

Navy Moves Forward on Compliance Strategy for Training & Testing at Sea

The Latest on Phase I & II Environmental Planning Efforts

THE NAVY'S AT sea compliance strategy is to produce environmental planning documents under the National Environmental Policy Act (NEPA) and/or Executive Order (EO) 12114 "Environmental Effects Abroad"; consult under the Endangered Species Act (ESA); and seek Marine Mammal Protection Act (MMPA) authorizations for at sea training and testing that is subject to these requirements.

NEPA requires Federal agencies to examine the environmental effects of their proposed actions that have the potential to significantly affect the environment. NEPA's objective is to ensure that pertinent environ-

often addresses NEPA and EO 12114 in the same document. Under the MMPA, no "takes" of marine mammals by harassment, injury or mortality can occur unless exempt or authorized under a permit. Under the ESA, the Navy must consult with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service (NMFS) on any proposed action that "may affect" listed species or designated critical habitat. As part of the analysis prepared to meet NEPA, ESA and MMPA requirements, the Navy conducts an effects analysis that predicts the number of animals exposed to a NMFS-defined acoustic threshold.

tively. Over the past six years, the Navy has been proactively engaged in permitting actions and consultations with various federal wildlife agencies regarding testing and training activities on all of its sea ranges and OPAREAs.

"So far, the Navy has completed its environmental planning, permitting, and consultation requirements for ten of its sea ranges and OPAREAs," said Karen Foskey, lead environmental planner for the Chief of Naval Operations Energy and Environmental Readiness Division (N45). "The Navy expects to have initial environmental documents completed for its remaining four ranges and OPAREAs in late 2010 and early 2011," said Foskey.

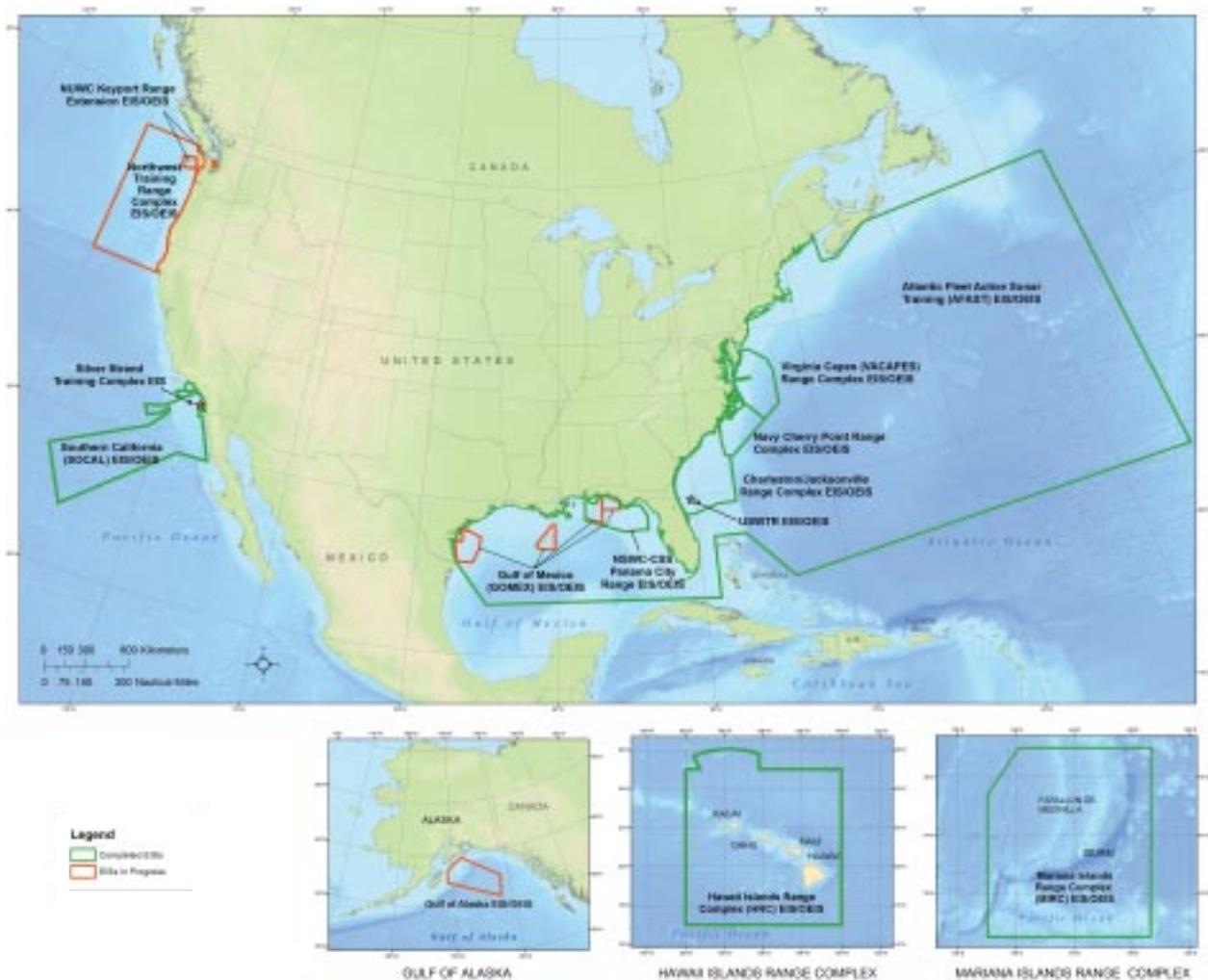
It's critical to the mission that we complete these efforts on time, and we will.

