

NSRP | National Shipbuilding Research Program

2025 NSRP All Panel Meeting

Charleston, SC

February 25-27, 2025

AGENDA

Tuesday, February 25, 2025

7:00	CONTINENTAL BREAKFAST <i>Crystal Ballroom</i>
8:00	GENERAL SESSION <i>Crystal Ballroom</i>
8:00	Welcome and Meeting Overview – Mark Smitherman, Executive Director, National Shipbuilding Research Program
8:15	David Bolcar, Executive Control Board Chair, HII – Newport News Shipbuilding/Colin Dunlop, NSRP NAVSEA Program Manager, SEA 05T
8:45	Larissa Smith, Deputy Director, Advanced Manufacturing Technology, DRPM Maritime Industrial Base
9:15	Tim Barnard, Director, NAVSEA Technology Office, SEA 05T
9:45	BREAK
10:00	GENERAL SESSION <i>Crystal Ballroom</i>
10:00	NSRP State of the Panel – Electrical Technologies – Jason Farmer, Panel Chair – HII-Ingalls Shipbuilding
10:10	NSRP State of the Panel – Ship Design and Material Technologies – Monika Skowronska, Panel Chair – GD NASSCO
10:20	NSRP State of the Panel – Sustainment – Kirsten Walkup, Panel Chair – GD Bath Iron Works
10:30	NSRP State of the Panel – Planning, Production Processes and Facilities – Peter Radzicki, Panel Chair – GD NASSCO
10:40	NSRP State of the Panel – Surface Preparation and Coatings – Conlan Hsu, Panel Chair – HII-Newport News Shipbuilding



AGENDA

Tuesday, February 25, 2025

10:50	NSRP State of the Panel – Business Technologies – Jamie Breakfield, Panel Chair – HII-Ingalls Shipbuilding		
11:00	NSRP State of the Panel – Workforce & Compliance – Ean Greene, Panel Chair – HII-Newport News Shipbuilding		
11:10	NSRP State of the Panel – Ship Warfare Systems Integration – Perry Haymon, Panel Chair – HII-Ingalls Shipbuilding		
11:20	NSRP State of the Panel – Welding Technology – Kevin Roossinck, Panel Chair – HII-Ingalls Shipbuilding		
11:45 - 1:00	LUNCH (Provided)		
	Panel Meetings in Crystal Ballroom Breakout Rooms and via ZoomGov		
	Business Technologies <i>Room B</i>	Welding Technology <i>Room C/D</i>	Sustainment <i>Room E</i>
1:15-5:00	Panel Meeting	Panel Meeting	Panel Meeting
5:00 – 7:00	RECEPTION (Cash Bar) <i>Outer Hall & Crystal Ballroom</i>		

NSRP | National Shipbuilding Research Program

AGENDA

Wednesday, February 26, 2025

7:00	CONTINENTAL BREAKFAST <i>Crystal Ballroom</i>
8:00	GENERAL SESSION <i>Crystal Ballroom</i>
8:10	Neil Graf, ManTech Program Lead, Office of Naval Research
8:30	Dr. Jennifer Wolk, ONR Code 333 Department Head
9:00	Roger Camp, Senior Director for Business Development, Hanwha Philly Shipyard
9:30	BREAK
10:00	ManTech Centers of Excellence Update – Dan Reed, Naval Shipbuilding & Advanced Manufacturing
10:15	ManTech Centers of Excellence Update – Andrew Trageser, Electro-Optics Center
10:30	ManTech Centers of Excellence Update – Mark Snider, Center for Naval Metalworking
10:45	ManTech Centers of Excellence Update – Chris Ligetti, Institute for Manufacturing & Sustainment Technology
11:00	ManTech Centers of Excellence Update – Leslie Hill, Composite Manufacturing Technology Center
11:15	ManTech Centers of Excellence Update – Ken Freyvogel, Electronics Manufacturing Center

AGENDA

Wednesday, February 26, 2025

11:45 - 1:00	LUNCH (Provided)		
	Panel Meetings in Crystal Ballroom Breakout Rooms and via ZoomGov		
	Workforce and Compliance <i>Room B</i>	Ship Design and Material Technologies <i>Room C/D</i>	Planning, Production Processes, and Facilities <i>Room E</i>
1:15-5:00	Panel Meeting	Panel Meeting	Panel Meeting
5:00	ADJOURN		

