



R/V NEIL ARMSTRONG

The Navy-owned, WHOI-operated Auxiliary General Oceanographic Research (AGOR-27) vessel *Neil Armstrong* was commissioned in 2015 and designed to meet the range, endurance, and technical requirements to support advanced oceanographic research from tropical to subpolar oceans worldwide. The ship's construction minimizes noise transmission to the water, to maximize the sensitivity of its advanced suite of built-in acoustic sensors, which can map the seafloor to full ocean depth and the sub-seafloor in extremely high detail to identify small features and objects. *Neil Armstrong* is currently the primary long-range, general-purpose ship based on the U.S. East Coast.

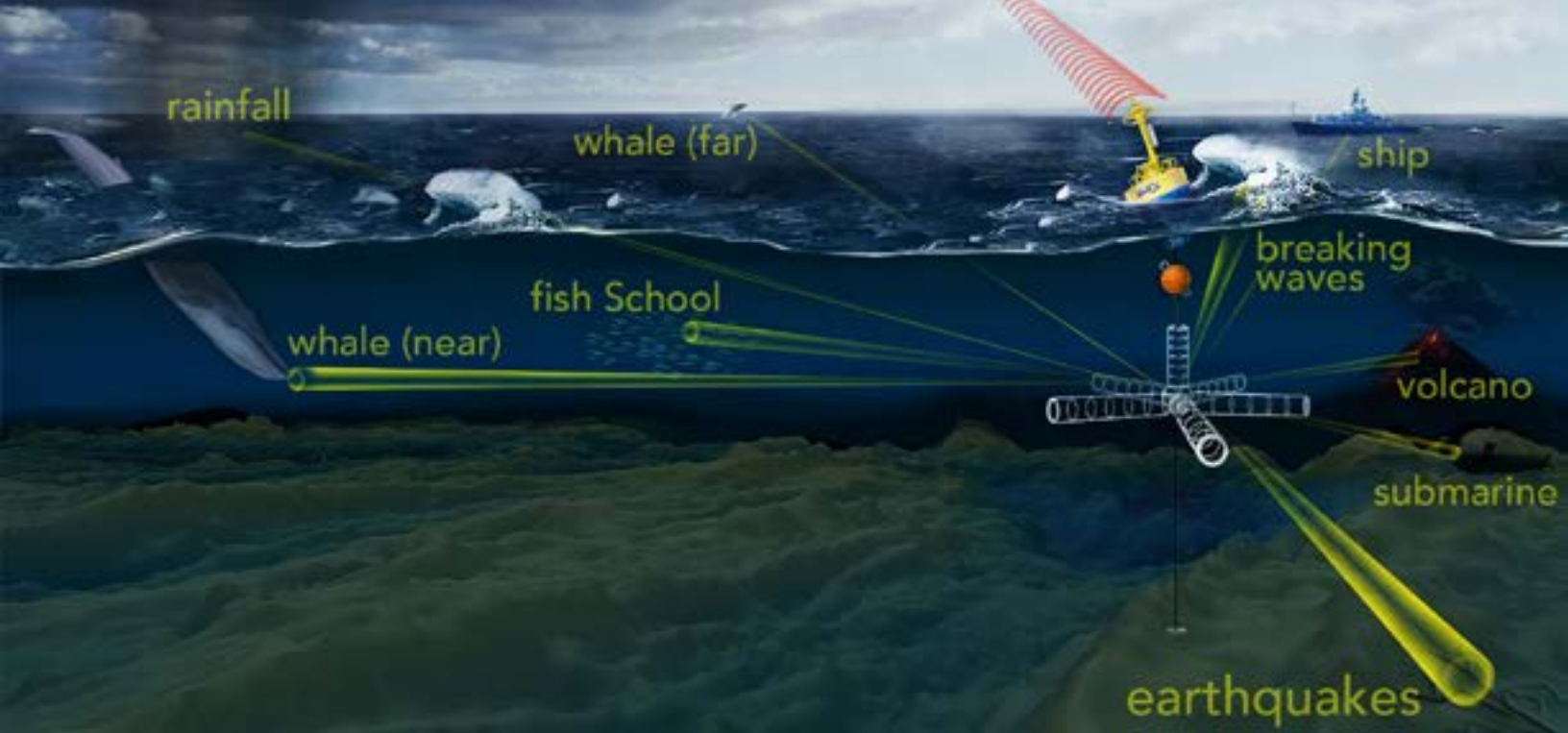
Provides consistent presence of a long-duration oceanographic research ship in the Atlantic since 2016

The global-capable *Neil Armstrong* serves as the primary large oceanographic research vessel based on the U.S. East Coast, ensuring reliable access for the research, defense, and marine technology communities to critical ocean regions and underwater features that have far-reaching impacts on land.



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Supports long-term ocean monitoring and infrastructure in the North Atlantic

Neil Armstrong regularly services mooring arrays of the Ocean Observatories Initiative (OOI), the largest infrastructure investment by NSF's Division of Ocean Science and a key monitor of conditions that affect U.S. fisheries and coastal communities. The ship also supports long-term observation systems that provide critical data about key regions of the North Atlantic, including Northeast Shelf Long-Term Ecological Research (NES-LTER) site, Overturning in the Subpolar North Atlantic Program (O-SNAP), and Bermuda Atlantic Time-series Study (BATS).

Provides consistent access to Arctic waters

With its home port in Woods Hole, Mass., the ice-classed *Neil Armstrong* is uniquely positioned and designed to extend the reach of the Academic Research Fleet into northern waters of the North Atlantic. Its highly trained crew certified for polar operations has led more than 25 expeditions to Arctic and Arctic gateway regions over the past decade, often using Nuuk, Greenland, as a home port.

Advances the development of new underwater sensors, samplers, and vehicles

Neil Armstrong serves as a testbed for innovative technology developed specifically for use in challenging marine conditions. Notable examples have included the Nereid Under Ice hybrid remotely operated vehicle capable of exploring under sea ice and the X-spar meteorological buoy designed for long-term deployments in remote and hostile ocean regions.

Supports mission-critical projects for national security

Operations conducted from *Neil Armstrong* have supported development of an underwater "acoustic telescope" funded by the Office of Naval Research to identify and track natural and human sounds underwater across the North Atlantic basin. Other recent projects include optimizing state of the art sonar systems that serve both national security and science.

