

Press Release

For Immediate Release

National Shipbuilding Research Program Selects \$5.4 million for R&D Project Portfolio

September 12, 2024-- The Executive Control Board of the [National Shipbuilding Research Program](#) (NSRP) selected a new round of R&D projects for award, as part of the Program's continuing mission to employ a unique collaborative framework to research, develop, mature, and implement industry-relevant shipbuilding and sustainment technologies and processes, improving efficiency across the U.S. shipyard industrial base and meeting future demand. The four projects, valued at over \$5.4M in government funding and industry cost share, were among those proposed in response to a Research Announcement issued on April 8, 2024. Abbreviated descriptions follow; prime contractors are listed first and noted in **bold text**:

Advanced Ergonomic Assessment

General Dynamics - Electric Boat | General Dynamics - NASSCO

Duration: 22 Months

Objective:

This project will utilize new technology for predicting ergonomic risks and preventing injuries in the General Dynamics - Electric Boat manufacturing plant. The team will develop a process for data-driven continuous ergonomic improvement utilizing leading indicators to help reduce injury rates across the shipbuilding industry.

Install of a Distributed Temperature Sensing System on Naval Vessel for Electrical Plant Monitoring

RSL Fiber Systems | Austal USA | Silixa USA | PSU-ARL | AIT | NAVSEA 05Z33 | NSWC Philadelphia Division Code 44 | NSWC Dahlgren Division

Duration: 24 Months

Objective:

This project will provide the final steps required to implement the Distributed Temperature Sensing (DTS) technology on Navy vessels to lower ships' Total Ownership Cost (TOC) by monitoring electrical switchboards in real-time to detect faults, isolate the location, determine the fault severity, and perform Condition Based Maintenance (CBM) before damage occurs.

Best Practices for Rapid Qualification of Additively Manufactured Parts

American Bureau of Shipping (ABS) | Fincantieri Marinette Marine | General Dynamics - NASSCO | GE Vernova Advanced Research | Oak Ridge National Laboratory | Siemens Digital Industries Software | NAVSEA 05T | USCG Surface Forces Logistics Center | NOAA Office of Marine and Aviation Operations | Maritime Administration Strategic Sealift

Duration: 24 Months

Objective:

This project will develop and demonstrate guidance on best practices for rapid qualification of additively manufactured (AM) parts to satisfy technical authority requirements for use on-board ships and other maritime assets. ABS will summarize the research work in a new ABS guidance publication to help disseminate lessons learned from the project across Government agencies and industry.

USCG Product Lifecycle Management Data Requirements

SSI USA | Eastern Shipbuilding Group | Austal USA | U.S. Coast Guard Baltimore Shipyard | Birdon US

Duration: 24 Months

Objective:

This project will review sustainment data requirements for the United States Coast Guard (USCG) that can be harvested from the 3D Product Build Model. Additional data requirements needed for the USCG product lifecycle management (PLM) product will be determined during this project and mapped through an interface between the respective shipyard's PLM products. The project results will enable the USCG to extract useful lifecycle support data from authoritative sources with lower labor content.