2 Description of Proposed Action and Alternatives

Gulf of Alaska Navy Training Activities

Draft Supplemental Environmental Impact Statement/ Overseas Environmental Impact Statement

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2 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

The United States (U.S.) Department of the Navy's (Navy's) Proposed Action is a supplement to the 2011 Gulf of Alaska (GOA) Navy Training Activities Final Environmental Impact Statement(EIS)/Overseas Environmental Impact Statement (OEIS) (U.S. Department of the Navy, 2011a), hereinafter referred to as the 2011 GOA Final EIS/OEIS, and Record of Decision (ROD) for the 2011 GOA Final EIS/ (U.S. Department of the Navy, 2011b), and the 2016 GOA Final Supplemental EIS (SEIS)/OEIS (U.S. Department of the Navy, 2016) and ROD for the 2016 GOA Final SEIS/OEIS (U.S. Department of the Navy, 2017), pursuant to the guidance of 40 Code of Federal Regulations (CFR) Section 1502.9(c) (2019).

At-sea joint exercises in the GOA, historically referred to as Northern Edge, and described in the 2011 GOA Final EIS/OEIS and the 2016 GOA Final SEIS/OEIS, support the training of combat-capable naval forces. The Proposed Action in this SEIS/OEIS is consistent with the Proposed Action analyzed in the previous documents. In this SEIS/OEIS, the Navy reevaluated potential impacts from the ongoing military training activities in the GOA Temporary Maritime Activities Area (TMAA). The GOA TMAA supports opportunistic experimentation and testing activities when conducted as part of training activities and when considered to be consistent with the proposed training activities. These activities could occur as part of large-scale exercises or as independent events. Therefore, there is no separate discussion or analysis for testing activities that may occur as part of the proposed military readiness activities in the TMAA.

2.1 Description of the Joint Pacific Alaska Range Complex

As noted in Section 1.1 (Introduction) of the 2016 GOA Final SEIS/OEIS, the term "Alaska Training Areas" was changed to the "Joint Pacific Alaska Range Complex" (JPARC). The JPARC was described in the 2011 GOA Final EIS/OEIS in Section 2.1 (Description of the Alaska Training Areas). There are no additional changes to the training areas, and this SEIS/OEIS only analyzes activities occurring within the TMAA, a component of the JPARC.

2.1.1 Gulf of Alaska Temporary Maritime Activities Area

The TMAA is depicted in Figure 2.2-1 and is described in Section 2.1.1 (Gulf of Alaska Temporary Maritime Activities Area) of the 2011 GOA Final EIS/OEIS. There are no changes to the TMAA in this SEIS/OEIS. The TMAA is located entirely in international waters and is 12 nautical miles (NM) or greater from bodies of land. A full description of the TMAA is provided in Section 1.5 (Overview and Strategic Importance of the Joint Pacific Alaska Range Complex) of this SEIS/OEIS.

2.2 Primary Mission Areas

The Navy categorizes many of its training activities into functional warfare areas called primary mission areas. The Navy's proposed activities for the GOA TMAA generally fall into the following six primary mission areas:

- air warfare
- surface warfare
- anti-submarine warfare
- electronic warfare
- naval special warfare
- strike warfare

Most activities addressed in this SEIS/OEIS are categorized under one of these primary mission areas; activities that do not fall within one of these areas are listed as "support operations." Each warfare community (aviation, surface, and subsurface) may train in some or all of these primary mission areas.

