
1 Purpose and Need of the Proposed Action

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1 PURPOSE AND NEED OF THE PROPOSED ACTION

1.1 INTRODUCTION

The National Environmental Policy Act of 1969 (NEPA) (42 United States Code [U.S.C.] § 4321 *et seq.*) requires federal agencies to examine the environmental effects of major federal actions in an Environmental Impact Statement (EIS), which is a detailed public document that provides an assessment of the potential effects that a major federal action may have on the human, natural, or cultural environment. Executive Order (EO) 12114, *Environmental Effects Abroad of Major Federal Actions*, directs federal agencies to provide for informed decision-making for major federal actions outside United States (U.S.) territory in an Overseas EIS (OEIS). The U.S. Department of the Navy (DoN) is preparing this EIS/OEIS (hereafter referred to as “EIS/OEIS”) to assess the potential environmental effects associated with ongoing and proposed naval activities (described in detail in Chapter 2) in the Alaska Training Areas (ATA). The Navy is the lead agency for the EIS/OEIS and Headquarters, National Marine Fisheries Service (NMFS) is a cooperating agency, pursuant to 40 CFR (Code of Federal Regulations) Section 1501.6.

Since the 1990s, the Navy has participated in a major joint training exercise in Alaska and off the Alaskan coast that involves the Departments of the Navy¹, Army, Air Force, and Coast Guard participants reporting to a unified or joint commander who coordinates the activities planned to demonstrate and evaluate the ability of the services to engage in a conflict and carry out plans in response to a threat to national security. Service Secretaries and Combatant Commanders report to the Secretary of Defense. Combatant Commanders are the senior military authority for their assigned area of responsibility. The U.S. Pacific Command (PACOM²), based in Hawaii, has the primary warfighting mission to defend the United States and its interests in the Asia-Pacific Region. The U.S. Northern Command (NORTHCOM) has the primary responsibility for homeland defense. Each of these combatant commanders is supported by component commanders comprising forces from the Navy, Army, and Air Force. The Combatant Commanders develop exercises that train the Navy, Army, and Air Force components to execute plans for situations that they identify as potential threats to the United States. PACOM further delegates its authority to several different joint task force commanders including Commander, U.S. Pacific Fleet (PACFLT).

The exercises currently conducted in the GOA alternate annually between a PACOM and a NORTHCOM scenario. Because of the severe environmental conditions during the winter months, the exercises normally occur during the period between April and October. PACOM’s scenarios typically center on a major conflict that poses a threat to the United States that requires integration of Navy and Air Force assets with Army units conducting ground warfare in mountainous rural areas. The manner in which the Defense Department deploys its forces to respond to scenarios is relatively consistent, aiding a programmatic analysis at this time.

NORTHCOM’s scenarios supporting homeland defense, and the manner in which it deploys its forces, change rapidly as new needs and requirements are identified. Given this information, this comprehensive programmatic analysis cannot adequately capture the broad range of activities that may be possible in a NORTHCOM scenario. As these exercise scenarios are developed, environmental compliance needs will

¹ The Department of the Navy includes the United States Marine Corps. References to Navy training include Marine Corps training.

² PACOM is a unified command which includes about 325,000 military personnel from the Army, Navy, Air Force, and Marine Corps (about 20 percent of all active duty U.S. military forces).

be evaluated for each exercise. Hence, this EIS/OEIS analyzes exercises designed to address PACOM's requirements in Alaska. It does not address activities unique to the NORTHCOM-conducted exercises in Alaska.

The exercises have typically occurred within the ATA over a 14-day period during the April – October time frame. The ATA (Figure 1-1) is comprised of three basic components: 1) the Gulf of Alaska (GOA) Temporary Maritime Activities Area (TMAA); 2) U.S. Air Force (Air Force) over-land Special Use Airspace (SUA³) and air routes over the GOA and State of Alaska; and 3) U.S. Army (Army) training lands (to include associated airspace). An overview of the ATA is provided in Section 1.3, and a detailed discussion is provided in Chapter 2.

Modern military actions require teamwork between hundreds or thousands of people, and their various equipment, vehicles, ships, and aircraft, all working individually and as a coordinated unit to achieve success. This joint training conducted in the ATA by the services during these exercises allows for an opportunity to train Navy, Air Force, and Army forces simultaneously in an area of diverse terrain over large areas with relatively unstricted air space.

The Navy's mission is to organize, train, equip, and maintain combat-ready naval forces capable of winning wars, deterring aggression, and maintaining freedom of the seas. This mission is mandated by federal law (Title 10 U.S.C. § 5062), which ensures the readiness of the United States' naval forces.⁴ The Navy executes this responsibility by establishing and executing training programs, including at-sea training and exercises, and ensuring naval forces have access to the ranges, operating areas, and airspace needed to develop and maintain skills for conducting naval activities.

The purpose of the Proposed Action is to achieve and maintain fleet readiness using the ATA to support and conduct current, emerging, and future training activities.

The need for the Proposed Action is to enable the Navy to meet its statutory responsibility to organize, train, equip, and maintain combat-ready naval forces and to successfully fulfill its current and future global mission of winning wars, deterring aggression, and maintaining freedom of the seas.

The ATA plays a vital part in executing this naval readiness mandate. The training areas serve as a training venue for annual joint training exercises, which can involve forces from the Navy, Air Force, Army, and U.S. Coast Guard (USCG). The Navy's Proposed Action is a step toward ensuring the continued vitality of this essential naval training resource.

This EIS/OEIS assesses environmental effects associated with current and proposed training activities and force structure changes (to include new weapons systems and platforms) in the ATA. Chapter 2 describes in greater detail the alternatives, including the Proposed Action addressed in this EIS/OEIS. In summary, the Navy proposes to implement actions within the ATA to:

- Maintain baseline training activities at current levels;

³ Special use airspace (SUA) is airspace of defined vertical and lateral limits that has been established by the FAA to segregate air activities, which may be hazardous to non-participating aircraft. Restricted areas, Military Operating Areas (MOAs), and Military Training Routes (MTRs) are examples of different types of SUA.

⁴ Title 10, Section 5062 of the United States Code provides: "The Navy shall be organized, trained, and equipped primarily for prompt and sustained combat incident to operations at sea. It is responsible for the preparation of Naval forces necessary for the effective prosecution of war except as otherwise assigned and, in accordance with Integrated Joint Mobilization Plans, for the expansion of the peacetime components of the Navy to meet the needs of war."

