Final

Environmental Impact Statement/Overseas Environmental Impact Statement Atlantic Fleet Training and Testing

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1 PURPOSE AND NEED

1.1 INTRODUCTION

The United States (U.S.) Department of the Navy (Navy) proposes to conduct training activities (hereinafter referred to as "training") and research, development, testing, and evaluation (hereinafter referred to as "testing") activities in the Atlantic Fleet Training and Testing (AFTT) Study Area, as represented in Figure 1.2-1. When discussed together, training and testing are also referred to as "military readiness activities." These military readiness activities include the use of active sonar and explosives within existing range complexes and testing ranges, in high seas areas located in the Atlantic Ocean along the eastern coast of North America, in portions of the Caribbean Sea and the Gulf of Mexico, at Navy pier side locations, within port transit channels, near civilian ports, and in bays, harbors, and inshore waterways (e.g., lower Chesapeake Bay). These military readiness activities are generally consistent with those analyzed in the AFTT Environmental Impact Statement (EIS)/Overseas Environmental Impact Statement (OEIS) completed in August 2013 and are representative of training and testing that the Navy has been conducting in the AFTT Study Area for decades.

The United States is facing increased global disorder, characterized by decline in the long-standing, rules-based international order and creating a more complex and volatile security environment. Major conflicts, terrorism, outlaw actions, and natural disasters all have the potential to threaten national security of the United States. The security, prosperity, and vital interests of the United States are increasingly tied to other nations because of the close relationships between the United States and other national economies. The Navy operates on the world's oceans, seas, and coastal areas—the international maritime domain—on which 90 percent of the world's trade and two-thirds of its oil are transported. The majority of the world's population also lives within a few hundred miles of an ocean. The U.S. Navy carries out training and testing activities to be able to protect the United States against its potential adversaries, to protect and defend the rights and interests of the United States and its allies to move freely on the oceans, and to provide humanitarian assistance.

The Navy has historically used the areas along the eastern coast of the United States and in the Gulf of Mexico for training and testing. These areas have been designated by the Navy as "range complexes" and testing ranges (Figure 1.2-1). Range complexes provide controlled environments where military ship, submarine, and aircraft crews can train in realistic conditions while safely deconflicting with non-military activities, such as civilian shipping and aircraft. The combination of undersea ranges and operating areas (OPAREAs) with land training ranges, divert airfields, and nearshore amphibious landing sites is critical to realistic training and testing. A test range may have electronic instrumentation including radar, optical tracking, and communication systems. Electronics on the ranges capture important data on the effectiveness of tactics and equipment—data that provide a feedback mechanism for training evaluation. While these at-sea areas provide ideal training and testing environments for the Navy, these areas are shared with civilian and commercial vessels and aircraft; these are not areas over which the Navy has exclusive control.

Military readiness activities which prepare the Navy to fulfill its mission to protect and defend the United States and its allies, have the potential to impact the environment. The Navy prepared this EIS/OEIS to comply with the National Environmental Policy Act (NEPA) and Executive Order 12114, *Environmental Effects Abroad of Major Federal Actions,* by assessing the potential environmental impacts associated with two categories of military readiness activities conducted at sea: training and

testing. Collectively, the at-sea areas in this EIS/OEIS are referred to as the AFTT Study Area (Figure 1.2-1).

Training. Naval personnel (Sailors and Marines) first undergo entry-level (or schoolhouse) training, which varies according to their assigned warfare community (aviation, surface warfare, submarine warfare, and special warfare) and the community's unique requirements. Personnel then train within their warfare community at sea in preparation for deployment; each warfare community has primary mission areas (areas of specialized expertise that may involve or overlap with multiple warfare communities) that are described in detail in Chapter 2 (Description of Proposed Action and Alternatives).

Testing. The Navy researches, develops, tests, and evaluates new platforms¹, systems, and technologies, collectively known as testing. Many tests require realistic conditions at sea and can range from testing new software to complex operations of multiple systems and platforms. Testing activities may occur independent of or in conjunction with training activities.

1.2 THE NAVY'S ENVIRONMENTAL COMPLIANCE AND AT-SEA POLICY

In 2000, the Navy completed a review of its environmental compliance requirements for exercises and training at sea. The Navy then instituted the "At-Sea Policy" to ensure compliance with applicable environmental regulations and policies, and preserve the flexibility necessary for the Navy and Marine Corps to train and test at sea. This policy directed, in part, that Fleet Commanders develop a programmatic approach to environmental compliance at sea for ranges and OPAREAs within their respective geographic areas of responsibility (U.S. Department of the Navy, 2000). Those ranges affected by the "At-Sea Policy" are designated water areas, sometimes containing instrumentation that are managed and used to conduct training and testing activities. Some ranges are further broken down into OPAREAs, to better manage and deconflict military readiness activities.

In 2005, the Navy and the National Oceanic and Atmospheric Administration reached an agreement on a coordinated programmatic strategy for assessing certain environmental effects of military readiness activities at sea. The Navy is currently in the third phase of implementing this programmatic approach.

Phase I of environmental planning. The first phase of the planning program was accomplished by the preparation and completion of individual or separate environmental documents for each range complex and OPAREA. The Navy prepared NEPA/Executive Order 12114 documents for range complexes, testing ranges, and OPAREAs off the east coast and in the Gulf of Mexico—the Atlantic Fleet Active Sonar Training EIS/OEIS, Virginia Capes EIS/OEIS, Cherry Point EIS/OEIS, Jacksonville Range Complex EIS/OEIS, Undersea Warfare Training Range EIS/OEIS, Gulf of Mexico EIS/OEIS, and Naval Surface Warfare Panama City Division EIS/OEIS—to analyze training and testing activities.

¹ Throughout this EIS/OEIS, ships, submarines, and aircraft may be referred to as "platforms"; weapons, combat systems, sensors, and related equipment may be referred to as "systems."



Figure 1.2-1: Atlantic Fleet Training and Testing Study Area

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1.0 Purpose and Need

These range complexes pre-date World War II and have been used by U.S. naval forces continuously since then for training and testing activities. Phase I NEPA/Executive Order 12114 documents catalogued training and testing activities; analyzed potential environmental impacts; and supported other requirements under applicable environmental laws, regulations, and executive orders. For example, Marine Mammal Protection Act (MMPA) [16 United States Code (U.S.C.) sections 1361–1407] incidental take authorizations and incidental take statements under the Endangered Species Act (ESA) (16 U.S.C. sections 1531–1544) were issued by the National Marine Fisheries Service (NMFS) to the Navy for range complexes on the east coast and in the Gulf of Mexico; those MMPA authorizations began expiring in early 2014.

