American Society of Naval Engineers

Naval Science & Technology Expo / Combat Systems / Technology, Systems & Ships Symposium 2024

Employing and Sustaining Naval Weapons to Win Meeting the Demand Signal – More Players on the Field

December 9-12, 2024

George Mason University Van Metre Hall, Arlington, VA

The Office of Naval Research is supporting the 2024 Naval Science & Technology / Combat Systems Symposium and Technology, Systems & Ships Symposium over the December 9-12, 2024 timeframe at the George Mason University Arlington, VA Campus.

In recent years, ASNE Combat System Symposiums have focused on Digital Engineering concepts and their impact on Combat Systems as well as reflected on the Secretary of the Navy's Strategic Objectives of how we go about expanding our forward presence, enhancing our warfighting readiness, and innovating and modernizing our combat system capability. Given real world operations and conflicts in both Eastern Europe and the Middle East, ASNE Combat Systems Symposium 2024 will delve into our offensive and defensive weapons that have been used or may be called into service, tactics used to employ those weapons, and how we maintain and sustain those weapons to ensure they are available when needed. The Symposium will also look at future weapon capabilities, from both the benefits and challenges perspective.

The Technology, Systems & Ships Symposium will focus on 'meeting the demand signal' with Technology, Systems & Ships. As the CNO has stated "...our Sailors must be the best warfighters in the world with the best systems, weapons, and platforms to ensure we can defeat our adversaries. We will put 'more players on the field' -- platforms that are ready with the right capabilities, weapons and sustainment, and people who are ready with the right skills, tools, training, and mindset."

Agenda: <u>Day One, Monday, 9 December 2024</u>

Welcome & Kickoff 8:15 AM - 8:30 AM Speakers:

- CAPT Dale Lumme, USN (Ret.), Executive Director, ASNE
- CAPT Joe Johnson, USN (Ret.), Chairman, ASNE CSS Committee

Joint Keynote Address

8:30 AM - 9:15 AM

Speakers:

- Rear Admiral Kurt Rothenhaus, USN, Chief of Naval Research
- Rear Admiral Tom Dickinson, USN, Program Executive Officer for Integrated Warfare Systems (PEO IWS)

CSS Panel 1: Offensive and Defensive Weapons for Today and the Future

9:15 AM - 10:45 AM

Moderator:

• Rear Admiral Tom Dickinson, USN, Program Executive Officer for Integrated Warfare Systems (PEO IWS) Panelists:

- CAPT Tom Seigenthaler, USN, Major Program Manager (MPM) Surface Ship Weapons (PEO IWS 3.0);
- CAPT Sarah Rice, USN, MPM, Terminal Defense Systems (PEO IWS 11.0)
- Ms. Gina Fachini, Deputy MPM, NATO SEASPARROW Program Office (NSPO) (PEO IWS 12.0);
- CAPT Timothy King, USN, MPM, Command and Control (PEO IWS 6.0)

Networking Break 10:45 AM - 11:00 AM

CSS Panel 2: Rapid Capability Update: Getting Innovation to Sea Case Study (CUAS Prototyping) 11:00 AM - 12:10 PM

Moderator:

• Mr. Newman Evans, Deputy Director, Program Executive Office Integrated Warfare Systems (PEO IWS) Rapid Capability Office (RCO)

Panelists:

- Mr. Harpal Maan, Terminal Defense Systems (PEO IWS 11.0)
- CAPT Chris Marvin, USN, US Fleet Forces Command (USFF), N85;
- CAPT Kevin Hoffman, USN, COMNAVSURFLANT (CNSL) N8;
- Mr. Phil Lecznar, PEO IWS, RCO Team
- LCDR Han Yi, USN, (OPNAV N96)

Lunch 12:10 PM - 1:00 PM Keynote Address: Fleet Perspectives on Warfighting Advantage 1:00 PM - 1:45 PM Speaker:

Rear Admiral Calvin Foster, USN, Deputy Commander, Naval Surface Force Atlantic (CNSL)

Networking/Snack Break 1:45 PM - 2:00 PM

CSS Panel 3: Integrated Combat System Challenge 2:00 PM - 3:30 PM Moderator:

• CAPT Andy Biehn, USN, Program Executive Office, Integrated Warfare Systems Panelists:

- CAPT Brian Phillips, USN, MPM, Integrated Combat System (PEO IWS X)
- CAPT Jill Cesari, USN, MPM, AEGIS (PEO IWS 1.0)
- CAPT Brandon Cornes, USN, MPM, Atalanta Integrated Combat System (PEO IWS 80.0)
- CAPT Tim Shanley, USN, MPM, ZUMWALT (PEO IWS 9.0)
- CAPT Christopher Carroll, USN, MPM, MDA, AEGIS-Adaptation

Keynote Address 3:30 PM - 4:30 PM

Speaker:

• The Honorable Carlos Del Toro, Secretary of the Navy

Day One Wrap-Up & Day Two Preview 4:30 PM

Speaker:

• CAPT Joe Johnson, USN (Ret.), Chairman, ASNE CSS Committee

<u>ONR S&T / CSS</u> Day Two, Tuesday, 10 December 2024

Day Two Welcome & Day One Review 8:00 AM - 8:15 AM Speakers:

- CAPT Dale Lumme, USN (Ret.), Executive Director, ASNE
- CAPT Joe Johnson, USN (Ret.), Chairman, ASNE CSS Committee

Presentation: The Future of Naval Weapons 8:15 AM - 9:00 AM

Speaker:

• CAPT Dave Stoner, USN, Office of the Chief of Naval Operations, Surface Warfare, Deputy for Weapons and Sensors (OPNAV N96C)

CSS Panel 4 (ONR S&T): Naval Power: Science and Technology to deliver in an era of strategic competition and rapid technological change.

9:00 AM - 10:15 AM

Moderator:

Dr. Thomas Fu, SES, Executive Director, Office of Naval Research (ONR)

Panelists:

- Dr. Michael Pollock, SES, , Department Head, C5ISRT, ONR
- Dr. Knox Millsaps, SES, Department Head, Naval Air Warfare and Weapons, ONR
- Dr. Gregory Orris, Acting Department Head, Sea Warfare and Weapons, ONR

Networking Break 10:15 AM - 10:30 AM

CSS Panel 5: Enhancing Readiness and Sustainment of Naval Weapons 10:30 AM - 11:45 AM

Moderator:

• Mr. Howard Berkof, SES, Director for Production, Deployment, and Fleet Readiness, PEO IWS D Panelists:

- CAPT John Bowman, USN, MPM, AEGIS Fleet Readiness (PEO IWS 1.0F);
- CAPT Andrew Hoffman, USN, MPM, SSDS Fleet Readiness (PEO IWS 80F)
- CAPT Jesse Mink, USN, MPM, Above Water Sensors & Lasers (PEO IWS 2.0)
- Mr. Robert Stukes, Digital Transformation Advisor to SEA 00
- CAPT Michael Ladner, USN (Ret.), Deputy Technical Director, Naval Surface Warfare Center, Port Hueneme Division (NSWC PHD)

Presentation: The Future of Naval Weapons

11:45 AM - 12:30 PM

Speaker:

• CAPT Jesse Black, USN, Commanding Officer, Naval Research Laboratory (NRL)

Lunch 12:30 PM - 1:15 PM

Presentation: The Case and the Challenges of Directed Energy Weapons 1:15 PM - 2:00 PM

Speaker:

 Dr. Bonnie Johnson, Senior Lecturer with the Systems Engineering Department at the Naval Postgraduate School

Networking/Snack Break 2:00 PM - 2:30 PM

CSS Panel 6: Multi-Pronged Terminal Defense 2:30 PM - 3:45 PM Moderator:

• Rear Admiral Tom Druggan, USN (Ret.)

