Panel Brief

Ship Warfare Systems Integration Panel

Perry Haymon, Panel Chair

NSRP

NATIONAL SHIPBUILDING RESEARCH PROGRAM
Taking Shipbuilding and Repair to the Next Level

Prountly Celebrating 50 Years of Tunoxasian

Huntington Ingalls Industries, Ingalls Shipbuilding

SWSI Agenda

NSRP | National Shipbuilding Research Program

Panel Meeting

2023 NSRP Panel Meeting – Washington, DC 300 M St. Third Floor July 13, 2023

Room: Arleigh Burke Conference Room

Time	Presentation	Speaker
8:00 am	Convene Meeting	
8:00 am	Introduction / Panel Chair Welcome / Chair Report	Haymon
8:10 am	NSRP Update	ATI
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	Qualification and Optimization	H.G. Howard
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	Tray	Wilke Talley
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NSRP Program Overview Panel Meeting 13 July 2023



Anti-Trust Rules

- Regarding your company's and/or your competitor's product & services:
 - Do not discuss current or future prices.
 - Do not discuss any increase or decrease in price.
 - Do not discuss pricing procedures.
 - Do not discuss standardizing or stabilizing prices.
 - Do not discuss controlling sales or allocating markets for any product.
 - Do not discuss future design or marketing strategies.

Anti-Trust Rules

- Regarding your company's and/or your competitors' selection of their supplier companies:
 - Do not discuss refusing to deal with a company because of its pricing or distribution practices.
 - Do not discuss strategies or plans to award business to remove business from a specific company.
- Regarding your company's and/or competitors' **trade secrets**:
 - Do not discuss trade secrets or confidential information of your company or any other participant.

Today's meeting is an open forum- keep discussion at the "Public Release" level

NSRP Mission

The mission of the National Shipbuilding Research Program (NSRP) is 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.

NSRP Collaboration







GENERAL DYNAMICS
Bath Iron Works







Electric Boat

NATIONAL SHIPBUILDING RESEARCH PROGRAM™

Taking Shipbuilding and Repair to the Next Level











Organization













Executive Control Board

Program Administrator

Extended Team			
Major Initiatives			
Information, Design, & Integration	Ship Production Technologies	Infrastructure, Logistics, & Sustainment	
	Panels		
Ship Design & Material Technologies	Electrical Technologies	Workforce & Compliance	
Ship Warfare Systems Integration	Planning, Production Processes & Facilities	Sustainment	
Business Technologies	Surface Preparation & Coatings		
	Welding Technology		

Major Initiative Teams

Information, Design, &	Ship Production	Infrastructure, Logistics, &	MITL-At-Large
Integration	Technologies	Support	
Dan Sfiligoi (NASSCO)	Craig Haverly (EB)	Alicia Harmon (NNS)	John Walks (Ingalls) Gary Zimak (NNS) Adam Sprecace (EB) Pat Kitchel (BAE Ship Repair) Tony Ardito (Austal)
Michael Gerardi (BIW)	Vacant	Dru Khaira (BIW)	

Structure

- From NSRP member yard
- Relevant shipbuilding experience

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 issues

Panel Leadership

Information, Design, & Integration

Ship Design & Material Technologies

Chair: Monika Skowronska (NASSCO) Vice Chair: Victoria Dlugokecki (Consultant)

Ship Warfare Systems Integration

Chair: **Perry Haymon** (Ingalls) Vice Chair: **Harold Howard** (NNS)

Business Technologies

Chair: **Jamie Breakfield** (Ingalls) Vice Chair: **Patrick Roberts** (ShipConstructor) Ship Production Technologies

Electrical Technologies

Chair: **Jason Farmer** (Ingalls) Vice Chair: **Walter Skalniak** (Ashby)

Planning, Production Processes & Facilities

Chair: **Vacant**Vice Chair: **Pat Cahill** (Cahill
Consulting)

Surface Preparation & Coatings

Chair: Vacant Vice Chair: Bob Cloutier (Consulting)

Welding Technology

Chair: **Paul Herbert** (NNS) Vice Chair: **Kevin Roossinck** (Ingalls) Infrastructure, Logistics, & Support

Workforce & Compliance

Chair: Vacant
Vice Chair: Maurissa D'Angelo
(D'Angelo Technologies)