—John Quinn

mental information for major Federal actions is available to decision-makers and the public. Similarly, EO 12114 requires federal agencies to identify, document and consider environmental effects of their proposed actions. The Navy

In 2004, the Navy initiated long range comprehensive environmental impact statements (EIS) for 12 ranges and operating areas (OPAREA), adding the Gulf of Alaska and the Silver Strand Training Complex near San Diego to the scope in 2007 and 2008, respec-

Collectively, the initial 14 EISs and associated regulatory processes are often referred to within the Navy environmental planning community as "Phase I." Although the Navy has been training at sea for decades, Phase I represents the first time the



Navy has conducted comprehensive, long-term environmental analyses for its sea ranges and OPAREAs. Prior to Phase I, Navy environmental planning for activities at sea was done piecemeal, covering single exercises or tests. From a workload perspective, Phase I is a massive undertaking by the Navy, as well as for NMFS, the regulatory agency that provides oversight to most of the Navy’s at sea environmental planning efforts.

“Environmental planning for all Navy training, testing and research at sea, covering activities far in the future and over large geographic areas, is a daunting challenge,” said John Quinn, N45’s deputy director. “It’s critical to the mission that we complete these efforts on time, and we will.”

This workload is expected to increase for the Navy and NMFS in 2014, when the original authorizations issued

under the MMPA and ESA begin to expire and new environmental analyses, permits, and consultations are required.

Way Forward for Navy Environmental Planning & Compliance

The next phase of environmental planning, “Phase II,” will cover maritime activities including but not limited to Fleet training; Fleet and System Commands pier-side maintenance locations where sonar testing of hull mounted active sonar systems occurs; at sea acquisition-related research, development, test and evaluation activities sponsored by Program Executive Offices, such as service weapons tests and sea trials of new construction vessels; testing of new systems; and Office of Naval Research-(ONR) and Space and Naval Warfare Systems Command-sponsored science and technology activities. Phase II documentation is anticipated to:



The USS ABRAHAM LINCOLN prepares for flight operations in the Gulf of Alaska as part of joint training exercise Northern Edge.
Photographer's Mate 3rd Class Kittie VandenBosch

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- Incorporate sea areas that were covered in Phase I environmental planning and compliance documentation, including expanded areas as needed for transit routes, pierside locations, etc.
- Cover areas within the Mediterranean Sea where Navy conducts testing and training
- Include other ocean areas where the Navy has historically trained and/or conducted tests outside of recognized Foreign Exclusive Economic Zones.

Phase II environmental planning will also incorporate lessons learned from

the analyses conducted for the initial ranges and OPAREAs. “The Navy is committed to incorporating advances in scientific research into its effect analysis process as appropriate” said Linda Petitpas, N45’s ocean acoustics technical lead. For example, ONR developed the Effects of Sound on the Marine Environment (ESME) conceptual model as a research tool for studying anthropogenic sound effects in the marine environment. We have evaluated individual portions of ESME and incorporated them into the new Phase II effects analysis.” said Petitpas. The Phase II effects analysis has been updated to incorporate standardization of model

input parameters such as environment, animal density, and source parameters as well as placement of the marine mammals in the water column to more closely reflect their natural dive profiles. (For more insights, read our article entitled “Environment in a (High-Tech) Box: Navy’s Single Effects Analysis Model Simulates Undersea Sound Fields & Marine Mammal Locations to Plan Training & Testing Activities” on page 42 of this issue of *Currents*.) The Navy intends to put the Phase II effects analysis process through a vigorous verification, validation, and accreditation process both internal and external to the Navy. In addition,



The guided missile destroyer USS WINSTON S. CHURCHILL (DDG 81) fires its MK-45 Mod 4 lightweight gun mount during an exercise in the Virginia Capes operating area.

