

National Security Through U.S. Leadership

Submitting Organization: RECOS – The Ocean Coalition
Affected Government Agencies: Department of Defense / Navy
Corresponding Appropriations: Defense

Background: Department of Defense (DoD) basic and applied research funding is an important source of continuous science and technology innovation that keeps the U.S. more nimble, safer, and better positioned in this era of global competition. Defense research, especially the Office of Naval Research, supplies the ocean understanding, data and intelligence to support the military.

The oceans are the primary battlespace of the U.S. Navy, making it essential for the Navy to have operational awareness above, below, and on the surface of the oceans. Oceanography is a source of innovation for proposed new platforms, sensing techniques, and concepts of operation, and ongoing research efforts involve the development of instruments and techniques that have significant defense relevance. Continued production of ocean data has important short-term tactical applicability and significant long-term strategic utility. Scientific knowledge of the oceans and ocean environments makes critical contributions to the nation's commercial vitality and national security.

Innovative, at-sea Navy research supports groups of highly skilled sea-going engineers and technicians and trains students to meet Navy challenges. The academic research fleet supports multidisciplinary, multi-investigator research and advances in ocean technology and plays a critical role in science diplomacy. Global class ships are critical to the U.S. oceanographic research effort due to their range, payload, duration, and ability to effectively conduct operations in remote areas and high sea states.

Without investments in new global class ships, the U.S. risks losing the sea-going observational expertise that is at the foundation of U.S. ocean science and the source of new ocean physics knowledge and observational technology that is the cornerstone for Navy advanced system concepts of the future. Investment into research and development connected to autonomous systems and sensors will support Naval operations at lower cost and on relevant timescales, while also permitting new operational concepts in contested environments. Seagoing researchers can also build strategic relationships in countries in support of Navy objectives

Defense and Navy basic research programs are also essential to ensure the U.S. has a robust defense industrial base (DIB) and S&T workforce. These programs support a wide range of programs dedicated to strengthening the industrial workforce by attracting the most creative minds to solve complex military challenges and training students in fields of critical interest to DoD.

U.S. investment in science and technology is essential in protecting the nation against current and emerging threats. We recommend the highest possible funding levels for DoD basic and applied research programs, including research instrumentation and future academic research fleet recapitalization.

Recommendation in Legislation: RECOS supports sustained basic and applied research investments in national security funding for new technologies to observe the ocean environment from seafloor to space over the next decade.