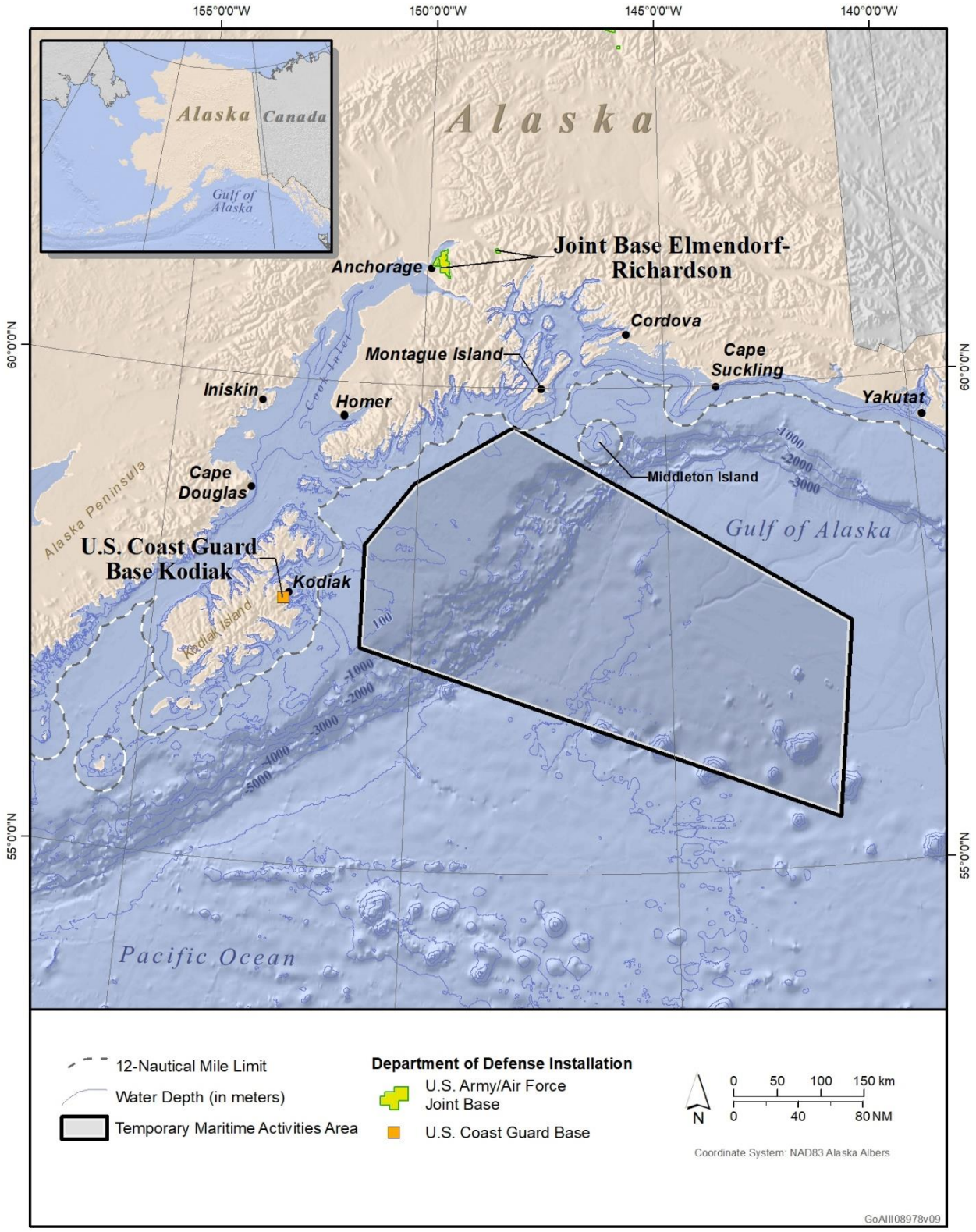

Figure 2.2-1: Gulf of Alaska Temporary Maritime Activities Area

A description of the sonar, munitions, targets, systems and other material used during training activities within these primary mission areas is provided in Appendix A (Navy Activities Descriptions).

2.2.1 Air Warfare

The mission of air warfare (named anti-air warfare in the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS, but since changed by the Navy to "Air Warfare") is to destroy or reduce enemy air and missile threats (including unmanned airborne threats) and serves two purposes: to protect U.S. forces from attacks from the air and to gain air superiority. Air warfare provides U.S. forces with adequate attack warnings, while denying hostile forces the ability to gather intelligence about U.S. forces.

Aircraft conduct air warfare through radar search, detection, identification, and engagement of airborne threats. Surface ships conduct air warfare through an array of modern anti-aircraft weapon systems such as aircraft detecting radar, naval guns linked to radar-directed fire-control systems, surface-to-air missile systems, and radar-controlled guns for close-in point defense.

2.2.2 Surface Warfare

The mission of surface warfare (named anti-surface warfare in the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS, but since changed by the Navy to "Surface Warfare") is to obtain control of sea space from which naval forces may operate, and entails offensive action against other surface targets while also defending against enemy forces. In surface warfare, aircraft use guns, air-launched cruise missiles, or other precision-guided munitions; ships employ torpedoes, naval guns, and surface-to-surface missiles; and submarines attack surface ships using torpedoes or submarine-launched, anti-ship cruise missiles.

