Executive Control Board selects new round of R&D Projects

$2.5M Awarded

On September 22, 2016 The National Shipbuilding Research Program (NSRP) Executive Control Board selected 18 new research and development projects for award as part of NSRP's core mission to reduce the costs associated with Navy shipbuilding and repair. The projects, totaling $2.5M, will be executed through the 10 NSRP Panels, which serve as the program's primary public forum for industry-wide networking, technology transfer and best-practice sharing; and the Commonality Working Group. Click through to the press release for more information.

Research Announcement (RA) 15-01 Solicitation

On June 30, 2016, the National Shipbuilding Research Program issued Research Announcement 15-01 to solicit proposals for research, development and implementation of best practices in the U.S. Shipbuilding and repair enterprise.

Proposals have been submitted to ATI. The Technical Evaluation Review Panel convened October 18-21 to review proposals and has provided recommendations to the Blue Ribbon Panel, which meets on 15 November.

The Executive Control Board will meet in December to select projects for award.
RECENT PROJECT NEWS

**Computer-Aided Robotic Welding (CAR-W)** - The project team held their year 1 demonstration at Wolf Robotics in Fort Collins, CO on July 12, 2016. This milestone marked the end of Phase I and showcased the groundbreaking CAR-W automatic path planning technology on a gantry solution custom-designed for Bollinger Shipyards. The demo was attended by civilian and military Navy representatives, the NSRP Executive Control Board Chair, and several representatives from NSRP member shipyards.

The day included a tour of Wolf Robotics, Technical Sessions describing both the Engineering and Production workflows associated with CAR-W implementation, and a live welding demo of Bollinger’s production components. Phase II of the project will include installation of the gantry at Bollinger Shipyards and a final project demonstration of the production installation.

**HiDep Welding Process for Butt & T-Fillet Joints Implementation** – The project team recently completed the design of the Hybrid Induction Arc Welding (HIAW) system for the Ogden Gantry at Bollinger Shipyards. The Hi-Dep welding system was assembled at the Energyn Tech facility where it is now being used on the laboratory gantry to develop welding procedures for the installation at Bollinger. The team completed the mounting system and induction system designs. The project aims to reduce weld distortion by 50%, improve production speed welding on production length joints by 50%, and reduce welding costs (labor, consumables, and power) by 50%.

RECENTLY COMPLETED PROJECTS:

- **Monatomic Hydrogen Control in High Strength Steel**
- **Alternative Corrosion Control Methods for Inaccessible Void Spaces**
- **Safer Inspection of Medium-High Voltage Switchboards**
- **Flexible Infrastructure Qualification**
- **Evaluation of ICE Welding Technology for Enhanced Productivity and Distortion Reduction**

Click on the name to view the project page on the NSRP website and to request final reports.
The annual SNAME Maritime Conference was held November 1-5th in Bellevue, Washington. NSRP Panel Chairs and MITLs will be moderating technical papers that are part of the Ship Production Symposium. The 3rd annual NSRP Project Demos & Displays will be held during the Opening Reception in the Expo Hall. Over 20 NSRP project teams will be exhibiting the cutting-edge technologies, tools and processes they are developing, including:

- spARky
- Digital Deadweight Survey Project
- Fiber Optic Testing Enhancement for Cost Reduction
- Implementation of Robust Paperless Paint
- Improved Methods for Bonding and Grounding
- High-Speed, High Quality Welding of Copper Nickel Pipe Joints
- Partial Blast of Ultra High Solids Coated Tanks
- Thermal Spray Coating of 5xxx Aluminum

NSRP Day @ NAVSEA 2016

The 6th annual NSRP Day @ NAVSEA was held on September 23, 2016 at NAVSEA Headquarters. Mr. Bill Deligne kicked off the event and there was great attendance by Navy personnel. Over 30 NSRP project teams participated and demonstrated their technologies.
NSRP
NSRP Extended Teams
August-October 2016

Major Initiative Team Leads

The NSRP Extended Team is comprised of individuals who are either from a U.S. shipyard or a related industry and have both relevant technical experience and interest in a Major Initiative and/or panel.

### Ship Design & Material Technologies
- **Lead:** David Rice (NNS)
- **Asst Lead:** Dan Sfiligoi (NASSCO)

### Ship Production Technologies
- **Lead:** Gary Zimak (NNS)
- **Asst Lead:** Kirk Daniels (EB)

### Business Processes & Information Technologies
- **Lead:** Mark Debbink (NNS)
- **Asst Lead:** Jeff Schaedig (NASSCO)

### Infrastructure & Support
- **Lead:** Denny Moore (EB)
- **Asst Lead:** Ryan Lee (Austral)

### MITL-at-large
- Barry Fallon (NNS)
- Steve Cogswell (BAE)
- John Walks (Ingalls)
- Paul Friedman (BIW)
- Mimi Vymola (EB)

#### Current Major Initiative Team Leads

<table>
<thead>
<tr>
<th>Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team Lead</td>
</tr>
<tr>
<td>From NSRP member yard</td>
</tr>
</tbody>
</table>

#### Responsibilities

- Provide technical oversight on projects aligned with Major Initiative
- Engage in technology transfer activities
- Provide input/feedback on Program documents
- Stay abreast of shipyard/industry current issues

### NSRP Shipyard Delegates

NSRP Shipyard Delegates (NSD) serve as a primary point of contact for NSRP-related information flowing into and out of their shipyards. For those ECB shipyards who are not represented on the MITL slate, a qualified individual is appointed by the ECB representative from that shipyard to serve as NSD.

#### Newport News
- Alicia D’Aurora

#### NASSCO
- Jeff Schaedig

#### Bollinger
- Dennis Fanguy

#### Austal
- Shawn Wilber

#### Bath Iron Works
- Sarah Bramson

#### Electric Boat
- Ingalls

#### Marinette Marine
- John Walks

#### BAE Systems SE
- Greg Abbs

#### VT Halter
- Steve Cogswell

#### David Delancey
The eleven panels are aligned with the four NSRP Major Initiatives and focus areas of the Strategic Investment Plan, and are the working groups of NSRP.
**NSRP MISSION**

Manage and focus national shipbuilding and ship repair research and development funding on technologies and processes that will reduce the total ownership cost of ships for the U.S. Navy, other national security customers and the commercial sector and develop and leverage best commercial and naval practices to improve the efficiency of the U.S. shipbuilding and ship repair industry. Provide a collaborative framework to improve shipbuilding-related technical and business processes.

For more information, contact the NSRP staff at: nsrp@ati.org

www.nsrp.org