Phase II of environmental planning. The second phase of the Navy's environmental compliance planning covered activities and existing ranges and OPAREAs previously analyzed in the Phase I NEPA/Executive Order 12114 documents and additional geographic areas including, but not limited to, pierside locations and transit corridors. The Phase II EIS/OEIS for AFTT combined the geographic scope of the range complexes and testing ranges off the east coast and in the Gulf of Mexico, as well as study areas covered in NEPA documents for other at-sea areas on the east coast, and analyzed ongoing, routine at-sea activities that occur during transit between these range complexes, testing ranges, and OPAREAs. The Navy expanded the geographic scope to include additional areas where military readiness activities historically occurred and also included new platforms and systems not addressed in previous NEPA/Executive Order 12114 documents. As was done in Phase I, the Navy used this analysis to support new regulatory consultations and new requests for Letters of Authorization (set to expire in November 2018) under the MMPA and incidental take statements under the ESA.

Phase III of environmental planning. The third phase of the Navy's environmental compliance planning covers similar types of Navy training and testing activities as were analyzed in Phase II. The Navy has re-evaluated impacts from these ongoing activities in existing ranges, OPAREAs, and testing ranges, including activities that occur during transit between these range complexes, testing ranges, and OPAREAs.

Navy has also analyzed new or changing military readiness activities into the reasonably foreseeable future based on evolving operational requirements, including those associated with new platforms and systems not previously analyzed. The Navy has thoroughly reviewed and incorporated into this analysis the best available science relevant to analyzing the environmental impacts of the proposed activities. As with previous Phases, the Navy will use this new analysis to support environmental compliance with other applicable environmental laws, such as the MMPA and ESA.

1.3 PROPOSED ACTION

The Navy's Proposed Action, described in detail in Chapter 2 (Description of Proposed Action and Alternatives), is to conduct military readiness activities in the western Atlantic Ocean off the east coast of the United States, in the Gulf of Mexico, and portions of the Caribbean Sea. These activities will also occur at Navy pierside locations, Navy-contracted shipbuilder locations, port transit channels, and select bays, harbors and inshore waters, e.g., Chesapeake Bay (see Figure 1.2-1 and Section 2.1, Description of the Atlantic Fleet Training and Testing Study Area, for more detail on the geographic areas analyzed with regard to the Proposed Action).

1.4 PURPOSE AND NEED

The Navy and NMFS (as a cooperating agency) have coordinated from the outset and developed this document to meet each agency's distinct NEPA obligations and support the decision making of both agencies. The Navy's purpose for the Proposed Action is to ensure that the Navy meets its mission, which is to maintain, train, and equip combat-ready naval forces capable of winning wars, deterring aggression, and maintaining freedom of the seas. This mission is achieved in part by conducting training and testing within the Study Area in accordance with established Navy military readiness requirements. The sections that follow provide a description of the need for military readiness activities.

The Navy has requested authorization to take marine mammals incidental to conducting their testing and training activities in the Study Area by Level A and B harassment, serious injury, and/or mortality. Take under the MMPA is defined as "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal." For military readiness activities, harassment is defined as "(i) any act that injures or has the significant potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment] or (ii) any act that 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]."

NMFS has issued proposed regulations and is considering issuance of subsequent Letters of Authorization under section 101(a)(5)(A) of the Marine Mammal Protection Act of 1972, as amended (MMPA; 16 U.S.C. 1361 et seq.) that would govern the taking of marine mammals incidental to the Navy training and testing activities within the Study Area. The issuance of regulations and associated Letters of Authorization to the Navy is a major federal action requiring NMFS to analyze the effects of their issuance on the human environment pursuant to NEPA requirements and National Oceanic and Atmospheric Administration (NOAA) policies.

The purpose of issuing incidental take authorizations is to provide an exception to the take prohibition in the MMPA and to ensure that the action complies with the MMPA and implementing regulations. Incidental take authorizations may be issued as either: (1) regulations and associated Letters of Authorization under section 101(a)(5)(A) of the MMPA or (2) Incidental Harassment Authorizations under section 101(a)(5)(D) of the MMPA. An Incidental Harassment Authorizations can be issued only when there is no potential for serious injury or mortality or where any such potential can be negated through required mitigation measures. Because some of the activities under the Proposed Action may create a potential for lethal takes or takes that may result in serious injury that could lead to mortality, the Navy is requesting rulemaking and the issuance of Letters of Authorization for this action.

NMFS's purpose is to evaluate the Navy's Proposed Action pursuant to NMFS's authority under the MMPA, and to make a determination whether to issue incidental take regulations and Letters of Authorization, including any conditions needed to meet the statutory mandates of the MMPA. To authorize the incidental take of marine mammals, NMFS evaluates the best available scientific information to determine whether the take would have a negligible impact on the affected marine mammal species or stocks and an unmitigable impact on their availability for taking for subsistence uses (not relevant here for Navy's Proposed Action). NMFS must also prescribe permissible methods of taking, other "means of effecting the least practicable adverse impact" on the affected species or stocks and their habitat, and monitoring and reporting requirements. NMFS cannot issue an incidental take authorization unless it can make the required findings. The need for NMFS's action is to consider the

impacts of the Navy's activities on marine mammals and meet NMFS' obligations under the MMPA. This Final EIS analyzes the environmental impacts associated with issuance of the requested authorization of the take of marine mammals incidental to the training and testing activities within the Study Area, to include a variety of mitigation measures that were considered during the MMPA authorization process. The analysis of mitigation measures considers benefits to species or stocks and their habitat, and analyzes the practicability and efficacy of each measure. This analysis of mitigation measures was used to support requirements pertaining to mitigation, monitoring, and reporting that would be specified in final MMPA regulations and subsequent Letters of Authorization.

1.4.1 WHY THE NAVY TRAINS

As described above, the Navy is statutorily mandated to protect U.S. national security by being ready, at all times, to effectively prosecute war and defend the nation by conducting operations at sea. The Navy is essential to protecting U.S. national interests, considering that 70 percent of the earth is covered in water, 80 percent of the planet's population lives within close proximity to coastal areas, and 90 percent of global commerce is conducted by sea. Naval forces must be ready for a variety of military operations to address the dynamic, social, political, economic, and Title 10 section 5062 of the U.S.C. 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."

environmental issues that occur in today's rapidly evolving world. Through its continuous presence on the world's oceans, the Navy can respond to a wide range of situations because, on any given day, over one-third of its ships, submarines, and aircraft are deployed overseas. Units must be able to respond promptly and effectively while forward deployed. This presence helps to dissuade aggression, which prevents conflict escalation, and provides the President with options to promptly address global contingencies. Before deploying, naval forces must train to develop a broad range of capabilities to respond to threats, from full-scale armed conflict in a variety of different geographic areas and environmental conditions to humanitarian assistance and disaster relief efforts. This also prepares Navy personnel to be proficient in operating and maintaining the equipment, weapons, and systems they will use to conduct their assigned missions. The training process provides personnel with an in-depth understanding of their individual limits and capabilities; the training process also helps the testing community improve new weapon systems' capabilities and effectiveness.