Surface warfare training includes surface-to-surface gunnery and missile exercises, air-to-surface gunnery and missile exercises, submarine missile or torpedo launch events, and use of other munitions against surface targets.

2.2.3 Anti-Submarine Warfare

The mission of anti-submarine warfare (ASW) (see the 2011 GOA Final EIS/OEIS) is to locate, neutralize, and defeat hostile submarine forces that threaten Navy surface forces. ASW is based on the principle that surveillance and attack aircraft, ships, and submarines all search for hostile submarines. These forces operate together or independently to gain early warning and detection, and to localize, track, target, and attack submarine threats.

ASW training addresses basic skills such as detecting and classifying submarines, as well as evaluating sounds to distinguish between enemy submarines and friendly submarines, ships, and marine life. For a discussion on differentiating sound and noise, see Appendix B (Acoustic and Explosive Concepts), Section B.1.2 (Signal Versus Noise). More advanced training integrates the full spectrum of ASW, from detecting and tracking a submarine to attacking a target using either exercise torpedoes (i.e., torpedoes that do not contain a warhead) or simulated weapons. These integrated ASW training exercises are conducted in coordinated, at-sea training events involving submarines, ships, and aircraft.

2.2.4 Electronic Warfare

The mission of electronic warfare (named Electronic Combat in the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS, but since changed by the Navy to "Electronic Warfare") is to degrade the enemy's ability to use electronic systems, such as communication systems and radar, and to confuse or

deny them the ability to defend their forces and assets. Electronic warfare is also used to detect enemy threats and counter their attempts to degrade the electronic capabilities of the Navy.

Typical electronic warfare activities include threat avoidance training, signals analysis for intelligence purposes, and use of airborne and surface electronic jamming devices (that block or interfere with other devices) to defeat tracking, navigation, and communications systems.

2.2.5 Naval Special Warfare

Naval special warfare conducts military activities in five Special Operations mission areas: unconventional warfare, direct action, special reconnaissance, foreign internal defense, and counterterrorism.

Naval special warfare training involves specialized tactics, techniques, and procedures, employed in training events that could include insertion/extraction activities using parachutes, rubber boats, or helicopters and other equipment.

2.2.6 Strike Warfare

Strike Warfare addresses combat (or interdiction) activities by air and surface forces against hostile land-based forces and assets. Strike warfare activities include training of fixed-wing fighter/attack aircraft in delivery of precision-guided munitions, nonguided munitions, rockets, and other ordnance against land targets in all weather and light conditions.

Training events typically involve a strike mission with a flight of four or more aircraft. The strike mission practices attacks on long-range targets (i.e., those geographically distant from friendly ground forces), or close air support of targets within close range of friendly ground forces. Laser designators from aircraft or ground personnel may be employed for delivery of precision-guided munitions. Some strike missions involve no-drop events in which prosecution of targets is practiced, but video footage is often obtained by onboard sensors. Strike exercises occur on the land and air training ranges as identified in the Air Force Alaska Military Operations Areas EIS (U.S. Department of the Air Force, 1995), and their impacts are covered under its environmental analysis. The activity in the TMAA is limited to the launch and recovery of aircraft conducting strike training in the land and air training ranges.

2.2.7 Support Operations

Other training (see the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS) is conducted in the TMAA that falls outside of the primary mission areas, but supports overall readiness. Specifically, this includes Deck Landing Qualifications, which provides for helicopter crews to land on ships underway at sea.

2.3 Proposed Activities

Training activities proposed by the Navy in this SEIS/OEIS are identified in Table 2.6-1 at the end of this chapter. This table lists the current name of the activity and a brief description of the activity (Appendix A, Navy Activities Descriptions, includes a full description of each activity). More information about each activity can be found in Appendix A (Navy Activities Descriptions).

2.3.1 Changes to Proposed Activities

The activities analyzed in this SEIS/OEIS are a continuation of activities that have been ongoing and were analyzed previously in the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS. This SEIS/OEIS includes the analysis of those at-sea activities projected to meet readiness requirements beyond 2022

and into the reasonably foreseeable future and reflects the most up-to-date compilation of training activities deemed necessary to accomplish military readiness requirements. Though the types of activities and number of events in the Proposed Action are the same as in the previous documents (Alternative 1 in both the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS), there have been changes in the platforms and systems used as part of those activities (e.g., EA-6B aircraft and frigate, and their associated systems, have been replaced with the EA-18G, Littoral Combat Ship, and Destroyer). Consistent with the previous analysis for Alternative 1, the sinking exercise activity will not be part of the Proposed Action for this SEIS/OEIS.

