ONR Update 2023 UNOLS Annual

Rob Sparrock, Program Officer

Means: Research Vessels other tools and platforms

Ways: UNOLS, community of Interest

Ends: Oceanographic Data

Geostrategic Setting: Scientific Diplomacy STEM Education AI, "Big Data", MetaData Multi-disciplinary Collaboration International Data Database Management Cyber Implications Unmanned Systems Means: Analytical Data

> Ways: Basic/APPLIED Research Techniques

Ends: Basic/APPLIED Research Knowledge

Support functions My primary Program Officer Roll is DATA Is there a Gap? Does this Require specialized management & skillset

Basic and Applied Research Programs

SEABED, Acoustics and ARCTIC are ONR concentration areas

Definitions

50 USC 4552: Definitions

Critical infrastructure: means any systems and assets, whether physical or cyber-based, so vital to the United States that the degradation or destruction of such systems and assets would have a debilitating impact on national security, including, but not limited to, national economic security and national public health or safety.

National Defense: means programs for military and energy production or construction, military or critical infrastructure assistance to any foreign nation, homeland security, stockpiling, space, and any directly related activity. Such term includes emergency preparedness activities conducted pursuant to title VI of The Robert T. Stafford Disaster Relief and Emergency Assistance Act [42 U.S.C. 5195 et seq.] and critical infrastructure protection and restoration.

Purpose of Naval Research (and Survey) Vessels

Pure Civilian Research No Military Purpose/Control

- Principally (or defacto) built for civilian research/public purpose
- Lease 'breaks' line of authority/responsibility to President
- Ship operators are defacto owners and "assume responsible for safety ..."
- Ship's are: Gov't Property (or GFE)

Maritime Statecraft & National Defense – Dual Nature

- Built for a National Defense
- USCG-like: "<u>shall</u> be a military service and a branch of the armed forces of the United States <u>at all times</u>"
- <u>Shall</u> be a *naval auxiliary* and "force" of the Navy <u>at all times</u>
- Ships are: a Gov't Vessel

Implications of Naval Research (and Survey) Vessels

Pure Civilian Research No Military Purpose/Control

- Legal Suits in Admiralty
- Cyber attack no support or implication of national security
- Less policy as unmanned Gov't owned maritime system.
- No responsibility for accident investigation

Maritime Statecraft & National Defense – Dual Nature

- Legal Suits: Public Vessel Act
- Could integrate with other Public Assets
- Can do military missions in US and Intl waters (e.g. search for lost subs/recovery of nuclear weapons)
- Same policy as unmanned system

Current (proposed) RV Capabilities Document The U.S. is a maritime nation, and the U.S. Navy protects America at sea, alongside our allies and

partners. The Navy's involvement mission to preserve economic prosperity, protect critical infrastructure, domestic security, combat operations overseas, and humanitarian assistance confirm that the Navy will continue to operate across the globe in a wide variety of environments. Our nation is engaged in long-term competition which includes maintaining informational and technological advantages. Meteorological and Oceanographic data are necessary, support technology development, to understand the operating environment, and to support information superiority for the warfighter. The high-resolution, four dimensional information collected by the Navy's survey and oceanographic research vessels support the development of ocean, seabed, air, and space prediction systems for coastal, littoral, polar, and deep water areas. In order to meet this need, the Navy requires manned, uncrewed, and autonomous platform capability to include multi-disciplined oceanographic research systems, including marine geology and geophysics, ocean engineering and marine acoustics, optics, bathymetry, gravimetry, and magnetometry, and physical, chemical and biological oceanography. Our global posture ensures the presence of naval forces with the right mix of platforms, *including manned research vessels*, capability, and capacity to maintain freedom of the seas, support international law and norms, stand by our allies, and continue to operate wherever international law allows.

RV Capabilities Document - Logic

- 1. Mission Statement (previous slide)
- 2. Determine/Validate quantity requirements (see next slide)
- 3. Relationship to NOPP, IWG-FI (and report update in progress), Whitehouse (via Office of Science & Technology Policy (OSTP)
- 4. Affirm SECNAV and CNR position include reference to Reports to Congress (including Shipbuilding plan)
- 5. Tie to UNOLS operations and Fleet Improvement Committee input (e.g. Global Science Requirements complete or refine?)
- 6. Commercial Standards & Independence of Naval Fleet
- 7. No IT compatibility with DoD (e.g. unmanned systems)
- 8. Notes about options for NOAA, NATO, other agencies?
- 9. Designate as DOD ACAT III program (internal Navy formal declaration that tasks NAVSEA Shipbuilding
- 10. The program will begin with a Government Notional Design phase which will yield performance specifications, cost/performance trade studies, and a detailed engineering estimate. At the conclusion of that effort a single, two phased Request for Proposals (RFP) will be issued for the vessels' design and construction
- 11. PHASE I: Multiple funded contracts for preliminary designs based on the System Specification, tailored to the individual contractors' design and construction processes
- 12. PHASE II: Down-select to just one of the Phase I contractors for the Detail Design & Construction of the lead vessel and X follow on vessels