AGENDA

Thursday, February 27, 2025

7:00	CONTINENTAL BREAKFAST <i>Crystal Ballroom</i>		
Panel Meetings in Crystal Ballroom Breakout Rooms and via ZoomGov			
	Ship Production Technologies Track <i>Room B</i>	Electrical Technologies & Ship Warfare Systems Integration <i>Room C/D</i>	Surface Preparation and Coatings <i>Room E</i>
8:00 - 11:30	Technical Briefs	Joint Panel Meeting	Panel Meeting
11:30 - 1:00	LUNCH (Provided)		
	Ship Warfare Systems Integration <i>Room B</i>	Electrical Technologies <i>Room C/D</i>	Surface Preparation and Coatings <i>Room E</i>
1:15 - 4:30	Panel Meeting	Panel Meeting	Panel Meeting
All Panel Meeting Adjourned			

NSRP | National Shipbuilding Research Program

Business Technologies Panel Meeting

2025 NSRP All Panel Meeting – Charleston, S.C.

Charleston Marriott

February 25-27, 2025

Meeting Agenda

**Times listed are Eastern Time Zone*

Tuesday, 2/25/2025

Room B

Time	Presentation	Speaker
1:15	Welcome/Introduction	Panel Leadership
1:15	NSRP Anti-Trust Rules	ATI
1:25	Panel Chair	Jamie Breakfield, BT Panel Chair
1:30	Presentations	
1:30	Navy ManTech: Point Cloud Conversion for Detailed Design	Ken Crowe, GD-BIW
2:00	NSRP RA Project: Enterprise-wide Digital Accuracy Control in a Digital Environment	Colin Smith, Newport News Shipbuilding
2:30	BT Panel Project: Optimized Weld Records Phase Two	Megan Brinker, TRU
3:00	Break	
3:15	NSRP RA Project: USCG Product Lifecycle Management Data Requirements Interface Mapping	John Walks, SSI USA, Walks Maritime Capt. Emily Tharp, USCG
3:45	Navy ManTech: Temporary Services Call Board	Jamie Breakfield, Ingalls Shipbuilding
4:15	NSRP RA Project: Automated Detailed Planning and Integrated Shipyard Operations with Engineering Data	Robert Parker, SSI USA Ronald deVries, Floororganise
4:45	Panel Business	Panel Leadership
5:15	Adjourn	

NSRP | National Shipbuilding Research Program

Welding Technology Panel Meeting

2025 NSRP All Panel Meeting – Charleston, S.C.

Charleston Marriott

February 25-27, 2025

Meeting Agenda

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Tuesday, 2/25/2025

Room C/D

Time	Presentation	Speaker
1:15 PM	Convene Meeting	
1:15 PM	Panel Chair Welcome/NSRP Update	Kevin Roossinck Welding Technology Panel Chair
1:30 PM	NSRP RA Project: Camera "In The Torch" Welding System Productization	Nick Herrera/Lisa Elles Pacific Shipyards International
2:00 PM	Welding Panel Project: Semi-Automatic Pit Repair	Jim Hansen EWI
2:30 PM	Navy ManTech: One-Sided Tie-Down Welding and Inspection	Jonathan Roberts Ingalls Shipbuilding
3:00 PM	Break	
3:15 PM	Navy ManTech: Inner Bottom Transformation	Dan Meath/Jonathan Roberts ATI/Ingalls Shipbuilding
3:45 PM	Welding Panel Project: Handheld Laser Welding	Ryder Gilmore Schweitzer Engineering Lab
4:15 PM	Navy ManTech: Automated Hull Access Welding and Cutting Applications	Gary Rosetti Ingalls Shipbuilding
4:45 PM	Closing Remarks/Adjourn	Kevin Roossinck Welding Technology Panel Chair