2.3.2 Standard Operating Procedures

For training to be effective, units must be able to safely use their sensors and weapons systems as they are intended to be used in military missions and combat operations and to their optimum capabilities. Standard operating procedures applicable to training have been developed through years of experience, and their primary purpose is to provide for safety (including public health and safety) and mission success. Because they are essential to safety and mission success, standard operating procedures are part of the Proposed Action and are considered in the Chapter 3 (Affected Environment and Environmental Consequences) environmental analysis for applicable resources.

In many cases, there are benefits to environmental and cultural resources (some of which have high socioeconomic value in the TMAA) resulting from standard operating procedures. Those standard operating procedures that are recognized as providing a benefit to the resources analyzed in this SEIS/OEIS are included in Appendix A (Navy Activities Descriptions), as applicable. The following standard operating procedure categories apply to the Proposed Action and are generally consistent with those included in these specified sections in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the 2016 GOA Final SEIS/OEIS:

- Section 5.1.1 (General Safety)
- Section 5.1.2 (Vessel Safety)
- Section 5.1.3 (Aircraft Safety)
- Section 5.1.4 (Laser Procedures)
- Section 5.1.5 (Weapons Firing Procedures)
- Section 5.1.6 (Unmanned Aerial Vehicle Procedures)
- Section 5.1.7 (Unmanned Surface Vehicle and Unmanned Underwater Vehicle Procedures)
- Section 5.1.8 (Towed In-Water Device Procedures)
- Section 5.1.9 (Best Management Practices)

Standard operating procedures that apply to the Proposed Action and were not included in, or require a clarification from, the 2016 GOA Final SEIS/OEIS are discussed in the sections below.

2.3.2.1 Sea Space and Airspace Deconfliction

The Navy schedules training activities to minimize conflicts with the use of sea space and airspace throughout the Study Area to ensure the safety of military personnel, the public, commercial aircraft, commercial and recreational vessels, and military assets. The Navy deconflicts its own use of sea space and airspace to allow for the necessary separation of multiple military units to prevent interference with equipment sensors and to avoid interaction with established commercial air traffic routes and commercial shipping lanes. Military aircraft fly in accordance with Federal Aviation Administration

Regulations, Part 91, General Operating and Flight Rules, which govern such flight components as operating near other aircraft, right-of-way rules, aircraft speed, and minimum safe altitudes. These rules include the use of tactical training and maintenance test-flight areas, arrival and departure routes, and airspace restrictions as appropriate to help control air operations.

These standard operating procedures benefit public health and safety (including persons participating in activities that have subsistence benefits and socioeconomic value, such as recreational or commercial fishing) by reducing the potential for interactions with training activities. Additional information on the Navy's communication and cooperation with Tribes and communities is presented in Section 3.14 (Public Safety) of the 2016 GOA Final SEIS/OEIS.

2.3.2.2 Target Deployment and Retrieval Safety

The standard operating procedures for target deployment and retrieval safety apply to weapons firing activities that involve small boats deploying or retrieving targets. These activities are typically conducted in daylight hours in Beaufort Sea state number 4 conditions or better to ensure safe operating conditions during target deployment and recovery. These standard operating procedures benefit public health and safety, marine mammals, sea turtles, and seabirds by increasing the effectiveness of visual observations for mitigation, thereby reducing the potential for interactions with the weapons firing activities associated with the use of applicable deployed targets.

During activities that involve recoverable targets (e.g., aerial drones), the military recovers the target and any associated decelerators/parachutes to the maximum extent practicable consistent with personnel and equipment safety. Recovery of these items helps minimize the amount of materials that remain on the surface or on the seafloor, which could potentially alert enemy forces to the presence of military assets during military missions and combat operations. This standard operating procedure benefits biological resources (e.g., marine mammals, sea turtles, fish, seabirds) by reducing the potential for physical disturbance and strike, entanglement, or ingestion of applicable targets and any associated decelerators/parachutes.

