2023 UNDERSEA WARFARE FALL CONFERENCE

The Critical Enabler to Integrated Deterrence

September 18 – 20, 2023 | Groton, CT | NDIA.org/USW
**MONDAY, SEPTEMBER 18**

3:00 – 6:30 pm  
Registration  
DEALEY CENTER AUDITORIUM

5:00 – 6:30 pm  
Networking Reception  
MYSTIC MARRIOTT HOTEL & SPA

**TUESDAY, SEPTEMBER 19**

7:00 am – 5:00 pm  
Registration  
DEALEY CENTER AUDITORIUM

7:00 – 8:00 am  
Networking Breakfast  
OUTSIDE PLAZA

8:00 – 8:15 am  
Welcome and opening comments  
DEALEY CENTER AUDITORIUM

8:15 – 8:45 am  
Presentation  
DEALEY CENTER AUDITORIUM  
ADM Frank Caldwell, USN  
Director, Naval Nuclear Propulsion Program

8:45 – 9:15 am  
Presentation  
DEALEY CENTER AUDITORIUM  
VADM William Houston, USN  
Commander, Naval Submarine Forces

9:15 – 9:45 am  
Presentation  
DEALEY CENTER AUDITORIUM  
VADM Richard Correll, USN  
Deputy Commander, U.S. Strategic Command

9:45 – 10:15 am  
Networking Break  
OUTSIDE PLAZA

10:15 – 10:45 am  
Presentation  
DEALEY CENTER AUDITORIUM  
CAPT Drew Miller, USN  
Commander, Undersea Warfighting Development Center

10:45 – 11:15 am  
Presentation  
DEALEY CENTER AUDITORIUM  
Scott Bray  
Deputy Director, Naval Intelligence, (OPNAV N2N6C)

11:15 – 11:45 am  
Presentation  
DEALEY CENTER AUDITORIUM  
Dr. Martin Irvine  
Executive Director, Naval Surface Warfare Center (NSWC) and Naval Undersea Warfare Center (NUWC)

11:45 am – 12:00 pm  
Awards Ceremony  
DEALEY CENTER AUDITORIUM  
Pierre Corriveau  
Awards Chair, Undersea Warfare Division, NDIA

12:00 – 1:15 pm  
Networking Lunch  
BASE GYMNASIUM

1:15 – 1:45 pm  
Presentation  
DEALEY CENTER AUDITORIUM  
RADM Scott Pappano, USN  
Program Executive Officer, Strategic Submarines

1:45 – 2:15 pm  
Presentation  
DEALEY CENTER AUDITORIUM  
Stefanie Link  
Executive Director, In-Service Submarines for Program Executive Office Attack Submarines
2:15 – 2:45 pm

**Presentation**
DEALY CENTER AUDITORIUM

CAPT Todd Weeks, USN
Program Executive Officer, Undersea Warfare Systems

2:45 – 3:15 pm

**Networking Break**
OUTSIDE PLAZA

3:15 – 3:45 pm

**Presentation**
DEALY CENTER AUDITORIUM

Rob McHenry
Deputy Director, Defense Advanced Research Projects Agency

3:45 – 4:15 pm

**Presentation**
DEALY CENTER AUDITORIUM

RDML Mark Behning, USN
Director, Undersea Warfare Division, Office of the Chief of Naval Operations (N97)

4:15 – 4:20 pm

**Closing Remarks**
DEALY CENTER AUDITORIUM

Eric Irwin
Chairman, Undersea Warfare Division Fall Conference
Warfare Analysis Program Lead, Electric Boat Corporation

6:00 – 7:00 pm

**Networking Reception**
NORTH LAKE
Ticket Required

7:00 – 9:00 pm

**Networking Clambake**
NORTH LAKE
Ticket Required

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**Visit NDIA.org/Events for more information on all of our meetings, conferences, and events**

**Leading the Way in Engagement, Networking, and National Defense**

**Plan Ahead for Success | 2023 – 2024 Featured Meetings, Conferences, and Events**

- **34th Annual NDIA SO/LIC Symposium**
  October 30 – 31, 2023 | Washington, DC

- **2024 Tactical Wheeled Vehicles Conference**
  February 26 – 28, 2024 | Charlotte, NC

- **2023 Aircraft Survivability Symposium**
  October 31 – November 2, 2023* | Monterey, CA

- **2024 Munitions Executive Summit**
  March 19 – 21, 2024 | Parsippany-Troy Hills, NJ

- **2023 WID National Conference**
  September 26, 2023 | Arlington, VA

- **I/ITSEC 2023**
  November 27 – December 1, 2023 | Orlando, FL

- **2024 Human Systems Conference**
  March 21 – 22, 2024 | Arlington, VA

- **26th Annual Systems & Mission Engineering Conference**
  October 16 – 19, 2023 | Norfolk, VA