Sustainment Panel Meeting, All Panel – Charleston, SC

Tuesday, 2/25/2025 – Agenda is in Eastern Standard Time

	Presentation	Speaker
1:00 pm	Welcome	Kirsten Walkup Sustainment Panel Chair
1:30 pm	Project Presentation – Building Failure Data and Prediction Models for Ship Sustainment	Mark Debbink HII - Newport News Subrat Nanda - ABS
2:00 pm	Project Update – Body Cooling Technology	Karen Cassidy HII – Ingalls Shipbuilding
2:30 pm	Project Update - Digital Twin Technologies for In-Situ Ballast Tank Inspection	Cody Porter - SwRI
3:00 pm	Project Update - Defect Characterization of Navy Ship Structures with Active Ultrasonic Mode Imaging	Gerald Addison – Antech
3:30 pm	Presentation – Drydocking Technology	Alex Stiglich DM Consulting
4:00 pm	Project Update – Intumescent Fire Protection	Stan Bovid – Hepburn & Sons
4:30 pm	Wrap-up & Adjourn	

Workforce and Compliance Panel Meeting

26 February, 2025

Time (EST)	Presentation	Speaker
1:15 PM	Introductory Statements	Ean Greene (NNS)
1:25 PM	NSRP Program Update	Lydia Szydlo (ATI)
1:35 PM	ODIN Tool Overview & Demo	Ted Dennis (Valkyrie)
2:35 PM	Opportunities in Shipbuilding Ergonomics & Training through Deep Learning and Simulation	Michel Audette (ODU)
3:35 PM	--Break--	
3:50 PM	Body Cooling Technology Study	Dr. Karen Cassidy (Ingalls)
4:20 PM	Cooling Suits for Increased Worker Efficiency	William Robinson (GD-EB)
4:40 PM	Closing Statements & Networking	Ean Greene (NNS), All

Ship Design & Material Technologies Panel Meeting

2025 NSRP All Panel Meeting – Charleston, S.C.

Charleston Marriott

February 25-27, 2025

Meeting Agenda

**Times listed are Eastern Time Zone*

Wednesday, 2/26/2025

Room C/D

Time	Presentation	Speaker
1:00 PM	Convene Meeting	
1:00 PM	Panel Chair Welcome/Panel Chair Update	Monika Skowronska, SDMT Panel Chair
1:15 PM	SDMT Panel Project: Navy Standard Bookend Fixtures for Shock Testing	Gibbs and Cox
1:45 PM	SDMT Panel Project: Data-Centric Detail Design and Drafting Process Improvements	Greg Kangas, Hawk Technologies
2:15 PM	SDMT Panel Project: Industry Recommended Framework and Implementation Roadmap for Delivering Cyber-Ready Ships	Harshal Patil, ABS
2:45	Break	
3:00 PM	NSRP RA Project: Develop a Fast Analysis Solver for Weld Sequencing	Steve Scholler, Ingalls
3:30 PM	NSRP RA Project: Increase Steelwork Throughput and Reduce TOC by Leveraging Structural Design Optimization Tools Integrated with Process-Oriented Work-Content Tools for Preliminary Design	Tobin McNatt, MAESTRO Marine LLC
4:00 PM	NSRP RA Project: Lift Ship III	Darren Guillory, SSI
4:30 PM	Closing Remarks	Monika Skowronska, SDMT Panel Chair
5:00 PM	Adjourn	

Planning, Production Process, & Facilities Panel Meeting

2025 NSRP All Panel Meeting – Charleston, S.C.

Charleston Marriott

February 25-27, 2025

Meeting Agenda

**Times listed are Eastern Time Zone*

Wednesday, 2/26/2025

Room E

Time	Presentation	Speaker
1:15 PM	Convene Meeting	
1:15 PM	Panel Chair Welcome/Panel Chair Update	Peter Radzicki, PPPF Panel Chair
1:30 PM	Fast Docking System Study	Alex Stiglich, PE, DM Consulting
1:55 PM	Shipbuilding COBOT Alliance	Patrick Cahill, Cahill Consulting
2:20 PM	Plug-and-Play Cobotics	Ryan Gneiting, EWI
2:45 PM	Enhancing Production Through Smart Robotic Automation	Tom Rodenberg, Kranendonck
3:10 PM	Break	
3:20 PM	Lead Ladle Replacement	Geoff McGraw, ATI John Lovezzola, Electric Boat
3:45 PM	Ballast Bay Packing	Connor McNulty-Ule, Electric Boat
4:10 PM	Robotic Blending of Large Diameter Internal Piping (Pipe Crawler)	Maksim Vasilchenko, Electric Boat
4:35 PM	Open Forum to Pitch Ideas	
4:50 PM	Closing Remarks/ Adjourn	Peter Radzicki, PPPF Panel Chair