2.3.3 Mitigation Measures

The Navy will implement mitigation measures to avoid or reduce potential impacts from Alternative 1 of the Proposed Action on environmental and cultural resources. Mitigation measures that the Navy will implement under the Proposed Action are organized into two categories: procedural mitigation and mitigation areas. The Navy will implement procedural mitigation measures whenever and wherever applicable training activities take place within the Study Area. Mitigation areas are geographic locations within the Study Area where the Navy will implement additional mitigation during all or part of the year.

A list of the activity categories, stressors, and mitigation areas for which the Navy developed mitigation measures is provided in Table 2.3-1. Chapter 5 (Mitigation) of this SEIS/OEIS provides a full description of each mitigation measure that would be implemented under Alternative 1 of the Proposed Action. It also presents a discussion of how the Navy developed and assessed each measure and includes maps of the mitigation area locations. Mitigation developed for the Proposed Action is generally in line with the type of mitigation included in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the 2016 GOA Final SEIS/OEIS. The Navy has updated Chapter 5 (Mitigation) of this SEIS/OEIS in its entirety based on its ongoing analysis of the best available science and practicality of implementing potential mitigation measures. Chapter 5 (Mitigation) presents a full analysis of the procedural mitigation and mitigation areas the Navy developed for the TMAA. The Navy ROD will document all mitigation measures the Navy will implement under the Proposed Action. The National Marine Fisheries

Service (NMFS) ROD, Marine Mammal Protection Act (MMPA) Regulations and Letter of Authorization, Endangered Species Act (ESA) Biological Opinion, and other applicable consultation documents will include the mitigation measures applicable to the resources for which the Navy consults.

Table 2.3-1: Overview of Mitigation Categories

Mitigation Category	*Chapter 5 (Mitigation) Section*	*Applicable Activity Category, Stressor, or Mitigation Area*
Procedural Mitigation	Section 5.3.2 (Acoustic Stressors)	Active Sonar Weapon Firing Noise
	Section 5.3.3 (Explosive Stressors)	Explosive Medium-Caliber and Large-Caliber Projectiles Explosive Bombs
	Section 5.3.4 (Physical Disturbance and Strike Stressors)	Vessel Movement Towed In-Water Devices Small-, Medium-, and Large-Caliber Non-Explosive Practice Munitions Non-Explosive Bombs
Mitigation Areas	Section 5.4 (Geographic Mitigation to be Implemented)	North Pacific Right Whale Mitigation Area Portlock Bank Mitigation Area Temporary Maritime Activities Area

2.4 Action Alternatives Development

The identification, consideration, and analysis of alternatives are critical components of the National Environmental Policy Act (NEPA) process and contribute to the goal of objective decision-making. The Council on Environmental Quality developed regulations to implement NEPA, and these regulations require the decision maker to consider the environmental effects of the proposed action and a range of alternatives (including the No Action Alternative) to the proposed action (40 CFR section 1502.14). Council on Environmental Quality guidance further provides that an EIS must rigorously and objectively explore all reasonable alternatives for implementing the proposed action and, for alternatives eliminated from detailed study, briefly discuss the reasons for having been eliminated. To be reasonable, an alternative, except for the No Action Alternative, must meet the stated purpose of and need for the proposed action.

The action alternative and the mitigation measures that are incorporated in the action alternative were developed to meet both the Navy's purpose and need to train; and NMFS's independent purpose and need to evaluate the potential impacts of the Navy's activities. In order for NMFS to determine whether incidental take resulting from the Navy's activities would have a negligible impact on affected marine mammal species and stocks, and prescribe measures to affect the least practicable adverse impact on species or stocks and their habitat, the Navy has incorporated these requirements into the analysis of the Proposed Action.

The Navy developed the alternatives considered in this SEIS/OEIS after careful assessment by subject matter experts, including military commands that utilize the ranges, military range management professionals, and Navy environmental managers and scientists.

2.5 Alternatives Eliminated from Further Consideration

This SEIS/OEIS serves as an update to the 2011 GOA Final EIS/OEIS and the 2016 GOA Final SEIS/OEIS. Alternatives eliminated from consideration in those documents were re-evaluated to determine if they

should be reconsidered for this SEIS/OEIS and are discussed below. After a thorough consideration of each alternative, the Navy once again determined that they did not meet the purpose of and need for the Proposed Action.

