA) at the Naval Air Weapons Station China Lake, California. As this action involves modification of the National Airspace System (NAS), the Federal Aviation Administration is a cooperating agency for the NEPA review. The Section 106 consultation will follow the standard process identified in 36 CFR 800.3 through 800.5.

The proposed action is administrative in nature, would be entirely airspace-based, and would establish a SUA consisting of one Restricted Airspace, R-2511, connecting the existing R-2505 and R-2524. The proposed action would not change or modify existing military flight activities or weapons testing occurring within the SUA. Aircraft activities would be consistent with those already occurring in the airspace. No additional military flight activities or weapon launches would be introduced as part of this proposed action.

Currently, the U.S. Navy is performing an Environmental Assessment (EA) that is investigating the proposed action and the No-Action Alternative. Neither alternative would involve ground disturbance; however, the proposed Area of Potential Effects (APE) would consist of the land under the R-2511 SUA (see attached).

Nearly all the land of the APE is managed by the Bureau of Land Management (BLM). In January 2020, we met with members of the BLM Ridgecrest, California Field Office to scope the project with the agency. In the meeting, BLM decided not to be a cooperating agency and asked only to review the draft EA. We also discussed potential environmental impacts for consideration in the EA, including cultural/archaeological resources. No potential significant impacts were identified in the meeting.

The draft EA will be made available on the Navy Region Southwest Public website, https://www.cnrc.navy.mil/regions/cnrsw/om/environmental_support/Public_Review_of_Navy_Projects.html. The FAA is conducting an Airspace Proposal analysis in parallel with the EA, which involves a public outreach effort separate from the NEPA public comment period. We will provide your office review copies of the documents and other materials, upon request.

We look forward to receiving any comments or questions that you may have. We will consult with you, pursuant to 36 CFR Part 800.3-5, as we develop the EA. If you have any questions or need any additional information, please feel free to contact me.

Sincerely,



Mark Dimsha, AICP

Senior Environmental Engineer/Planner

Tel: 505-977-3951

mdimsha@epsilonsystems.com

www.epsilonsystems.com



Dimsha, Mark

From: Tozer, Tristan@Parks <Tristan.Tozer@parks.ca.gov>
Sent: Wednesday, October 14, 2020 12:14 PM
To: Dimsha, Mark
Subject: Re: 106 U.S. Navy/FAA Establishment of R-2511 Special Use Airspace

Hi Mark,

Thanks for the clarification. I agree with Don: as described, this doesn't seem to be an activity requiring Section 106 consultation. If you need any guidance, I would recommend reaching out to NAVFAC SW in San Diego. The cultural resources/environmental staff there have a good handle on the process and might be able to help you.

Cheers,

Tristan

Tristan Tozer
State Historian II
California Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816
Voicemail: (916) 445-7027
Tristan.Tozer@parks.ca.gov

From: Dimsha, Mark <mdimsha@epsilonsystems.com>
Sent: Wednesday, October 14, 2020 10:52 AM
To: Tozer, Tristan@Parks <Tristan.Tozer@parks.ca.gov>
Subject: RE: 106 U.S. Navy/FAA Establishment of R-2511 Special Use Airspace

Hi Tristan,

Please consider this a notification of intent to consult. We have been in touch with the BLM Ridgecrest Field Office CRM, Don Storm, regarding this project as nearly all the land underlying the proposed airspace is owned by BLM. He saw no need for a full consultation, as the proposed action is administrative in nature and would involve no land disturbance or change in aircraft operations.

The Epsilon team (Navy contractor) has pulled the CHRIS information for the ~85-square mile area to help set the APE for the EA affected environment. I can provide that information if needed.

I am the Epsilon project manager and am not fully aware of the Section 106 process. Should we generate a determination and submit, or are there other steps to be taken?

Thank you for your patience in walking me through the process.

Mark

From: Tozer, Tristan@Parks <Tristan.Tozer@parks.ca.gov>
Sent: Wednesday, October 14, 2020 11:40 AM
To: Dimsha, Mark <mdimsha@epsilonsystems.com>
Subject: Re: 106 U.S. Navy/FAA Establishment of R-2511 Special Use Airspace

Hi Mark,

Sorry for not getting back to you. I am unsure of what the Navy is requesting. Does this documentation serve as a notification of intent to consult or is the Navy initiating consultation?

Cheers,

Tristan

Tristan Tozer
State Historian II
California Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816
Voicemail: (916) 445-7027
Tristan.Tozer@parks.ca.gov

From: Dimsha, Mark <mdimsha@epsilonsystems.com>
Sent: Wednesday, October 14, 2020 9:33 AM
To: Tozer, Tristan@Parks <Tristan.Tozer@parks.ca.gov>
Subject: FW: 106 U.S. Navy/FAA Establishment of R-2511 Special Use Airspace

Mr. Tozer,

I just wanted to touch base with you with regards to the request for coordination initiated early last month. The EA for the proposed establishment of the Restricted Airspace R-2511 is moving forward, and it would be helpful to know the level of analysis needed for the assessment of cultural/historic properties.

Please let me know if more information is needed, or if my team can provide any assistance in this effort.

Thank you for your time and consideration during these unprecedented times. I know that the double whammy of the COVID lockdown and wildfire season are really testing the limits of available resources.

Sincerely,
Mark Dimsha

From: Dimsha, Mark
Sent: Thursday, September 3, 2020 9:43 AM

Project Description – Establishment of R-2511, NAWS China Lake, CA

The purpose of the proposed action is to establish permanent Special Use Airspace (SUA) in the form of a Restricted Airspace (RA) which would allow safe and realistic research, development, acquisition, testing, and evaluation (RDAT&E) and training activities on Naval Air Weapons Station China Lake (NAWSCL), between the North and South ranges. These activities would include aircraft flights between existing RAs R-2505 and R-2524, free flight weapon launches, and training missions.

The proposed action is needed to continue RDAT&E and training activities on the NAWSCL Ranges, including aircraft flights and weapons launches between the North and South ranges. Military aircraft and weapons may be highly modified and often used in nonstandard ways, which are considered hazardous to other aircraft within the airspace. Establishing an RA and replacing the Trona Controlled Firing Area would create an additional level of segregation from non-participating aircraft not currently provided.

The proposed action would be entirely airspace-based and would establish a SUA, consisting of one RA, connecting the existing R-2505 and R-2524. The new RA would be titled R-2511. The proposed action would not change or modify existing military flight activities or weapons testing occurring within the SUA. Aircraft activities would be consistent with those already occurring in the airspace. No additional military flight activities or weapon launches would be introduced as part of this proposed action.

The proposed RA would help notify, advise, and alert other pilots of where military training activity could be occurring. The proposed RA would be established when determined necessary to confine or segregate activities considered hazardous to nonparticipating aircraft. Itinerant (non-local) or other aircraft not familiar with Naval Air Warfare Center Weapons Division (NAWCWD) RDAT&E activities would now be made aware of the military flight activity more formally, by the existence of the proposed RA on the Sectional Aeronautical Chart. The existence of a RA will be mapped on the Los Angeles Sectional Chart, and knowledge of its activation, would prompt all pilots to take notice of existing military flight activity, resulting in better awareness and coordination. Non-participating aircraft would not be allowed in the RA when activated.

The Federal Aviation Administration (FAA) and the Navy would establish a Letter of Agreement to ensure that radio communications provide adequate coverage to provide service to both participants and nonparticipants; publish area navigation waypoints for use in circumnavigating the SUA; establish recall procedures for weather, emergencies and medivac aircraft; and codify Joint Use requirements.

The establishment of the proposed RA would improve flight safety for all pilots (civilian, commercial, and military) while improving the capability of the NAWCWD to conduct RDAT&E and training activities.

The proposed R-2511 would create a linkage between R-2505 and R-2524, covering an area of approximately 87 square miles (225 square km). Figure 1 provides an overview of the proposed R-2511. The proposed RA would be located in San Bernardino County, California. A description of the proposed R-2511 is provided below.

Designated Altitudes: 6,000 ft MSL to, but not including, FL200.

Times of Use: Activated by Notice to Airmen (NOTAM) at least seven (7) days in advance, between 0700-1700 Monday through Friday.

Controlling Agency: Joshua Approach.

Using Agency: NAWCWD, China Lake, California.

Annual operations would be conducted within the proposed R-2511 up to 36 days per year, which is the current operations tempo for this airspace. Operations would be conducted within two-hour blocks, with a maximum of two blocks authorized per day. The airspace will be scheduled for a two-hour block but activated 15 minutes prior (with Joshua Approach) to transition between R-2505 and R-2524. Even though the airspace would be scheduled for a two-hour block, average activation time is only 10-15 minutes. Once transition is complete, the airspace will be returned to the controlling agency (Joshua Approach). The RA must be coordinated five working days in advance with the R-2508 Central Coordinating Facility, as per Letter of Agreement.

Free flight weapon systems, their associated aircraft platforms, and chase planes would cross the proposed RA, as they transit from R-2505 to R-2524 and from R-2524 to R-2505. The weapon systems include: High Speed Anti-Radiation Missile (HARM), Advanced Medium Range Air-to-Air Missile (AMRAAM), Standoff and Attack Missile (SLAM), and Joint Standoff Weapon (JSOW). Other weapon systems could be used, once it is demonstrated that they meet minimum safety standards to be provided in the forthcoming Letter of Agreement.

Mission scenarios for aircraft utilizing the proposed R-2511 would include launch platforms for free flight weapon systems, simulated close air support, and reconnaissance operations. Fixed wing aircraft such as F/A-18, F-35, and AV-8 would participate in R-2511 operations.

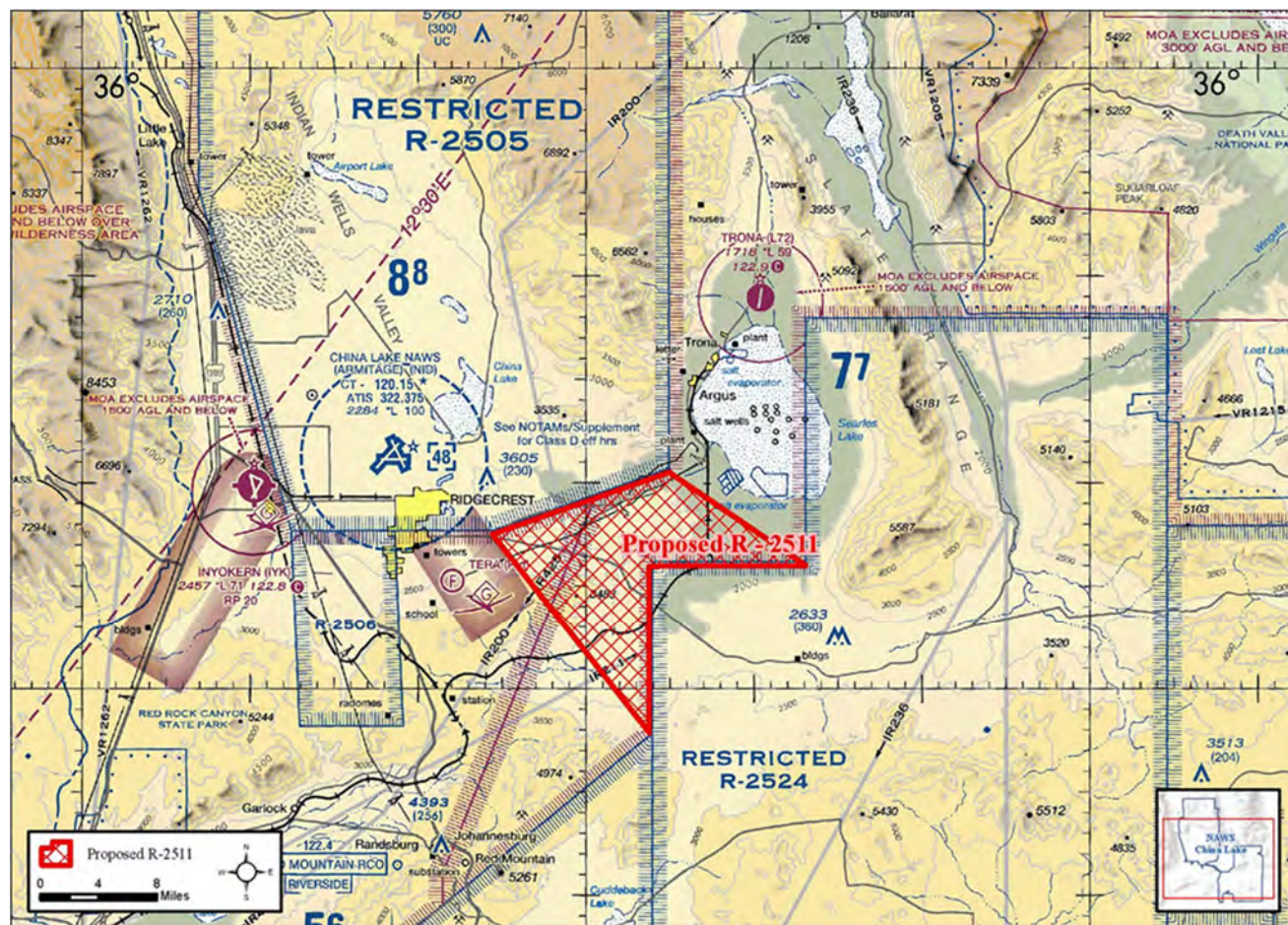


Figure 1 Overview of the Proposed R-2511

To: tristan.tozer@parks.ca.gov; calshpo.ohp@parks.ca.gov

Subject: 106 U.S. Navy/FAA Establishment of R-2511 Special Use Airspace

Good morning Mr. Tozer,

The U.S. Navy proposes to convert Special Use Airspace (SUA) connecting two existing Restricted Areas (RA) from a Controlled Firing Area to a third RA, in the vicinity of Naval Air Weapons Station China Lake, California. This is an administrative action that will provide a greater level of safety to military and non-participating aircraft, as it will provide a greater level of security in the airspace and increase communications. The proposed action includes no change in operational tempo, with no ground activities or ground disturbance.

As this action requires modification of a SUA, the Federal Aviation Administration (FAA) will be a cooperating agency for the projects National Environmental Policy Act (NEPA) review of the project. Nearly all of the land under the airspace is owned and managed by the Bureau of Land Management (BLM). We have held a scoping meeting with the BLM Ridgecrest Field Office to discuss the proposed action and identify any areas of concern to be analyzed in the project's environmental assessment (EA). BLM identified no potential significant impacts, including cultural resources, and has asked not to be a cooperating agency. We will send the draft EA to the BLM field office for review.

Attached are a scoping letter for the project and a brief project description. We look forward to working with the OHP on this project and will provide documents for review upon your request. Our team of archaeologists has requested CHRIS data for the area under the airspace to set the existing environment for the EA. We can provide copy of the literature review report upon request.

Thank you for your time and consideration on this project. If you have any questions please feel free to call or email me at any time.

Sincerely,
Mark

Mark Dimsha, AICP

Senior Environmental Engineer/Planner

Tel: 505-977-3951

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APPENDIX D SPECIAL USE AIRSPACE PROPOSAL

Distribution Statement A: Approved for public release; distribution is unlimited.
NAWCWD PR21-0133.



DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER WEAPONS DIVISION
1 ADMINISTRATION CIRCLE 575 I AVENUE SUITE 1
CHINA LAKE, CA 93555-6100 POINT MUGU, CA 93042-5049

IN REPLY REFER TO:

3700
DB1000M/3038
24 Nov 20

From: Commander, Naval Air Warfare Center Weapons Division
To: Federal Aviation Administration Western Service Area Operations Support Group
Via: (1) Regional Airspace Coordinator, Naval Air Warfare Center Weapons Division
(2) Department of the Navy representative, Federal Aviation Administration Western Service Area (ANM-903)

Subj: RESTRICTED AREA R-2511 PROPOSAL

Ref: (a) OPNAVINST 3770.2L
(b) FAA Order 7400.2

1. In accordance with references (a) and (b), request the establishment of R-2511. This proposal is submitted in coordination with the Federal Aviation Administration (FAA) Western Service Area Operations Support Group.

a. Proposed Special Use Airspace: The Naval Air Warfare Center Weapons Division. China Lake, CA. proposes to establish restricted area R-2511 over the Trona Corridor, near Trona, California, to be used for free flight weapons systems transiting from launch areas within R-2505 to target areas within R-2524 and from launch areas within R-2524 to target areas within R-2505.

b. Area Description: R-2511 Trona, CA: Boundaries - Beginning at lat. 35°37'30" N., long. 117°35'33" W., to lat. 35°40'30" N., long. 117°25'03" W., to lat. 35°36'00" N., long. 117°16'55" W., to lat. 35°36'00" N., long. 117°26'03" W., to lat. 35°27'40" N., long. 117°26'03" W., thence to the point of beginning.

c. Designated altitudes: 6,000 feet MSL, up to but not including, FL 200 20,000 Feet MSL

d. Time of designation: Intermittent, 0700-1700L, Monday-Friday, activated by NOTAM at least 7 days in advance, between 0700-1700L, Monday - Friday. No more than two 2-hour blocks each day. No more than 36 times per year. The airspace will be scheduled for a two-hour block but activated 15 minutes prior to transition between R-2505 and R-2524.

e. Controlling agency: FAA, Joshua Control Facility, Edwards Air Force Base, CA.

f. Using agency: Naval Air Warfare Center Weapons Division. China Lake, CA.

CHINA LAKE NAVS (ARMITAGE) (NID)
CT - 120.15 ★
ATIS 322.375
2284 °L 100

China Lake

See NOTAMS/Supplement for Class D-eff hrs

3535

3605 (230)

Argus

salt evaporator

salt wells

plant

Searles Lake

RIDGECREST

towers

2500

school

R-2506

R-2511

IR200

IR425

IR211

IR236

radomes

station

3500

4974

2633 (360)

bldgs

RESTRICTED

77

- 2

Subj: RESTRICTED AREA R-2511 PROPOSAL

of 6,000 feet MSL, there will be sufficient maneuvering airspace to allow smaller, general aviation type aircraft to fly below the floor of the affected proposed area. Stratification of the proposed restricted area has been evaluated but is not practical. The added risk of non-participating aircraft within a stratified R-2511, either above or below the weapon nominal flight path would be unacceptable for weapon releases. Most weapons that will be launched across this corridor will vary their flight altitude, either climbing to establish a look-down aspect or descending on their path toward their target. Additionally, the weapons' altitude is expected to vary somewhat based on the shooter aircraft's launch tolerances and day-of weather conditions. Given the already relatively narrow altitude band of the proposed R-2511, there would be insufficient standoff segregation from non-participating aircraft to justify conducting live fire events within a stratified R-2511.

4. Land Use: R-2505 and R-2524 are located over government controlled land ranges. Launching weapons over one of these two areas enables China Lake Ranges safety personnel to verify that the weapon launch was successful and, if necessary, terminate the weapon's flight over government-controlled land prior to transiting uncontrolled land. The vast majority (over 95%) of the land under the proposed R-2511 is BLM-administered with a State-owned parcel in the vicinity of the Pinnacles. The proposed R-2511 will not extend to the surface.

5. Joint Use: The proposed restricted airspace will be available for joint-use with Joshua Control Facility (JCF), which will be the designated controlling agency. JCF is already the controlling agency for R-2505 and R-2524. An Air Traffic Control Assigned Airspace will not be required.

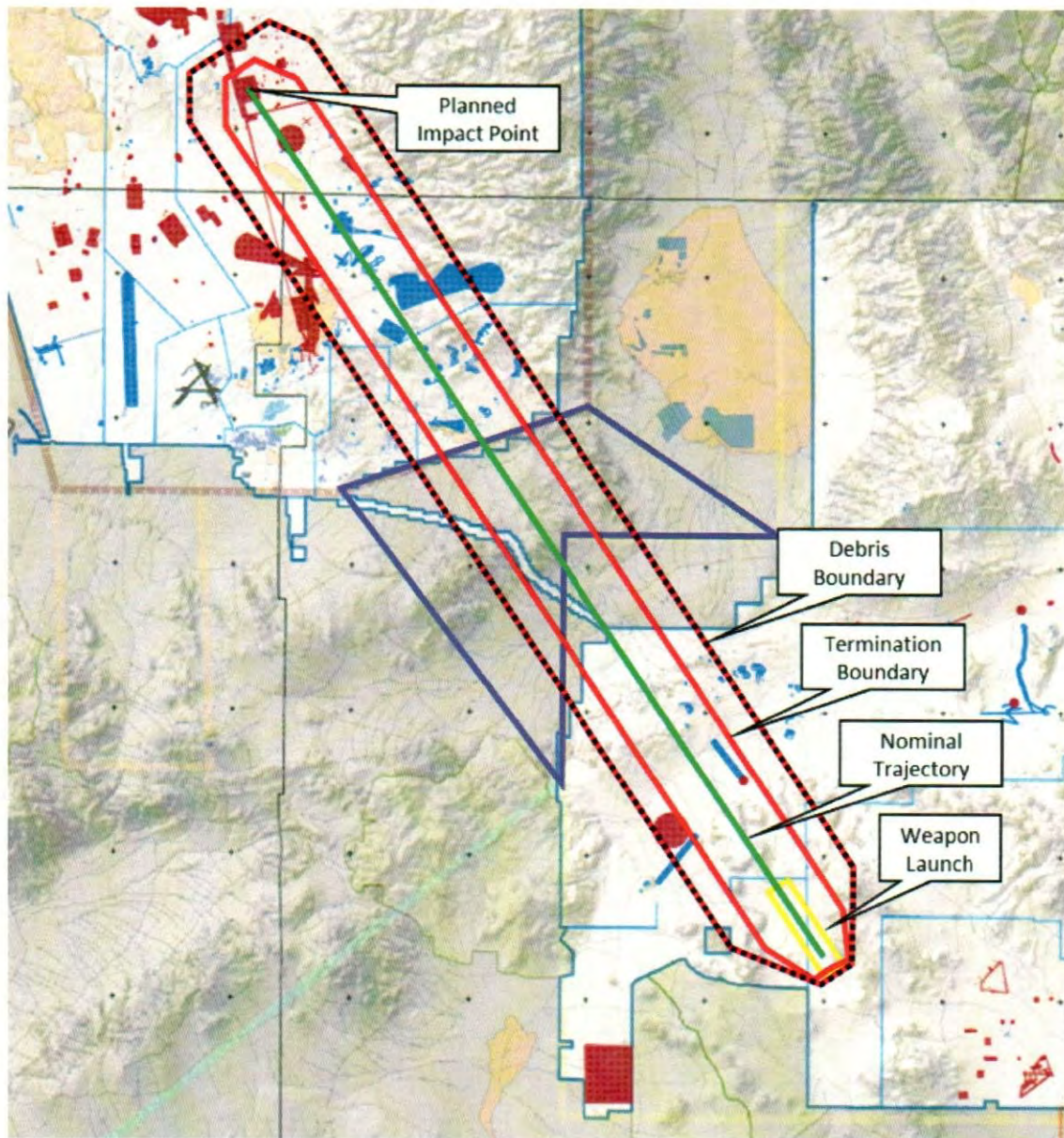
6. Activities: The proposed restricted area will be used for free flight weapon systems transiting from launch areas within R -2505 to target areas within R-2524 and from launch areas within R-2524 to target areas within R-2505. Other unproven or immature weapon systems or aviation platforms in testing and development may also utilize proposed restricted airspace.

7. Environmental POC: Mr. Steve Penix, Range Sustainability, DSN 437-6026, commercial 760-939 6026, email steve.penix@navy.mil.

8. Communications and Radar: Both radar surveillance and radio communications will be available for the real-time monitoring and coordination of the proposed restricted area. This service will primarily be provided by the Joshua Control Facility and augmented by the China Lake Air Surveillance Center, a military radar unit.

Subj: RESTRICTED AREA R-2511 PROPOSAL

9. Safety Considerations: Most weapons transiting the gap between R-2524 and R-2505 will be air launched from the South-West portion of R-2524 between Cuddeback South and Superior Valley. This aligns the weapon to transit through the center of R-2511 and impact the target areas in the center of R-2505. The exact launch location may vary somewhat depending on the planned impact location, and whether the weapon has the capability to follow waypoints vs. being constrained to a straight-line approach to the target. There are no current plans in the next 5 years to utilize R-2511 using surface launched weapons. An example weapon-firing pattern is depicted below.



Subj: RESTRICTED AREA R-2511 PROPOSAL

a. Measures taken to ensure containment of the activity within the proposed area: All weapons transiting R-2511 will have a Flight Termination System (FTS) capable of terminating the weapon's flight and ensuring it does not leave a predetermined corridor. Weapon termination boundaries will be determined on a case-by-case basis and will take into account the weapon's speed, maneuverability, altitude, and debris propagation following a termination command. Weapon health and status will be evaluated prior to launch and throughout the flight. Prior to entering R-2511, the test execution team will ensure the weapon is functioning nominally and that it is following its planned trajectory. Weapons transiting R-2511 will be tracked by sources capable of providing real-time Time Space Position Information (TSPI) to the Flight Termination Officer (FTO). If TSPI is unavailable prior to entering R-2511, weapon flight will be terminated. If TSPI indicates that, the weapon has deviated from its nominal flight path and crosses the termination boundaries, its flight will be terminated.

b. Procedures for handling malfunctions: Weapon malfunctions occurring prior to launch will be assessed in regards to their impact on the ability to safely transit R-2511. The weapon will not be launched in a known degraded state if the malfunctions could prevent successful transit of R-2511 along the nominal route. Weapon malfunction after launch will not automatically be grounds for terminating its flight. Consideration will be given to the nature of the malfunction and whether it jeopardizes the weapon's safe transit of R-2511. In all cases, the FTO will exercise best judgement to activate the FTS at a time and location that minimizes risk to populated areas.

c. Ordnance trajectory envelopes: Trajectory envelopes will be calculated by the China Lake Ranges Range Safety Branch. The envelopes will be based on the predicted nominal trajectory of the weapon including reasonable deviations to account for launch point tolerances, environmental conditions, and variability in the weapon's real-time guidance calculations. Flight termination boundaries will be established to either side of the nominal flight path as well as for the weapon's altitude. Weapon mass properties, airspeed, maneuverability, and termination breakup effects will be used as inputs for determining a debris boundary. The debris boundary will represent the ground area where weapon debris will impacted if the weapon is terminated within the termination boundaries.

d. When an aircraft activity could measurably affect the safety of persons or property on the surface, the proponent must demonstrate that provisions have been made for their protection. Weapon maturity and known failure modes will be considered when planning a cross-range shot. Cross-range launches will not be attempted unless there is a high degree of confidence that the weapon will safely transit R-2511. Hazard assessments will be calculated for every cross-range shot, and the Range Commander will consider the guidance of RCC-321 in their risk decisions. Holidays and other times when the surface population may be significantly increased will be avoided. To further enhance safety for the general aviation community; we request annotation on the Los Angeles VFR Sectional Chart similar to this:

Subj: RESTRICTED AREA R-2511 PROPOSAL



10. Coordination Summary: R-2508 Complex Control Board; National Training Center, Fort Irwin, CA; 412 OSS, Edwards AFB, CA; 412 OG, Edwards AFB, CA; Naval Test Wing Pacific, China Lake, CA; VX-31, China Lake, CA; VX-9, China Lake, CA; Naval Air Weapons Station China Lake, CA; 144 FW ANG, Fresno, CA; Commander, Strike Fighter Wing Pacific, Lemoore, CA; 12 CTS (Fort Irwin Detachment), 57 WG, Nellis AFB, NV; Joshua Control Facility, Edwards AFB, CA; local general aviation community.

11. Environmental Documents. These will be added upon completion.

12. Point of Contact: Direct questions to Ms. Sandra Ciriaco, Air Space Management Control Specialist, at DSN 437-5480, commercial 760-939-5480 or e-mail sandra.ciriaco@navy.mil.


ANDY CORZINE

APPENDIX E CUMULATIVE IMPACTS PROJECTS

This appendix provides summary of projects considered within the cumulative effects analysis for the Environmental Assessment (EA) of the Naval Air Warfare Center Weapons Division (NAWCWD) establishment of the proposed restricted area airspace, R-2511. The cumulative effects of these projects, when added to the Proposed Action, are discussed within the individual resource sections in the EA included in Chapter 3 of this EA. Before listing the specific projects, this appendix summarizes the related National Environmental Policy Act (NEPA) requirements regarding cumulative effects analysis and geographic boundary determination.

CEQ regulations implementing the procedural provisions of NEPA define cumulative impacts as:

...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. (40 CFR 1508.7)

The CEQ also provides guidance on cumulative impacts analysis in *Considering Cumulative Effects Under the National Environmental Policy Act* (CEQ 1997). Noting that environmental impacts result from a diversity of sources and processes, this CEQ guidance observes that “no universally accepted framework for cumulative effects analysis exists,” while noting that certain general principles have gained acceptance. One such principle provides that “cumulative effects analysis should be conducted within the context of resource, ecosystem, and community thresholds—levels of stress beyond which the desired condition degrades.” Thus, “each resource, ecosystem, and human community must be analyzed in terms of its ability to accommodate additional effects, based on its own time and space parameters.” Therefore, cumulative effects analysis normally will encompass geographic boundaries beyond the immediate area of the Proposed Action, and a time frame including past actions and foreseeable future actions, to capture these additional effects. Bounding the cumulative effects analysis is a complex undertaking, appropriately limited by practical considerations. Thus, CEQ guidelines observe, “it is not practical to analyze cumulative effects of an action on the universe; the list of environmental effects must focus on those that are truly meaningful.”

Geographic boundaries for analyses of cumulative impacts in this EA vary for different environmental resources. For example, for air quality, the potentially affected air basin is the appropriate boundary for assessment of cumulative impacts from releases of pollutants into the atmosphere. The cumulative impacts analysis focuses on projects that directly overlap with the Proposed Action (i.e., occur in similar locations and potentially impact similar resources). The cumulative effects analysis area includes private and public lands that lie within the cumulative effects boundaries.

Table E-1 lists the past, present, and reasonably foreseeable future actions within the ROI that have had, continue to have, or would be expected to have some impact on the natural and human environment. The projects in this table are limited to those implemented in the last five years or those with ongoing contributions to environmental effects. Projects with measurable contributions to impacts within the ROI for a resource area were included in the cumulative analysis.