- **38th Annual National Logistics Forum**
  February 6 – 7, 2024 | Oklahoma City, OK

- **2024 Ronald Reagan Missile Defense Conference**
  April 16 – 17, 2024 | Washington, DC
## Technical Sessions

### Wednesday, September 20

#### 7:00 am

**Registration**
Dealey Center Auditorium | U.S. Naval Submarine Base New London

#### 7:00 am

**Networking Breakfast**
Outside Plaza | U.S. Naval Submarine Base New London

### 8:00 am

**Aviation Systems**
Glen Sharpe, Session Chair

- **Development of New Underwater Explosives and Warheads**
  - Daniela Wagus
  - George McDaniel

**Mine Warfare**
Kevin Hagen, Session Chair

- **DARPA Kraken Program Update**
  - Katherine Woolfe
  - Michael Ott

**Undersea Sensors**
Joe Cuschieri, Session Chair

- **1562196**
  - **Unmanned Maritime Systems (PMS 406)**
  - Djueno Searles

- **1556393**
  - **DARPA Manta Ray Program**
  - Kyle Woerner

- **1559222**
  - **Mission-Level Modeling & Simulation of Mining Operations**
  - Nicholas Evans
  - Caroline Stocking

- **1555621**
  - **NAVIR PEO-Air ASW Programs**
  - Shawn Slade

#### 8:30 am

**Undersea Vehicles**
Chuck Fralick, Session Chair

- **1556980**
  - **Warfighter Decision Centered Design**
  - Joseph Gabriel

- **1562362**
  - **Seafloor Bottom Node**
  - Rick Cox

- **1559563**
  - **Virtual Undersea Battlespace: Enabling the SUBFOR Wargaming and Experimentation Center (SFWEC)**
  - Michael Pelczarski

- **1558995**
  - **Target Strength Signature Comparisons**
  - Thomas Bowling

- **1575195**
  - **IWSS Sensor Systems Update**
  - George Arnold

- **1562362**
  - **Seaifloor Bottom Node**
  - Rick Cox

- **1575195**
  - **IWSS Sensor Systems Update**
  - Caroline Stocking

- **154983**
  - **DARPA Hunter Program Update**
  - Katherine Woolfe

- **1545983**
  - **DARPA Hunter Program Update**
  - George Arnold

- **1547820**
  - **Target Strength Signature Comparisons**
  - Saliou Telly

- **1587195**
  - **PMW 770: Accelerating Undersea and Shore Communications**
  - Capt Paul Seitz, USN

#### 9:00 am

**Combat Systems & Warfighter Performance**
Paul Rosbolt, Session Chair

- **1587195**
  - **PMW 770: Accelerating Undersea and Shore Communications**
  - Capt Paul Seitz, USN

- **1559563**
  - **Virtual Undersea Battlespace: Enabling the SUBFOR Wargaming and Experimentation Center (SFWEC)**
  - Michael Pelczarski

- **1558995**
  - **High Power Microwave (HPM) Systems**
  - Nishita Mirchandani

- **1576455**
  - **Undersea Constellation Communications Architecture Study**
  - William Craig