LTJG Caleb Swigart



An MV-22 Osprey flies over the Gulf of Mexico during a two-week exercise that allows aircrew members to train and navigate in an unfamiliar environment.

Senior Airman Andy M. Kin

the Navy is exploring the possibility of a National Research Council/National Academy of Sciences review of the process used to determine the effects of the Navy's proposed actions and publish the results in a National Academies Press document. With each five year increment of permits, the Navy will reevaluate the current state of science and update the effects analysis process as appropriate.

The Navy initiated Phase II in summer 2010, publishing Notices of Intent and conducting public scoping meetings to identify community concerns and issues relating to the Atlantic Fleet Training and Testing Environmental Impact Statement/ Overseas Environmental Statement (EIS/OEIS) and the Hawaii Southern California Training and Testing EIS/OEIS. Although Phase I and



Engineman 2nd Class Kpaku Palay serves as aft lookout during a simulated escort of high value asset USNS HENRY J. KAISER (T-AO 187) in San Diego Bay.
Mass Communication Specialist 1st Class R. Jason Brunson

Phase II documentation addresses a majority of training and testing each year, at sea environmental planning is a long-term proposition required to support military readiness.

Marine Mammal Protection

A key focus of the Navy's environmental stewardship at sea is the protection of marine species, including

marine mammals. "We understand and share the public's concern for marine mammals. Our Sailors and Marines have the amazing opportunity to share the natural environment with marine mammals in a way that many Americans do not," said Quinn. "Because of our collaborative efforts with regulatory agencies, academia, and non-governmental organizations, we have improved our conservation efforts. We have made significant investments to better understand the behavior of marine mammals and protect them from potential impacts of Navy training activities," said Quinn.

In partnership with NMFS, the Navy develops and implements appropriate science-based monitoring and mitigation measures to protect marine mammals during testing and training activities at sea. In addition to area-specific mitigation measures for ranges and OPAREAs with



The air boss aboard the USS NASSAU (LHA 4) radios commands to aircraft handlers during deck landing qualifications for V-22 Osprey and AH-1 Cobra aircraft.
Mass Communication Specialist 1st Class James R. Stilipiec

Sailors assigned to Strike Fighter Squadron (VFA) 213 remove ordnance from an F/A-18F Super Hornet aboard the USS GEORGE H.W. BUSH (CVN 77) during training in the Atlantic Ocean.

Naval Air Crewman 3rd Class Joshua K. Horton

permits, the Navy employs protective measures worldwide to ensure the least practicable effects on the marine environment. Examples include marine species awareness training for shipboard lookouts, using all available sensor systems to aid in marine mammal detection prior to sonar use, and ceasing sonar transmissions if marine mammals are sighted within a specified range of ships using sonar.

In support of its environmental stewardship goals, the Navy has long supported a robust program of marine mammal research. The Navy's marine mammal research program has historically been funded approximately \$20 million annually, making it one of the largest single contributors to marine mammal research globally. The Navy's marine mammal research program invests in research on the potential effects of sound on marine mammals and develops scientific information that supports the Navy's preparation of EISs and associated regulatory processes under the MMPA, ESA and other statutes. The research program also goes beyond compliance requirements to support the development of improved marine mammal monitoring and detection technology and overall knowledge about marine mammals.

"The Navy takes its environmental stewardship responsibilities very seriously. We understand that national security, like all aspects of life on Earth, requires a healthy ocean environment," said Dr. Robert Gisiner, N45's senior marine biologist.



Finally, Navy ships, aircraft and installations have long assisted in the rescue and/or study of stranded marine mammals by reporting animal locations and providing assistance to NMFS' stranding response network. These cooperative efforts with NMFS will be enhanced in 2011 with the signing of a Navy-NMFS Memorandum of Understanding that is currently under development. Once signed, the memorandum will establish a national framework that allows

the Navy to assist NMFS in investigations of stranding events that occur on and around Navy ranges during major training exercises and in certain other circumstances. ⚓

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