Table E.1. Reasonably Foreseeable Actions within the Region of Influence

Project Title	Project Description	Project Timeframe		
		Past	Present	Future
Pacific Gas & Electric (PG&E) Hydrostatic Testing	PG&E is conducting maintenance work, hydrostatic testing and other integrity management activities on segments of Lines 300A/B and completing strength testing on segments of Lines 311/311-1 in accordance with California Public Utilities Commission General Order 112 F and federal regulations (49 CFR Part 192). As part of the Proposed Action, PG&E also would install in-line inspection equipment along the segments of Lines 300A/B to provide new permanent areas within PG&E's right-of-way (BLM 2018).	✓	✓	✓
Commercial Filming on Bureau of Land Management (BLM) Lands	BLM allows commercial filming on its lands within the ROI, by permit. Commercial filming is defined as use of motion picture, videotaping, sound recording, or other moving image or audio recording equipment on public lands that involves the advertisement of a product or service, the creation of a product for sale, or the use of actors, models, sets, or props, but not including activities associated with broadcasts for news programs (BLM 2020a).	✓	✓	✓
BLM Special Recreation Permits on Lands	Special Recreation Permits are issued to businesses, organizations, and individuals to allow the use of specific public land and related waters for commercial, competitive, and organized group use. These permits allow the land stewards to coordinate and track commercial and competitive use of public lands. They also provide resource protection measures to ensure the future enjoyment of those resources by the public (BLM 2020b).	✓	✓	✓
Las Vegas Metroplex Project	The Federal Aviation Administration (FAA) is planning on improving the efficiency of airspace in the Las Vegas, Nevada area through implementation of area navigation (RNAV) flight procedures. These RNAV procedures would optimize aircraft arrival and departures at the following airports: McCarran International Airport, Henderson Executive Airport, and North Las Vegas Airport. The project could involve changes in flight paths and altitudes in certain areas but would not involve ground activities (FAA 2020a).		✓	
Note Change – Las Vegas McCarran International Airport	This action changes the term “LANDING LAS COMPLEX” to “LANDING LAS TERMINAL AREA.” The note change also involves some minor procedure edits (FAA 2020b).	✓	✓	✓
Riverside Two Departure (Obstacle) procedure amendment	The FAA is proposing to change the departure procedure for Riverside Municipal Airport to correct a safety issue that conflicts with air traffic arrivals at nearby Chino Airport (FAA 2020c).	✓	✓	✓
RNAV Visual Approach to Runway 24 for San Bernardino International Airport	The FAA is proposing to establish a RNAV for visual approach to Runway 24 at the San Bernardino International Airport. The procedure is proposed at the request of United Parcel Service and is considered a third-party procedure developed for their use.	✓	✓	✓

Project Title	Project Description	Project Timeframe		
		Past	Present	Future
Proposed Eastgate Air Cargo Facility	The San Bernardino International Airport Authority proposes to develop facilities at the airport to accommodate unmet demand for air cargo facilities in San Bernardino, California (FAA 2020d).	✓	✓	✓
Southern California Optimization of Airspace and Procedures in the Metroplex	This project included the optimization of aircraft routes and the supporting airspace management structure serving aircraft operating under instrument flight rules (IFR) while departing from or arriving to the Southern California Metroplex area (FAA 2016).	✓		
Supersonic Operations – Mojave Air and Space Port	The Mojave Air and Space Port is seeking a waiver from the FAA for limited operations within the confines of pre-existing supersonic corridors.		✓	✓

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APPENDIX F AIRSPACE TRAFFIC IMPACT ANALYSIS

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NAWCWD PR21-0133.



*Airspace Analysis in Support
of
Environmental Assessment for
the Establishment of R-2511*

Final Report

7 October 2020

Submitted Under
Contract No. N68936-19-D-0009

to:

Epsilon Systems
901 North Heritage Drive, Suite 204
Ridgecrest, CA 93555

by:



ATAC Corporation
2770 De La Cruz Blvd.
Santa Clara, CA 95050

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Preface

In support of preparation of an Environmental Assessment (EA) to evaluate potential impacts associated with the establishment of a proposed restricted area (RA), the Navy requested an airspace traffic analysis of operations in the local area of the Trona Controlled Firing Area (CFA).

This study focused on analyzing recorded Federal Aviation Administration (FAA) flight track data around the region of the Trona CFA, in particular the region defined by the proposed R-2511 RA. One year's worth of flight track information was processed, analyzed, and summarized.

The Airspace Traffic Analysis in Support of the EA for the Establishment of R-2511 study was conducted by ATAC under Contract Number N68936-19-D-0009. This report documents the study process and results from the analysis.

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Executive Summary

The Airspace Traffic Analysis was conducted in support of the Environment Assessment (EA) for the establishment of restricted area (RA) R-2511 at Naval Air Weapons Station China Lake, CA (NAWSCL). This report provides an analysis of air traffic operations within and in close proximity to the proposed R-2511. This proposed RA is to be used to improve the capability of the Naval Air Warfare Center Weapons Division (NAWCWD) to conduct research, development, acquisition, testing, and evaluation (RDAT&E) and training activities. The analysis focused on characteristics of recent traffic operations from fiscal year 2019 (FY19) transiting the proposed airspace.

The purpose of this analysis was to provide an inventory of both civilian and military usage of the proposed airspace to support the ongoing EA. The analysis serves to assist by providing a snapshot of existing air traffic operations and summarize impacts the proposed RA might have upon these operations.

Proposed Restricted Area R-2511

A total of 3,118 flight tracks crossed proposed R-2511 airspace during FY19, of which 27% (842 crossings) were made by aircraft classified as civilian, 12.6% (394 crossings) were made by military aircraft, and 60.4% (1,882 crossings) were made by flights of unknown origin. These 1,882 crossings were uncategorized due to limitations in the radar data. Of the 1,236 known flights categorized as either civilian or military, 69.1% (854 crossings) were made by an aircraft on an instrument flight plan and 30.1% (382 crossings) were VFR.

The majority of aircraft (96.9%) crossed R-2511 airspace below FL180. Of the aircraft that crossed above FL180, 5.8% (6 crossings) were civilian, 61.5% (64 crossings) were military, and 32.4% (34 crossings) were uncategorized.

Approximately half of civilian flights crossing the proposed R-2511 did not have origin or destination airport information due to lack of data captured by the ATC system. Of those flights with airport information, most aircraft were traveling to or from airports located in the Las Vegas area, as well as Bakersfield and Trona. The most prevalent origin and destination airports for military aircraft crossing R-2511 were Edwards Air Force Base and China Lake Naval Air Weapons Station.

On average, there were 9.0 crossings per day through the proposed R-2511 airspace. There are no published airways located within the boundaries of the proposed airspace. However, this area, commonly referred to as the Trona Gap, is a known corridor for general aviation (GA) aircraft flying to Death Valley or as a shortcut to Las Vegas from the west. In addition, military aircraft not participating in activities in R-2524 and R-2505 must also transit using this gap. In order to avoid the proposed R-2511 airspace when active, these aircraft would either need to fly below the floor of the RA (below 6,000' MSL) or plan flights around the activation times published by NOTAM.

Conclusion

Although there were occurrences of aircraft traveling through the proposed R-2511 airspace in the FY19 radar data analyzed, the overall impact to civilian flight operations is expected to be minimal.

Considering that the proposed airspace would be activated via NOTAM at least seven days in advance, it would be the responsibility of VFR pilots to become aware of days when the RA is activated and to avoid the airspace. Aircraft on an IFR flight plan would be automatically separated by ATC.

NAWCWD flight operations in R-2511 are expected to occur up to 36 days per year. Operations will occur in two-hour blocks with a maximum of two blocks per day and an average activation time of 10-15 minutes. With a total of 3,118 flights crossing the proposed R-2511 boundary in FY19, a projected average of 9.0 aircraft per day would have been impacted on each of the 36 days the RA is expected to be active.

1 Introduction

This report provides an analysis of air traffic operations within and in close proximity to the proposed airspace as depicted in *Figure 1-1*, in support of the EA for the establishment of R-2511 at NAWSCL.

This analysis provides an inventory of both civilian and military usage of the area to support further study and decisions regarding the establishment of R-2511. The study focused on analyzing existing air traffic operations based on recorded flight data from FY19. This data contains the geometry of radar flight tracks and, when available, other specific information such as aircraft type and flight plan information.

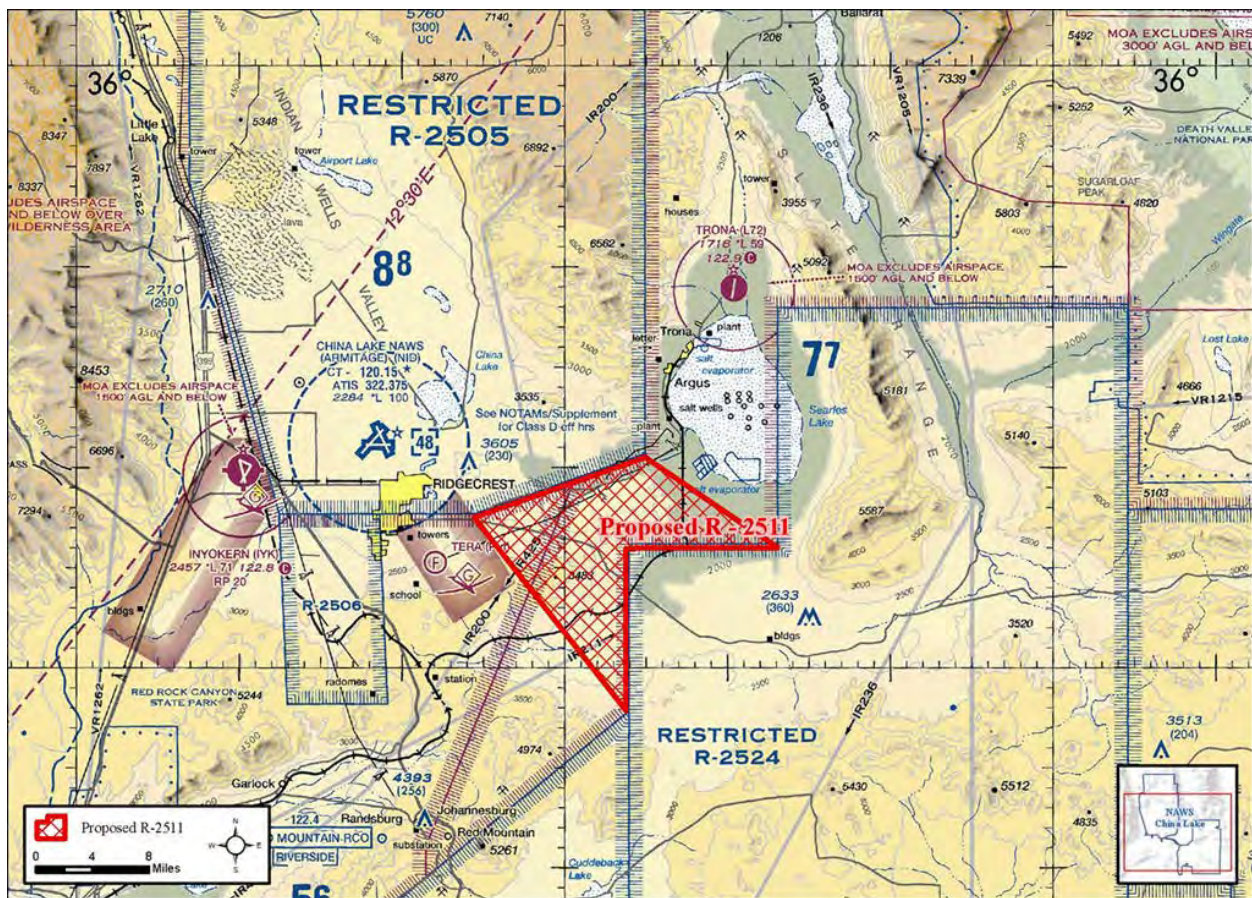


Figure 1-1: Overview of the Proposed R-2511

FAA approval for the use of the Performance Data Analysis and Reporting System (PDARS) and the system's archived Los Angeles Center (ZLA) data is pending. Los Angeles Center data, in conjunction with System Wide Information Management (SWIM) radar data from Northern California (NCT), Southern California (SCT), and Phoenix (P50) Terminal Radar Approach Control (TRACON) facilities, was used for the purpose of performing the airspace traffic analysis.

1.1 General Study Process

The airspace traffic analysis centers on the examination and evaluation of historical (PDARS and SWIM-collected data) traffic flows within the proposed R-2511. In addition, flight tracking data by individual flights was produced for entry into the SkyViewer visualization tool for analysis and to produce graphics for illustrating flights.

Figure 1-2 presents the radar coverage for Los Angeles Center and three TRACONS in relation to the airspace under study. Due to the location of the study airspace among the Center and three TRACONS, flight plan and radar track data from Los Angeles Center and NCT, SCT, and P50 TRACONS was collected and verified to ensure the quality and reliability of the data. The four sets of radar data were then merged into a single dataset in order to simplify the analytic process, as well as to prevent errors in the analysis. This new dataset was then examined for any errors and omissions. The dataset was validated and the analytical processing commenced.

The PDARS SkyView Reporting System (SVRS) was used in conjunction with ATAC's SkyViewer as the primary analytical tools. The PDARS SVRS is a Microsoft Excel plug-in that allows for the analysis of radar flight tracks and is used specifically with PDARS data. SkyViewer is a state-of-the-art 4-dimensional computer tool for displaying, analyzing, designing, and evaluating air traffic operations.

SVRS and SkyViewer allow for the systematic allocation of PDARS radar data for the operating areas of interest. PDARS contains radar flight track data as well as flight plan information for every flight in the data set. SVRS reports are generated from this flight plan data and used to analyze operations with each airspace volume. PDARS flight processing tools allow for the reconstruction of flight trajectories with a great level of precision and reliability. Built-in flight analysis capabilities allow for the automatic computation of a wide variety of parameters for a particular airspace, including time spent in the airspace, distance flown, and origin and destination airports. SkyViewer provides the capability to analyze and visualize these airspace traffic operations.

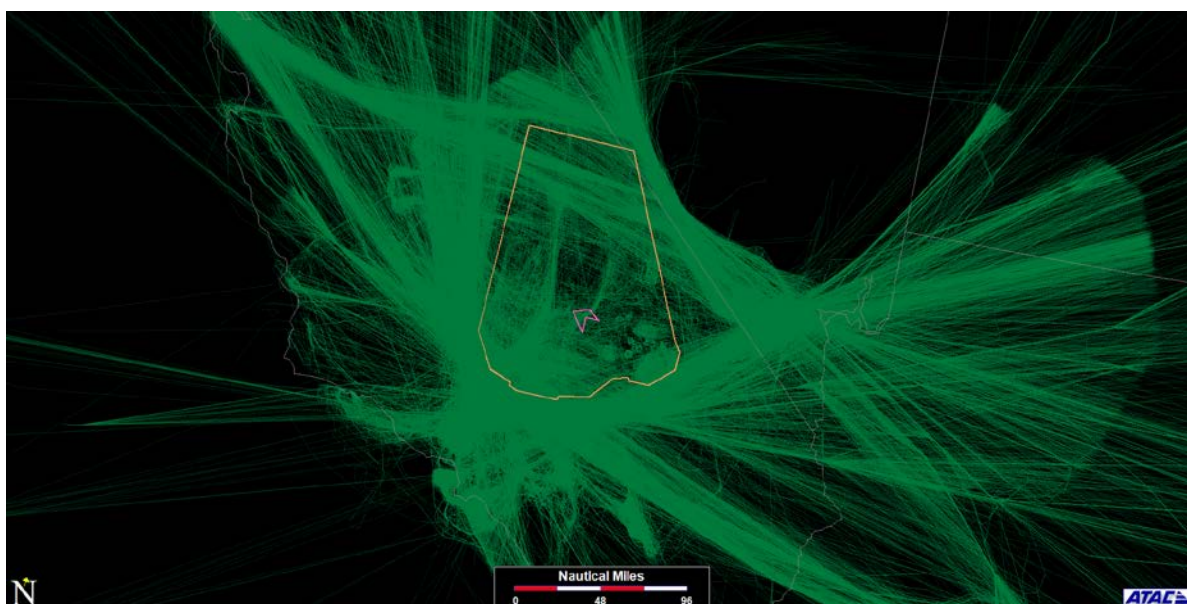


Figure 1-2: Radar Coverage for Study Area

In order to ensure a sufficient number of operational days to cover the potential variance in traffic operations in the areas under study, a radar sample of 365 days taken from FY19 was processed to obtain metrics for the area under study. The lateral and vertical boundaries of the RA are listed in *Table 1-1*. Altitudes selected for examination are listed in *Table 1-2*. All data reported is from this time period and altitudes unless otherwise noted.