Modern weapons bring both unprecedented opportunities and challenges to the Navy. For example, precision (or smart) weapons help the Navy accomplish its mission with greater accuracy with far less collateral damage than in past conflicts; however, modern weapons are also very complex to use. Military personnel must train regularly with these weapons to understand the capabilities, limitations, and operations of the platform or system, as well as how to keep them operational under difficult conditions and without readily available technical or logistical assistance.

Modern military actions require teamwork among hundreds or thousands of people, across vast geographic areas, and the coordinated use of various equipment, ships, aircraft, and vehicles (e.g.,

unmanned aerial systems) to achieve success. Personnel increase in skill level by completing basic and specialized individual military training, then they advance to intermediate (e.g., unit-level training) and larger exercise training events, which culminate in advanced, integrated training composed of large groups of personnel and, in some instances, joint or combined exercises.²

Military readiness training must be as realistic as possible to provide the experiences vital to success and survival during military operations because simulated training, even in technologically advanced simulators, cannot duplicate the complexity faced by Sailors and Marines in the real world. While simulators and synthetic training are critical elements that provide early skill repetition and enhance teamwork, there is no substitute for live training in a realistic environment. Just as a pilot would not be ready to fly solo after simulator training, a Navy commander cannot allow military personnel to engage in military operations based merely on simulator training.

The large size of the range complex is essential to allow for realistic training scenarios that prepare Sailors and Marines for real-world operations. Only a large range complex offers the space necessary for operations such as the launch and recovery of aircraft or replenishment maneuvers which require a straight line course at a fixed speed for a sustained period of time. For example, in light wind conditions, to maintain a safe wind speed over the carrier's deck of 20 knots, flight operations taking 30 to 60 minutes would require traveling in a straight line over a distance of at least 10 to 20 nautical miles (NM) before any restrictive boundary was approached. Furthermore, multiple fixed wing aircraft landing on an aircraft carrier must be organized into a holding pattern, typically located 10 to 50 NM distance from the carrier, depending on several factors, including weather conditions, visibility, the number of aircraft waiting to land, and the condition of the aircraft (e.g., fuel remaining). To practice this maneuver safely away from civilian airspace, the carrier would need to be 20 to 50 NM away from any OPAREA boundary. In short, safe and effective Navy training often requires expansive operating areas due to a number of complex and interrelated factors.

The Navy also requires extensive areas of ocean to conduct its training in order to properly separate and coordinate different training events so that individual training events do not interfere with each other or with public and commercial vessels and aircraft. For example, hazardous activities such as gunnery or missile fire from a vessel in one training event would need to be conducted away from other training events. Additionally, large areas of ocean are required to ensure different training events can be conducted safely while minimizing the risks inherent in military training, such as aircraft flying too closely to one another or to commercial airways. Navy ships must also train to operate at long distances—often hundreds of miles—from each other while still maintaining a common picture of the "battlespace" so that individual Navy units can be coordinated to achieve a common objective. Separation of Navy units may also be required to ensure that participants of other exercises do not experience interference with sensors.

This need for expansive sea space is even more critical today as the Navy has a renewed emphasis on "sea control," which is the need to secure large areas of oceans from other highly capable naval forces. When the Cold War ended, the Navy emerged unchallenged and dominant. That dominance allowed the Navy to focus on projecting power ashore. The balance between sea control and power projection

² Large group exercises may include carrier strike groups, expeditionary strike groups, other U.S. services, and other nations.

tipped strongly in favor of the latter, and the Navy's surface force evolved accordingly. The Navy's proficiency in land-attack and maritime security operations reached new heights, while foundational skills in anti-submarine warfare and anti-surface warfare slowly began to erode. The emergence of more sophisticated capabilities by potential adversaries will require the Navy to operate farther from their coastline in times of conflict, and the modernization of navies able to challenge the U.S. Navy directly means that control of the seas can no longer be assumed. In response, the Navy is developing a model of "distributed lethality," which is intended to enhance the offensive power of individual surface ships. The concept of distributed lethality enables the goal of sea control where and when needed. It is achieved by increasing the offensive and defensive capability of individual warships, employing them in dispersed formations across a wide expanse of geography (e.g., hundreds of thousands of square miles). Extensive areas of ocean are required to effectively conduct distributed lethality training.

1.4.2 OPTIMIZED FLEET RESPONSE PLAN

The Fleet Response Plan that the Navy operated under during Phase I and II emphasized constant readiness. The Fleet Response Plan identified the number of personnel and vessels that had to be ready to deploy on short notice (i.e., surge) in order to respond to rapidly evolving world events. For example, the Fleet Response Plan mandated that the Navy be able to deploy six aircraft carrier strike groups³ within 3 months of a crisis and follow those with two more strike groups within 3 months after the first six deployed. Additionally, the Fleet Response Plan was based on a notional maintenance schedule and strike group deployments of 6 months in length and approximately 27 months between deployments. However, due to world events and the need for naval forces to be located overseas, Navy vessels were actually deployed for longer periods, resulting in longer maintenance periods. The Fleet Response Plan no longer represented actual fleet readiness preparation.

In December 2014 the Navy initiated the Optimized Fleet Response Plan, which reinforces the three tenets of "Warfighting First – Operate Forward – Be Ready" (U.S. Department of the Navy, 2014a). The Optimized Fleet Response Plan achieves this by better aligning manning distribution with operational requirements; optimizing maintenance and modernization plans; improving the overall quality of work and life balance for personnel; and ensuring that forces deploy with the right capabilities, properly trained and equipped to meet mission objectives. Like the previous plan, the Optimized Fleet Response Plan maintains a surge requirement by sustaining readiness of deployment-certified forces to enable three aircraft carrier strike groups in both the Atlantic and Pacific Oceans to respond to a national crisis. The Optimized Fleet Response Plan is now based on notional 7-month deployments and approximately 36 months between deployments. Following the Optimized Fleet Response Plan allows the Navy to respond timely to global events with the proper forces while maintaining a structured process that ensures continuous availability of trained, ready Navy forces.