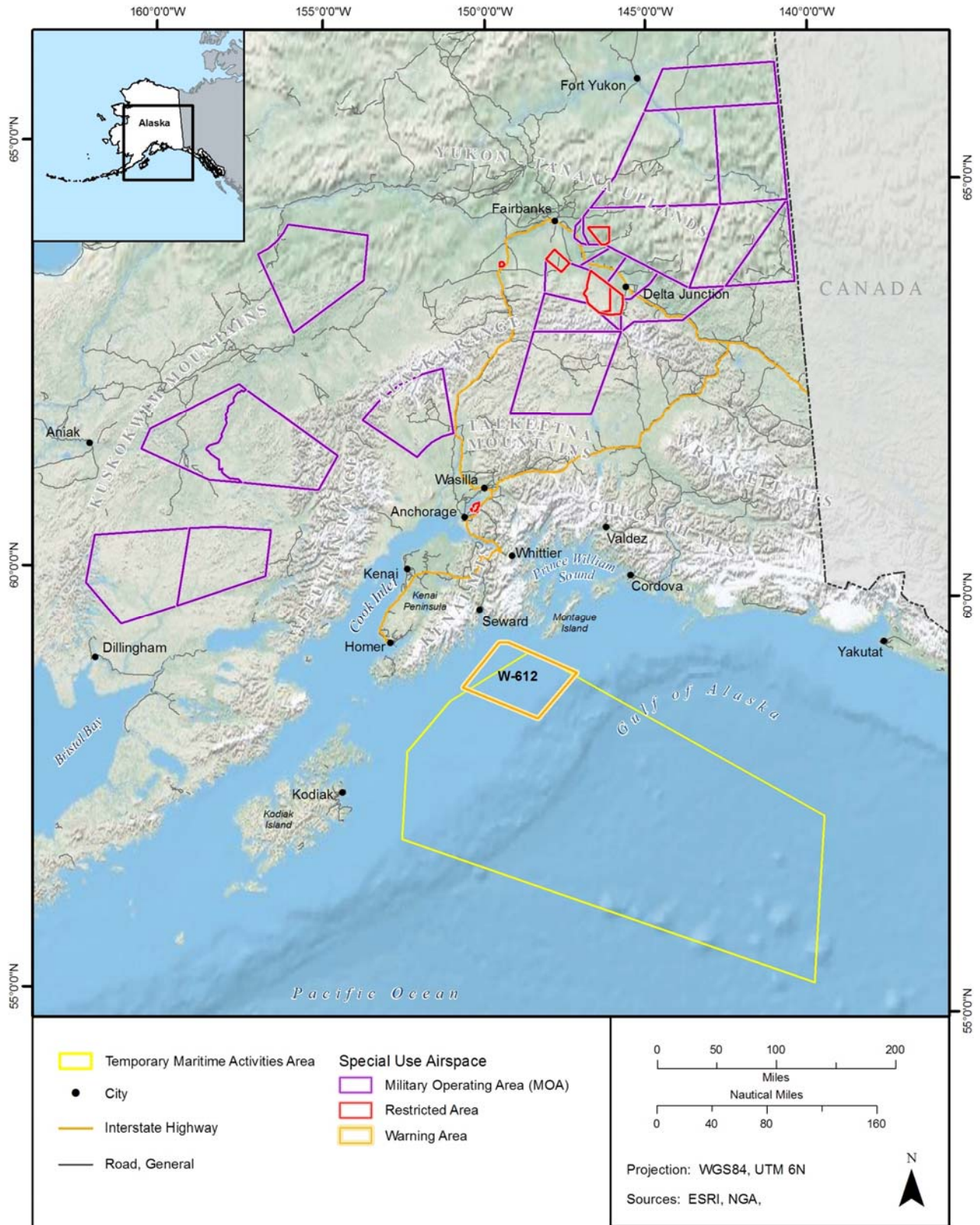


Figure 1-1: Alaska Training Areas

- Increase certain training activities from current levels in order to support the Fleet exercise requirements to include the use of active sonar; and
- Accommodate new training requirements associated with force structure changes and introduction of new weapons and systems to the Fleet.

The No Action Alternative is required by Council on Environmental Quality (CEQ) regulations as a baseline against which the impacts of the Proposed Action are compared. In this EIS/OEIS, the No Action Alternative is represented by current training activities (one joint force exercise occurring over a maximum time period of 14 consecutive days during summer months [April through October]), which provide the analytical baseline.

The Proposed Action would result in selectively focused and critical increases in training activities and levels that are necessary if the Navy is to maintain a state of military readiness commensurate with the national defense mission (conducting up to two joint force level exercises each of which could last up to 21 days between April and October).

The decision to be made by the Navy is to determine the scope and levels of training to be conducted within the ATA, as set forth in the Alternatives discussed in Chapter 2 of this document. To support an informed decision, the EIS/OEIS identifies objectives and criteria for naval training activities in the ATA. The core of the EIS/OEIS is the development and analysis of different alternatives for achieving the Navy's objectives. Alternatives development is a complex process, particularly in the dynamic context of military training. The touchstone for this process is a set of criteria that respond to the naval readiness mandate, as it is implemented in the ATA. The criteria for developing and analyzing alternatives to meet these objectives are set forth in Section 2.3.1. These criteria provide the basis for the statement of the Proposed Action and alternatives and selection of alternatives for further analysis (Chapter 2), as well as analyses of the environmental effects of the Proposed Action and alternatives (Chapter 3). Chapter 2 also discusses alternatives that were considered but eliminated because they do not satisfy the purpose and need or they fail to meet selection criteria.

This EIS/OEIS is being prepared in compliance with NEPA; the CEQ Regulations for Implementing the Procedural Provisions of NEPA (Title 40) Code of Federal Regulations [C.F.R.] Parts [§§] 1500-1508); Department of the Navy Procedures for Implementing NEPA (32 C.F.R. Part 775); and EO 12114, *Environmental Effects Abroad of Major Federal Actions*. The NEPA process ensures that environmental impacts of proposed major federal actions are considered in agency decision making. EO 12114 requires consideration of environmental impacts of actions outside the United States territorial seas. This EIS/OEIS satisfies the requirements of both NEPA and EO 12114.

1.2 BACKGROUND

The U.S. Navy routinely trains and operates in the ATA for national defense purposes. The land, air, and sea space of the ATA have provided, and continue to provide, a safe and realistic training environment for naval and joint forces.

1.2.1 Why the Navy Trains

The U.S. military is maintained to ensure the freedom and safety of all Americans both at home and abroad. In order to do so, Title 10 U.S.C. § 5062 requires the Navy to “maintain, train and equip combat-ready naval forces capable of winning wars, deterring aggression and maintaining freedom of the seas.” Modern war and security operations are complex. Modern weaponry has brought both unprecedented opportunity and innumerable challenges to the Navy. Smart weapons, when used properly, are very accurate and actually allow us to accomplish our mission with greater precision and far less destruction

than in past conflicts. But these modern smart weapons are very complex to use. U.S. military personnel must train regularly with them to understand their capabilities, limitations, and operation. As stated above, modern military actions require teamwork between hundreds or thousands of people, and their various equipment, vehicles, ships, and aircraft, all working individually and as a coordinated unit to achieve success. Navy training addresses all aspects of the team, from the individual to multi-service (joint) and coalition teamwork. To do this, the Navy employs a building block approach to training. Training doctrine and procedures are based on operational requirements for deployment of naval forces. Training proceeds on a continuum, from teaching basic and specialized individual military skills, to intermediate skills or small unit training, to advanced, integrated training events, culminating in joint exercises or predeployment certification events.

