



**National Shipbuilding Research Program
Advanced Shipbuilding Enterprise**

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For Immediate Release

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NSRP EXECUTIVE BOARD SELECTS 10 NEW SHIPBUILDING R&D PROJECTS

The Executive Control Board of the National Shipbuilding Research Program Advanced Shipbuilding Enterprise (NSRP ASE) has announced selection of 10 new research projects as part of the Navy/Industry co-funded portfolio specifically designed to save taxpayers money in Navy shipbuilding and ship repair. This action occurred during the Board's April 10 meeting in Charleston, S.C. The Navy's continued sponsorship of the Program is a reflection of their ongoing commitment to cost reduction in building and maintaining the fleet. The 10 new projects, valued at approximately \$18 million including industry cost share, were in response to the latest NSRP solicitation released in November 2007. A brief description of each project with a list of participants and funding information follows.

Development of Manufacturing and Assembly Technology for Low Cost Pultruded Composites

Description: This proposal responds to Navy interest in researching and adapting advanced materials and designs to reduce weight, realize greater fuel economy and increase lifespan in future Naval ships, as expressed by the Program Executive Officers who oversee Navy shipbuilding programs. To realize the reduced maintenance cost and weight savings associated with composites, this effort will build on the promising results of the ongoing NSRP pultrusion joining project which has demonstrated the rapid assembly of flat panels with integrated edge joints. This follow-on effort will apply the same labor saving methodology to other joints needed in complex structures, including four joints (flat, "L", "T", and cruciform), plus a panel edge feature, which will be designed to mate with any of the four joint configurations. Standardized pultruded joints will essentially permit the manufacturing process to more closely resemble snapping the panels together to make the structure. Finite Element Analysis will be performed and each joint will be compared to the corresponding joint constructed using the current standard Vacuum Assisted Resin Transfer Molded process.

Participants: Northrop Grumman Shipbuilding—Gulf Coast, Material Sciences Corporation, West Virginia University, KaZak Composites

Program Funding: \$1.1M **Industry Cost Share:** \$1.1M