The Optimized Fleet Response Plan outlines the training activities required to achieve a state of military readiness that will allow Navy personnel to execute operations as ordered by their commanders, to include responding to a conflict. The plan uses a building-block approach where initial basic training complements later phases of more complex training, with each phase building upon the skills obtained

³ While strike groups could be configured differently, a typical aircraft carrier strike group would include an aircraft carrier, a guided missile cruiser, two guided missile destroyers, an attack submarine, and a supply ship.

in the previous phase. Specifically, training activities proceed in five phases: maintenance, basic, advanced, integrated, and sustainment, as depicted in Figure 1.4-1. The training events that occur in each of these phases are designed to prepare Sailors for the multitude of contingencies they may face, ranging from large strike group level activities such as defending against submarine or mine threats, conducting long-range bombing missions, putting Marines ashore in a hostile environment, to humanitarian responses for natural catastrophes such as earthquakes and hurricanes. To ensure Sailors and Marines can perform the variety of missions they could face, the training building blocks are designed to maximize their effectiveness at accomplishing the mission safely and professionally.

The Optimized Fleet Response Plan cycle starts at the beginning of the maintenance phase and ends upon the beginning of the next maintenance phase, as detailed below. Readiness increases throughout the cycle and culminates with the highest level of readiness at the end of the integrated or advanced phase.

1.4.2.1 Maintenance Phase

The beginning of the maintenance phase signals the start of the Optimized Fleet Response Plan cycle. The goal of this phase is on-time completion of maintenance and modernization so that units are able to begin training and adhere to the Optimized Fleet Response Plan training schedule. All deployable Navy forces have a maintenance phase, which varies among different types of forces. The maintenance phase is



Figure 1.4-1: Optimized Fleet Response Plan

critical to the success of the Optimized Fleet Response Plan since this represents the ideal time for major shipyard repairs, upgrades, and platform modernization. Also during this phase, Navy forces will complete required inspections, certifications, assist visits, and individual and team training to achieve required levels of personnel, equipment, supply, and ordnance readiness.

1.4.2.2 Basic Phase

The intent of the basic phase is to focus on the development of core capabilities and skills through the completion of basic-level training, inspections, certifications, and assessments. Achieving required levels of personnel, equipment, supply, and ordnance readiness is essential to success in subsequent Optimized Fleet Response Plan phases. Units that have completed all basic phase requirements are ready for more complex training and are capable of independent operations in support of homeland security, humanitarian assistance, and disaster relief missions.

The basic phase consists of training exercises performed by individual ships and aircraft and is mostly characterized as unit-level training. Unit-level training focuses on fundamental combat skills for a unit, such as an individual ship. Operating area and range support requirements for unit-level training are relatively modest compared to large-scale, major exercises. Coordinated unit-level exercises involve two or more units, such as ships, aircraft, or both and are also included in the basic phase. These exercises further refine the basic, fundamental skills while increasing difficulty by requiring coordination with other units.

Due to the repetition required in unit-level training, proximity of local range complexes to the locations where Sailors and Marines are stationed is important, as it reduces the amount of travel time and training costs during the basic phase of training. Access to local ranges also increases the time these Sailors and Marines can spend at home, with their families and communities before going on long deployments.

Ships and aircraft conducting basic phase training are likely operating in the same range complex or OPAREA where other units are conducting unrelated activities in the basic phase, integrated phase, or sustainment phase. Without sufficiently sized OPAREAs, this necessary, simultaneous training could not occur.

1.4.2.3 Advanced Phase

The purpose of the advanced phase is to build on unit warfighting capabilities through academic, synthetic, and live training in advanced training, tactics, and procedures in all mission areas within a challenging warfighting environment. This phase provides an opportunity to hone advanced training, tactics, and procedures with other units and conduct mission-specific training to meet mission requirements while maintaining proficiency attained in the basic phase. The advanced phase provides a sufficient block of time to complete required inspections, certifications, assessments, visits, and training. This phase includes attainment of acceptable unit warfighting proficiency in all required mission areas and completion of mission-specific training for identified mission sets. Upon completion of the advanced phase, most Navy forces will aggregate into a strike group, amphibious ready group, or other combined arms force and commence the integrated phase of training. Occasionally, forces will not conduct an integrated phase of training because, for example, they will be ordered to deploy independently (separate from a strike group or amphibious ready group). In those instances, these units will be certified to deploy following the advanced phase.

1.4.2.4 Integrated Phase

The goal of the integrated phase is to provide these units and staffs advanced warfare skills in a challenging, multidimensional, and realistic threat warfare environment. This phase allows members of a combined force to build on individual and unit-level skills and conduct multi-unit in-port and at-sea training, culminating in an assessment of their performance under high-end and high-stress realistic threat conditions. The integrated phase combines the units that have completed the advanced phase of training into strike groups (such as an Amphibious Ready Group). Strike groups are composed of multiple ships and aircraft operating together but covering many, sometimes thousands of square miles to simulate a real-world situation. For example, a strike group may be expected to operate in coordinated fashion in the entire Persian Gulf or Mediterranean Sea. Major exercises in this phase require access to large, relatively unrestricted areas of ocean and airspace, multiple targets, and unique range attributes (complex and varying oceanographic features, close proximity to naval bases, and land-based targets).

The integrated phase concludes with certification for deployment, meaning that the strike group has demonstrated the skills and proficiencies across the entire spectrum of warfare that may be needed during deployment.

1.4.2.5 Sustainment Phase

The sustainment phase includes all activities and training following certification for deployment until the next maintenance phase begins. The goal of the sustainment phase is to provide strike groups with training that allows forces to maintain their highest level of readiness and proficiency, as well as the ability to evaluate new and developing technologies, and evaluate and develop new tactics. The strike group needs to continue training after certification for deployment and upon return from deployment up until it enters the maintenance phase, to maintain its perishable skills.

Similar to the integrated phase, sustainment exercises require access to large, relatively unrestricted areas of ocean and airspace and unique range attributes to support the scenarios.

Ships and aircraft conducting sustainment phase training are likely operating in the same range complex or OPAREA where other units are conducting unrelated activities in the basic phase, advanced phase, integrated phase, or sustainment phase. Without sufficiently sized OPAREAs, this necessary, simultaneous training could not occur.