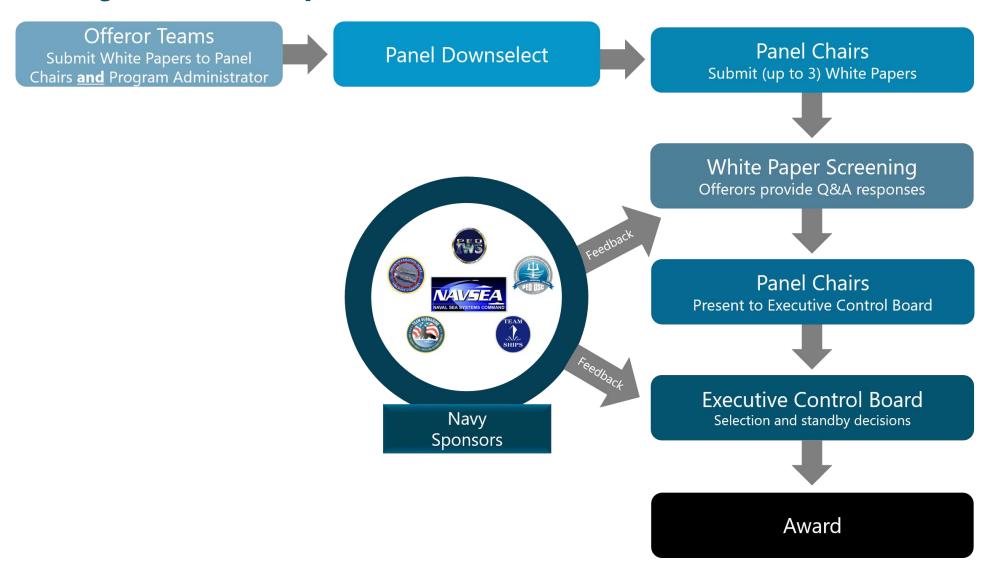
Sustainment

Chair: **Kirsten Walkup** (BIW)
Vice Chair: **Kaipo Crowell**(Kakou Professional
Development)

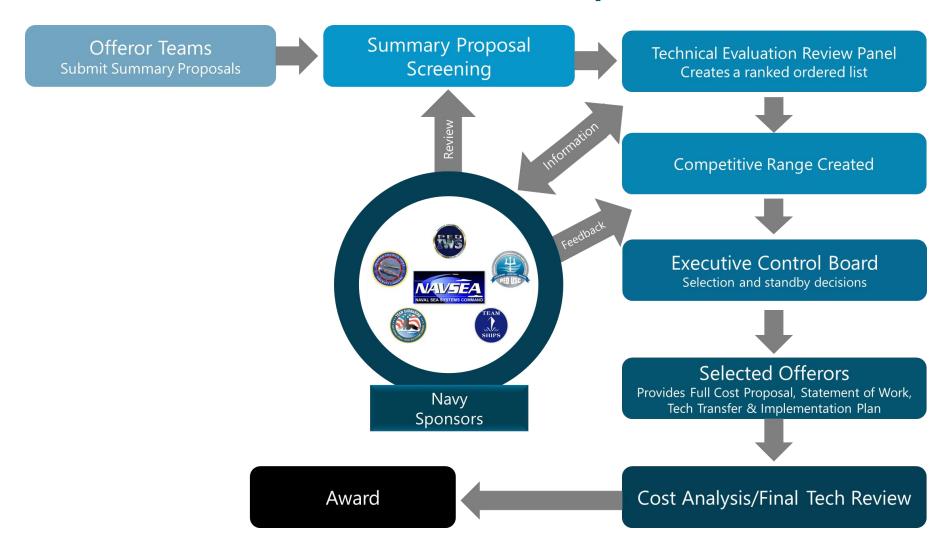
Operations Strategic Investment Plan Technology Investment Plan Shipbuilding Industry **Executive Control Board** Navy **NSRP R&D Project Portfolio Sponsors Competitive Selection** Feedback: Metrics/Benchmarking RA **Panel Projects Projects** Implementation **\$ Millions Up to \$150K** Up to 24 months 1 Year duration Multi-phase Technology Transfer **Panel Meetings**

Conferences

Panel Project Proposal Process



Research Announcement Proposal Process



NSRP LinkedIn Page and Mailing Lists



Follow NSRP on LinkedIn to get the latest Program updates, event notifications, shipyard updates, and networking opportunities.

subscribe to the NSRP General Info mailing lists or individual panel mailings

lists.

NSRP LinkedIn Page

NSRP YouTube Page



Created playlists



EWI Robotic Arc DED AM **Advanced Capabilities Workshop**

VIEW FULL PLAYLIST

Project Workshops

VIEW FULL PLAYLIST

VIEW FULL PLAYLIST

Highlights

2021 Virtual NSRP All Panel Meeting

VIEW FULL PLAYLIST



2015 L&D Innovation Project VIEW FULL PLAYLIST

NSRP YouTube Page

Questions?