The Navy's training cycle, Fleet Response Plan, ensures that naval forces achieve and maintain the capabilities to carry out the requirements of combatant commanders. The Navy implements this Plan through the Fleet Response Training Cycle. This cycle involves three basic phases: unit level training; integration training; and sustainment. The exercises that the Navy conducts in the ATA focus on maintaining and improving readiness of forces or the sustainment phase. These exercises also allow the Navy to train in a joint environment. Joint training is invaluable, as most conflicts tend to be fought jointly and the ability of the individual services to work cohesively together while maximizing and exploiting each services' own unique capabilities often times is the difference between success and failure.

To provide the experience so important to success and survival, training must be as realistic as possible. The Navy often employs simulators and synthetic training to provide early skill repetition and to enhance teamwork, but live training in a realistic environment is vital to success. This training requires sufficient sea and airspace to maneuver tactically, realistic targets and objectives, simulated opposition that creates a realistic enemy, and instrumentation to objectively monitor the events to help participants learn to correct errors.

Training areas provide controlled and safe environments that enable Navy forces to conduct realistic combat-like training as they undergo all phases of the graduated buildup needed for combat-ready deployment. These training areas and operating areas provide the space necessary to conduct controlled and safe training scenarios representative of those that our men and women would have to face in actual combat. The training areas are designed to provide the most realistic training in the most relevant environments, replicating to the best extent possible the operational stresses of warfare. The integration of undersea ranges and operating areas with land training ranges is critical to this realism, allowing execution of multidimensional exercises in complex scenarios. Typically, they also provide instrumentation that captures the performance of Navy tactics and equipment in order to provide the feedback and assessment that are essential for constructive criticism of personnel and equipment. The live-fire phase of training facilitates assessment of the Navy's ability to place weapons on target with the required level of precision while in a stressful environment.

Navy training activities focus on achieving proficiency in each of several functional areas encompassed by Navy operations. These functional areas, known as Primary Mission Areas (PMARs), are: Anti-Air Warfare (AAW), Amphibious Warfare (AMW), Anti-Surface Warfare (ASUW), Anti-Submarine Warfare (ASW), Mine Warfare (MIW), Strike Warfare (STW), Electronic Combat (EC), and Naval Special Warfare (NSW). With the exception of MIW and AMW, all PMARs are conducted in the ATA and each training activity addressed in the EIS/OEIS is categorized under a PMAR.

The ATA is one of several areas (Southern California Range Complex, Hawaii Range Complex, Northwest Training Range Complex) used by the Navy for training of operational forces in the northern and eastern Pacific Ocean. As with each Navy training area, the primary mission of the ATA is to provide

a realistic training environment for naval and joint forces to ensure that they have the capabilities and high state of readiness required to accomplish their assigned missions.

Training is focused on preparing for worldwide deployment. Naval forces generally deploy in specially organized units called Strike Groups. A Strike Group may be organized around one or more aircraft carriers, together with several surface combatant ships and submarines, collectively known as a Carrier Strike Group (CSG). A naval force known as a Surface Strike Group (SSG) consists of three or more surface combatant ships. The Navy and Marine Corps deploy CSGs and SSGs on a continuous basis. The number and composition of Strike Groups deployed and the schedule for deployment are determined based on worldwide requirements and commitments.

1.2.2 The Strategic Importance of the Alaska Training Areas

The ATA has a unique combination of attributes that make it a strategically important training venue for the Navy. These attributes include:

Location. The large contingent of Air Force aircraft and Army assets based within a few hundred miles of the TMAA creates the possibility of rare joint training opportunities with Navy forces. The TMAA provides a maritime training venue that is located within flight range of Elmendorf Air Force Base (AFB), Eielson AFB, Fort Richardson, Fort Wainwright, Fort Greely, and their associated air and land training ranges (Figure 1-1). Furthermore, numerous shipping lanes in the GOA and the abundance of commercial vessels on those shipping lanes provide valuable training during exercise scenarios.

Oceanographic conditions. The complex bathymetric and oceanographic conditions, including a continental shelf, submarine canyons, numerous seamounts, and fresh water infusions from multiple sources, create a challenging environment in which to search for and detect submarines in ASW training activities. In the summer, the TMAA provides a safe cold-water training environment.

Area of Training Space. The ATA is one of the largest air, surface, subsurface, and land training areas in the Northern Pacific. Detailed descriptions of these areas are provided in Section 1.3.2. This vast training area provides ample space to support the necessary forces and allow for the full range of activities required of a robust joint training scenario.

1.3 OVERVIEW OF THE ALASKA TRAINING AREAS

1.3.1 Mission

The ATA is the principal training venue for the naval forces that participate in large-scale joint exercises in the Alaska area. Northern Edge⁵ is a large-scale joint exercise that has been conducted annually, principally within the TMAA (see Figure 1-2 and Section 1.3.2 for description of the TMAA) for several years. The TMAA meets large-scale joint exercise training objectives to support naval and joint operational readiness by providing a “geographically realistic” training area for U.S. Pacific Command (PACOM), Joint Task Force Commander⁶ scenario-based training, and supports the mission requirement

⁵ Northern Edge is training exercise that exercises joint interoperability of service component forces by testing and evaluating contingency plans, policies, procedures, command structure, communications, logistics, and operations in a joint environment. The exercise also provides a venue for the development and implementation of joint experimentation in Alaska. Depending on the specific exercise objectives, Northern Edge may also incorporate joint task force training modules and transformation initiatives for air and space operations center employment, defensive counter air, counter surface/maritime interdiction, and personnel recovery.

⁶ A Joint Task Force Commander and supporting staff is capable of planning and executing any contingency from relatively small-scale operations, such as noncombatant evacuations or maritime interdiction, to major theater conflict.

of Alaskan Command (ALCOM)⁷ to conduct joint training for Alaska-based forces. The strategic vision of the Commander, U.S. Pacific Fleet (CPF) and the Commander, United States Fleet Forces (USFF) is that the training area support naval operational readiness by providing a realistic, live-training environment for forces assigned to the Pacific Fleet and other users with the capability and capacity to support current, emerging, and future training requirements.

1.3.2 Primary Components

The ATA consists of three primary components: the TMAA, the Air Force SUA, and the Army training lands (to include associated airspace). The components of the ATA encompass 42,146 square nautical miles (nm²) (145,482 square kilometers [km²]) of sea space, 88,731 nm² (305,267 km²) of SUA (not including the portion of Warning Area 612 [W-612] that falls outside the MAA), and over 2,624 square miles (mi²) (6,796 km²) of land area (Army ranges). Each of the primary components of the ATA can be divided into numerous subcomponent training areas, which are described in detail in Chapter 2.

