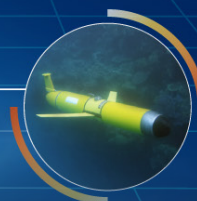


UPDATED 8.24.22

NDIA



2022 UNDERSEA WARFARE FALL CONFERENCE

September 26 – 28, 2022 | Groton, CT | [NDIA.org](https://www.ndia.org)

TECHNICAL SESSIONS

WEDNESDAY, SEPTEMBER 28

	Aviation Systems Glen Sharpe, Chair	C4I Paul Rosbalt, Session Chair	Combat Systems & Warfighter Performance Paul Rosbalt, Session Chair
	Room 318	Room 319	Room 317
8:00 am	24976 CDR Justin Wiesen, USN NAVAIR PMA-264 Programs	24970 The Evolving Undersea Communications CAPT Dave Kuhn, USN PM770	24803 Submarine Combat System Innovative Payload Integration Lynn Sikora Progeny Systems
8:30 am	24976 CDR Justin Wiesen, USN NAVAIR PMA-264 Programs	24883 Countering Undersea Surveillance Dr. Katherine Woolfe DARPA	24906 The Next Steps of System-of-System (SoS) Modeling from a TEAMSub Perspective Dr. Robert Pallack Naval Undersea Warfare Center (NUWC) - Newport
9:00 am	24977 Common Acoustic Simulation Environment (CASE) Sara Groth Advanced Acoustic Concepts A Thales Company	24891 NPS C2 Capstone 2021: Establishing Aegis Ashore on Senkaku Islands Dr. Donald Brutzman Naval Postgraduate School	24971 ARCI DEVSECOPS Implementation – How It's Going So Far... Jeffrey Merritt NUWC DIV NPT
9:30 am	24978 Digital Magnetic Anomaly Detection (DMAD) TBD Lockheed Martin	24896 Supporting Commanders' Operational Planning & Decision-Making for Submarine Security Using Bayesian- Based AI & Data Fusion TBD OSD/DOT&E	24915 Submerged Acoustic Navigation System (SANS) Capabilities: Present and Future Dr. Steven Ceocker MIKEL, Inc.
10:00 am	NETWORKING BREAK		
10:30 am	24890 P-8A Sonobuoy Positioning System (SPS) Roadmap R&D Efforts and Plans Howard Ebersman Ultra Electronics	24921 DARPA TIMEly Program Update Aaron Kofford DARPA	24754 IWS 5.0 Program Update CAPT Leroy Mitchell, USN PEO ISW 5.0
11:00 am	24978 Artificial Intelligence (AI) Test Bed Dustin Overmiller Advanced Acoustic Concepts, A Thales Company	24960 Platform PCIe: the Solution to Advance Combat and C4I System Capabilities, While Reducing System Complexity Brian Kornish Accipiter Systems, Inc.	24928 A Model-Based Systems Engineering Approach to Cyber-Resilience for USW Combat Systems Dr. Benjamin Drozdenko NUWCDIVNPT

