# NSRP National Shipbuilding Research Program



News & Information

August 2018

#### Research Announcement (RA) 19-01 Solicitation Released

On July 6, 2018, the National Shipbuilding Research Program issued <u>Research Announcement 19-01</u> to solicit proposals for research, development and implementation of best practices in the U.S. Shipbuilding and Repair Industry.

Proposals are due to ATI by September 13, 2018. The Technical Evaluation Review Panel will convene in October to review proposals and provide recommendations to the Blue Ribbon Panel, which meets in November.

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



#### NSRP ECB Welcomes Todd Hooks

August 2018

# **TODD HOOKS**General Manager, BAE Systems Jacksonville Ship Repair



Mr. Hooks is currently the General Manager of BAE Systems Jacksonville Ship Repair. Where he is responsible for managing the organization that provides ship maintenance and modernization services to the U.S. Navy at the Mayport Naval Station as well as providing commercial ship repair services through the company's shipyard in Jacksonville, Florida. He assumed his current role in November 2017.

Mr. Hook joined BAE Systems in September 2013, as the director of CVN/Amphibious Programs for Norfolk Ship Repair (NSR). In addition to those ship programs, he was responsible for NSR's Logistics Support department, which included planning, scheduling and work integration activities, and the Navy's Big Blue modernization program. Before his general manager role, he served as the Ship Repair director of business development, primarily supporting activities at the company's shipyards in Florida and Alabama.

Prior to joining BAE Systems, he served nearly 25 years in the U.S. Navy, first as a surface warfare officer and later as an engineering duty officer. His last active-duty assignment was as the engineering and maintenance officer on the Naval Surface Forces, U.S. Pacific Fleet staff. He retired in the rank of Captain in 2013.

His educational background includes a bachelor's degree in physics from Virginia Military Institute and was commissioned via the Naval Reserve Officers Training Corps program. He earned a master's degree in physics from Naval Postgraduate School in Monterrey, California.

**Project News** 

August 2018

## Assisted Decision Support System for Outfitting Work Content Palletization

The "Assisted Decision Support System for Outfitting Work Content Palletization" Research Announcement project was implemented in production at GD NASSCO in March 2018. The system is being used to develop work packages for the TAO (Fleet Oiler) program. In addition to the software system, the project developed a qualified commercial resource for replicating these types of automated systems in other shipyards.

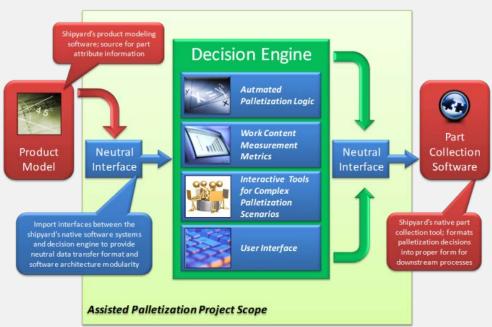
#### **Benefits Include:**

- A reduction in duration/equivalent labor in planning palletized work content, as well as a reduction in peak to valley differences for planning labor swings between first-of-class ships.
- The predicted labor savings for a first-of-class ship is 25%; equating to approximately \$220K for the Mobile Landing Platform (MLP).
- The system will automatically palletize or assist in palletizing 50% of outfit parts while preserving the quality of the output product
- The Auto Pallet system will greatly reduce manual errors that are expensive to encounter and correct in downstream production processes, and result in a more standardized product and process.
- The system's open architecture facilitates the changing of upstream and downstream software systems without requiring an overhaul of the decision engine.

Continued...

The objective of the NSRP Research Announcement project was to investigate assistance/automation opportunities in relation to the work package creation process (palletization), develop a solution, and implement the system with the goal of automatically palletizing and/or assisting in the palletization process of half (50%) of the outfit parts, while preserving or improving the quality of the output product. The developed system consists of (1) a neutral format CAD interface for part attribute input from the product model, (2) a decision engine consisting of the palletization logic and user interface, and (3) a neutral format interface for palletized part output, allowing a shipbuilder's native work package management tools to process the information for downstream use.

Additional information can be found on the <u>project page</u>.



The Auto Pallet software is available to NSRP ECB member shipyards by request and non-member U.S. shipyards may request approval for the software by contacting <a href="MSRP@ati.org">NSRP@ati.org</a>.

### NSRP

#### **Industry Events**

August 2018

#### ShipTech 2018 | March 27-28, 2018 | Charleston, SC

NSRP co-hosted and participated in ShipTech 2018 in Charleston, SC on March 27-28, 2018. The NSRP Booth participated in the expo and several NSRP Extended Team members assisted with moderation of the Technical



Sessions. Approximately 20 NSRP research announcement and panel projects presented or displayed posters during the conference.