NSRP | National Shipbuilding Research Program

Surface Preparation & Coatings Panel Meeting

2025 NSRP All Panel Meeting – Charleston, S.C.

Charleston Marriott

February 25-27, 2025

Meeting Agenda

**Times listed are Eastern Time Zone*

Thursday, 2/27/2025

Room E

Time	Presentation	Speaker
8:00	Welcome & Introductions	Conlan Hsu Chair, SPC Panel
8:10	Surface Preparation & Coatings Panel Update	Conlan Hsu
8:40	NAVSEA 05 Coatings & Corrosion Control Update	Mark Ingle TWH, NAVSEA 05
9:40	BREAK	
10:00	SPC Panel Project - Testing and Analysis of Anti-Biofouling Coatings	Stan Bovid Hepburn & Sons
10:30	SPC Panel Project - Enhanced Primers for Welding Operations	Eric Shoyer Elzly Technology Corp
11:00	SPC Panel Project - The Effects of Blast Media on Production and Coating Performance	Michael Kibler Elzly Technology Corp
11:30	LUNCH	
12:00	SPC Panel Project - Extended Recoat Windows for Non-Critical Zones	Eric Shoyer
12:30	ManTech Project - Laser Ablation of PCP from HSLA Steel	Melissa Klingenberg Penn State Applied Research Lab
1:00	Joint Panel Project - Pulsed-Laser Comparison Tool	Melissa Klingenberg
1:30	ManTech Project - Thermal Insulating Coatings	Chris Yoko Newport News Shipbuilding
2:00	ManTech Project - Autonomous Abrasive Collection	Chris Yoko
2:30	Rotary Steel Grit Dryer	Ron Tribble The Grit Dryer Group
3:00	For the Good of the Panel & Wrap-Up	Angel Zepeda Vice Chair, SPC Panel



Ship Warfare Systems Integration Panel Meeting

2025 NSRP All Panel Meeting – Charleston, S.C.

Charleston Marriott

February 25-27, 2025

Meeting Agenda

**Times listed are Eastern Time Zone*

Thursday, 2/27/2025

Room C/D (Morning) / Room B (Afternoon)

Time	Presentation	Speaker
8:00 am	Convene Meeting – Joint Meeting with Electrical Panel	
8:00 am	Introduction / Panel Chair Welcome / Chair Report	Haymon/Farmer
8:10 am	NSRP Update	ATI
8:30 am	High Operating Temperature Pump Diodes for High Energy Lasers <i>(Navy ManTech project S3000)</i>	David Rearick, Penn State ARL/EOC
9:00 am	Distributed Temperature Sensing (DTS) Integration into Ship Electrical Plants <i>(PP 2019-477-004 and RA 2025-04)</i>	Gio Tomasi, RSL Fiber Systems
9:30 am	Power Electronics Power Distribution System (PEPDS)	Dr Julie Chalfant, Massachusetts Institute of Technology
10:00 am	Enhanced video quality bandwidth reduction & automatic target recognition for US Navy, DOD, SOF and ISR	Nate Reeves, SensorOps
10:30 am	NSRP Increments are Making a Difference for the Navy	John Mazurowski, Penn State ARL/EMC
11:00 am	Fiber Optic Cables Enhancements <i>(PP 2019-477-001, 2019-477-003, and pending 2025 ET and SWSI PP)</i>	Gio Tomasi, RSL Fiber Systems
11:30 am	DOD Lighting Handbook 289 Revision <i>(PP 2019-477-005 & -002)</i>	Gio Tomasi, RSL Fiber Systems
12:00 pm	Lunch	All
1:00 pm	SWSI Panel Discussion/SWSI FY 25 Panel Project Selection	ATI/Haymon
1:30 pm	Combat Systems Standard Foundations Qualification and Optimization – Final Review	H.G. Howard
2:00 pm	MCI Tough Coat wear surface	H.G. Howard
2:30 pm	Performance Improvement for 25Hz DSSM Spring Tray – Final Review	Mike Talley
3:00 pm	DSSM Latch Adjustment Mechanism	Mike Talley
3:30 pm	FY 26 Panel Project Solicitation Ideas/ Next Panel Meeting	All
4:30 pm	Review Action Items / Closing Remarks	Haymon

