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U.S. SENATOR *for* CALIFORNIA

Accelerating Networking, Cyberinfrastructure, and Hardware for Oceanic Research (ANCHOR) Act

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The Academic Research Fleet (ARF) is composed of 17 oceanographic vessels owned by the National Science Foundation (NSF), the Office of Naval Research (ONR), and U.S. universities. This network of ships enables scientists across the nation to conduct complex research on the ocean, seafloor, Great Lakes, and remote polar regions.

The data collected is vital to national security, environmental research, and more. The ANCHOR Act takes a first step in planning needed, cost-effective cybersecurity and telecommunication upgrades for the ARF.

What the *ANCHOR Act* would do:

- Direct the National Science Foundation to report to Congress within one year on the costs, personnel, and equipment needed to improve cybersecurity and telecommunications for the ARF. A second report, due two years later, would detail progress on implementing the plan.

Benefits of ship upgrades:

- **Cybersecurity Resilience**: U.S. universities and navy vessels working on national security research are current targets of nation-state sponsored hacking.

- **International Competitiveness**: As countries like China invest heavily in their oceanographic research vessels, it is critical the U.S. maintains our fleet.

- **Workforce Development**: Fast internet helps U.S. mariners connect with their loved ones, access regular mental healthcare, and be retained in the workforce.

- **Cost-effective**: Upgrading the 17 vessels in the ARF will save money by enabling remote diagnosis and repair of equipment so ships can continue working.

- **Education Access**: Better connectivity means more opportunities for scientists to connect with classrooms and for students to participate in remote fieldwork.

- **Improved Science:** Safely sending data to shore allows outsourcing of time-consuming data processing like seafloor mapping to do more science per mission.