Table 1-1: Proposed R-2511 Definitions

Designated Altitudes	Boundaries
6,000' MSL to, but not including, FL200	35°37'30" N 117°35'33" W
	35°40'30" N 117°25'03" W
	35°36'00" N 117°16'55" W
	35°35'58" N 117°26'13" W
	35°27'40" N 117°26'03" W

FL: flight level MSL: mean sea level SFC: surface

Table 1-2: Altitude Strata

Shelf	Altitudes
A	SFC – 6,000' MSL
B	6,000' MSL – 12,500 MSL
C	12,500' MSL – FL180
D	FL180 – FL200

FL: flight level MSL: mean sea level SFC: surface

1.1.1 Radar Flight Tracks

When available, PDARS Data contains electronic flight plan information for recorded flights. Instrument Flight Rules (IFR) aircraft are associated with a specific flight plan describing the route, and this data is recorded in PDARS. The increased fidelity of information allows for more detailed analysis of the flight tracks, including arrival and departure pairs. Visual Flight Rules (VFR) aircraft may or may not be transmitting location data to air traffic control centers. Most VFR flight tracks do not have detailed information available, and only in rare cases can additional information be calculated.

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2 Airspace Traffic Analysis

This section documents the results and analyses of the airspace traffic analysis. The airspace traffic analysis consisted of examining historical PDARS and SWIM radar flight data in the area of interest. Radar tracks that crossed the boundaries of the proposed R-2511 had the track data and attributed information recorded. Various analytics were then performed on this data.

2.1 Proposed Restricted Area R-2511

The proposed restricted airspace R-2511 is situated from 6,000' MSL up to but not including FL200. The proposed R-2511 would create a linkage between R-2505 and R-2524, covering an area of approximately 87 square miles (225 square km). The restricted area would be activated by Notice to Airmen (NOTAM) to improve flight safety for all pilots (civilian, commercial, and military) while improving the capability of the NAWCWD to conduct RDATE and training activities. The proposed R-2511 is expected to be activated for up to 36 days per year. Operations would be conducted within two-hour blocks with a maximum of two blocks per day. *Table 2-1* presents the R-2511 crossing counts by operator category. These are recorded aircraft movements that, without altering course or altitude, would have entered the restricted area boundaries had R-2511 been implemented and active. A total of 3,118 crossings were observed for R-2511 airspace in FY19. Of those, 12.6% were identified as military, 27.0% were identified as civilian, and 60.4% were unidentified VFR aircraft.

1,882 crossings were performed by aircraft that were categorized as unknown due to the lack of data captured by the ATC system. The system does not capture any identifying information beyond a radar flight track for aircraft operating with a 1200 beacon code. Additionally, flight plan information is not passed through to PDARS or SWIM for aircraft receiving radar services from a TRACON only (i.e. aircraft that never talk to a Center controller). This means that any identifying information, such as aircraft type, callsign, and origin or destination airport, is not available in the radar data. These “unknowns” are likely VFR general aviation (GA) aircraft, but may also be transiting military aircraft.

Table 2-1: R-2511 Crossings by Operator Type

Type	Count	Percent
Civilian	842	27.0%
Military	394	12.6%
Unknown	1,882	60.4%
Total	3,118	100%

Of the 1,236 known civilian and military flights, 69.1% (854 crossings) were made by aircraft on an instrument flight plan and 30.9% (382 crossings) were VFR. Civil aircraft accounted for approximately three-quarters (77%) of crossings by IFR aircraft. Civil aircraft observed in this study include many single engine propeller aircraft such as the BE-35, PA-28, C-182, C-172, and SR-22. Military aircraft accounted for 196 (23%) of crossings by IFR aircraft. The most common military aircraft types were F-18s and MQ-9As. *Table 2-2* presents R-2511 crossings counts by IFR/VFR.

Table 2-2: R-2511 Crossings by IFR/VFR

Category	Civilian		Military		Total	Percent
	Count	Percent	Count	Percent		
IFR	658	77.0%	196	23.0%	854	69.1%
VFR	184	48.2%	198	51.8%	382	30.9%
Total	842	68.1%	394	31.9%	1,236	100.0%

Figure 2-1 presents a snapshot of radar flight tracks that traversed the boundaries of proposed R-2511 by operator type.

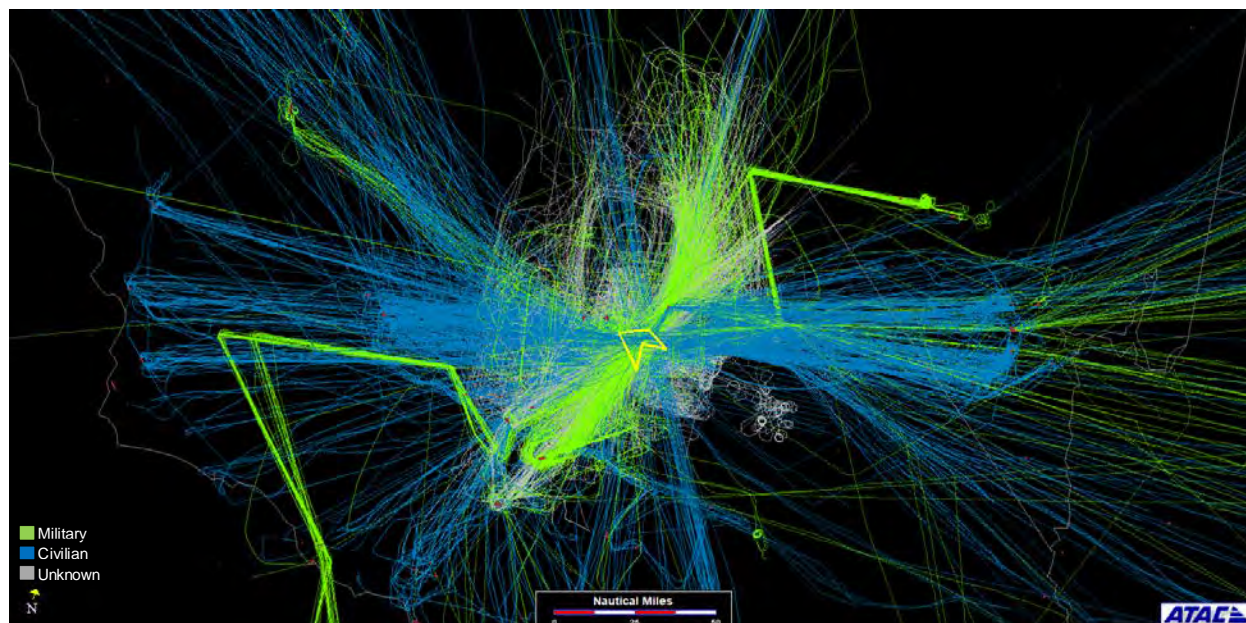


Figure 2-1: Radar Flight Tracks by Operator Type

2.1.1 Crossing Durations

Table 2-3 presents a summary of time that aircraft spent traversing R-2511 airspace. Figure 2-2 presents the distribution of crossing times by operator type. On average, civilian aircraft spent 2.8 minutes transiting R-2511 and military aircraft spent 1.2 minutes transiting the airspace. Longer durations are from aircraft that circled within the proposed airspace or traversed it several times during the same flight.

Table 2-3: Summary of Crossing Durations

Category	Min (mm:ss)	Max (mm:ss)	Average (mm:ss)
Civilian	00:00	35:42	02:49
Military	00:00	31:57	01:14
Unknown	00:00	18:33	01:03
Total	00:00	35:42	01:31

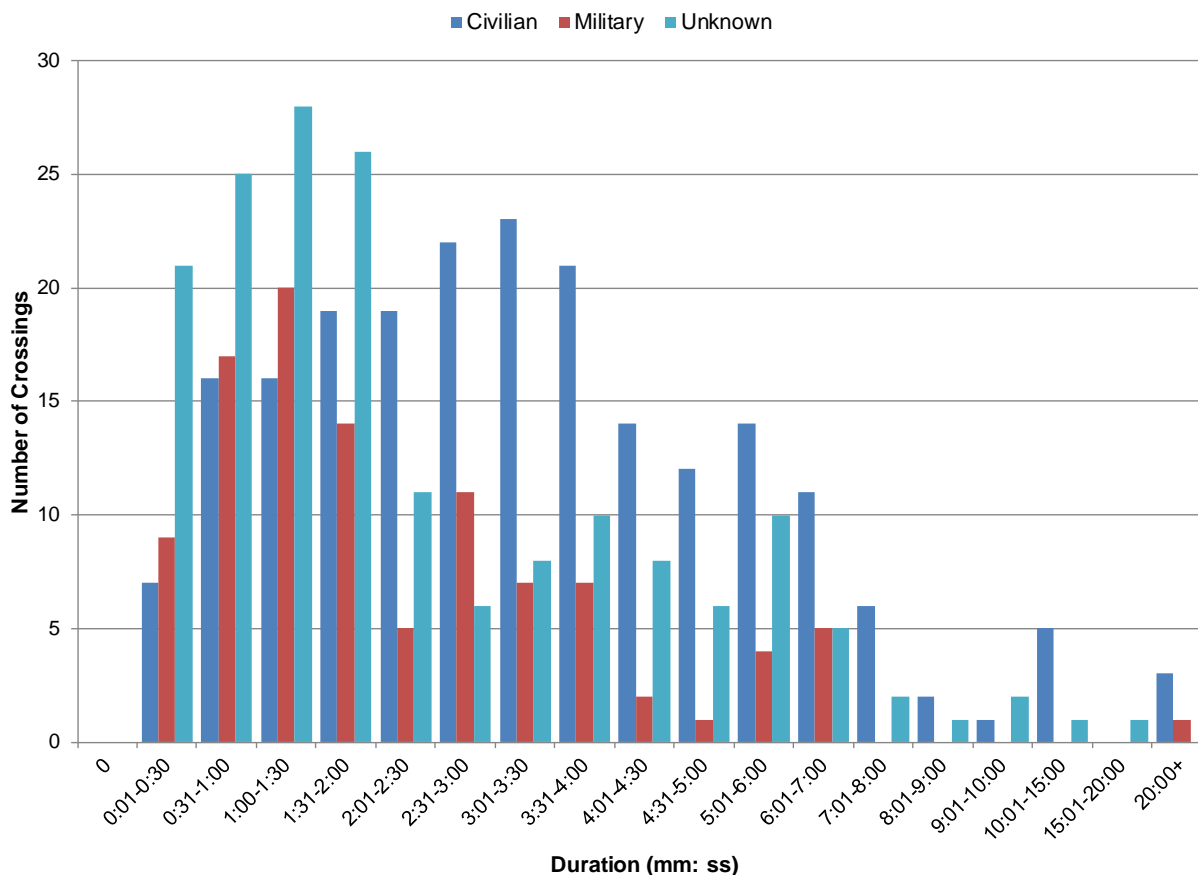


Figure 2-2: Distribution of Aircraft Crossing Durations in R-2511

2.1.2 Monthly Crossings

Table 2-4 and Figure 2-3 present the monthly flight counts for R-2511. Traffic counts peaked in April with 389 total flight tracks crossing the proposed airspace. The lowest traffic counts occurred in December, with 117 flight tracks crossing the airspace.

Table 2-4: Monthly Crossings

Month	Civilian	Military	Unknown	Total	Average Daily	Percent
October	71	25	78	174	5.8	5.6%
November	69	17	53	139	4.8	4.5%
December	51	11	55	117	4.2	3.8%
January	38	14	80	132	5.1	4.2%
February	28	17	114	159	6.4	5.1%
March	63	44	153	260	9.3	8.3%
April	86	47	256	389	13.0	12.5%
May	82	45	214	341	11.0	10.9%
June	77	46	240	363	12.1	11.6%
July	102	47	180	329	10.6	10.6%

Month	Civilian	Military	Unknown	Total	Average Daily	Percent
August	89	48	260	397	13.2	12.7%
September	86	33	199	318	11.0	10.2%
Total	842	394	1,882	3,118	9.0	100.0%

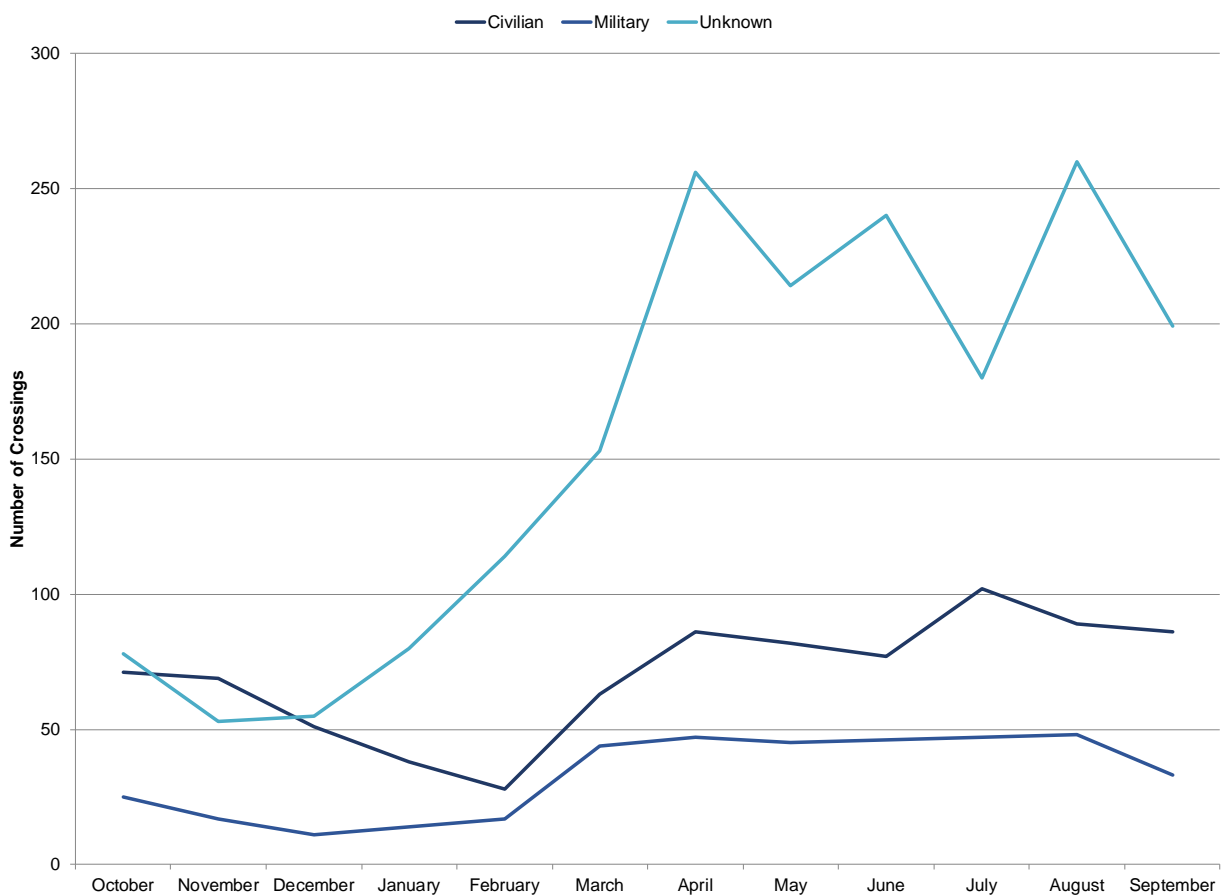


Figure 2-3: Monthly Crossings

2.1.3 Daily Crossings

The following tables present flight track counts for R-2511 broken out by day of week. Crossings were highest mid-week, peaking on Wednesdays with a daily average of 13.1 crossings. Traffic counts were lowest on Saturdays, with a daily average of 2.9 crossings.