### Building Locations
- Building 83 Room 318
- Building B4 Room 106
- Dealy Theater
- Building 83 Room 317
- Bledsoe Hall
- Building 84 Room 104
- Building 83 Room 319
- Building 84 Room 105
- Dealy Theater
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker(s)</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>9:30 am</td>
<td>Navy STP: Transition Innovative Technology to Deliver Warfighting Capabilities</td>
<td>Donald Williamson</td>
<td>ATSI</td>
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<td>MCM Capabilities and Vectors for Future Development</td>
<td>Emily Waymire</td>
<td>Naval Surface Warfare Center Panama City Division</td>
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<td>IUSS Mobile Surveillance System Future Capabilities and Opportunities</td>
<td>Don Ringel</td>
<td>NAVSEA PMS 485</td>
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<td>Cooke Rabon</td>
<td>NAVSEA PMS 485/JHU APL</td>
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<td>Fighting into the Bastions: Getting Noisier to Sustain the U.S. Undersea Advantage</td>
<td>Timothy Walton</td>
<td>Hudson Institute</td>
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<td>Stability Certification via Semidefinite Programming</td>
<td>Austin Juhl</td>
<td>Johns Hopkins University Applied Physics Laboratory</td>
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<td>Building Operational Trust in Deployed Autonomy Platforms</td>
<td>Tristan Endsley</td>
<td>The Charles Stark Draper Laboratory</td>
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<td>10:00 am</td>
<td>Networking Break</td>
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<td>10:30 am</td>
<td>Recent Breakthroughs in Air ASW Acoustic Automation</td>
<td>Laurence Riddle</td>
<td>Signals Systems Corporation</td>
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<td>Making Naval Mining Improvements a Reality</td>
<td>Andrew Blair</td>
<td>Naval Surface Warfare Center Panama City Division</td>
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<td>Wargaming the Future of Integrated Undersea Surveillance System (IUSS)</td>
<td>Angie Milano</td>
<td>Naval Undersea Warfare Center</td>
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<td>Brendan Gotowka</td>
<td>Division Newport</td>
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<td>The Application of Machine Learning to Enhance Torpedo Target</td>
<td>Jillian Green</td>
<td>U.S. Naval Research Laboratory</td>
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<td>Classification</td>
<td>James Turner</td>
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<tr>
<td>11:00 am</td>
<td>MQ-9B SeaGuardian Anti-Submarine Warfare, Surveillance Capabilities, and Operational Demonstrations Brief</td>
<td>Peter Yelle</td>
<td>General Atomics, Aeronautical Systems, Inc.</td>
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<td>LCS Mission Modules Program Office (PMS 420) Update</td>
<td>George Saroch</td>
<td>PMS 420</td>
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<td>Demonstration of MIMO Active Sonar Capabilities</td>
<td>Stephen Blackstock</td>
<td>Applied Research Laboratory, University of Texas</td>
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<td>AI/ML-Based State of Charge Prediction to Support Mission Planning of UUVs</td>
<td>Alex Stimpson</td>
<td>VTG</td>
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<td>Tetra Subsea Seabed Warfare Vehicle Providing Rapid Payload Capability</td>
<td>Philip Anderson</td>
<td>Oceanwring International</td>
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<td>IWS 5.0 Program Status &amp; Plans</td>
<td>Glenda Leon</td>
<td>PEO IWS 5.0</td>
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<td>Enabling Operations Across the Air-Water Boundary ~ A Submarine Integration Perspective</td>
<td>Michael Brawner</td>
<td>SD Electric Boat</td>
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<td>12:00 pm</td>
<td>Networking Lunch</td>
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1:00 pm
- Advances in the Precision High Altitude Sonobuoy Emplacement (PHASE) Project
  - Brian Montague
  - SeaLandAire Technologies, Inc.

1:30 pm
- Triton UAS Communications Gateway
  - Greg Loegering
  - Northrop Grumman
  - Dave Smallwood
  - Northrop Grumman

1:30 pm
- ACINT Update
  - ONI

2:00 pm
- Aviation Systems
  - Suresh Mirchandani
  - BRYKA SKYSTOCKS, LLC
  - Yash Mirchandani
  - BRYKA SKYSTOCKS, LLC

2:30 pm
- Unmanned Vehicle Launch and Recovery Demonstrations from Horizontal Payload Tubes
  - John Chapman
  - Electric Boat Corp

3:00 pm
- Networking Break
  - OUTSIDE PLAZA
### 3:30 pm
**Potential Adversary #1**  
Submarine and USW Operations  
ONI

<table>
<thead>
<tr>
<th>Speaker</th>
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<tr>
<td>Michael Dalrymple</td>
<td>Commander Mine Countermeasures Group THREE Operations ONI</td>
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<tr>
<td>Richard Nielsen</td>
<td>Detecting and Tracking Surface Ships Using Non-Traditional Processing of Forward Looking Sonar Data The Boeing Company</td>
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<tr>
<td>Mitchell Loyd</td>
<td>Commander Mine Countermeasures Group THREE Operations ONI</td>
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### 4:00 pm
**Threats to Acquisition**  
ONI

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<tr>
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<tbody>
<tr>
<td>Yash Mirchandani</td>
<td>AI-MDCS Based Mine Warfare System Neoskye, Inc.</td>
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<td>Sebastian Pascarella</td>
<td>Automated Torpedo Acoustic Classifier (ATAC) In-Depth Engineering</td>
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### 4:30 pm
**Threats to PNT**  
ONI

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<tbody>
<tr>
<td>LT Daniel Petersen, USN</td>
<td>Ongoing Naval Postgraduate School Research Efforts in Naval Mining Naval Postgraduate School</td>
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<tr>
<td>Jeffrey Ridgway</td>
<td>The Multi Sensor Sonobuoy and its Promise for ASW Information Systems Laboratories, Inc.</td>
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<tr>
<td>Jameson Benning</td>
<td>Information Systems Laboratories, Inc.</td>
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### 5:00 pm
**Conference Adjourns**