2.5.1 Alternative Training Locations

As described in Section 2.3.2.1 (Alternative Locations) in the 2011 GOA Final EIS/OEIS, the proposed locale encompasses existing training areas with unique sizes and capabilities, and training areas that have the continuity and capability to support joint training purposes in Alaska waters. There are no other proximate alternative locations that provide for this capability. As a result, this alternative is neither reasonable nor practicable, does not meet the purpose of and need for the Proposed Action, and has been eliminated from detailed study.

2.5.2 Reduced Training

As described in Section 2.3.2.2 (Reduced Training) in the 2011 GOA Final EIS/OEIS, a reduction or cessation of training would prevent the military services from meeting statutory requirements and adequately preparing forces for operations ranging from disaster relief to armed conflict. Therefore, this alternative does not meet the purpose of and need for the Proposed Action and has been eliminated from detailed study.

2.5.3 Alternate Time Frame

As described in Section 2.3.2.3 (Alternate Time Frame) in the 2011 GOA Final EIS/OEIS, an alternate period in which to hold Navy training in the TMAA, such as in the winter months, would not be feasible. Weather conditions in the GOA preclude conducting an integrated exercise during the winter. Winter sea conditions, storms, fog, fewer daytime hours, and other environmental conditions would lead to navigational safety concerns for both ships and airplanes involved in any winter exercise. Additionally, other services' training requirements prohibit overwater training when the water temperature decreases below a certain level (typical during the winter months in the GOA), as this needlessly jeopardizes the health and safety of exercise participants. Therefore, an alternate time frame would not meet the appropriate weather conditions for safety of maritime training activities at sea, as described in Section 2.3.1 (Alternatives Development) of the 2011 GOA Final EIS/OEIS.

2.5.4 Simulated Training

As described in Section 2.3.2.4 (Simulated Training) in the 2011 GOA Final EIS/OEIS, the Navy continues to use computer simulation and other types of simulation for training activities whenever possible; however, there are limits to the realism that current simulation technology can provide, and its use cannot substitute for live training. Training through simulated means cannot replicate the conditions in which Navy personnel and platforms are required to conduct military operations. While beneficial as a complementing medium to train and test personnel and platforms, simulation alone cannot accurately replicate both the conditions and the stresses that must be placed on personnel and platforms during training. These conditions and stresses are absolutely vital to adequately preparing Naval forces to conduct the broad spectrum of military operations required of them by operational Commanders. Therefore, simulation as an alternative that completely replaces training in the field does not meet the purpose of and need for the Proposed Action and has been eliminated from further analysis.

2.5.5 Training without the Use of Active Sonar

In order to be proficient in detecting and countering potentially hostile submarines, the Navy needs to routinely train using both passive and active sonar. Sonar proficiency is a complex and perishable skill that requires regular, hands-on training in realistic and diverse conditions. Training with active sonar is needed to find and counter newer-generation submarines around the world, which are growing in number and are true threats to global commerce, national security, and the safety of military personnel. As a result, defense against enemy submarines is a top priority for the Navy. The detection and countering of submarines is paramount to national security. Naval forces cannot counter this threat without the use of active sonar. Because the Navy is statutorily responsible to provide combat-ready forces to operational commanders, it must train in a manner in which it will be utilized in military operations. Accordingly, training without active sonar is not a reasonable alternative and will not be carried forward.

2.5.6 Alternatives Including Geographic Mitigation Measures Within the Study Area

The Navy considered, but did not develop, an alternative based solely on geographic mitigation that would impose geographic or temporal restrictions on specific areas in the TMAA, such as areas associated with the presence of specific species. Such an alternative would present a patchwork of areas and time periods in which the Navy could conduct required training, preventing the Navy from conducting the full scope of activities necessary to fulfill its Title 10 responsibilities and running counter to the purpose of and need for the Proposed Action. Thus, such an alternative would not be reasonable. Further, NEPA regulations allow agencies to "Include appropriate mitigation measures not already included in the proposed action or alternatives" (40 CFR 1502.14[f]). The Navy designed its alternatives development and mitigation development processes to ensure the maximum level of mitigation that is practical to implement when balanced against impacts to safety, sustainability, and the ability to continue meeting mission requirements. Under the action alternative, the Navy would implement geographic mitigation that is both biologically effective as well as practical to implement. Mitigation areas developed for the Proposed Action are detailed in Chapter 5 (Mitigation).