Table 2-5: Crossings by Day

Day of the Week	Civilian	Military	Unknown	Total	Average Daily	Percent
Monday	84	63	328	475	9.5	15.2%
Tuesday	96	86	398	580	10.9	18.6%
Wednesday	118	101	447	666	13.1	21.4%
Thursday	122	74	440	636	12.2	20.4%
Friday	137	54	199	390	7.5	12.5%
Saturday	97	4	29	130	2.9	4.2%
Sunday	188	12	41	241	5.2	7.7%
Total	842	394	1,882	3,118	9.0	100.0%

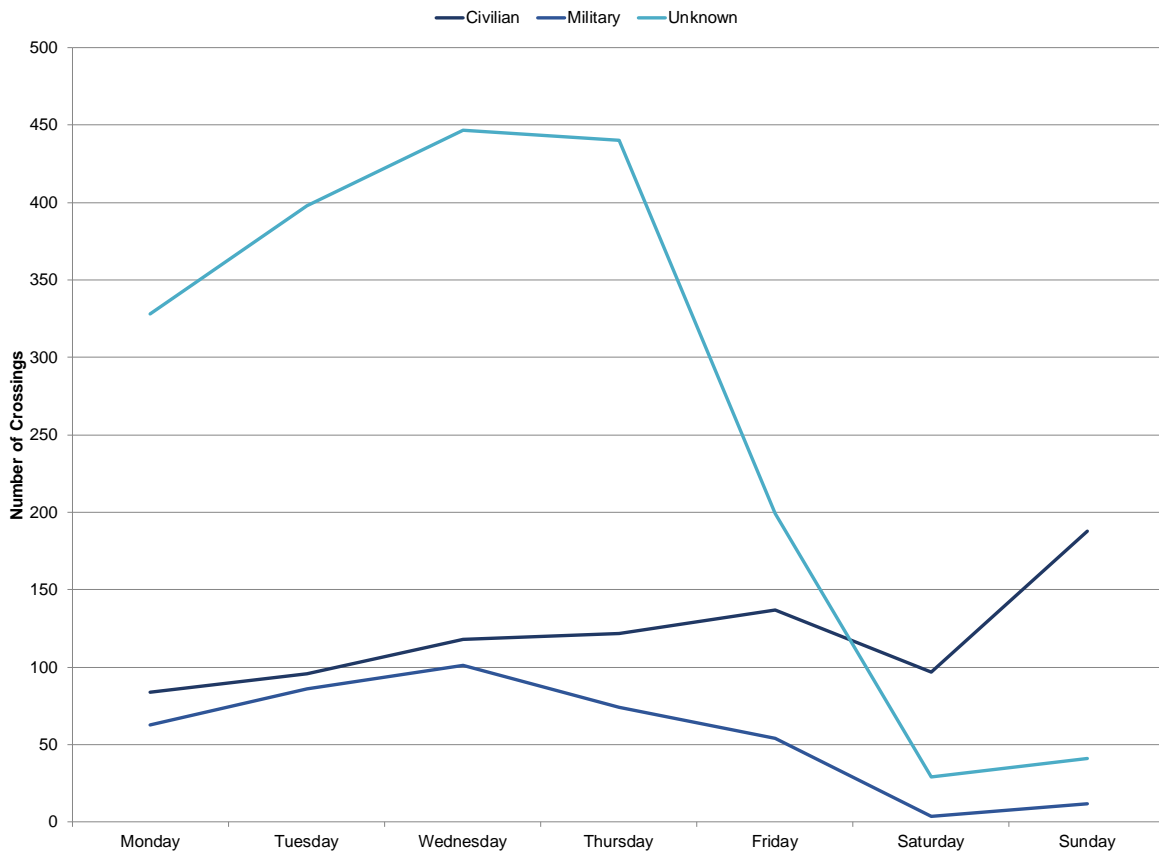


Figure 2-4: Crossings by Day

Table 2-6 presents the maximum, minimum, and average number of flight tracks crossing proposed R-2511 as observed for each day in FY19. On average, there were 9.0 aircraft crossings the proposed airspace per day.

Table 2-6: Occurrence of Crossings

Category	Minimum	Maximum	Average
Civilian	1	13	2.4
Military	1	10	1.1
Unknown	1	32	5.4
Total	1	40	9.0

The following table and figure present the numbers of days that experienced the listed number of aircraft crossing into the RA by aircraft category. Military aircraft produced no crossings on 167 separate days, while civilian aircraft made no crossings on 54 separate days, and uncategorized aircraft made no RA crossings on 70 separate days in FY19.

Table 2-7: Daily Crossings

Crossings	Civilian	Military	Unknown
0	54	167	70
1	80	77	46
2	74	43	27
3	56	32	25
4	37	16	22
5	18	7	17
6	10	2	22
7	11	2	13
8	1	0	12
9	2	0	19
10	1	1	13
More than 10	1	0	61

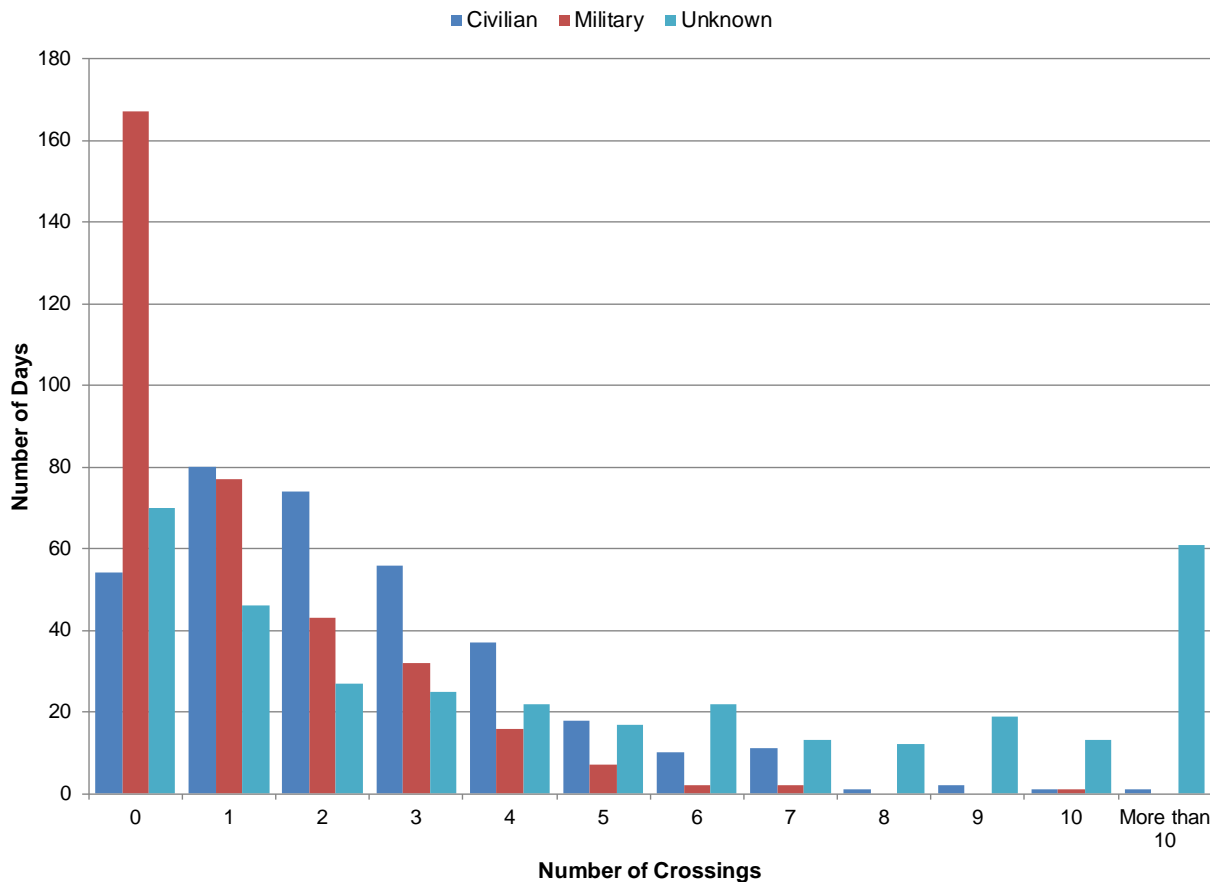


Figure 2-5: Daily Crossings

2.1.4 Hourly Crossings

The following table and figure present crossings in R-2511 by hour of the day. The majority of crossings occurred between the hours of 10:00 and 15:00.

Table 2-8: Hourly Crossings

Hour	Civilian	Military	Unknown	Total	Average Daily	Percent
0	-	2	3	5	1.7	0.2%
1	1	3	6	10	1.4	0.3%
2	1	3	4	8	1.1	0.3%
3	-	2	1	3	1.0	0.1%
4	-	-	-	-	-	0.0%
5	2	4	11	17	1.3	0.5%
6	18	5	13	36	1.1	1.2%
7	39	14	23	76	1.1	2.4%
8	56	18	57	131	1.3	4.2%
9	80	26	159	265	1.6	8.5%
10	82	38	226	346	1.9	11.1%

Hour	Civilian	Military	Unknown	Total	Average Daily	Percent
11	89	28	220	337	1.8	10.8%
12	104	38	203	345	1.9	11.1%
13	70	42	205	317	1.9	10.2%
14	69	42	177	288	1.8	9.2%
15	71	46	216	333	1.8	10.7%
16	61	22	117	200	1.6	6.4%
17	36	11	78	125	1.5	4.0%
18	25	9	61	95	1.3	3.0%
19	18	11	32	61	1.3	2.0%
20	11	12	32	55	1.4	1.8%
21	6	9	16	31	1.4	1.0%
22	3	8	22	33	2.2	1.1%
23	-	1	-	1	1.0	0.0%
Total	842	394	1,882	3,118	9.0	100%

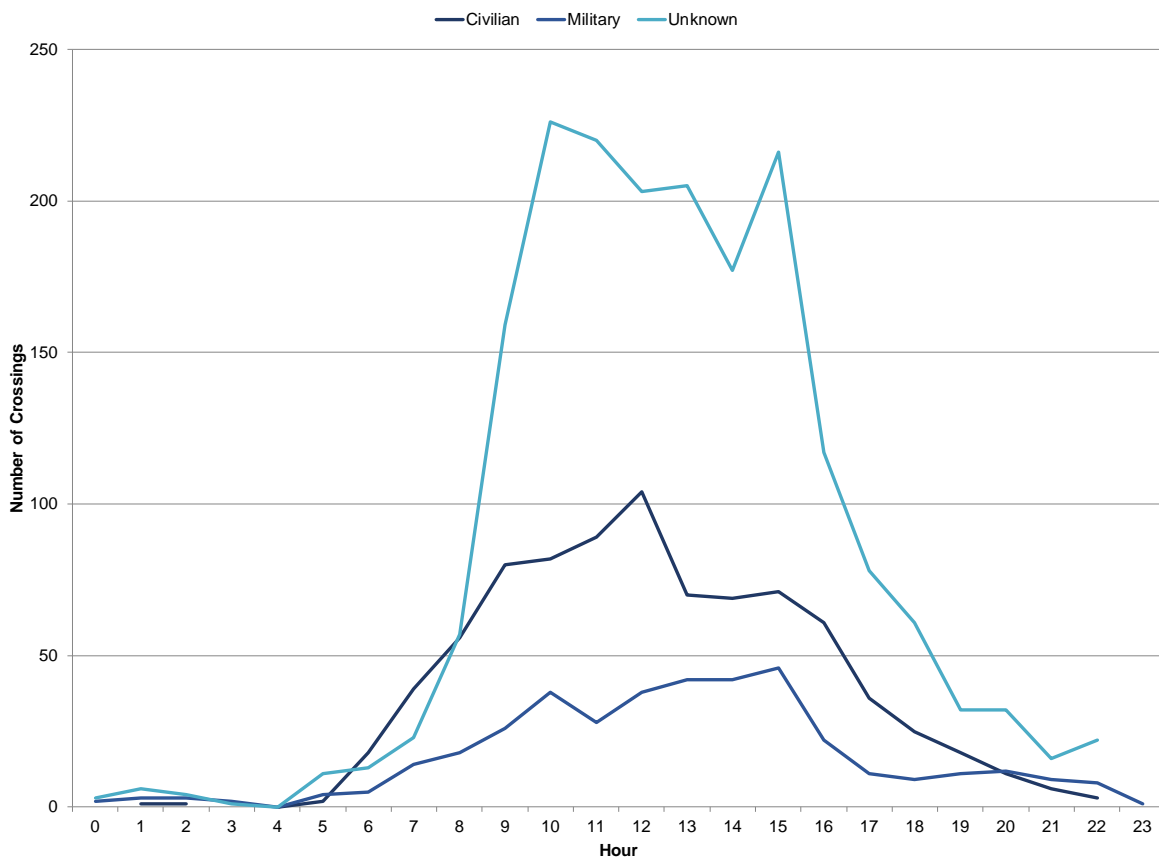


Figure 2-6: Hourly Crossings

2.1.5 Aircraft Origin and Destination

This section presents the most common origin and destination airports for flights crossing R-2511. *Table 2-9* and *Table 2-10* present the origin and destination airports for civilian flights traversing R-2511.

Table 2-9: Origin Airport - Civilian Flight Tracks

Airport	Prevalence
Meadows Field (BFL)	9.4%
Trona Airport (L72)	8.8%
Henderson Executive Airport (HND)	7.8%
Inyokern Airport (IYK)	5.2%
McCarran International Airport (LAS)	3.0%
North Las Vegas Airport (VGT)	2.9%
San Luis County Regional Airport (SBP)	2.1%
Santa Maria Airport (SMX)	2.1%
Palmdale USAF Plant 42 Airport (PMD)	1.5%
Mojave Air and Space Port (MHV)	1.4%
Lone Pine/Death Valley Airport (O26)	1.3%
Others*/Unknown	54.4%

* Less than 1%

Table 2-10: Destination Airport - Civilian Flight Tracks

Airport	Prevalence
Henderson Executive Airport (HND)	11.2%
North Las Vegas Airport (VGT)	7.7%
Meadows Field (BFL)	7.0%
Inyokern Airport (IYK)	5.9%
McCarran International Airport (LAS)	2.5%
Santa Maria Airport (SMX)	2.3%
San Luis County Regional Airport (SBP)	1.9%
Furnace Creek Airport (L06)	1.8%
Mojave Air and Space Port (MHV)	1.7%
General Wm J Fox Airfield (WJF)	1.7%
Boulder City Municipal Airport (BVU)	1.4%
Creech Air Force Base (INS)	1.4%
Shafter Airport-Minter Field (MIT)	1.4%
Paso Robles Municipal Airport (PRB)	1.3%
St George Regional Airport (SGU)	1.2%
Others*/Unknown	49.6%

* Less than 1%

Table 2-11 and Table 2-12 present the origin and destination airports for military flights traversing R-2511.