1.4.3 WHY THE NAVY TESTS

The Navy's research and acquisition community, including research funding organizations, laboratory facilities, and systems commands, have a mission to provide weapons, systems, and platforms for the men and women of the Navy that support their missions and give them a technological edge over the United States' adversaries. This community is at the forefront of researching, developing, testing, evaluating, acquiring, and delivering modern platforms, systems, and related equipment to meet Fleet capability and readiness requirements while providing the necessary high return on investment to the American taxpayer. The Navy's research funding organizations and laboratories concentrate primarily on the development of new science and technology and include the initial testing of concepts that are relevant to the Navy of the future. The results of these research efforts carry forward to the ship, aircraft, and weapon system products developed by systems commands, who support the full lifecycle of product and service delivery from research and development, to testing, acquisition, and deployment, to operations and logistics support, including maintenance, repair, and modernization of Navy platforms (e.g., ships, aircraft), weapon systems, and components. Testing begins at the research and development phase and continues through to the final certification of systems and hardware. For example, the building of a new ship would involve the development of all the software and hardware systems within the ship, the construction of the ship itself, and testing the ship's seaworthiness and operation of its systems. After delivery to the fleet, the testing community supports maintenance, provides updates to software and hardware systems, and may include training Sailors on the operation of the ship's systems.

The Navy's research, acquisition, and testing community includes the following:

• Naval Air Systems Command, which develops, acquires, delivers, and sustains naval aviation aircraft, weapons, and systems with proven capability and reliability to ensure Sailors and Marines achieve mission success.

- Naval Sea Systems Command, which develops, acquires, delivers, and maintains surface ships, submarines, unmanned vehicles, and weapon system platforms that provide the right capability to the Sailors and Marines.
- Office of Naval Research, which is a research funding organization that plans, fosters, encourages, and conducts a broad program of scientific research (at universities, industry, small business, etc.) that promotes future naval sea power, enhances national security, and meets the complex technological challenges of today's world. The Office of Naval Research is also a parent command for the Naval Research Laboratory, which operates as the Navy's corporate research laboratory and conducts a multidisciplinary program of scientific research.
- Space and Naval Warfare Systems Command, which provides the Sailor with knowledge superiority by developing, delivering, and maintaining effective, capable, and integrated command, control, communications, computer, intelligence, and surveillance systems.

The Navy's systems commands design, test, and build component, system, and platforms to address requirements identified by the fleet. The Navy's systems commands must test and evaluate the platform, system, or upgrade to validate whether it performs as expected and to determine whether it is operationally effective, suitable, survivable, and safe for its intended use by the fleet.

1.4.3.1 Types of Testing

Testing performed by the Navy's research and acquisition community can be categorized as scientific research testing, performance and specification testing, developmental testing, operational testing, fleet training support, follow-on test and evaluation, lot acceptance testing, or maintenance and repair testing. Fleet training events often offer the most suitable environment for testing a system because training events are designed to accurately replicate operational conditions. Testing, therefore, is often embedded in fleet training events such that distinguishing a testing event from a training event would be difficult for an observer, as the only difference could be the purpose for which the activity was being conducted. Categories of testing events include:

- Scientific research testing. Scientific research testing is required to evaluate emerging threats or technology enhancement before development of a new system. As an example, testing might occur on a current weapon system to determine if a newly developed technology would improve system accuracy or enhance safety to personnel. Additionally, scientific research involves the use of devices to measure the properties of the environment in which a system may operate. For example, acoustic propagation experiments are conducted in particular environments to see how far acoustic signals produced by current and future operational systems could travel. Other research activities involve the transmission of acoustic signals designed to convey information from one platform to another. This "acoustic communication" is also very dependent on environmental conditions and needs to be studied where a variety of these conditions occur.
- **Performance and specification testing.** Performance and specification tests are required prior to Navy acceptance of a new system or platform. These tests may be conducted on a Navy testing range, in a Navy range complex, or at pierside locations; these tests are sometimes done in conjunction with fleet training activities.
- **Developmental testing.** Developmental tests are conducted to assist in the design of a platform or system and to ensure that technical performance specifications have been met. For example,

a weapon system may be tested using prescribed settings (e.g., a specific run pattern) to ensure the full range of system parameters can be met.

- **Operational testing.** Operational tests are conducted by specialized Navy units to evaluate the platform or system under conditions as it would be used by the fleet during operations. For example, a weapons system may be tested without prearranged settings, such that the specialized unit conducting the test can make adjustments as necessary for the prevailing conditions.
- Fleet training support. Fleet training support is conducted when systems still under development may be integrated on ships or aircraft for testing, and new platforms and systems are transitioned to the fleet once they are ready for operational use. During this effort, the Navy's systems commands may provide training on the operation, maintenance, and repair of the system during developmental testing activities.
- Follow-on test and evaluation. A follow-on test and evaluation occurs when a platform receives a new system, after a significant upgrade to an existing system, or when the system failed to meet performance specifications during previous testing. Follow-on tests and evaluations ensure that the modified or new system meets performance requirements and does not conflict with existing platform systems and subsystems.
- Lot acceptance testing. Lot acceptance tests evaluate systems from the Department of Defense contractor's production line to ensure that the manufacturer is producing systems that conform to specifications and perform as designed. Lot acceptance testing serves as the Navy's quality control check of the system before it is delivered to the fleet.
- Maintenance and repair testing. Following periodic maintenance, overhaul, modernization, or repair of systems, testing of the systems may be required to assess performance. These testing activities may be conducted at sea, in shipyards, or at Navy piers.

Preparatory checks of a platform or system are often made during Navy repair and construction activities prior to actual testing to ensure the platform or system is operating properly before expending the often-considerable resources involved in conducting a full-scale test. For example, a surface combatant may conduct a functional check of its hull-mounted sonar system in a nearshore area before conducting a more rigorous test of the sonar system farther offshore.

1.4.3.2 Methods of Testing

The Navy uses a number of different testing methods, including computer simulation and analysis as well as at-sea testing, throughout the development of platforms and systems. Although computer simulation is a key component in the development of platforms and systems, it cannot provide information on how a platform or system will perform or whether it will be able to meet performance and other specification requirements in the environment in which it is intended to operate. Actual performance data are needed. For this reason, platforms and systems must undergo at-sea testing at some point in the development process. Thus, as with fleet training, the research and acquisition community requires access to large, relatively unrestricted ocean OPAREAs, multiple strike targets, and unique range attributes to support its testing requirements.

Navy platforms and systems must be tested and evaluated within the broadest range of operating conditions available (e.g., bathymetry, topography, geography, oceanographic conditions) because Navy

personnel must be capable and confident to perform missions within the wide range of conditions that exist worldwide.

However, forecasting when technologies will be mature for testing is not easy. Programs and projects that have successfully completed the research and development stage and are determined mature enough to transition into an official, fully funded program have more defined test requirements. However, programs and projects are still subject to fiscal constraints and technical challenges that can often delay their development or even cancel continuation. Technical issues can require that systems or platforms undergo additional tests. Continued upgrades and maintenance of systems may occur on variable schedules due to availability, emergent requirements, or unforeseen system issues. Therefore, the types, amounts, and locations of testing activities may vary across different programs and projects in any given year. For all of these reasons, capturing the future testing requirements for platform, weapons, and system programs is challenging and reflects the system commands' best estimation based on historical and current best available information. To ensure comprehensive environmental impact analysis in this EIS/OEIS, the Navy assumes that all proposed testing projects will proceed as scheduled, with no unexpected delays.