Panelists:

- Dr. Bonnie Johnson, Naval Post Graduate School;
- Mr. Chris Behre, OSD R&E
- CAPT Sarah Rice, MPM, Terminal Defense Systems (PEO IWS 11.0)
- CAPT Jon Haase, USN, MPM, Expeditionary Missions (PMS 408)

Keynote Address 3:45 PM - 4:30 PM Speaker:

• Rear Admiral Pete Small, USN, Chief Engineer and Deputy Commander for Naval Systems Engineering and Logistics (NAVSEA 05)

Day 2 Wrap-Up 4:30 PM - 4:45 PM Speaker:

• ONR S&T / CSS Planning Committee

Reception: ASNE Flagship Section 5:00 PM

<u>ONR S&T / TSS</u> Day One, Wednesday, 11 December 2024

Intro to Combat Systems Engineering Course held at GMU [concurrently] requires separate registration 8:00 AM - 4:30 PM

Welcome & Kickoff 8:30 AM - 8:45 AM Speakers:

- CAPT Dale Lumme, USN (Ret.), Exective Director, ASNE
- CAPT Rick White, USN (Ret.), Chairman, ASNE TSS Committee
- Vice Admiral David Lewis, USN (Ret.), President, ASNE

Keynote Opening Address 8:45 AM - 9:45 AM Speaker:

> The Honorable Nickolas Guertin, Assistant Secretary of the Navy (Research, Development, and Acquisition)

Networking/Snack Break 9:45 AM - 10:00 AM

TSS Panel 1: Future Aircraft Carrier Construction and Modernization 10:00 AM - 11:30 AM Moderator:

• Rear Admiral Casey Moton, USN, Program Executive Officer, Aircraft Carriers (PEO CVN) Panelists:

- Mr. Doug Vaughters (SES), Director, Carrier Engineering Directorate (NAVSEA 05V)
- CAPT Mark Johnson, USN, Program Manager, PMS 378 (Gerald R. Ford Class New Construction)
- CAPT Samuel Hallock, USN, Program Manager, PMW 750
- Mr. Todd Loyd, PEO CVN Director Aircraft Carrier industrial Base

Lunch / Networking 11:30 AM - 12:30 PM

TSS Panel 2: PEO Ships 12:30 PM - 2:00 PM Moderator:

• Rear Admiral Thomas J. Anderson, USN, Program Executive Officer, Ships Panelists:

- CAPT Seth Miller, USN, Program Manager, DDG 51 Class
- CAPT Clint Lawler, USN, Program Manager DDG 1000 Class
- CAPT Matt Tardy, USN, Program Manager, Amphibious Warfare Program
- Mr. Matt Evans, Maritime Industrial Base

ASNE Awards Ceremony: Clifford G. Geiger Award 2:00 PM - 2:20 PM ASNE Clifford G. Geiger Award Recipient(s): • Ms. Carletta Long Presented by: • Vice Admiral David Lewis, USN (Ret.), President, ASNE ASNE "Jimmie" Hamilton Award Recipient(s): • Dr. Douglas Van Bossuvt, PH D: Mr. Andrew Machamer

• Dr. Douglas Van Bossuyt, PH.D; Mr. Andrew Machamer; CDR Mark M. Rhoades, USN (Ret.) Presented by:

Dr. Leigh McCue, Mechanical Engineering Dept. Head, George Mason University

Networking/Snack Break 2:20 PM - 2:40 PM TSS Panel 3: Workforce/Young Professionals/Gen Z 2:40 PM - 3:45 PM Moderator:

Mr. Andres Rivas, Aegis Shipbuilding

Panelists:

- Mr. Ryan McKalip, Business financial Manager, PMS 515, PEO USC
- Ms. Juilet Vendl, Flight Upgrade Engineer, PMS 400D, PEO Ships
- Mr. Christopher Davis, Technical & Strategic Sales, MASSA Products Corp
- Ms. Margo Zuchristian, Columbia Group

Presentation: Other Transaction Authority (OTA): Maritime Sustainment Technology and Innovation Consortium and the Naval Surface Technology & Innovation Consortium and Additive Manufacturing 3:45 PM - 5:00 PM

Speaker:

• Rear Admiral Thomas Kearney, USN (Ret.)