Table 2-11: Origin Airport - Military Flight Tracks

Airport	Prevalence
China Lake Naval Air Weapons Station (NID)	15.2%
Edwards Air Force Base (EDW)	9.6%
Inyokern Airport (IYK)	5.3%
Creech Air Force Base (INS)	4.1%
Tonopah Test Range Airport (TNX)	2.0%
California City Municipal Airport (L71)	1.5%
Mojave Air and Space Port (MHV)	1.3%
Nellis Air Force Base (LSV)	1.3%
Pueblo Memorial Airport (PUB)	1.0%
Others*/Unknown	58.6%

* Less than 1%

Table 2-12: Destination Airport - Military Flight Tracks

Airport	Prevalence
Edwards Air Force Base (EDW)	42.4%
China Lake Naval Air Weapons Station (NID)	9.4%
Lemoore Naval Air Station (NLC)	7.9%
Creech Air Force Base (INS)	5.1%
Palmdale USAF Plant 42 Airport (PMD)	2.5%
Grand Junction Regional Airport (GJT)	1.8%
Pueblo Memorial Airport (PUB)	1.5%
Miramar Marine Corp Air Station (NKX)	1.3%
Yuma Marine Corps Air Station/Yuma International Airport (NYL)	1.3%
Others*/Unknown	26.9%

* Less than 1%

2.1.6 Altitude Strata

Table 2-13 presents crossing counts by altitude strata. The following table and figure present the flight counts for R-2511 by altitude strata. The majority of aircraft traversed R-2511 between 12,500' and 18,000' MSL.

Table 2-13: Count of Crossings by Altitude Strata

Shelf	Civilian		Military		Unknown		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
SFC - 6,000' MSL	112	32.2%	38	10.9%	198	56.9%	348	100%
6,000' to 12,500' MSL	657	43.6%	148	9.8%	701	46.5%	1,506	100%
12,500' MSL to FL180	222	12.9%	282	16.4%	1,215	70.7%	1,719	100%
FL180 to FL200	6	5.8%	64	61.5%	34	32.7%	104	100%

Figure 2-7 presents the civilian traffic flows through R-2511 broken out by altitude strata. The majority of civilian crossings (88.2%) occurred between the altitudes of 12,500' MSL and FL180.

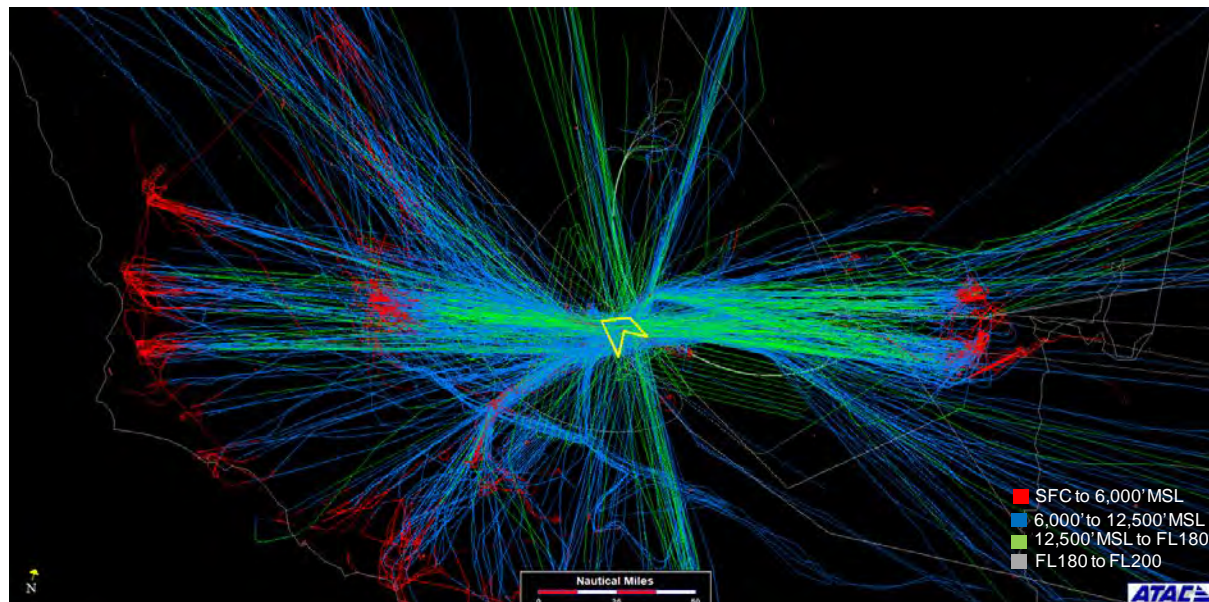


Figure 2-7: Civilian Traffic Flows

Figure 2-8 presents the military traffic flows through R-2511 broken out by altitude strata. The majority of military crossings (80.8%) occurred between the altitudes of 12,500' MSL and FL180.

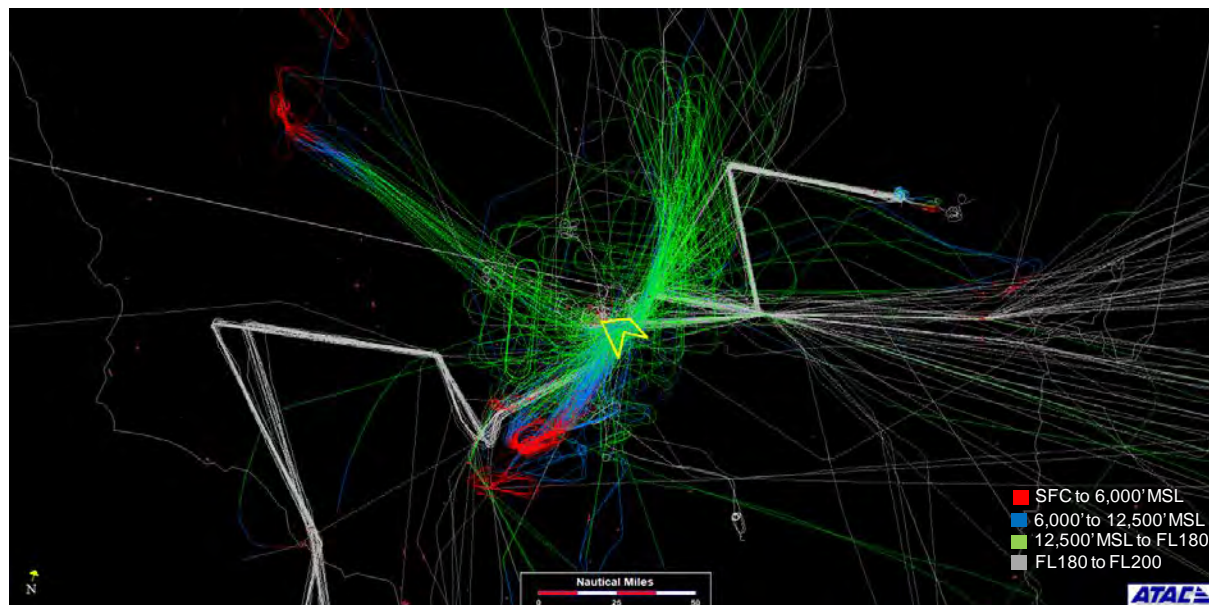


Figure 2-8: Military Traffic Flows

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3 Appendix

3.1 Acronyms and Abbreviations

Table 3-1: Acronyms and Abbreviations

AGL	above ground level
ARTCC	Air Route Traffic Control Center
CFA	Controlled Firing Area
EA	Environmental Assessment
FAA	Federal Aviation Administration
FL	flight level
FY	fiscal year
GA	general aviation
IFR	Instrument Flight Rules
MSL	mean sea level
NAWCWD	Naval Air Warfare Center Weapons Division
NAWSCL	Naval Air Weapons Station China Lake
NCT	Northern California TRACON
NOTAM	Notice to Airmen
P50	Phoenix TRACON
PDARS	Performance Data Analysis and Reporting System
RA	restricted area
RDAT&E	research, development, acquisition, testing, and evaluation
SCT	Southern California TRACON
SFC	surface
SVRS	Sky View Reporting System
SWIM	System Wide Information Management
TRACON	Terminal Radar Approach Control
VFR	Visual Flight Rules
ZLA	Los Angeles ARTCC

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ENDOFDOCUMENT

APPENDIX G NOISE ASSESSMENT METHODOLOGY

This appendix summarizes the methodologies used to assess potential noise impacts associated with implementation of the Proposed Action of this environmental assessment (EA).

DEFINITION OF RESOURCE

Noise is measured in terms of decibels (dB), a logarithmic unit that represents the intensity of a sound. A sound level of 0 dB is approximately the threshold of human hearing and is barely audible under extremely quiet listening conditions. Normal speech has a sound level of approximately 60 dB; sound levels above 120 dB begin to be felt inside the human ear as discomfort. The minimum change in the sound level of individual events that an average human ear can detect is about 1 dB (Gray 2000). On average, a person perceives a change in sound level of about 10 dB as a doubling (or halving) of the sound's loudness, and this relation holds true for both loud and quiet sounds.

In California, Community Noise Equivalent Level (CNEL) is typically used for the evaluation of community noise effects (i.e., long-term annoyance and compatible land uses). CNEL is a composite metric that accounts for all noise events over a 24-hour period. To account for increased human sensitivity to noise at night, a 10-dB penalty is applied to nighttime events (10:00 P.M. to 7:00 A.M.), and a 5-dB penalty is applied to flights occurring from 7:00 P.M. to 10:00 P.M.

The Federal Aviation Administration (FAA) guidelines state that 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). DNL is similar to CNEL except events occurring during the CNEL evening period are treated as day operations with no penalty. The FAA guidelines allow usage of CNEL in lieu of DNL for actions requiring approval in California (FAA 2015).

APPROACH TO ANALYSIS

FAA actions are subject to FAA Order 1051.1F, *Environmental Impacts: Policies and Procedures*, which states that special consideration needs to be given to the evaluation of the significance of noise impacts on noise sensitive areas. A noise sensitive area is defined by the FAA as 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, parks, recreational areas (including areas with wilderness characteristics), wildlife refuges, and cultural and historical sites. FAA Order 1051.1F adds guidance that gives special consideration to the evaluation of the significance of noise impacts on noise-sensitive areas within national parks, national wildlife refuges, and historic sites, including traditional cultural properties. For air traffic airspace and procedure actions (i.e., changes in airspace management procedures), the FAA identifies three significance metrics for noise impacts analysis:

- For existing noise environments 65 dB CNEL and higher, with an increase of 1.5 dB or more;
- For existing noise environments between 60 and 65 dB CNEL, with an increase of 3 dB or more;
- For existing noise environments between 45 and 60 dB CNEL, with an increase of 5 dB or more.

As defined by FAA Order 1051.1F, an action resulting in an increase over the levels of the first bullet, a “significant” impact is anticipated. The second and third bullets represent “reportable” levels (FAA 2020a).

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NAWCWD PR21-0133.

In May 2021, the Navy utilized the NoiseMap suite of computer programs, including the MOA-Range NoiseMap (MR_NMAP) version 3.0, to estimate the anticipated noise levels associated with each alternative analyzed in this EA (Wasmer 2006).

An airspace traffic analysis has been performed to determine the number and type of aircraft that cross the proposed R-2511 over a defined period of time (ATAC 2020). A total of 3,118 crossings were documented for the R-2511 airspace in FY2019. These aircraft were determined to be 87.4 percent civilian and 12.6 percent were military. Table 1 breaks these flight data into altitude strata.

Table 1 Annual Flights per Altitude Strata

Altitude Strata	Civilian Aircraft		Military Aircraft	
	Number	Percentage	Number	Percentage
SFC-6,000 ft MSL	269	9.86	44	11.2
6,000-12,500 ft MSL	1,176	43.2	40	10.2
12,500 ft MSL-FL180	1,245	45.7	66	16.8
FL180-FL200	34	1.24	244	61.8
TOTAL	2,724	100	394	100

The airspace traffic analysis indicates that the busiest months of the year for the airspace are April and August, with approximately 13 flights per day or 390 flights for the month. To assess the most conservative case, the traffic across the proposed R-2511 was conducted at this level. Table 2 provides the number of aircraft crossings included in the cases modeled for this EA, and Table 3 provides the number of flights by time of day (i.e., day, evening, night) as estimated for the month of April to determine the CNEL penalty applied for evening and night flights.

Table 2 Modeled Flights by Altitude Strata

Altitude Strata	Civilian	Military
SFC-6,000 ft MSL	34	5
6,000-12,500 ft MSL	148	5
12,500 ft MSL-FL180	156	8
FL180-FL200	4	30
TOTAL	342	48

Table 3 Modeled Time of Day

Time of Day ¹	Civilian	Military
Day	317	41
Evening	14	4
Night	11	3
TOTAL	342	48

Note: 1. All Proposed Action R-2511 transits would be conducted during daytime hours.

GA aircraft, comprised primarily of single or double engine turboprop aircraft, are the most frequent overflight aircraft in the proposed airspace. The aircraft types modeled represents the aircraft that most frequently used the airspace. The Beechcraft Baron 58 was selected to represent GA aircraft transiting the R-2511, and the F-18A/C was chosen to represent military aircraft.

Overflight activity not associated with the airspace is not typically included in noise analysis. However, the activation of the proposed R-2511 may result in some VFR and IFR non-participating aircraft avoiding the area altogether or, when active, IFR aircraft transiting around or through the proposed R-2511 and those potential effects are considered.

MODELING RESULTS

This section provides reports generated by the BaseOps/NoiseMap modeling suite. The first report represents the flight paths and flight profiles associated with the No-Action and Proposed Action alternatives. The second report represents the Increased Operations alternative. Modeling output is provided in the form of noise contours mapped over the ROI.

Case Information

Case

Name Baseline

Abstract F-18 transiting the R-2511 airspace, associated with NAWCWD Proposed Action. Case also involves military and civilian non-participating aircraft. This case represents the No-Action and Proposed Action

Purpose Noise analysis in support of R-2511 EA

Site

Name R-2511 (formerly Trona CFA)

Noise Models

Noise Models Used by Case AAM, NMap, MRNMap

Reference Point

Name Trona Pinnacles sensitive receptor
Location long: 117.239700° W lat: 35.665000° N
Elevation 1,800 ft

Magnetic Declination

Declination 0° east

Operations

Flying Days per Month 30
Annual Operating Days 365
Number Daily Periods 3 (day, evening, night)

Contact Information

Name Mark Dimsha
Position/Title Sr. Environmental Planner/Engineer
Organization Epsilon Systems Solutions, Inc.
Address 1908 Buffalo Dancer Tr NE
City Albuquerque
State/Province NM
Zip/Postal Code 87112
Country USA
Telephone 505-977-3951
Email mdimsha@epsilonsystems.com

Weather

Temperature 85 F
Humidity 25.0 %
Pressure 29.92 in Hg

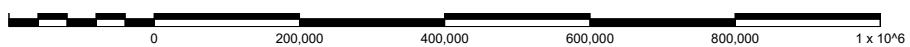
Point of Interest Summary

Name	A/C Category	Height ft
Trona Pinnacles - Trona Pinnacles National Nature Area	Based	5

Summary Map of Arcs



Arc Summary Map



Scale in Feet 1:3.17E6 (1 inch = 264,000 feet)



Flight Track Summary

Name	Track Type	A/C Category	Runway/Pad
Chase	Interfacility	Based	Armitage Field
GA1	Interfacility	Civilian	HND
Military	Interfacility	Based	EDW