Sea Air Space 2018 | April 9-11, 2018 | National Harbor, MD NSRP ATI staff and NAVSEA Program Office staff represented the program at the Navy League's Sea Air Space Symposium and Expo in National Harbor, MD April 9-11, 2018. The NSRP booth received excellent foot traffic, including interest from senior Navy stakeholders. Significant interest was shown in NSRP Panel participation and project selections. The 2019 Sea Air Space Symposium will take place May 6-8, 2019 at the Gaylord National Convention Center.

The Navy League's Global Maritime Exposition

#### **NSRP**

#### **NSRP Extended Teams**

August 2018

#### 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 (Austal)

MITLat-large

Anthony Ardito
(Austal)
Barry Fallon (NNS)
Steve Cogswell(BAE)
John Walks (Ingalls)
Mimi Vymola (EB)

Current Major Initiative Team Leads

# Structure Asst Team Lead From NSRP member yard Relevant shipbuilding experience

# 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	NASSCO	Bollinger	Austal	Bath Iron Works
Alicia D'Aurora	Jeff Schaedig	Brent Tompkins	Shawn Wilber	Sarah Bramson
Electric Boat	Ingalls	Marinette Marine	BAE Systems SE	Conrad
Mimi Vymola	John Walks	Charlie Jackson	Steve Cogswell	Joe Browning

#### **NSRP**

#### **NSRP Extended Teams**

August 2018

#### **Panel Chairs**

The ten panels are aligned with the four NSRP Major Initiatives and focus areas of the Strategic Investment Plan, and are the working groups of NSRP.

Ship Design & Material Technologies

Chair: Vice Chair: Monika
D'Aurora Skowronska
(NNS) (NASSCO)

Ship Warfare Systems Integration

Chair: Vice Chair:

Chair:Vice Chair:PerryVinceHaymonStammetti(Ingalls)(Alion)

Electrical Technologies

Chair: Jason Farmer (Ingalls)

Vice Chair: Walter Skalniak (Panduit Corp)

Planning, Production Processes & Facilities

Chair: Ken Fast (EB) Vice Chair: Bob Watkins (FMM)

Surface Preparation & Coatings

Chair: Arcino Quiero (NNS) Vice Chair: Robert Cloutier (BIW)

Welding Technology

Chair: Lee Kvidahl (Ingalls)

Vice Chair: TBD Business Technologies

**Chair:** Virgel Smith (Ingalls)

Vice Chair: Patrick Roberts (ShipConstructor)

Digital Shipbuilding Committee Chair:

Jamie Breakfield (Ingalls)

Environmental

Chair: Kyle Hopf (HII-TS) Vice Chair: Brian McVey (Ingalls)

Risk Management

Chair: Thresa Nelson (NNS) Vice Chair: Yaniv Zagagi (Golder)

Workers Comp Committee Chair: Lauren

Seals (EB)

Safety & Health Committee Chair: Frederick Davis (EB)

Workforce Development

Chair: Anna Bourdais (Ingalls)

Vice Chair: Nancy Martin (EB)

Structure

Chair

- From U.S. Shipyard
- Relevant industry experience

Vice-Chair

- Relevant technical and industry experience
- Preferably from a U.S.
   Shipyard

Members

**Industry and Navy stakeholders** 

Responsibilities

Oversee panel meetings

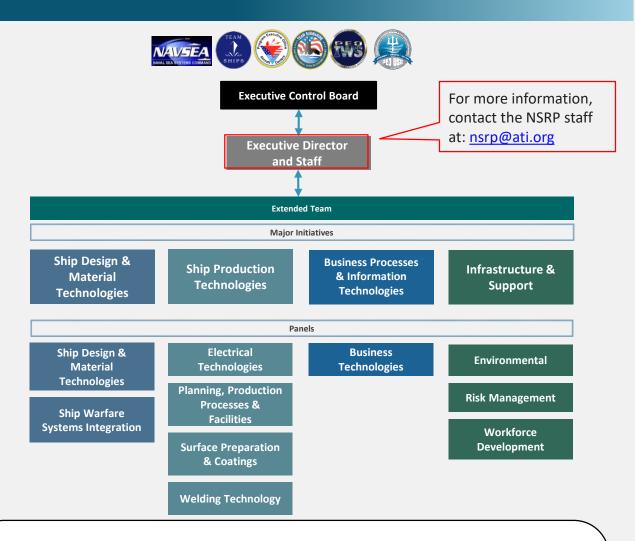
Provide technical oversight on panel projects

Assist in the execution of panel project solicitations

Participate in other technology transfer activities

Provide input/feedback on Program documents

Stay abreast of shipyard/industry current issues



#### **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.