TMAA. The TMAA (see Figure 1-2) is composed of the 42,146 nm² (145,482 km²) of surface and subsurface operating area and overlying airspace that includes the majority of W-612 located over Blyng Sound. W-612 is 2,256 nm² (8,766 km²) of SUA. The TMAA is roughly rectangular shaped and oriented from northwest to southeast, approximately 300 nautical miles (nm) (555.6 kilometers [km]) long by 150 nm (277.8 km) wide, situated south of Prince William Sound and east of Kodiak Island. The TMAA is bounded by the following coordinates: 57° 30'N, 141° 30'W to 59° 36'N, 148° 10'W to 58° 57'N, 150° 04'W to 58° 20'N, 151° 00'W to 57° 16'N, 151° 00'W to 55° 30'N, 142° 00'W. The majority of Navy training activities occur in the TMAA. The specific geographical area of the TMAA supports operational and logistical (time, speed, and distance) challenges associated with real world scenarios that support joint operations within PACOM's unique area of responsibility. For example, CSG and land based joint operations, both overland and overwater, require air route access to land ranges, proximity to bases where a landing could be made in an emergency, and supportable fuel costs, which includes air-to-air refueling where appropriate. The TMAA provides these requirements.

Air Force Inland Special Use Airspace Training Areas. The ATA includes numerous Air Force airspace areas designated as Restricted Areas (RAs), Military Operations Areas (MOAs) or Visual Flight Rules (VFR) corridors. Other airspace for special use in Alaska consists of Military Training Routes (MTRs), Air Traffic Control Assigned Airspace (ATCAA), Air Refueling Anchors/Tracks, Low-Altitude Tactical Navigation (LATN) areas, Controlled Firing Areas, and Slow Speed Low-Altitude Training Routes. In total, these training areas comprise 46,585 nm² (159,782 km²/61,692 mi²) of SUA, 43,963 nm² (150,789 km²/58,220 mi²) of which is instrumented (ability to track, score and replay events), that overlays portions of the State of Alaska, generally to the west and north of Anchorage and to the east of Fairbanks. The Air Force's SUA in Alaska is among the largest components of SUA in the Air Force's range inventory, facilitating realistic training involving high speed military aircraft with the capability to traverse extensive airspace very quickly. A significant portion of naval air activity occurs in the Air Force's SUA.

⁷ The mission requirement of ALCOM is to: 1) integrate military activities within Alaska to maximize the readiness of theater forces, 2) expedite deployment of forces from and through Alaska in support of worldwide contingencies, and 3) serve as the JTF headquarters for protection of critical infrastructure and coordination of Military Assistance to Civil Authorities.

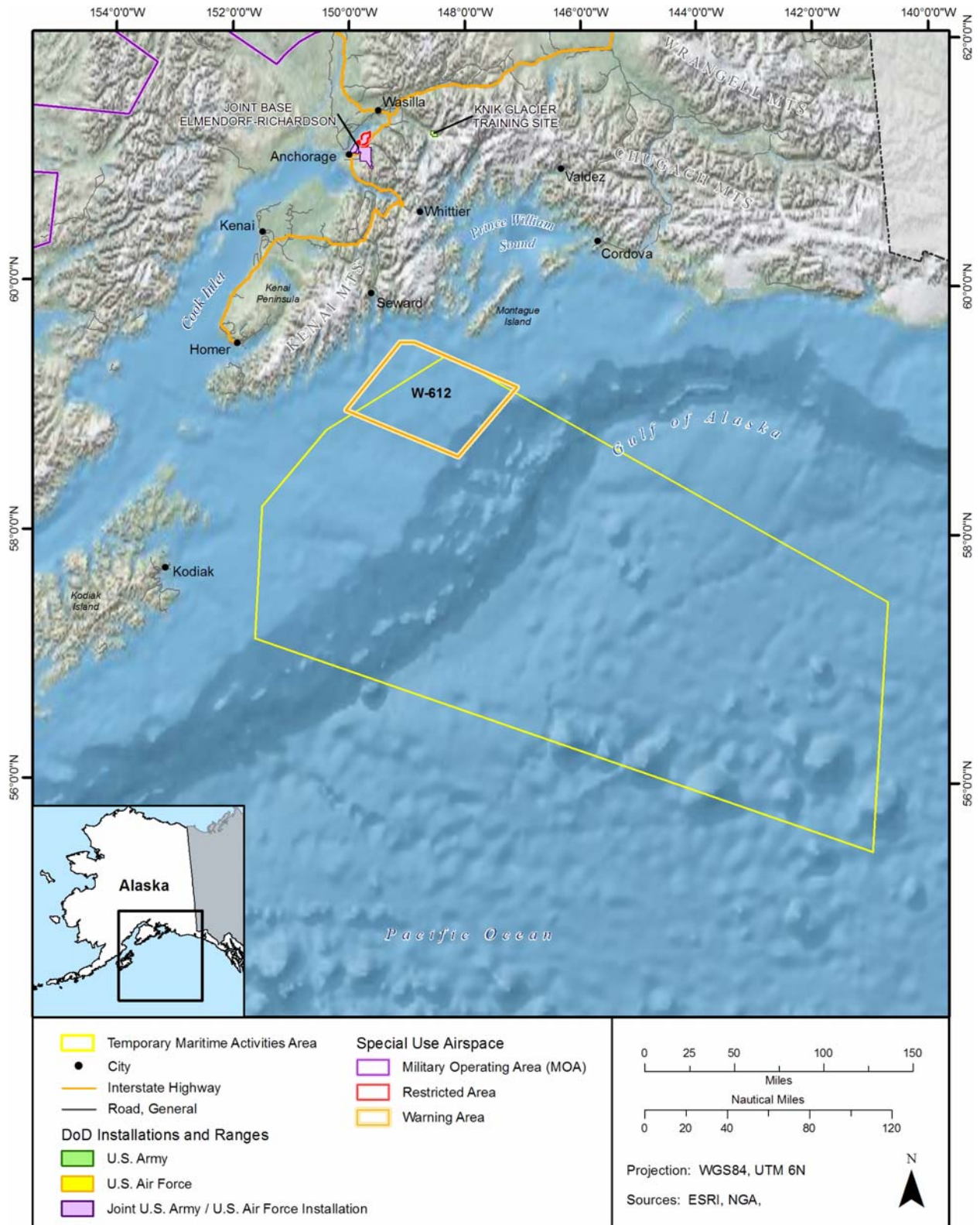


Figure 1-2: Gulf of Alaska Temporary Maritime Activities Area

Army Training Land. The ATA includes numerous Army land training areas that are located both on and off Army installations. In total, these training areas comprise 2,624 mi² (1,981 nm²/6,796 km²) of land that is located generally to the south and east of Fairbanks, below the Air Force's SUA. The Army's land training areas in Alaska are among the largest of all training areas in the Army's inventory.

These ground training areas provide an extensive suite of capabilities for tactical training, including live-fire training areas for small arms, maneuver areas, and other dedicated areas for the conduct of training. These training areas have extensive instrumentation, and provide opposing force simulation and targets for use in land and air live-fire training. Additionally, these training areas contain airfields, drop zones, landing zones, and other infrastructure for training and logistical support. Combined with the Air Force's SUA, these ground training areas provide Navy and Air Force aircraft the capability to drop live and inert munitions into existing impact areas near instrumented ranges during large, complex flying evolutions.