1.5 OVERVIEW AND STRATEGIC IMPORTANCE OF EXISTING RANGE COMPLEXES AND TESTING RANGES

The range complexes and testing ranges analyzed in this EIS/OEIS have each existed for many decades, some dating back to the 1940s. Range use and infrastructure have developed over time as military readiness requirements in support of modern warfare have evolved.

Proximity of the AFTT range complexes to naval homeports and air stations is strategically important to the Navy. Close access allows for efficient execution of military readiness activities including maintenance functions, as well as access to alternate airfields when necessary in order to provide for a margin of safety. Fuel is saved and equipment is exposed to less wear when ranges are near where the platforms are based. The proximity of training to homeports also ensures that Sailors and Marines do not spend unnecessary time away from their families during the training cycle. Additionally, the *Navy Personnel Tempo and Operating Tempo Program* requires the Navy to track and, where possible, limit the amount of time Sailors and Marines spend deployed from home (U.S. Department of the Navy, 2014b). Less time away from home is an important factor in military readiness, morale, and retention. The proximate availability of the AFTT range complexes is critical to Navy efforts in these areas.

The following range complexes and testing ranges are located in the AFTT Study Area and are described in further detail in Section 2.1 (Description of the Atlantic Fleet Training and Testing Study Area), as depicted in Figure 1.2-1:

- Northeast Range Complexes
- Naval Undersea Warfare Center Division, Newport Testing Range
- Virginia Capes Range Complex
- Navy Cherry Point Range Complex
- Jacksonville Range Complex
- Naval Surface Warfare Center Carderock Division, South Florida Ocean Measurement Facility Testing Range

- Key West Range Complex
- Gulf of Mexico Range Complex
- Naval Surface Warfare Center, Panama City Division Testing Range

1.6 THE ENVIRONMENTAL PLANNING PROCESS

This EIS/OEIS is designed to comply with the requirements of both NEPA and Executive Order 12114,

Environmental Effects Abroad of Major Federal Actions, and support additional legal compliance requirements, as further described below. Since NEPA does not apply globally, President Carter issued Executive Order 12114 in 1979, furthering the purpose of NEPA by creating similar procedures for federal agency activities affecting the environment of the global commons outside U.S. jurisdiction. Thus, the Navy undertakes environmental planning for major Navy actions occurring throughout the world in accordance with applicable laws, regulations, and executive orders.

1.6.1 NATIONAL ENVIRONMENTAL POLICY ACT REQUIREMENTS

When developing an EIS, the first step in the NEPA process (Figure 1.6-1) is to prepare a Notice of Intent to develop an EIS. The Notice of Intent is published in the *Federal Register* and in local newspapers and provides an overview of the proposed action and the scope of the EIS. The Notice of Intent is also the first step in engaging the public, initiating the scoping process.

Scoping is an early and open process for developing the "scope" of issues to be addressed in an EIS and for identifying significant issues related to a proposed action. During this process, the public helps define and prioritize issues that will be analyzed in the EIS.

After the scoping process, a Draft EIS is prepared to assess potential impacts of the proposed action and alternatives on the environment. When completed, a Notice of Availability is published in the *Federal Register* and notices are placed in local or regional newspapers announcing the availability of the Draft EIS. The Draft EIS is circulated for public review and comment. Public meetings may also be scheduled to further inform the public and solicit their comments.

The Final EIS addresses all public comments received on the Draft EIS. Responses to public comments may include factual corrections, supplements or modifications to analysis, and inclusion of new information. Additionally, responses may explain why the comments do not warrant further agency response.

Finally, the decision-maker will issue a Record of Decision no earlier than 30 days after the Final EIS is made available to the public.

Notice of Intent Published in Federal Register Scoping ublic Comments Received and Considered reparation of Draft EIS/OEIS lotice of Availability of Draft EIS/OEIS Public Comment Period for Draft IS/OEIS (Includes Public Meetings) Received and Incorporated Preparation of Final EIS/OEIS Notice of Availability of Final EIS/OEIS & Wait Period Record of Decision

Figure 1.6-1: National Environmental Policy Act Process

For a description of how the Navy complies with each of these requirements during the development of the AFTT EIS/OEIS, please see Chapter 8 (Public Involvement and Distribution).

1.6.2 EXECUTIVE ORDER 12114

Executive Order 12114 of 1979, *Environmental Impacts Abroad of Major Federal Actions*, furthers the purpose of NEPA by directing federal agencies to provide for informed environmental decision making for major federal actions outside the United States and its territories. Presidential Proclamation 5928, issued December 27, 1988, extended the exercise of U.S. 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. Thus, as a matter of policy, the Navy analyzes environmental effects and actions within 12 NM under NEPA (an EIS) and those effects occurring beyond 12 NM under the provisions of Executive Order 12114 (an OEIS).

1.6.3 OTHER ENVIRONMENTAL REQUIREMENTS CONSIDERED

The Navy must comply with all applicable federal environmental laws, regulations, and executive orders, including, but not limited to, those listed below. Further information can be found in Chapter 6 (Regulatory Considerations).

1.6.3.1 Federal Statutes

The following are federal statutes that are most relevant to the analysis of impacts in this EIS/OEIS.

1.6.3.1.1 Clean Air Act

The purpose of the Clean Air Act (42 U.S.C. sections 7401–7671q) is to protect public health and welfare by the control of criteria air pollution at its source and set forth primary and secondary National Ambient Air Quality Standards to establish criteria for states to attain, or maintain, these minimum standards. Non-criteria air pollutants that can affect human health are categorized as hazardous air pollutants under section 112 of the Clean Air Act. The U.S. Environmental Protection Agency identified 189 hazardous air pollutants such as benzene, perchloroethylene, and methylene chloride. Section 176(c)(1) of the Clean Air Act, commonly known as the General Conformity Rule, requires federal agencies to ensure that their actions conform to applicable state implementation plans for achieving and maintaining the National Ambient Air Quality Standards for criteria pollutants in non-attainment and maintenance areas for criteria pollutants and their precursors.

1.6.3.1.2 Clean Water Act

The Clean Water Act (33 U.S.C. sections 1251–1376) regulates discharges of pollutants in surface waters of the United States. The Uniform National Discharge Standards (40 Code of Federal Regulations [CFR] part 1700) govern discharges incidental to the normal operation of Navy ships at sea.