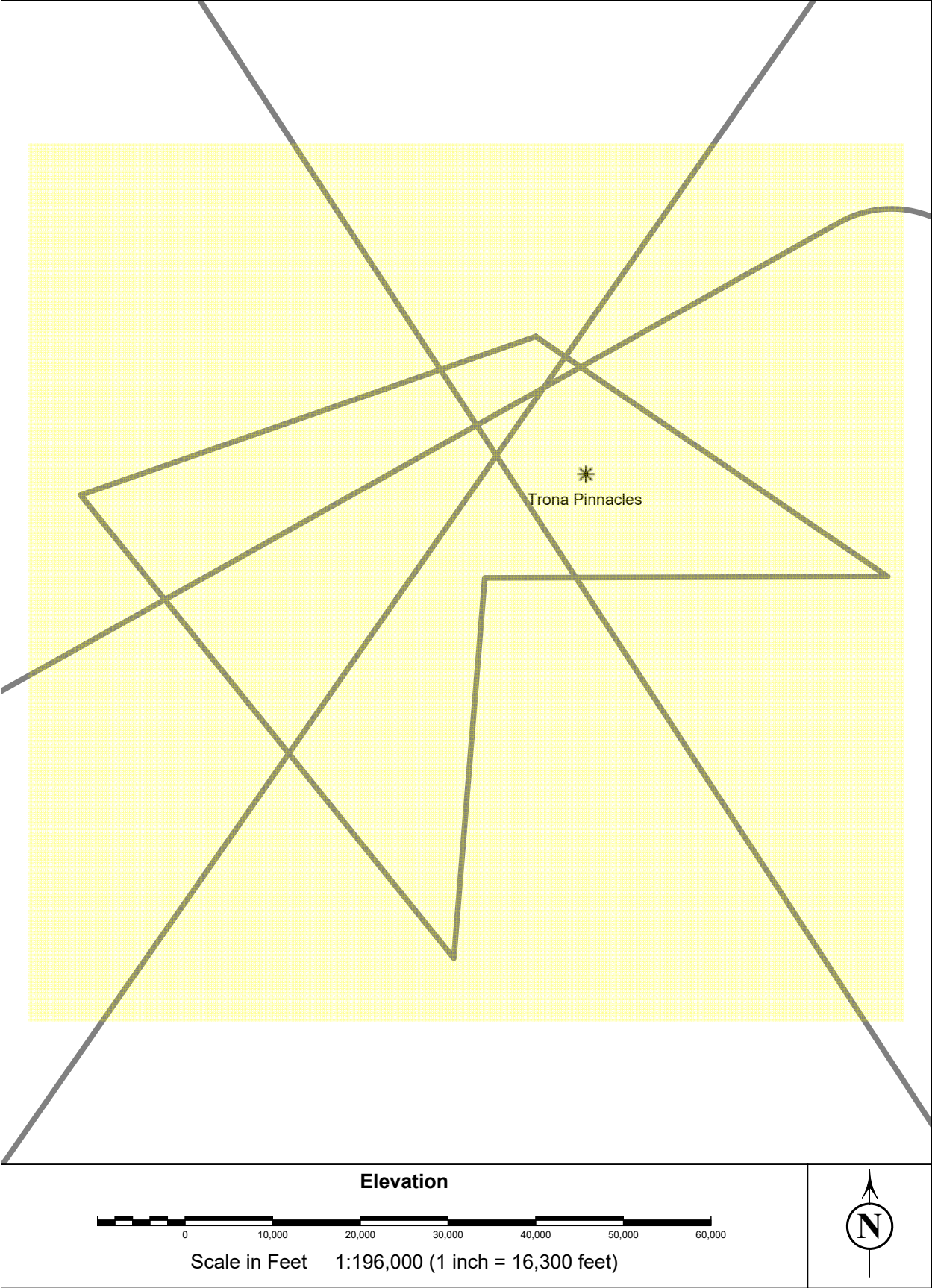
Flight Profile Summary

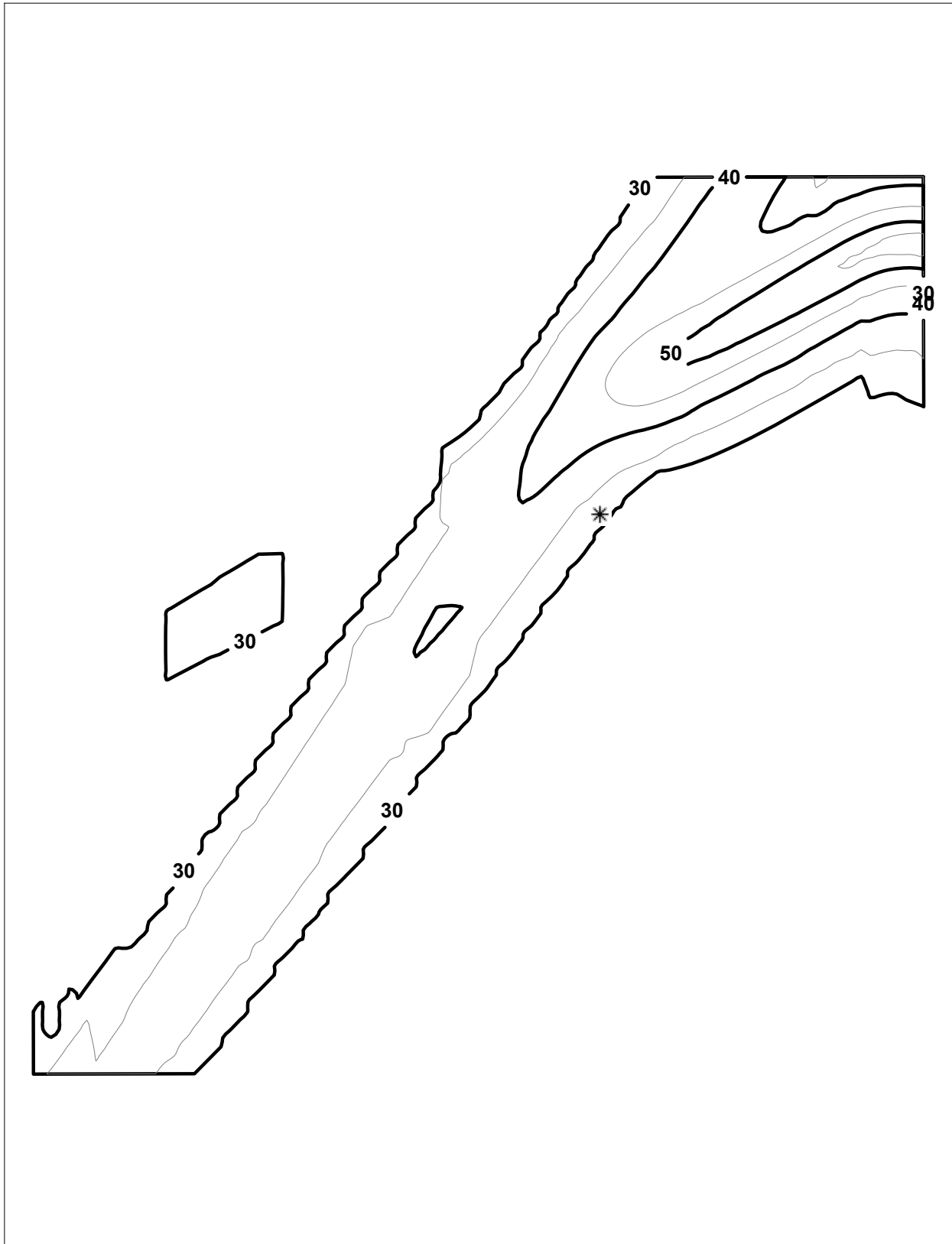
Name	Day Ops	Night Ops	Aircraft	A/C Category	Track
Chase	3	0	F-18A/C	Based	Chase
GA3	145	5	BEECH BARON 58P	Civilian	GA1
GA4	0	2	BEECH BARON 58P	Civilian	GA1
GA 1	34	0	BEECH BARON 58P	Civilian	GA1
GA 2	138	4	BEECH BARON 58P	Civilian	GA1
Military1	4	1	F-18A/C	Based	Military
Military 2	2	1	F-18A/C	Based	Military
Military 3	6	1	F-18A/C	Based	Military
Military 4	28	1	F-18A/C	Based	Military

Military Operations Area Summary

Name	A/C Category	Floor ft	Ceiling ft	Area sq. miles
R-2511 - Formerly Trona CFA	Based	6,000 MSL	20,000 MSL	82.975

Elevation Map





CNEL, Noisemap Case "Baseline", Scenario "Baseline"
This plot of "R2511_Baseline_20210503 - Baseline.grd" was created at 4:33 PM on May 3, 2021.

Case Information

Case

Name R-2511 transit
Abstract F-18 transiting the R-2511 airspace
Purpose Noise analysis in support of R-2511 EA

Site

Name R-2511 (formerly Trona CFA)

Noise Models

Noise Models Used by Case AAM, NMap, MRNMap

Reference Point

Name Trona Pinnacles sensitive receptor
Location long: 117.239700° W lat: 35.665000° N
Elevation 1,800 ft

Magnetic Declination

Declination 0° east

Operations

Flying Days per Month 30
Annual Operating Days 365
Number Daily Periods 3 (day, evening, night)

Contact Information

Name Mark Dimsha
Position/Title Sr. Environmental Planner/Engineer
Organization Epsilon Systems Solutions, Inc.
Address 1908 Buffalo Dancer Tr NE
City Albuquerque
State/Province NM
Zip/Postal Code 87112
Country USA
Telephone 505-977-3951
Email mdimsha@epsilonsystems.com

Weather

Temperature 85 F
Humidity 25.0 %
Pressure 29.92 in Hg

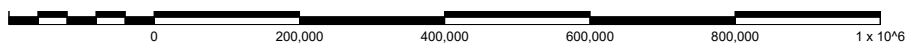
Point of Interest Summary

Name	A/C Category	Height ft
Trona Pinnacles - Trona Pinnacles National Nature Area	Based	5

Summary Map of Arcs



Arc Summary Map



Scale in Feet 1:3.17E6 (1 inch = 264,000 feet)



Flight Track Summary

Name	Track Type	A/C Category	Runway/Pad
Chase	Interfacility	Based	Armitage Field
GA1	Interfacility	Civilian	HND
Military	Interfacility	Based	EDW

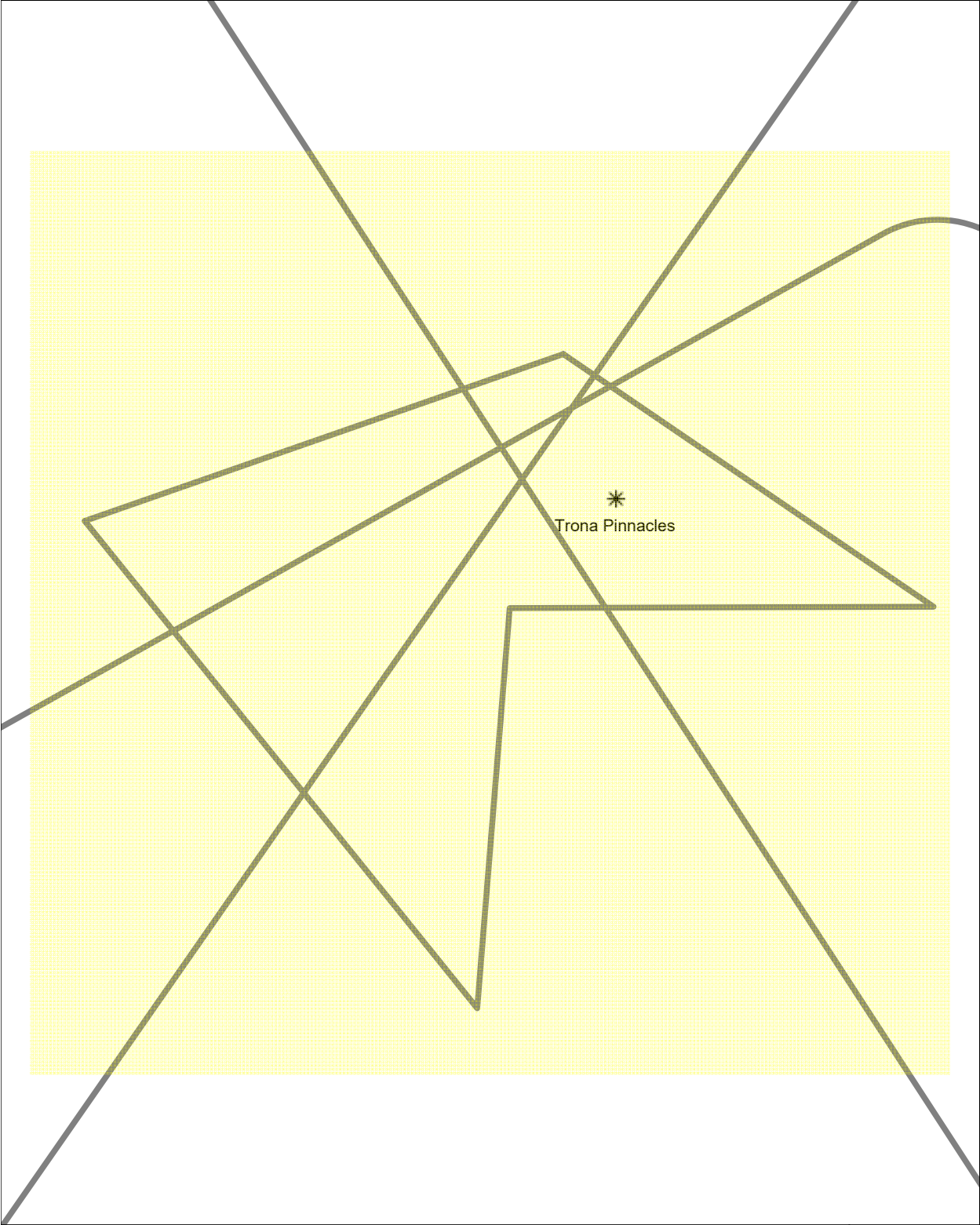
Flight Profile Summary

Name	Day Ops	Night Ops	Aircraft	A/C Category	Track
Chase	4	0	F-18A/C	Transient	Chase
GA3	145	5	BEECH BARON 58P	Civilian	GA1
GA4	0	2	BEECH BARON 58P	Civilian	GA1
GA 1	34	0	BEECH BARON 58P	Civilian	GA1
GA 2	138	4	BEECH BARON 58P	Civilian	GA1
Military1	4	1	F-18A/C	Based	Military
Military 2	2	1	F-18A/C	Based	Military
Military 3	6	1	F-18A/C	Based	Military
Military 4	28	1	F-18A/C	Based	Military

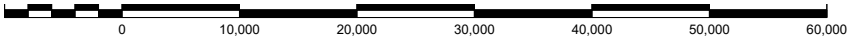
Military Operations Area Summary

Name	A/C Category	Floor ft	Ceiling ft	Area sq. miles
R-2511 - Formerly Trona CFA	Based	6,000 MSL	20,000 MSL	82.975