1.4 PURPOSE AND NEED OF THE PROPOSED ACTION

Given the vital importance of the ATA to the readiness of naval forces and the unique training environment provided by the ATA, the Navy proposes to take actions for the purposes of:

- Supporting PACOM training requirements;
- Supporting Joint Task Force Commander training requirements;
- Achieving and maintaining Fleet readiness using the ATA to support and conduct current, emerging, and future training activities; and
- Expanding warfare missions supported by the training conducted in the ATA, consistent with requirements.

The Proposed Action is needed to continue providing a training environment with the capacity and capabilities to fully support required training tasks for operational units participating in joint exercises, such as the annual Northern Edge exercise. The Navy has developed alternatives criteria based on this statement of the purpose and need for the Proposed Action (see Section 2.3.1).

In this regard, the ATA furthers the Navy's execution of its roles and responsibilities under Title 10. To comply with its Title 10 mandate, the Navy needs to:

- Maintain current levels of military readiness by training in the ATA;
- Accommodate future increases in training activity tempo in the ATA;
- Support the acquisition and implementation into the Fleet of advanced military technology using the ATA to conduct training activities for new platforms and associated weapons systems (EA-18G Growler aircraft, Guided Missile Submarines [SSGN], P-8 Poseidon Multimission Maritime Aircraft [MMA], Guided Missile Destroyer [DDG] 1000 (Zumwalt Class), and several types of Unmanned Aerial Systems [UASs]);
- Identify shortfalls in training, particularly training instrumentation and address through enhancements;
- Maintain the long-term viability of the ATA as a premiere Navy training area while protecting human health and the environment, and enhancing the quality, capabilities, and safety of the training area; and

- Be able to bring Army, Navy, Air Force, and Coast Guard assets together into one geographic area for joint training.

1.5 THE ENVIRONMENTAL REVIEW PROCESS

1.5.1 The National Environmental Policy Act

The National Environmental Policy Act of 1969 requires Federal agencies to examine the environmental effects of their Proposed Actions. An EIS is a detailed public document that provides an assessment of the potential effects that a Federal action might have on the human, natural, or cultural environment. The Navy is the lead agency for the EIS/OEIS as set forth in 40 CFR § 1501.5; NMFS is a cooperating agency as set forth in 40 CFR § 1501.6.

The Navy has prepared an EIS/OEIS for the ATA to assess the effects of ongoing and proposed future activities on the environment. The EIS/OEIS also gives the Navy an opportunity to review its procedures and ensure the benefits of recent scientific and technological advances are applied toward minimizing environmental effects.

The first step in the NEPA process is the preparation of a Notice of Intent (NOI) to develop an EIS/OEIS. The NOI provides an overview of the Proposed Action and the scope of the EIS/OEIS. The NOI for this project was published in the *Federal Register* on March 17, 2008, and in four local newspapers, (*Anchorage Daily News*, *Kodiak Daily Mirror*, *Cordova Times*, *Peninsula Clarion* [see Appendix G for information on the scoping meetings]). The NOI and newspaper notices included information about comment procedures, a list of information repositories (public libraries), the project website address (<http://www.GulfofAlaskaNavyEIS.com>), and the dates and locations of the scoping meetings.

Scoping is an early and open process for developing the “scope” of issues to be addressed in the EIS/OEIS, and for identifying significant issues related to a Proposed Action. The scoping meetings for this EIS/OEIS were advertised in local newspapers; the advertisements invited public attendance to help define and prioritize environmental issues, and convey these issues to the Navy (see Appendix G for information on the scoping meetings). Comments from the public, as well as from agencies and special interest groups, including the development of alternatives were considered in the preparation of this EIS/OEIS.

Some of the comments received from the public during the scoping process are categorized and summarized in Table 1-1. This table is not intended to provide a complete listing, but to show the extent of the scope of comments.

Subsequent to the scoping process, the Draft EIS/OEIS was prepared to assess the potential effects of the Proposed Action and alternatives on the environment. A Notice of Availability (NOA) was published in the *Federal Register* on December 11, 2009, and notices were placed in the *Anchorage Daily News*, *Kodiak Daily Mirror*, *Cordova Times*, *Peninsula Clarion*, and the *Juneau Empire* to announce the availability of the Draft EIS/OEIS. The Draft EIS/OEIS was made available for public and agency review and was circulated for review and comment. Public meetings were held in the same geographic venues as the scoping meetings; however, in response to public input, two additional venues were added in Homer and Juneau, Alaska to receive public comments on the Draft EIS/OEIS⁸. Public comments received on the

⁸ Public Meetings occurred at: Kodiak High School, Kodiak, AK on January 7, 2010; Fairview Recreation Center, Anchorage, AK on January 8, 2010; West Homer Elementary School, Homer, AK on January 9, 2010; Juneau Arts and Culture Center, Juneau, AK on January 11, 2010; and Orca Adventure Lodge, Cordova, AK on January 12, 2010.

Draft EIS/OEIS are included, along with Navy responses, in Appendix I of this EIS/OEIS. Appendix I contains a copy of all written, website, and oral comments and formal transcripts of the public hearings, including the comments received during the hearings.

Table 1-1: Public Scoping Comment Summary

Category	Comment Summary
Marine Mammals	<ul style="list-style-type: none"> Concerns about physical and physiological effects to marine mammals from Navy activities. In particular, injuries from ship strikes and sonar, to include disorientation, strandings, and hearing loss.
Sonar, Sound in the Water	<ul style="list-style-type: none"> Desires that the EIS/OEIS consider alternative technologies to mid-frequency active (MFA) sonar. General feeling that MFA and other forms of sonar are not required for training and should not be conducted within the GOA.
Fish and Marine Habitat	<ul style="list-style-type: none"> Concerns about the effects to fish and marine mammal habitats from Navy activities to include migratory routes, feeding grounds, and breeding as well as impacts from hazardous and expended materials..
Mitigation	<ul style="list-style-type: none"> Concern about the Navy's training program for spotting animals - The belief that spotting marine mammals is extremely difficult, even for expert observers, and doubts that shipboard lookouts will be able to detect animals in adverse sea conditions - especially at night. Questions about mitigating the possible adverse impacts to marine mammals from sonar. Belief that, in general, the Navy needs to aggressively consider ways to expand, improve, and employ better protective measures in future and to better identify clear monitoring goals and objectives with specific parameters for measuring success, and provide a feedback mechanism for the public to view information on mitigation effectiveness and monitoring results.
Policy/NEPA Compliance and Public Participation	<ul style="list-style-type: none"> Concern that information available during scoping was inadequate to inform comments or that the "poster" session was not the best format. Others desired a more open forum-type format, where all questions voiced could be heard by all. Request that meeting locations be expanded.
Threatened & Endangered Species	<ul style="list-style-type: none"> Concerns about the number of endangered species, particularly whales (seven in total), within the GOA, and designation of critical habitats.
Commercial Fishing	<ul style="list-style-type: none"> Concerns about the effects of Navy activities upon fish, their embryos, migration patterns, and the overall impact on the commercial fishing industry and thus the livelihoods of Alaskans in general.

In this Final EIS/OEIS, the Navy has made changes to the Draft EIS/OEIS, based on comments received during the public comment period. These changes included factual corrections, additions to existing information, and improvements or modifications to the analyses in the Draft EIS/OEIS.