1.6.3.1.3 Coastal Zone Management Act

The Coastal Zone Management Act of 1972 (16 U.S.C. sections 1451–1464) encourages coastal states to be proactive in managing coastal zone uses and resources. The act established a voluntary coastal planning program and required participating states to submit a Coastal Management Plan to the National Oceanic and Atmospheric Administration for approval. Under the act, federal actions that have reasonably foreseeable effects on a coastal use or resource are required to be consistent, to the maximum extent practicable, with the enforceable policies of federally approved Coastal Management Plans. The Coastal Zone Management Act defines the coastal zone as extending offshore "to the outer limit of State title and ownership under the Submerged Lands Act" (i.e., 3 NM from the shoreline, 9 NM for the west coast of Florida, Texas, and Puerto Rico).

A consistency determination, a negative determination, or a *de minimis* exemption may be submitted for review of federal agency activities. A federal agency submits a consistency determination when it determines that its activity may have either a direct or an indirect effect on a state coastal use or resource. In accordance with 15 CFR section 930.39, the consistency determination will include a brief statement indicating whether the proposed activity will be undertaken in a manner consistent, to the maximum extent practicable, with the enforceable policies of the management program.

1.6.3.1.4 Endangered Species Act

The ESA of 1973 (16 U.S.C. sections 1531–1544) provides for the conservation of endangered and threatened species and the ecosystems on which they depend. The act defines an endangered species as a species in danger of extinction throughout all or a significant portion of its range. A threatened species is one that is likely to become endangered within the near future throughout all or in a significant portion of its range. The U.S. Fish and Wildlife Service (USFWS) and NMFS jointly administer the ESA and are responsible for listing species as threatened or endangered and for designating critical habitat for listed species. The ESA allows the designation of geographic areas as critical habitat for threatened or endangered species. Section 7(a)(2) requires each federal agency to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat of such species. When a federal agency's action "may affect" a listed species, that agency is required to consult with the service (NMFS or USFWS) that has jurisdiction over the species (50 CFR section 402.14(a)). Consultation will conclude with preparation of a biological opinion that determines whether the federal agency action will jeopardize listed species or adversely modify or destroy critical habitat for formal consultation, or when the Services concur, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat for informal consultation. An incidental take statement is also included in every biological opinion where take is anticipated. This incidental take statement allows the proposed action to occur without being subject to penalties under the ESA.

1.6.3.1.5 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. sections 1801–1882), enacted in 1976 and amended by the Sustainable Fisheries Act in 1996, mandates identification and conservation of essential fish habitat. Essential fish habitat is defined as those waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity (i.e., full life cycle). These waters include aquatic areas and their associated physical, chemical, and biological properties used by fish, and may include areas historically used by fish. Substrate types include sediment, hard bottom, structures underlying the waters, and associated biological communities. Federal agencies are required to consult with NMFS and to prepare an essential fish habitat assessment if potential adverse effects on essential fish habitat are anticipated from their activities. Any federal agency action that is authorized, funded, undertaken, or proposed to be undertaken that may affect fisheries is subject to the Magnuson-Stevens Fishery Conservation and Management Act. In addition, federal agencies shall consult with the Secretary of Commerce with respect to any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken, by such agency that may adversely affect any essential fish habitat identified under this act.

1.6.3.1.6 Marine Mammal Protection Act

The 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 on the high seas by vessels or persons subject to U.S. jurisdiction. The term "take," as defined in section 3 (16 U.S.C. section 1362 (13)) 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 behavioral disturbance).

The MMPA directs the Secretary of Commerce, as delegated to NMFS, to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens or agencies who engage in a specified activity (other than commercial fishing) within a specified geographical region if NMFS finds that the taking will have a negligible impact on the species or stock(s), and will not have an unmitigatable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant). In issuing regulations authorizing the incidental taking, NMFS must set forth the permissible methods of taking, other means of effecting the least practicable adverse impact on the species or stock for subsistence uses (where relevant), and requirements pertaining to monitoring and reporting of such taking.

The National Defense Authorization Act of Fiscal Year 2004 (Public Law 108-136) amended the definition of harassment, removed the "specified geographic area" requirement, and removed the small numbers provision 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. section 1374(c)(3)). The Fiscal Year 2004 National Defense Authorization Act adopted the definition of "military readiness activity" as codified at 16 U.S.C. section 703 Note. A "military readiness activity" is defined as "all training and operations of the Armed Forces that relate to combat" and the "adequate and realistic testing of military readiness activities, 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") or
- 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. section 1362(18)(B)(i) and (ii)).

1.6.3.1.7 Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (16 U.S.C. sections 703–712) and the Migratory Bird Conservation Act (16 U.S.C. sections 715–715d, 715e, 715f–715r) of February 18, 1929, are the primary laws in the United States established to conserve migratory birds. The Migratory Bird Treaty Act prohibits the taking, killing, or possessing of migratory birds or the parts, nests, or eggs of such birds, unless permitted by regulation.

The 2003 National Defense Authorization Act provided interim authority to members of the Armed Forces to incidentally take migratory birds during approved military readiness activities without violating the Migratory Bird Treaty Act. The National Defense Authorization Act provided this interim authority to give the Secretary of the Interior time to exercise his/her authority under section 704(a) of the Migratory Bird Treaty Act to prescribe regulations authorizing such incidental take. The Secretary of the Interior delegated this task to the USFWS. On February 28, 2007, the USFWS issued a final military readiness rule (72 Federal Register 8931) authorizing members of the Armed Forces to incidentally take migratory birds during military readiness activities (U.S. Fish and Wildlife Service, 2007).

1.6.3.1.8 National Historic Preservation Act

The National Historic Preservation Act of 1966 (54 U.S.C. section 300101 et seq.) establishes preservation as a national policy and directs the federal government to provide leadership in preserving, restoring, and maintaining the historic and cultural environment. Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. The National Historic Preservation Act created the National Register of Historic Places, the list of National Historic Landmarks, and the State Historic Preservation Offices to help protect each state's historical and archaeological resources. Section 110 of the National Historic properties owned or controlled by them and to locate, inventory, and nominate all properties that qualify for the National Register. Agencies shall exercise caution to assure that significant properties are not inadvertently transferred, sold, demolished, substantially altered, or allowed to deteriorate. The National Historic Preservation Act applies to cultural resources evaluated in this EIS/OEIS.