Networking Reception 5:00 PM

ONR S&T / TSS Day 2, Thursday, 12 December 2024

Welcome & Kickoff

7:45 AM - 8:00 AM

Speakers:

- CAPT Rick White, USN (Ret.), Chairman, ASNE TSS Committee
- Vice Admiral David Lewis, USN (Ret.), President, ASNE

"Best Of" Technical Paper Presentations

8:00 AM - 9:00 AM

Papers:

- Current and Future Trends in Naval Classification.
 - CAPT Richard Delpizzo, USNR (ret), Director for International Government Services, American Bureau of Shipping"
- MIL-STD-1399 Section 300 Part 3: The Navy's New Low Voltage Direct Current Power Interface Standard, Steven Swindler PE, Director for International Government Services, American Bureau of Shipping"
- Scaling Innovation Through Collaboration.
 Rick Studley, Chief Engineer, Advanced Concepts Group, Leonardo DRS Naval Electronics"

ONR S&T / TSS Panel 5: S&T to Improve the Lethality, Survivability and Affordability of the Fleet and Force 9:00 AM - 10:30 AM

Moderator:

• Dr. Jennifer Wolk, Division Director, Advanced Materials and Systems, Office of Naval Research (ONR) Panelists:

- Mr. Ben Bouffard, Deputy Director, NAVSEA Technology Office (NAVSEA 05T)
- Mr. Neil Graf, Manufacturing Technology (ManTech) Program Lead, ONR
- Mr. William Nickerson, Manufacturing Program Officer, ONR

Networking/Snack Break 10:30 AM - 10:45 AM

TSS Panel 5 10:45 AM - 12:15 PM Moderator:

• Rear Admiral Kevin Smith, USN, Program Executive Officer, Unmanned and Small Combatants (PEO USC) Panelists:

- CAPT Greg Mitchell, USN, Program Manager (PM), U.S. Navy Boats and Craft (PMS 300)
- Mr. Marjan Ahmed, USN, Director of Unmanned Technology Maturation, Unmanned Maritime Systems (PMS 406)
- CAPT Jon Haase, USN, PM, Expeditionary Missions (PMS 408)
- Mr. George Saroch, USN, Deputy Program Manager (DPM), LCS Mission Modules (PMS 420)

Lunch

12:15 PM - 1:45 PM

TSS Panel 7: NSWCDD Focusing on the Fight 1:45 PM - 3:15 PM Moderator:

Mr. Alan Black, USN, Director Corporate Communications NSWCDD

Panelists:

- Mr. Dale Sisson Jr., SES, USN , Technical Director, NSWCDD
- Dr. James Keener, SL, USN, NAVSEA Warfare Centers Director for Surface Warfare
- Dr. Sam Koski, SSTM, USN, Deputy Director for Warfare Integration, NSWCDD

TSS Panel 8: Building the Maritime Industrial Base (MIB) 3:15 PM - 4:45 PM Moderator:

• Mr. Jay Stefany

ONR S&T / TSS Wrap-Up 4:45 PM

Speaker:

ONR/TSS Planning Committee

ONR Professional Talks

- ONR Code 32 (Ocean Battlespace Sending): Classroom #317
- ONR Code 33 (Sea Warfare and Weapons): Classroom #467
- ONR Code 34 (Warfighter Performance): Classroom #468
- ONR Code 35 (Naval Air Warfare and Weapons): Classroom #477
- ONR Code 02/Small Business (Contracts, Grants and Acquisition): Classroom #479
- Naval Research Laboratory: Classroom #113
- NavalX: Classroom #476
- Expeditionary Portfolio: Classroom #120
- NR Global/TechSolutions: Classroom #121

ONR Professional Talks Tuesday, December 10, 2024 10:30 - 11:00 Navy AI • Speaker: Ms. Sandy Landsberg 11:00 - 11:30 Naval X 2:00 - 2:30 NRL S&T Update

Speaker: CAPT Jesse Black, NRL Commanding Officer

Wednesday, December 11, 2024 1:30 - 2:00 USCG SFLC Update 2:00 - 2:30 USCG Yard Baltimore Update

Thursday, December 12, 2024 10:30 - 11:00 ONR Global Speakers:

- CAPT Eric "Nut" Hutter, ONRG Executive Officer
- Jason Payne, TechSolutions Director
- Troy Hendricks, Experimentation & Analysis Director