The Record of Decision (ROD) reflects the Navy's final decision on the Proposed Action, the rationale behind that decision, and any commitments to monitoring and mitigation. The ROD will be issued by the Navy following the issuance of this Final EIS/OEIS and a 30-day no action period, pursuant to 40 C.F.R. § 1502.2. An NOA of the ROD will be published in the Federal Register, and the ROD will be distributed to agencies and interested parties, and posted on the GOA EIS/OEIS website. Its availability will also be announced in local newspapers.

Navy training activities that occur within the Air Force inland SUA and the Army training lands are analyzed under separate previous NEPA documentation (the *Alaska Military Operations Area EIS* [USAF 1995], *Improvements to Military Training Routes in Alaska Environmental Assessment* [USAF 2007], the

Alaska Army Lands Withdrawal Renewal Final Legislative EIS [Army 1999], and the *Transformation of U.S. Army Alaska FEIS* [Army 2004]). These documents are incorporated by reference which, in NEPA terms, means that the environmental effects of these activities are addressed in these documents. For additional information, see Section 1.6.

1.5.2 Jurisdictional Considerations (Executive Order 12114)

In 1969, Congress enacted NEPA, which provides for the consideration of environmental issues in Federal agency planning and decision-making. Regulations for federal agency implementation of the act were established by the President's CEQ. The EIS must disclose significant environmental impacts and inform decision makers and the public of the reasonable alternatives to the Proposed Action.

Presidential Proclamation 5928, issued December 27, 1988 (54 Fed. Reg. 777, titled 'Territorial Sea of the United States'), extended the exercise of United States sovereignty and jurisdiction under international law to 12 nm; however, the Proclamation expressly provides that it does not extend or otherwise alter existing federal law or any associated jurisdiction, rights, legal interests, or obligations. As a result, the Navy analyzes environmental effects and actions within 12 nm under NEPA and those effects occurring beyond 12 nm under the provisions of EO 12114. Table 1-2 presents a list of training activities (by warfare area) and the geographical area in which they occur (Inland, 0-12 nm, and beyond 12 nm). As shown in Table 1-2, the majority of training activities occur outside of territorial waters (not within 12 nm of shore).

For the majority of resource sections addressed in this Final EIS/OEIS, projected impacts outside of U.S. territorial waters would be similar to those within territorial waters. Beyond 12 nm (22 km) is simply a jurisdictional boundary and is not delineated for purposes of scheduling or management of military training activities. In addition, the baseline environment and associated impacts to the various resource areas analyzed in this Final EIS/OEIS are not substantially different within or outside the 12 nm (22 km) jurisdictional boundary. Therefore, for these resource sections, the impact analyses contained in the main body of the Final EIS/OEIS are comprehensive and follow both NEPA and EO 12114 guidelines. The description of the affected environment addresses areas both within and beyond U.S. territorial sea.

Table 1-2 lists training activities by warfare area, and indicates whether a given activity is addressed pursuant to NEPA (because it occurs within U.S. territory, including the territorial seas) or pursuant to EO 12114 (because it occurs outside the territorial seas).

1.5.3 Government-to-Government Consultations

As part of the EIS/OEIS process and in accordance with EO 13175, Consultation and Coordination with Indian Tribal Governments, the Navy contacted the following federally recognized tribes in Alaska on this document: Afognak, Chenega, Eyak, Kaguyak, Lesnoi Village, Old Harbor, Ouzinke, Port Graham, Port Lions, Shoonaq, Tatitlek, and Yakutat. To date, all tribes have informally (telephonically/verbally) responded that they will not be requesting Government-to-Government consultations.

1.5.4 Regulatory Agency Briefings

The Navy held a series of regulatory agency briefings in November of 2008, with the following regulators: U.S. Fish and Wildlife Service (USFWS) Alaska Region, the Environmental Protection Agency (EPA) Region X, and the Alaska Department of Natural Resources (ADNR) Coastal Zone Management Act (CZMA) staff.

Table 1-2: Training Activities Analyzed under NEPA and EO 12114

Warfare Area	Training Activity	NEPA		EO 12114
		Inland ²	0-12 NM ³	Beyond 12 NM
Anti-Air Warfare (AAW)	Aircraft Combat Maneuvers	X	X	X
	Air Defense Exercise		X	X
	Surface-to-Air Missile Exercise (MISSILEX)			X
	Surface-to-Air Gunnery Exercise (GUNEX)		X	X
	Air-to-Air MISSILEX		X	X
Anti-Submarine Warfare (ASW) ¹	Helicopter ASW Tracking Exercise (TRACKEX)			X
	MPA ASW TRACKEX		X	X
	Extended Echo Ranging (EER) ASW Exercises			X
	Surface Ship ASW TRACKEX			X
	Submarine ASW TRACKEX			X
Anti-Surface Warfare (ASUW)	Visit Board Search and Seizure			X
	Air-to-Surface MISSILEX			X
	Air-to-Surface Bombing Exercise (BOMBEX)			X
	Air-to-Surface GUNEX			X
	Surface-to-Surface GUNEX			X
	Maritime Interdiction		X	X
	Sea Surface Control			X
Electronic Combat (EC)	Sinking Exercise		X	X
	EC Exercise	X	X	X
	Chaff Exercise	X	X	X
Naval Special Warfare (NSW)	Counter Targeting Exercise			X
	Insertion/Extraction	X		
Strike Warfare (STW)	Air-to-Ground BOMBEX	X	X	
	Personnel Recovery	X		X
Other Activities				
N/A	Deck Landing Qualification (DLQs)			X

1 – ASW activities are not currently conducted in the TMAA. N/A – Not applicable.

2 - Navy inland activities are a part of the Proposed Action; however, those inland activities are analyzed under existing USAF/Army NEPA documents, including potential increases in training activities.

3 – The only activities that occur within 0-12 nm are aircraft overflights above 15,000 feet.

1.5.5 Coastal Zone Management Act

The *Coastal Zone Management Act* (CZMA) of 1972 (16 U.S.C. § 1451) encourages coastal states to be proactive in managing coastal uses and coastal resources in the coastal zone. The CZMA established a voluntary coastal planning program; participating states submit a Coastal Management Plan (CMP) to the National Oceanographic and Atmospheric Administration (NOAA) Office of Ocean and Coastal Resource Management (OCRM) for approval. Under CZMA, federal actions are required to be consistent, to the maximum extent practicable, with the enforceable policies of approved CMPs.

CZMA defines the coastal zone (16 U.S.C. § 1453) as extending, “to the outer limit of State title and ownership under the Submerged Lands Act.” The coastal zone extends inland only to the extent necessary to control the shoreline. Excluded from the coastal zone are lands the use of which is by law subject solely to the discretion of, or which is held in trust by, the federal government (16 U.S.C. § 1453).

Accordingly, federal military lands are not within the coastal zone. In the State of Alaska, CZMA coastal boundaries are determined by each individual Coastal Resource District pursuant to 11 Alaska Administrative Code (AAC) 114.220.