NSRP | National Shipbuilding Research Program

Electrical Technologies Panel Meeting

2025 NSRP All Panel Meeting, Charleston, SC
 Charleston Marriott
 February 25-27, 2025

Meeting Agenda

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Thursday, 2/27/2025

Room C/D

Time	Presentation	Speaker
8:00 am	Convene Meeting – Joint Meeting with SWSI Panel	
8:00 am	Introduction / Panel Chair Welcome / Chair Report	Jason Farmer/Perry Haymon
8:10 am	NSRP Update	
8:30 am	High Operating Temperature Pump Diodes for High Energy Lasers <i>(Navy ManTech project S3000)</i>	David Rearick, Penn State ARL/EOC
9:00 am	Distributed Temperature Sensing (DTS) Integration into Ship Electrical Plants <i>(PP 2019-477-004 and RA 2025-04)</i>	Gio Tomasi, RSL Fiber Systems
9:30 am	Power Electronics Power Distribution System (PEPDS)	Dr Julie Chalfant, Massachusetts Institute of Technology
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11:30 am	DOD Lighting Handbook 289 Revision <i>(PP 2019-477-005 & -002)</i>	Gio Tomasi, RSL Fiber Systems
12:00 pm	Lunch	All
1:00 pm	Electrical Technologies Panel Breakout	
1:00 pm	NAVSEA 05Z3 Update	Chris Nemarich, NAVSEA 05Z33
1:30 pm	Navy Fiber Optic Specs and Standards Update	Nitin Ghadia, NSWC Dahlgren Division
2:00 pm	The importance of considering the effects of light on human performance in military & shipyard environments	Dr. Eliza Van Reen, CPS
2:30 pm	15kV MIL-SPEC Cable Development for U.S. Navy Ships <i>(pending 2025 ET PP)</i>	Greg Keyes, Ingalls Shipbuilding
3:00 pm	Improved Cable Installation and Testing <i>(Navy ManTech project S2975)</i>	Paul Davies, The Boeing Company Jason Farmer, Ingalls Shipbuilding
3:30 pm	Hybrid Acoustic/IR Scanner	Tim Rohrer, FOTRIC
4:00 pm	FY 26 Panel Project Solicitation Ideas/ Next Panel Meeting	All
4:30 pm	Review Action Items / Closing Remarks	Walt Skalniak, ET Panel Vice-Chair



NSRP | National Shipbuilding Research Program

Surface Preparation & Coatings Panel Meeting

2025 NSRP All Panel Meeting – Charleston, S.C.

Charleston Marriott

February 25-27, 2025

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Room E

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9:40	BREAK	
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2:00	ManTech Project - Autonomous Abrasive Collection	Chris Yoko
2:30	Rotary Steel Grit Dryer	Ron Tribble The Grit Dryer Group
3:00	For the Good of the Panel & Wrap-Up	Angel Zepeda Vice Chair, SPC Panel



NSRP | National Shipbuilding Research Program

Ship Production Technologies Track

2025 NSRP All Panel Meeting – Charleston, S.C.

Charleston Marriott

February 25-27, 2025

Meeting Agenda

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Thursday, 2/27/2025

Room B

Time	Presentation	Speaker
8:00 AM	Convene Meeting	
8:15 AM	S2981 – Portable Pipe Inspection	Christen Leggett: Ingalls Shipbuilding
8:45 AM	Automated Metrology for Structural Assembly,	Nick Herrera/Lisa Elles: Pacific Shipyards International
9:15 AM	Advanced Shipyard Welding Technologies: S2831 - Semi-Auto GTAW / S2928 - Next Generation Autogenous	Alex Ugarte / Shawn Bittmann: General Dynamics Electric Boat
9:45 AM	S2904 - Multi-Function Shipbuilding Robot	Daniel Meath: Advanced Technology International
10:15 AM	Closing Remarks/Adjourn	