2.6 Alternatives Carried Forward

Three alternatives were analyzed in the 2011 GOA Final EIS/OEIS and the 2016 GOA Final SEIS/OEIS: the No Action Alternative, Alternative 1, and Alternative 2. For this SEIS/OEIS, only two Alternatives are being carried forward, the No Action Alternative and Alternative 1 (the Preferred Alternative).

The No Action Alternative in the 2011 GOA Final EIS/OEIS and the 2016 GOA Final SEIS/OEIS consisted of training activities of the types and levels of training intensity as conducted prior to 2011 and did not include ASW training activities involving the use of active sonar. Alternative 1 included all training activities addressed in the No Action Alternative and an increase in training activities. This increase would encompass conducting one large-scale carrier strike group (CSG) exercise, as well as the inclusion of ASW activities and the use of active sonar, occurring over a maximum time period of up to 21 consecutive days during the months of April–October. Alternative 2 included all elements of Alternative 1 plus one additional CSG exercise during the months of April–October. Additionally, Alternative 2 included conducting one sinking exercise per CSG exercise for a total of two exercises per year. Alternative 2 was the Preferred Alternative and was selected in the ROD issued on May 11, 2011, while the ROD issued on April 21, 2017 selected Alternative 1 instead of the preferred Alternative 2.

The Navy's anticipated level of training activity evolves over time based on numerous factors. Based on the assessment of the training activities in the TMAA and future requirements, the Navy has determined

the level of activity analyzed in Alternative 1 from the 2016 GOA Final SEIS/OEIS will continue to meet the Navy's training requirements for the reasonably foreseeable future, and no new training activities are proposed for the Study Area. Therefore, this SEIS/OEIS will only carry forward the No Action Alternative, as described below, and Alternative 1 as described in the 2016 GOA Final SEIS/OEIS and 2017 GOA ROD. Consistent with the previous analysis for Alternative 1, the sinking exercise activity will not be part of the Proposed Action for this SEIS/OEIS.

As previously discussed, in addition to meeting the Navy's purpose and need to train, the action alternative, and in particular the mitigation measures that are incorporated in the action alternative, were developed to meet NMFS's independent purpose and need to evaluate the potential impacts of the Navy's activities; determine whether incidental take resulting from the Navy's activities would have a negligible impact on affected marine mammal species and stocks; and prescribe measures to effect the least practicable adverse impact on species or stocks and their habitat, as well as monitoring and reporting requirements.

2.6.1 No Action Alternative

As mentioned in Section 2.4 (Action Alternatives Development), the Council on Environmental Quality implementing regulations require that a range of alternatives to the Proposed Action, including a No Action Alternative, be analyzed to provide a clear basis for choice among options by the decision maker and the public (40 CFR 1502.14). Council on Environmental Quality guidance identifies two approaches in developing the No Action Alternative (46 FR 18026). One approach is applicable to ongoing, continuing actions as the present course of action under the current management direction or intensity. For example, the continuation of training activities conducted at levels analyzed in the 2011 GOA Final EIS/OEIS could be a viable No Action Alternative, even if separate legal authorizations under the MMPA and ESA are required to continue the activities. Under this approach, which was used in the 2016 GOA Final SEIS/OEIS, the analysis compares the effects of continuing current activity levels (i.e., the "status quo") with the effects of the Proposed Action. The second approach depicts a scenario where no authorizations or permits are issued, in which the Proposed Action does not take place, and the resulting environmental effects from taking no action are compared with the effects of implementing the Proposed Action. The Navy applied the second approach in this SEIS/OEIS as it further supports NMFS' regulatory process by presenting the scenario where no authorization or permits will be issued.

Under the No Action Alternative analyzed in this SEIS/OEIS, the Navy would not conduct the proposed training activities in the GOA TMAA. Consequently, the No Action Alternative of not conducting the proposed live, at-sea training activities in the TMAA is unreasonable in that it does not meet the purpose and need (see Section 1.4, Purpose of and Need for Proposed Military Readiness Training Activities) for the reasons noted below. However, the analysis associated with the No Action Alternative is carried forward in order to compare the magnitude of the potential environmental effects of the Proposed Action with the conditions that would occur if the Proposed Action did not occur (see Section 3.0.1, Approach to Analysis).