The State of Alaska has an approved CMP, the Alaska Coastal Management Program (ACMP), which was established under the Coastal Management Act of 1977, and is found at Alaska Statutes Annotated (AS) Title 45 Chapter 40. The ACMP received federal approval from the NOAA in 1979 and an amended version of the ACMP was approved by NOAA in December of 2005. The ACMP provides stewardship for Alaska's rich and diverse coastal resources to ensure a healthy and vibrant Alaskan coast that efficiently sustains long-term economic and environmental productivity. The Alaska Department of Natural Resources (ADNR) is the state's designated coastal management agency and is responsible for reviewing projects for consistency with the CMP and issuing coastal management decisions under the provisions of 11 AAC Code Chapters 110. Specific statewide standards for review under the ACMP are found at 11 AAC Chapter 112.

The CZMA federal consistency determination process includes a review of the Proposed Action to determine whether it has reasonably foreseeable direct or indirect effects on coastal zone resources or uses under the provisions of the CMP. An in-depth examination of any such effects, and a determination on whether those effects are consistent to the maximum extent practicable with the state's enforceable policies, is then conducted by the action proponent. Specific standards under the ACMP that appear applicable to proposed training activities occurring in the TMAA are 11 AAC Chapter 112 Sections 300 ("Habitats"), and 310 ("Air, Land, and Water Quality").

For the activities covered in this Final EIS/OEIS, the Navy has ensured compliance with the CZMA through coordination with the ADNR and the submission of a *de minimis* determination under 15 C.F.R. § 930.33(a)(3)(i) on 29 July 2010. This was based on the Navy's determination that the activities analyzed under this EIS were expected to have only insignificant direct or indirect (secondary and cumulative) coastal effects. ADNR concurred with the *de minimis* determination on 14 October 2010.

1.5.6 Marine Mammal Protection Act

The Marine Mammal Protection Act (MMPA) of 1972 established, with limited exceptions, a moratorium on the "taking" of marine mammals in waters or on lands under U.S. jurisdiction. The act further regulates "takes" of marine mammals in the global commons (that is, the high seas) by vessels or persons under U.S. jurisdiction. The term "take," as defined in Section 3 (16 U.S.C. 1362) of the MMPA, means "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal." "Harassment" was further defined in the 1994 amendments to the MMPA, which provided two levels of harassment, Level A (potential injury) and Level B (potential disturbance).

The National Defense Authorization Act of Fiscal Year 2004 (Public Law 108-136) amended the definition of harassment as applied to military readiness activities or scientific research activities conducted by or on behalf of the federal government, consistent with Section 104(c)(3) [16 U.S.C. 1374 (c)(3)]. The Fiscal Year 2004 National Defense Authorization Act adopted the definition of "military readiness activity" as set forth in the Fiscal Year 2003 National Defense Authorization Act (Public Law 107-314). Military training activities within the TMAA constitute military readiness activities as that term is defined in Public Law 107-314 because training activities constitute "training and operations of the Armed Forces that relate to combat" and constitute "adequate and realistic testing of military equipment, vehicles, weapons, and sensors for proper operation and suitability for combat use."

For military readiness activities, the relevant definition of harassment is any act that:

- Injures or has the significant potential to injure a marine mammal or marine mammal stock in the wild (“Level A harassment”).
- Disturbs or is likely to disturb a marine mammal or marine mammal stock in the wild by causing disruption of natural behavioral patterns including, but not limited to, migration, surfacing, nursing, breeding, feeding, or sheltering to a point where such behavioral patterns are abandoned or significantly altered (“Level B harassment”) [16 U.S.C. 1362 (18)(B)(i)(ii)].

16 U.S.C. § 1371(a)(5) directs the Secretary of the Department of Commerce to allow, upon request, the incidental (but not intentional) taking of marine mammals by U.S. citizens who engage in a specified activity (exclusive of commercial fishing), if certain findings are made and regulations are issued. Permission will be granted by the Secretary for the incidental take of marine mammals if the taking will have a negligible impact on the species or stock and will not have an unmitigable adverse impact on the availability of such species or stock for taking for subsistence uses.

In support of the Proposed Action, the Navy requested a Letter of Authorization (LOA) pursuant to Section 101(a)(5)(A) of the MMPA. The application was reviewed by NMFS and a Notice of Receipt of Application was published in the *Federal Register* on February 3, 2010 (75 FR 5575). Publication of the Notice of Receipt of Application initiated the 30-day public comment period, during which time anyone could obtain a copy of the application by contacting NMFS. In addition, the MMPA requires NMFS to develop regulations governing the issuance of a LOA and to publish these regulations in the *Federal Register*. Subsequently, NMFS published its Proposed Rule in the *Federal Register* on October 19th, 2010 (74 FR 32828). After receiving public comments on the Proposed Rule, NMFS will publish its Final Rule. Several species of marine mammals occur in the TMAA. Accordingly, the Navy has initiated the MMPA compliance process with NMFS, by submission of a request for a LOA. The Navy will receive a LOA from NMFS to permit takes as appropriate.

1.5.7 Endangered Species Act

The Endangered Species Act (ESA) of 1973 established protection over and conservation of threatened and endangered species and the ecosystems upon which they depend. An “endangered” species is a species that is in danger of extinction throughout all or a significant portion of its range, while a “threatened” species is one that is likely to become endangered within the foreseeable future throughout all or in a significant portion of its range. The USFWS and NMFS jointly administer the ESA and are also responsible for the listing of species (designating a species as either threatened or endangered). The USFWS has primary management responsibility for management of terrestrial and freshwater species, while the NMFS has primary responsibility for marine species and anadromous fish species (species that migrate from saltwater to freshwater to spawn). The ESA allows the designation of geographic areas as critical habitat for threatened or endangered species.

The ESA provides a program for the conservation of threatened and endangered plants and animals and the habitats in which they are found. The law requires federal agencies, in consultation with the USFWS and/or NMFS, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any threatened or endangered species or result in the destruction or adverse modification of designated critical habitat of such species. Under Section 7 of the ESA, “jeopardize” means to engage in any action that would be expected to reduce appreciably the likelihood of the survival and recovery of a listed species by reducing its reproduction, numbers, or distribution.

Regulations implementing the ESA expand the consultation requirement to include those actions that “may affect” a listed species or adversely modify critical habitat. If an agency’s proposed action would take a listed species, the agency must obtain an incidental take statement from the responsible wildlife

agency. Consultation is complete once NMFS prepares a final Biological Opinion (BO) and issues an incidental take statement, if necessary.

Four salmonid species (Chinook, coho, sockeye, and steelhead trout), one sea turtle (leatherback), seven marine mammal species (blue whale, fin whale, humpback whale, North Pacific right whale, sei whale, sperm whale, Steller sea lion) and one bird (short-tailed albatross) that are listed as endangered or threatened under the ESA could potentially occur in the TMAA. Critical habitat for North Pacific right whales and Steller sea lions has been designated under the ESA; however, these areas are outside the action area of the TMAA. Accordingly, the Navy has initiated the ESA Section 7 consultation process with NMFS and USFWS. Informal consultation for listed marine birds has been completed with USFWS with their concurrence letter of March 24, 2010. Consultation for listed marine species, including mammals, turtles, and fish, has been initiated with NMFS. Upon concluding Section 7 consultation, the Navy will adhere to any provisions of the NMFS Biological Opinion (BO).