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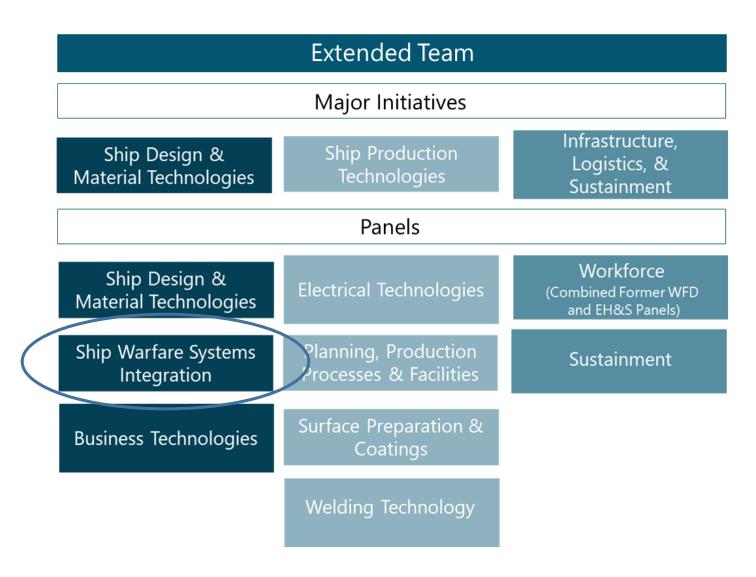
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NSRP National Shipbuilding Research Program

Panel Status



FY22 Organization



Organization













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Program Administrator

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Business Technologies	Surface Preparation & Coatings		
	Welding Technology		

Background

- In 2012 PEO Integrated Warfare Systems (PEO IWS) was added as a funding sponsor for NSRP
- At the March 2012 ECB Meeting ATI (Formally SCRA) was tasked with forming a Working Group
 - ATI with inputs from the Executive Control Board (ECB) yards and NAVSEA held a conference call to determine a way to better involve PEO IWS
 - Participants in the conference call agreed on the benefits of getting PEO IWS more involved with the shipyards.
- At the June 2012 quarterly meeting ECB voted to formally establish the NSRP IWS Working Group and fund associated travel expenses.
 - The First and only meeting of the Working group was held in DC on July 18, 2012
 - Present at the meeting included Six Shipyards, NAVSEA and PEO IWS.
 - It was recommended by the group that NSRP form an Integrated Warfare Systems Panel
- At the September 2012 ECB meeting the board voted to formally stand up the Ship Warfare Systems Integration Panel (SWSI).

SWSI providing the opportunity to look beyond just shipbuilder costs

SWSI Mission Statement

- Reduce the costs of integration and test for warfare and communication systems in ship construction and maintenance/ modernization.
- Facilitate communications among Navy programs, warfare system integrators, communication system integrators, ship designers, shipbuilders and other NSRP panels.

SWSI Focus Areas

- Promote standardization of physical interfaces between GFE/CFE and shipboard spaces.
- Promote ship mission system infrastructure flexibility, modularity and scalability.

SWSI Projects

- ~17 panels projects have been completed
- One Special Pilot Project Common Interface Pilot Program (CIPP)
- 2 Panel Projects added for 2023
- The majority of the Project focused on physical Interfaces been equipment and ship structure
- These efforts helped transition technology found on the Ford Class to LHA 8 and LPD 29 and follow (Flexible Infrastructure)

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NSRP - Combat Systems Standard Foundation Qualification & Optimization March 30th 2023

Harold Howard - Newport News Shipbuilding
Ify Amene - Newport News Shipbuilding



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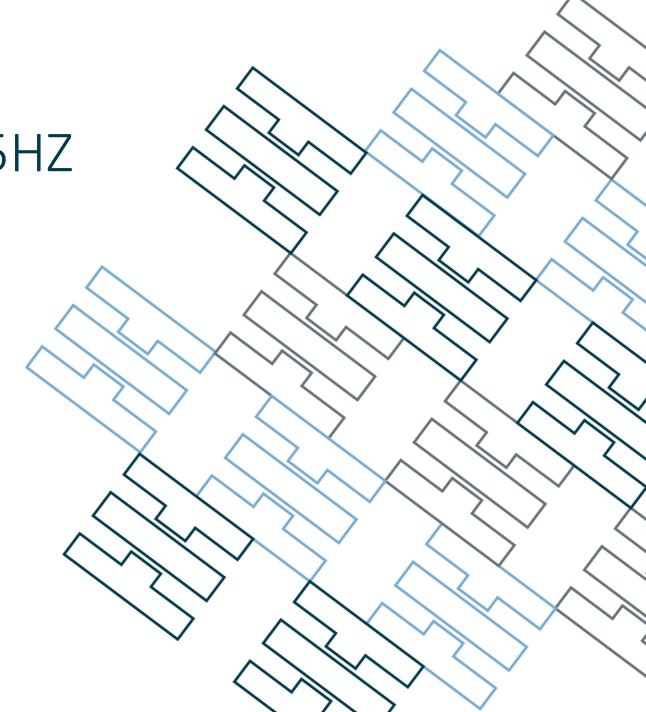
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PERFORMANCE
IMPROVEMENT FOR 25HZ
DSSM SPRING TRAY