1.6.3.1.9 National Marine Sanctuaries Act

Under the Marine Protection, Research, and Sanctuaries Act of 1972 (also known as the National Marine Sanctuaries Act), the Secretary of Commerce may establish a national marine sanctuary for marine areas with special conservation, recreational, ecological, historical, cultural, archaeological, scientific, educational, or aesthetic qualities. Day-to-day management of national marine sanctuaries has been delegated by the Secretary of Commerce to the National Oceanic and Atmospheric Administration's Office of National Marine Sanctuaries. Once a sanctuary is designated, the Secretary of Commerce may authorize activities in the sanctuary only if they can be certified to be consistent with the National Marine Sanctuaries Act and can be carried out within the regulations for the sanctuary. Regulations exist for each sanctuary, and military activities may be authorized within those regulations. Additionally, the National Marine Sanctuaries Act requires federal agencies whose actions are "likely to destroy, cause the loss of, or injure a sanctuary resource" to consult with the program before taking the action. In these cases, the Office of National Marine Sanctuaries is required to recommend reasonable and prudent alternatives to protect sanctuary resources if the action is likely to destroy, cause the loss of, or injure a sanctuary resources if the action is likely to destroy, cause the loss of, or injure a sanctuary resources if the action is likely to destroy, cause the loss of, or injure a sanctuary resources if the action is likely to destroy, cause the loss of, or injure a sanctuary resources if the action is likely to destroy, cause the loss of, or injure a sanctuary resources if the action is likely to destroy, cause the loss of, or injure a sanctuary resources if the action is likely to destroy, cause the loss of, or injure a sanctuary resources if the action is likely to destroy, cause the loss of, or injure a sanctuary resources if the action is likely to destroy, cause the loss of, or injure a sanctuary res

1.6.3.2 Executive Orders

The following are Executive Orders that are most relevant to the analysis of impacts in this EIS/OEIS.

1.6.3.2.1 Executive Order 13834, Efficient Federal Operations

Executive Order 13834 (83 *Federal Register* 23771) was issued on May 17, 2018 and revoked Executive Order 13693. The goal of Executive Order 13834 is to prioritize actions that reduce waste, cut costs, enhance the resilience of Federal infrastructure and operations, and enable more effective accomplishment of an agency's mission.

1.6.3.2.2 Executive Order 13158, Marine Protected Areas

Executive Order 13158 (65 *Federal Register* 34909) was authorized in May 2000 to protect special natural and cultural resources by strengthening and expanding the nation's system of marine protected

areas. The purpose of the order is to (1) strengthen the management, protection, and conservation of existing marine protected areas and establish new or expanded marine protected areas; (2) develop a scientifically based, comprehensive national system of marine protected areas representing diverse U.S. marine ecosystems and the nation's natural and cultural resources; and (3) avoid causing harm to marine protected areas through federally conducted, approved, or funded activities.

1.6.3.2.3 Executive Order 13840, Ocean Policy to Advance the Economic, Security, and Environmental Interests of the United States

On June 19, 2018, President Trump signed Executive Order 13840. The Executive Order is intended to advance the economic, security, and environmental interests of the United States through improved public access to marine data and information, efficient federal agency coordination on ocean-related matters, and engagement with marine industries, the science and technology community, and other ocean stakeholders, including Regional Ocean Partnerships. The Executive Order continues to require federal agencies to coordinate activities regarding ocean-related matters for effective management of the ocean as well as promote lawful use of the ocean by agencies, including the Armed forces. Navy continues to engage with regional and state ocean planning entities. This Executive Order revokes and replaces Executive Order 13547, Stewardship of the Ocean, Our Coasts, and the Great Lakes.

1.7 SCOPE AND CONTENT

In this EIS/OEIS, the Navy analyzed military readiness training and testing activities that could potentially impact human and natural resources, especially marine mammals, sea turtles, and other marine resources. The range of alternatives includes the No Action Alternative and two action alternatives. In this EIS/OEIS, the Navy analyzed direct, indirect, and cumulative impacts. The Navy is the lead agency for the Proposed Action and is responsible for the scope and content of this EIS/OEIS. The National Oceanic Atmospheric Administration's NMFS is a cooperating agency because the scope of the Proposed Action and alternatives involve activities that have the potential to impact protected resources under their jurisdiction and for which they have special expertise, including marine mammals, threatened and endangered species, essential fish habitat, and national marine sanctuaries. The National Oceanic Atmospheric Administration's authorities and special expertise is based on its statutory responsibilities under the MMPA, as amended (16 U.S.C. section 1361 et seq.), the ESA (16 U.S.C. section 1531 et seq.), the Magnuson-Stevens Fishery Conservation and Management Act and the National Marine Sanctuaries Act (16 U.S.C. sections 1431–1445c-1). In addition, NMFS, in accordance with 40 CFR sections 1506.3 and 1505.2, intends to adopt this EIS/OEIS and issue a separate Record of Decision associated with its decision to grant or deny the Navy's request for incidental take authorizations pursuant to section 101(a)(5)(A) of the MMPA.

In accordance with the Council on Environmental Quality Regulations, 40 CFR section 1505.2, the Navy will issue a Record of Decision that provides the rationale for choosing one of the alternatives.

1.8 ORGANIZATION OF THIS ENVIRONMENTAL IMPACT STATEMENT/OVERSEAS ENVIRONMENTAL IMPACT STATEMENT

This EIS/OEIS is organized as follows:

- Chapter 1 describes the purpose of and need for the Proposed Action.
- Chapter 2 describes the Proposed Action, alternatives considered but eliminated in the EIS/OEIS, and alternatives to be carried forward for analysis in the EIS/OEIS.

- Chapter 3 describes the existing conditions of the affected environment and analyzes the potential impacts of the proposed training and testing activities for each alternative.
- Chapter 4 describes the analysis of cumulative impacts, which are the impacts of the Proposed Action when added to past, present, and reasonably foreseeable future actions.
- Chapter 5 describes the protective measures the Navy evaluated that could mitigate impacts to the environment.
- Chapter 6 describes considerations required by NEPA and describes how the Navy complies with other federal, state, and local plans, policies, and regulations.
- Chapter 7 includes a list of preparers of this EIS/OEIS.
- Chapter 8 includes a list of agencies, government officials, tribes, groups, and individuals on the distribution list for receipt of the Draft EIS/OEIS.
- Appendix A provides descriptions of the proposed Navy activities.
- Appendix B shows the relationship of stressors to the activities and to the environmental resources analyzed.
- Appendix C provides air quality emissions calculations and Record of Non-Applicability.
- Appendix D explains acoustic and explosive concepts.
- Appendix E provides estimates of marine mammals and sea turtle impacts from exposure to acoustic and explosive stressors under Navy training and testing activities.
- Appendix F presents military expended material and direct strike impact analysis.
- Appendix G presents Federal Register notices applicable to this project.
- Appendix H provides responses to public comments.
- Appendix I lists geographic information system data sources.
- Appendix J provides agency correspondence applicable to this project.

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