

CNST Awards Laser Image Projection Project in Support of Virginia Class Submarine Program

The Center for Naval Shipbuilding Technology through its partnership with the Office of Naval Research and Navy ManTech – recently awarded a \$500K project to Electric Boat Corporation (EB) to evaluate new methodologies for locating attachments and penetrations onboard Virginia Class Submarines (VCS).

Electric Boat (a subsidiary of General Dynamics Corporation) designs, constructs, and outfits vessels for the U.S. Navy VCS program. The current process for locating attachments and penetrations is labor-intensive, lacking automation. However, the availability of 3D ship design data in digital format and the development of new layout technologies present opportunities for considerable reduction in labor hours and cycle time.

This project will evaluate two potential solutions: laser image projection and a local global positioning system. While both technologies are somewhat mature, their use for the proposed purpose is innovative.

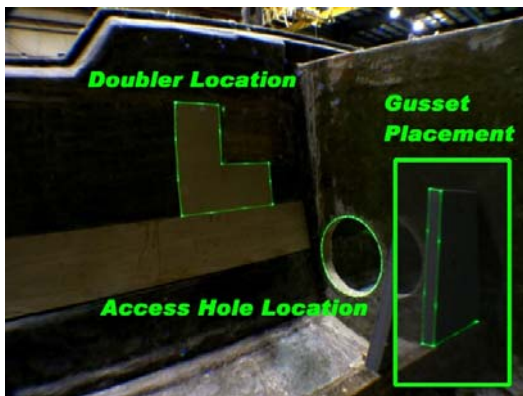


Image Projection Graphic from Laser Projection Technologies, Inc.

The project team will compare system requirements with available technological capabilities, and execute a detailed test plan in accordance with the proposed system architecture. For each technology, the investigation will address implementation issues and will also evaluate the accuracy and quantify the benefit compared with the current methodology. The project will culminate with a comprehensive plan for full implementation, to be carried out by EB.

Findings from this project should be applicable and benefit construction activities at other major shipyards.

Improvements to this methodology are not limited to submarines, but are applicable to aircraft carriers and other surface combatants.

About CNST

CNST is a Navy ManTech Center of Excellence, chartered by the Office of Naval Research (ONR) to identify, develop and deploy, in U.S. shipyards, advanced manufacturing technologies that will reduce the cost and time to build and repair Navy ships. For additional information on this and other CNST projects, please visit www.cnst.us.