Newport News Shipbuilding
A Division of HII

Michael Talley, DSc. SWSI Panel Meeting March 30, 2023



Questions?



901 D Modular Enclosure "Rack for Life"

Curtiss - Wright



SWSI Panel Meeting July 13, 2023

Questions?



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FY24 PANEL PROJECT SOLICITATION Overview



SWSI Panel Meeting July 13, 2023

WHITE PAPER TOPICS OF INTEREST

- Panel Project White Papers addressing topics from the multi-year <u>Strategic Investment Plan (SIP)</u> as amplified by the annual <u>Technology</u> <u>Investment Plan (TIP)</u> will be of particular interest. This solicitation is issued to solicit White Papers for research, development and implementation of best practices in the U.S. shipbuilding and repair enterprise.
- Panel Officers should strongly encourage their membership to review both the <u>SIP</u> and the latest <u>TIP</u> prior to submission of White Papers under this solicitation. However, this is not meant to restrict the process. Both during Panel White Paper submissions and during ECB selection, the objective is always to fund the best available projects that support the NSRP mission with the money available.

• The ECB will evaluate White Papers for selection using criteria that include, but are not limited to, those shown below. Offerors, Panels, and Panel Officers should also consider these criteria when submitting and when deciding which White Papers to select for consideration by the ECB.

 Technology transfer and implementation objectives that benefit both industry and Government are clearly stated.

NOTE: "Technology transfer and implementation" involves more than simply giving presentations at meetings and conferences. NSRP project proposals should include not only plans for disseminating information but also plans for others to receive that information and act on it to realize benefits from the project results. Develop these plans with the following steps in mind, along with other guidance in the NSRP Technology Transfer and Implementation Guide:

- Disseminate project information during the project execution;
- Facilitate adoption of the technologies and/or processes developed under the project across the industry (including public and private shipyards);
- Describe methods to engage industry and Government stakeholders, including plans for obtaining any Government approval, if applicable; and
- Transition the final project results to the U.S. shipbuilding and ship repair industry

- Reasonableness of proposed costs.
- Participation by one ECB member shipyard is required.
 Participation by multiple shipyards is preferable.
- Other non-ECB member shipyards, organizations and/or companies that have committed to participate should be clearly identified. If the Project Lead is a shipyard, commitment by the technical department, as well as the business/financial authority, is critical.
- Government technical community involvement, if applicable
- Government acquisition program office involvement, if applicable
- For projects that involve a survey, submissions should include evidence of a commitment by the target audience to participate in the survey.
- Risks to successful project completion are identified, along with mitigation strategies.

 All projects, if applicable, shall include Government Purpose Rights, as defined in the Base Task Order Agreement. Specially-negotiated rights are subject to approval by the NSRP Agreements Officer prior to award. Unless otherwise specifically negotiated and approved, the Government will obtain Government Purpose Rights to all intellectual property (IP) developed under the NSRP Program including IP developed using cost share sources. Any request for speciallynegotiated rights (other than Government Purpose Rights) must be disclosed in the White Paper for consideration and approval. The ECB will factor less-than-full Government Purpose Rights for IP into their selection decisions.

- For projects with otherwise equal merit, the ECB may favor those projects that can be implemented more readily.
- For higher TRL White Papers, the likelihood that the proposed effort (upon its completion) will meet the requirements of "Ready for Implementation," as detailed in the Panel Project Guide.

DEADLINES – These are Hard Date

- Deadline for Offerors to submit White Papers to BIDS is 4:00 p.m. ET on <u>August 25, 2023</u>.
- Deadline for Panel Chairs to submit up to three White Papers and one joint White Paper to ATI is 4:00 p.m. ET on September 22, 2023. Panel Chairs shall submit White Paper(s), using BIDS
- Deadline for Offerors whose White Paper is one of a Panel's top three and one joint White Paper to submit to ATI the Supporting Cost Data Table, required by the Panel Project Guide – Rev. V, is 4:00 p.m. ET on <u>September 27, 2023</u>.

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