1.5.8 Other Environmental Requirements Considered

The Navy must comply with a variety of other federal environmental laws, regulations, and EOs. These include (among other applicable laws and regulations):

- Migratory Bird Treaty Act (MBTA) (16 U.S.C. §§ 703-711);
- Rivers and Harbors Act (RHA) (33 U.S.C. §§ 401-426);
- Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) (16 U.S.C. §§ 1801-1891);
- Clean Air Act (CAA) (42 U.S.C. §§ 7401-7671);
- Federal Water Pollution Control Act (Clean Water Act, CWA) (33 U.S.C. §§ 1251-1387);
- National Historic Preservation Act (NHPA) (16 U.S.C. § 470);
- EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (EO 12898, 59 Federal Register [FR] 7269 [Feb 16, 1994]);
- EO 13045, Environmental Health and Safety Risks to Children (EO 13045, 62 FR 19885 [Apr 23, 1997]);
- Alaska Native Claims Settlement Act of 1971 (ANCSA) (43 U.S.C. §§ 1601-1629); and
- Alaska National Interest Lands Conservation Act (ANILCA) (16 U.S.C. §§ 3101-3233).

In addition, laws and regulations of the State of Alaska appropriate to Navy actions are identified and addressed in this EIS/OEIS. This EIS/OEIS will facilitate compliance with applicable, appropriate state laws and regulations.

1.6 RELATED ENVIRONMENTAL DOCUMENTS INCORPORATED BY REFERENCE

According to CEQ regulations for implementing NEPA, material relevant to an EIS may be incorporated by reference with the intent of reducing the size of the document (40 C.F.R. § 1502.21). Some of the programs and projects in the GOA that have undergone environmental review and documentation to ensure NEPA compliance are identified below and incorporated herein by reference.

- U.S. Department of the Air Force, 1995. Alaska Military Operations Areas Environmental Impact Statement. August 1995.
 - This EIS analyzed periodic major Joint Task Force (JTF⁹) (Army, Air Force, Marine Corps, and Navy) exercises such as COPE THUNDER and NORTHERN EDGE which utilize the three withdrawn military areas and which stage assets and/or personnel at the Army installations as well as at Eielson and Elmendorf Air Force Bases. The EIS evaluated the occurrence of up to six JTF exercises or Major Flying Exercises (MFE) each year, one sometime between February and April, four between May and August, and one between October and November. Each JTF or MFE usually covers 10 to 15 flying days, not exceeding 60 flying days each year. Additionally, each MFE could have up to 100 aircraft and 200 sorties per MFE-day.
 - The military uses examined in the *Military Operations Areas Environmental Impact Statement* correspond to the military activities of aircraft combat maneuvers, electronic combat operations, insertion/extraction, air-to-ground bombing exercises, and personnel recovery included in the Proposed Action addressed in the GOA EIS.
- U.S. Department of the Air Force, 2007. Improvements to Military Training Routes in Alaska Environmental Assessment (EA), Elmendorf AFB, Alaska: 11 AF.
 - The *Improvements to MTRs in Alaska EA* analyzed the environmental effects of modifying the Alaska network of MTRs to address the inefficiencies of existing routes and improve training efficiency. These modifications included modifying eight routes, removing two routes, adding two new routes, and extending two routes to the coast. The EA analyzed the effects of the Proposed Action on climate and topography, vegetation and wildlife, subsistence uses, parks and recreation, airspace, air quality, and noise. No significant impacts were identified by the EA.
 - The numbers and timing of sorties and the aircraft altitudes and speeds examined in the *Improvements to MTRs in Alaska EA* encompass those that would be associated with the military activities of aircraft combat maneuvers, electronic combat operations, insertion/extraction, air-to-ground bombing exercises, and personnel recovery included in the Proposed Action addressed in the GOA EIS.
- U.S. Department of the Army, 1999. Alaska Army Lands Withdrawal Renewal Final Legislative Environmental Impact Statement.
 - The *Alaska Army Lands Withdrawal Renewal Final Legislative EIS* (Army 1999) examined the effects of continued withdrawal from public use under the Military Lands Withdrawal Act and the continued military use of the Fort Wainwright Yukon Training Area (formerly the Fort Wainwright Maneuver Area), the Fort Greely West Training Area (formerly the Fort Greely Maneuver Area) and the Fort Greely East Training Area (formerly the Fort Greely Air Drop Zone). These areas together cover approximately 871,500 acres (352,684 hectares) in interior Alaska.

⁹ These JTF exercises are not “certification for deployment” exercises as conducted by Naval Forces in other Range Complexes

- The EIS examined military aircraft air-to-ground training in restricted airspaces R2202 and R2205 over Fort Greely West Training Area and Fort Wainwright Yukon Training Area, respectively. It also analyzed periodic major JTF (Army, Air Force, Marine Corps, and Navy) exercises such as COPE THUNDER and NORTHERN EDGE which utilize the three withdrawn military areas and which stage assets and/or personnel at the Army installations as well as at Eielson and Elmendorf Air Force Bases. The EIS evaluated the occurrence of up to six JTF exercises or Major Flying Exercises (MFE) each year, one sometime between February and April, four between May and August, and one between October and November. Each JTF or MFE usually covered 10 to 15 flying days, but not exceeding 60 flying days each year.
- The EIS also assessed Air Force and joint forces uses of Fort Wainwright and Fort Greely areas for military aircraft air-to-ground training in the restricted airspaces R2202 and R2205. The use of mock enemy airfields, targets, manned radar emitters, anti-aircraft threat simulators, and electronic scoring sensors in the areas was examined. Both low altitude and high altitude bombing by most aircraft in the military inventory at the time of the EIS were analyzed. Weaponry training included aircraft machine guns, rockets, bombs, and air-to-ground missiles.
- The military uses examined in the *Alaska Army Lands Withdrawal Final Legislative EIS* correspond to the military activities of aircraft combat maneuvers, electronic combat operations, insertion/extraction, air-to-ground bombing exercises, and personnel recovery included in the Proposed Action addressed in the GOA EIS.
- U.S. Department of the Army, 2004. Transformation of U.S. Army Alaska Final Environmental Impact Statement.
 - The *Transformation of U.S. Army Alaska Final EIS* examined the effects of transforming the Army's Current Force to a Future Force during the next 30 years. This transformation would affect most aspects of the Army's doctrine, training, leader development, organizations, installations, materiel, and Soldiers. As part of this action, the Army transformed the 172nd Infantry Brigade (Separate) at FWA and FRA into a Stryker Brigade Combat Team (SBCT). Transformation to a SBCT included stationing additional Soldiers; acquiring the Stryker vehicle, UASs and other weapon systems; changing training requirements; and constructing facilities.
 - The military uses examined in the *Transformation of U.S. Army Alaska Final EIS* are consistent with the land training elements of the Proposed Action addressed in the GOA EIS, including insertion/extraction and personnel recovery.