From NMFS' perspective, pursuant to its obligation to grant or deny permit applications under the MMPA, the No Action Alternative involves NMFS denying the Navy's application for an incidental take authorization under Section 101(a)(5)(A) of the MMPA. If NMFS were to deny the Navy's application, the Navy would not be authorized to incidentally take marine mammals, and the Navy would not conduct the proposed training activities in the GOA TMAA.

Cessation of proposed Navy at-sea training activities would mean that the Navy would be unable to (1) meet its statutory requirements, (2) adequately prepare to defend itself and the United States from enemy forces, (3) successfully detect enemy submarines, and (4) effectively use its weapons systems or defensive countermeasures due to a lack of training.

2.6.2 Alternative 1 (Preferred Alternative)

Alternative 1 is the Preferred Alternative. Alternative 1 is a Status Quo Alternative based on the 2016 GOA Final SEIS/OEIS and 2017 GOA ROD. Under this alternative, the Navy would continue the present course of action, continuation of Navy training in the TMAA at current levels documented in the 2017 GOA ROD, even if separate legal authorizations under the MMPA and ESA are required. The Navy could continue to conduct training activities, at the level and scope of activities necessary to fulfill its Title 10 responsibilities described in the Purpose and Need of the Proposed Action. In the GOA TMAA, a Status Quo Alternative would allow the Navy to meet current and future training requirements necessary to achieve and maintain fleet readiness.

Table 2.6-1 lists the level of activities of Alternative 1. Although they are consistent with the level of activities addressed in Alternative 1 of the 2016 GOA Final SEIS/OEIS, there have been changes in the platforms and systems used as part of those activities (e.g., EA-6B aircraft and frigate, and their associated systems, have been replaced with the EA-18G, Littoral Combat Ship, and Destroyer). The table describes the activities in terms of the activity name, where in the Study Area the Navy proposes to conduct it, and the number of annual events. The quantity of ordnance and expendables used in the TMAA is consistent with the levels identified for Alternative 1 in both the 2011 GOA Final EIS/OEIS and 2016 GOA Final SEIS/OEIS. Details of each activity, including acoustic and explosive, are presented in Appendix A (Navy Activities Descriptions) of this SEIS/OEIS.

Table 2.6-1: Current and Proposed Training Activities Within the TMAA

Range Activity	*No. of events[2] (annual)*	
	Alternative 1 (2016 Final SEIS/OEIS)	*Alternative 1 (Proposed)*
Air Warfare		
Aircraft Combat Maneuver	300 sorties[2]	300 sorties[2]
Air Defense Exercise	4 events	4 events
Surface-to-Air Gunnery Exercise	3 events	3 events
Air-to-Air Missile Exercise	3 events	3 events
Surface-to-Air Missile Exercise	3 events	3 events
Surface Warfare		
Visit, Board, Search, and Seizure	12 events	12 events
Air-to-Surface Bombing Exercise	18 events	18 events
Air-to-Surface Gunnery Exercise	7 events	7 events
Surface-to-Surface Gunnery Exercise	6 events	6 events
Maritime Interdiction	14 events	14 events
Air-to-Surface Missile Exercise	2 events	2 events
Sea Surface Control	6 events	6 events
Anti-Submarine Warfare (ASW)		
ASW Tracking Exercise – Helicopter	22 events	22 events
ASW Tracking Exercise – Maritime Patrol Aircraft	13 events	13 events
ASW Tracking Exercise – Submarine	2 events	2 events
ASW Tracking Exercise – Surface Ship	2 events	2 events
Electronic Warfare (EW)		
Counter Targeting Exercise	4 events	4 events
Chaff Exercise	2 events	2 events
EW Exercise	5 events	5 events
Naval Special Warfare		
Special Warfare Operations	10 events	10 events
Strike Warfare		
Air-to-Ground Bombing Exercise[1]	150 sorties[2]	150 sorties[2]
Personnel Recovery[1]	4 events	4 events
Support Operations		
Deck Landing Qualification	6 events	6 events

[1]This SEIS/OEIS covers the launch and recovery of aircraft from vessels in the TMAA. The training is conducted in the Air Force Special Use Airspace and Army Training Lands that are covered under separate National Environmental Policy Act analysis.
[2]A sortie is defined as a single activity by one aircraft (i.e., one complete flight from takeoff to landing).
Notes: SEIS = Supplemental Environmental Impact Statement, OEIS = Overseas Environmental Impact Statement, TMAA = Temporary Maritime Activities Area.

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