Elevation Map

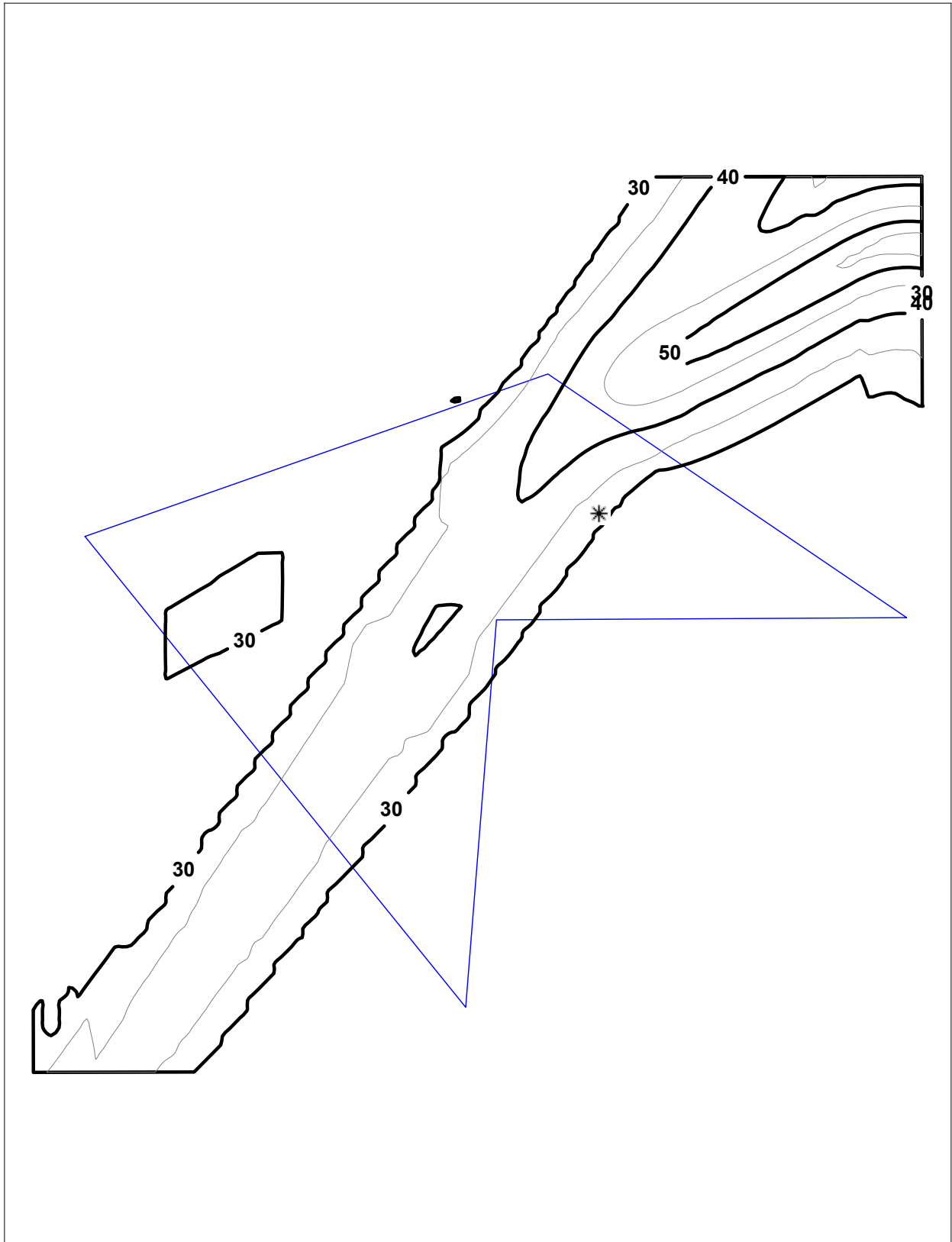


Elevation



Scale in Feet 1:196,000 (1 inch = 16,300 feet)





CNEL, Noisemap Case "Increased Operations", Scenario "Baseline"
his plot of "R2511_Increased Ops_20210503 - Baseline.grd" was created at 12:24 PM on May 3, 202

Environmental Consequences

Alternative 1 – Proposed Action (Preferred Alternative)

The Proposed Action would not introduce new or modify existing flight or training activities. No change from existing conditions and no change to existing military flight activities (e.g., flight tempo or aircraft type) would occur under the Proposed Action, as compared to the No-Action Alternative. Therefore, no change in noise levels would be anticipated from the existing to the projected environment within the vicinity of the proposed R-2511, including the Trona National Natural Landmark and any residential areas. Diverted GA aircraft may fly above, under, or around the R-2511.

For the Proposed Action the calculated maximum CNEL under the R-2511 would be 43.5 dB. A modeled receptor at the Trona National Natural Landmark would experience noise levels of 32 dB CNEL.

The Proposed Action would involve an existing noise environment less than 45 dB with no observed increase in noise levels, as compared to the No-Action Alternative. As indicated in the May 2021 analysis no reportable noise levels or increases in noise level, as defined by FAA Order 1051.1F, would be associated with the Proposed Action. Therefore, there would be no significant noise impacts as a result of the Proposed Action.

Alternative 2 – Increased Operations

Implementation of Alternative 2 would result in 45 annual activations of the proposed R-2511, as compared to 36 activations under the Proposed Action. When the R-2511 is activated, non-participating aircraft would have to avoid the proposed RA. Aircraft operating under IFR would transit around or above the R-2511 when active. Non-military aircraft currently operating under VFR could fly under, over, or around the R-2511 when activated, potentially increasing noise levels at ground level.

For Alternative 2, the calculated maximum CNEL under the R-2511 would be 43.5 dB. A modeled receptor at the Trona National Natural Landmark would experience noise levels of 32 dB CNEL. These results indicate no perceivable change in noise levels, when compared to the No-Action Alternative.

Alternative 2 would involve an existing noise environment less than 45 dB CNEL with an increase less than 5 dB, as compared to the No-Action Alternative. No reportable noise levels or increases in noise levels, as defined by FAA Order 1051.1F (FAA 2015), would be associated with this alternative. Therefore, there would be no significant noise impacts as a result of implementation of Alternative 2.

Alternative 3 – The No-Action Alternative

Under the No-Action Alternative, the proposed R-2511 would not be established and the Navy would cease operations within the existing airspace in May 2022. There would be no further NAWCWD operations in the airspace; therefore, implementation of the No-Action Alternative would result in no significant noise impact.

REFERENCES

FAA 2015. Environmental Impacts: Policies and Procedures, Order 1051.1F. U.S. Department of Transportation Federal Aviation Administration, July 16.

Gray, L. 2000. Background Science: Properties of Sound. *Journal of Perinatology*, 20: S5-S10.

Wasmer 2006. BaseOps 7.3 User's Guide, Wasmer Consulting, Gainesville, Florida.

APPENDIX H RECORD OF NON-APPLICABILITY

Distribution Statement A: Approved for public release; distribution is unlimited.
NAWCWD PR21-0133.

RECORD OF NON-APPLICABILITY (RONA)

Subj: Establishment of Restricted Area R-2511 at Naval Air Weapons Station China Lake, California

Ref: (a) U.S. Environmental Protection Agency, Determining Conformity of General Federal Actions to State or Federal Implementation Plans; Final Rule, published in the Federal Register on 30 November 1993 (40 CFR Parts 6, 51, and 93)

(b) U.S. Environmental Protection Agency, Revisions to the General Conformity Regulations; Final Rule, published in the Federal Register on 5 April 2010 (40 CFR Parts 51 and 93)

(c) OPNAV-M 5090.1 (Chapter 22), 25 Jun 2021

(d) Navy Guidance for Compliance with the Clean Air Act General Conformity Rule, 30 July 2013

(e) Airspace Analysis in Support of Environmental Assessment for the Establishment of R-2511 – Final Report, 7 October 2020

1. The references (a), (b), (c), and (d) provide implementing guidance for documenting Clean Air Act (CAA) Conformity Determination requirements. The General Conformity Rule applies to federal actions proposed within areas which are designated as either non-attainment or maintenance areas for a National Ambient Air Quality Standard (NAAQS) for any of the criteria pollutants.

2. The Proposed Action would be located in San Bernardino County, California, within the Trona Planning Area, which is designated as moderate nonattainment for PM₁₀ and in attainment or unclassified for all other federal criteria pollutants. The study area for assessing air quality impacts is the air basin in which the Proposed Action is located, the Mojave Desert Air Basin.

3. Minor changes in emissions from non-participating aircraft may occur when the proposed airspace, R-2511, is activated. As provided in the airspace analysis performed for the Proposed Action (reference (e)), less than 10 percent of the traffic crosses the R-2511 at elevations less than 6,000 ft above mean sea level (MSL) (approximately 2,700-4,000 ft above ground level [AGL] for the area under the R-2511). It is anticipated that the number of flights flying under the R-2511 would not increase; therefore, no increases in emissions at altitudes lower than the mixing level of 3,000 ft (914 m) AGL. Small increases in emissions could occur as aircraft are diverted around the R-2511. These changes would likely be above the mixing layer elevation of 3,000 ft (914 m) AGL and would not be included in the regional air emissions inventory.

4. To the best of my knowledge, the information presented in this Record of Non-Applicability (RONA) is correct and accurate, and I concur in the finding that implementation of the Proposed Action does not require a formal CAA Conformity Determination.

Robin Hoffmann

Robin Hoffmann (Sep 1, 2021 12:04 PDT)

Robin Hoffmann

**Command Environmental Program Manager
NAWCWD**

1 Sep 2021

Date

**ESTABLISHMENT OF RESTRICTED AREA R-2511
AT NAVAL AIR WEAPONS STATION CHINA LAKE, CALIFORNIA
EMISSIONS ANALYSIS FOR CLEAN AIR ACT CONFORMITY APPLICABILITY**

INTRODUCTION

The United States (U.S.) Environmental Protection Agency (EPA) published Determining Conformity of General Federal Actions to State or Federal Implementation Plans; Final Rule, in the November 30, 1993 Federal Register (40 Code of Federal Regulations [CFR] sections 6, 51, and 93). On April 5, 2010, the EPA finalized revisions to the General Conformity Rule (75 Federal Register 17253–17279). The U.S. Department of the Navy (Navy) published Navy Guidance for Compliance with the Clean Air Act (CAA) General Conformity Rule (July 30, 2013), as referenced in Chief of Naval Operations Manual M-5090.1, Environmental Readiness Program Manual dated 3 September 2019. These publications provide implementing guidance to document CAA Conformity Determination requirements. This RONA is provided to document compliance of the Proposed Action. Federal regulations state that “no department, agency, or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity that does not conform to an applicable State Implementation Plan (SIP).” It is the responsibility of the federal agency to determine whether a federal action conforms to the applicable SIP before the action is taken (40 CFR part 51.850[a]).

The General Conformity Rule applies to federal actions proposed within areas which are designated as either non-attainment or maintenance areas for a National Ambient Air Quality Standard (NAAQS) for any of the criteria pollutants. Former non-attainment areas that have attained a NAAQS are designated as maintenance areas. Emissions of pollutants for which an area is in attainment are exempt from conformity analyses.

The Mojave Desert Air Quality Management District is responsible for implementing and enforcing state and federal air quality regulations for the portion of Naval Air Weapons Station China Lake (NAWSCL) located in San Bernardino County, including the proposed R-2511 area. The project area is located within the Trona Planning Area, which is designated as moderate nonattainment for PM₁₀ and in attainment or unclassified for all other federal criteria pollutants

An emissions summary for the planned airspace management action is provided below. Emissions for the Proposed Action would be well below the *de minimis* threshold of 100 tons per year of PM₁₀ for a moderate nonattainment area, and the Proposed Action meets exemption requirements for air traffic actions provided in 40 CFR 93.153(c)(2). Therefore, a formal Conformity Determination is not considered necessary.

PROPOSED ACTION

Action Proponent: Naval Air Warfare Center Weapons Division (NAWCWD).

Location: Naval Air Weapons Station China Lake (NAWSCL), California.

Proposed Action Name: Establishment of Restricted Area R-2511 at NAWSCL, California

Proposed Action Summary: The Proposed Action would be entirely airspace-based and would establish a special use airspace (SUA), consisting of one restricted area (RA), connecting the existing R-2505 and R-

2524. The new RA would be titled R-2511. The Proposed Action would not change or modify existing military flight activities or weapons testing occurring within the SUA. Aircraft activities would be consistent with those already occurring in the airspace.

The proposed RA would help notify, advise, and alert other pilots of where military training activity could be occurring. The proposed RA would be established when determined necessary to confine or segregate activities considered hazardous to nonparticipating aircraft. Itinerant (non-local) or other aircraft not familiar with NAWCWD RDAT&E activities would now be made aware of the military flight activity more formally by the existence of the proposed RA on the Sectional Aeronautical Chart. The existence of a RA will be mapped on the Los Angeles Sectional Chart and knowledge of its activation would prompt all pilots to take notice of existing military flight activity, resulting in better awareness and coordination. Non-participating aircraft would not be allowed in the RA when activated.

Air Emissions Summary: Minor changes in emissions from non-participating aircraft may occur when the R-2511 is activated. As provided in the airspace analysis performed for the Proposed Action (Appendix F of the *Environmental Assessment – Establishment of Restricted Area R-2511 at Naval Air Weapons Station China Lake, California*), less than 10 percent of the traffic crosses the R-2511 at elevations less than 6,000 ft above mean sea level (MSL) (approximately 2,700-4,000 ft above ground level [AGL] for the area under the R-2511). It is anticipated that the number of flights flying under the R-2511 would not increase; therefore, no increases in emissions at altitudes lower than the mixing level of 3,000 ft (914 m) AGL. Small increases in emissions could occur as aircraft are diverted around the R-2511. These changes would likely be above the mixing layer elevation of 3,000 ft (914 m) AGL and would not be included in the regional air emissions inventory. Slight decreases in emissions would occur should pilots of non-participating aircraft decide not to fly when the R-2511 is activated. Neither of these scenarios is expected to significantly impact regional air quality.

Affected Air Basin: Mojave Desert Air Basin.

Analysis: The CAA General Conformity Rule exempts specific air traffic actions at 40 C.F.R. 93.153(c)(2)(xxii), including:

“[a]ir traffic control activities and adopting approach, departure, and enroute procedures for aircraft operations above the mixing height specified in the applicable SIP or TIP. Where the applicable SIP or TIP does not specify a mixing height, the Federal agency can use the 3,000 feet above ground level as a default mixing height, unless the agency demonstrates that use of a different mixing height is appropriate because the change in emissions at and above that height caused by the Federal action is *de minimis*.”

It should be noted that the acronym “TIP” is defined as Tribal Implementation Plan.

The Federal Aviation Administration (FAA) is a cooperating agency in the environmental assessment conducted for the Proposed Action in accordance with the National Environmental Policy Act (42 U.S.C. §§4321-4370h). The exemption above is mirrored in FAA’s *Federal Presumed to Conform Actions Under General Conformity* (72 Fed. Reg. 41565 July 30, 2007) and gives additional context about the presumption. It states that:

“[a]ir traffic control activities are defined as actions that promote the safe, orderly, and expeditious flow of aircraft traffic, including . . . enroute air traffic control.”

The presumption further states that:

“[a]irspace actions are implemented to enhance safety” and that the presumption applies to “[p]roject-related aircraft emissions released into the atmosphere above the . . . mixing height.”

Because such emissions do not have an effect on pollution concentrations at ground level, they are therefore presumed to conform for purposes of the CAA General Conformity Rule.

A review of the *Final Mojave Desert Planning Area Federal Particulate Matter (PM₁₀) Attainment Plan* (Mojave Desert Air Quality Management District, 31 July 1995) indicated that the applicable SIP did not specify the altitude for the mixing layer; therefore, the default value of 3,000 feet AGL is applicable.

The Proposed Action is an airspace action to change the designation of the Trona Controlled Firing Area to the R-2511 Restricted Area. The Proposed Action would not change or modify existing NAWCWD military flight activities occurring within an existing Controlled Firing Area. NAWCWD aircraft activities would continue to be consistent with activities currently occurring in the existing airspace. No new NAWCWD military flight activities are being introduced as part of this Proposed Action. The establishment of the R-2511 Restricted Area would improve flight safety for all pilots (civilian, commercial, and military) while improving the capability of the NAWCWD to conduct RDAT&E and training activities. Small increases in emissions could occur as non-participating aircraft are diverted around the R-2511; however, these changes would likely be above the mixing layer elevation of 3,000 ft AGL (see reference e) and would not impact ground level pollution concentrations.

Because the Proposed Action will not result in an increase in flight activity or an increase in tempo, and because any increases in air emissions from non-participating aircraft diverting around the R-2511 are likely to occur above the mixing height, FAA’s *Air Traffic Control Activities and Adopting Approach, Departure and Enroute Procedures for Air Operations* presumption applies to the Proposed Action, and thus further analysis under the CAA General Conformity Rule is not required.