Mine Warfare Kevin Hagan, Session Chair	Undersea Sensors & Mine Warfare Shelby Sullivan, Session Chair	Undersea Sensors Joe Cuschieri, Session Chair	Undersea Vehicles Tom Ruzic, Session Chair
Room 106	Dealy Classroom	Dealey Theater	Bledsoe Hall
24980 Maritime Mine Countermeasures and Acoustic Modems Dr. Kyle Waoerner DARPA	24922 DARPA Kraken Program Update John Waterston DARPA	24498 Accelerating ASW Proficiency and Performance through High-Fidelity ASW Trainers & Advanced Acoustic Reconstruction CAPT Justin Long, USN Surface Combat Systems Training Command San Diego	24952 Fighting into the Bastions: Overcoming Undersea Anti-access Networks Bryan Clark Hudson Institute
24877 PMS 495 - Mine Warfare Programs Portfolio Summary Andrw Fuller PEO USC / PMS-495	24917 Low Power Passive Acoustic Sensor Suite Gary Donoher SEACORP, LLC	24772 APB Development and Advanced Sensor Related Development Efforts Peter Scala PEO, Integrated Warfare Systems	24946 DARPA Hunter Program Update John Waterston DARPA
24885 Mine Countermeasures Machine Learning Research for Unmanned Underwater Systems Dr. Tory Cobb Office of Naval Research	24830 PMS 485 Deployable Surveillance Systems Update Susan Lashomb PMS 485 Deployable Surveillance Systems	24918 Cooperative SONAR Engagement for Theater Under-Sea Warfare (C-SET) Skevis Psaras Marine Acoustics, Inc.	24964 Goblin: Enabling Complex Maritime Operations Dr. Andrew Nuss DARPA
24968 Data as a Competitive Advantage: Access, Ownership, and Innovation Dr. Daniel Cook Georgia Tech Research Institute	24932 Navy Range Enterprise Sean Perry NUWC DIVISION NEWPORT	24975 Emerging and Disruptive Technology Updates: Undersea Sensors ONI	24937 Large Displacement Unmanned Vehicle (LDUUV) Testing Updates and Enhanced Capability for Fleet Operations Cheryl Mierzwa NUWC Division Newport
NETWORKING BREAK			
24981 LCS Mission Modules Program Office Update George Saroch LCS Mission Modules Program Office (PMS-420)	24947 'Magneto-Inductive Sensors—Low SWaP-C Magnetometers with Exceptional Performance Specifications for Magnetic Imaging and GPS Denied Navigation Jay Trojan Protonex, LLC dba PNI Sensor	24842 Acoustic Travel Time Assimilation Into An Ocean Circulation Model Ivana Escobar Applied Research Labs	24757 Foreign Unmanned Vehicle Capabilities Andrew Adelsen Newport News Shipbuilding
24982 Navy Expeditionary Warfare Resource Sponsor Update CAPT Cameron Chen, USN Naval Expeditionary Warfare (OPNAV N957)	24953 Electromagnetic Detection & Location of Submerged Targets Geoff Cranch Naval Research Laboratory	24879 Characterizing Sea Surface Conditions While Submerged and Underway Dr. Adrian Doran NUWC Newport	24963 Seafloor Service Node System Integration Laboratory (SIL) Rob Lehtinen Leidos

	Aviation Systems Glen Sharpe, Chair	C4I Paul Rosbolt, Session Chair	Combat Systems & Warfighter Performance Paul Rosbolt, Session Chair
	Room 318	Room 319	Room 317
11:30 am	24899 The World's Only Efficient Multi-domain (Marine, Ground, Air) Vehicle Scott Kempshall HyALTA Aeronautic, Inc.	24910 SIGINT-based Opportunistic Navigation in a GPS-Denied Environment Dr. John Schwacke Scientific Research Corporation	24974 USW Tactics Update ONI
12:00 pm	NETWORKING LUNCH		
1:00 pm	24902 Digital Twinning for Aerospace & Defense Applications Frank Schirmeister Cadence Design Systems	24933 Results and Lessons Learned from Final Testing in DARPA's Cross Domain Maritime Surveillance and Targeting (CDMaST) Program Aaron Kofford DARPA Strategic Technology Office (STO)	24927 Attributing Mission Performance to Submarine Subsystems Jonathan Proule Naval Undersea Warfare Center Division Newport
1:30 pm	24905 Working Towards Precise Positioning of Tethered Payloads with Fixed Wing UAVs Via Autonomous Aerobatic Maneuvering Joshua Robbins Penn State Applied Research Laboratory	24914 Asynchronous Communication: A culture change to decrease the time variable in development of JADC2/ Overmatch applications and systems Jim Pietrocini KBR	24967 Submarine Kill Chain and Warfighter Performance improvement through Remote Access to Tactical System of Systems in the Cloud Joseph Piccinini Innovative Defense Technologies
2:00 pm	24979 Scoping SSW ONI	24925 Undersea Project Overmatch: A SEC-ACQ-DEVOPS Effort Stephen O'Grady NUWC DIVNPT	24930 Submarine Payload Storage Solutions Benjamin Aldrich Naval Undersea Warfare Center Division
2:30 pm		24919 Architecting Quantum Resistant Implementations for Undersea Maritime Systems (AQuaRIUMS) Dr. JD Dulny Booz Allen Hamilton	24938 Undersea Warfare (USW) Decision Superiority Innovative Naval Prototype (INP) Dr. Peter Squire Office of Naval Research
3:00 pm	NETWORKING BREAK		
3:30 pm		24942 Deep Learning for Cybersecurity: an AI/ML approach to USW Network Traffic Analysis Makia Powell NUWC DIVNPT	24871 Own Ship Electromagnetic Signature Monitoring Dr. Srikanth Raghavan Naval Surface Warfare Center, Carderock Division

Mine Warfare Kevin Hagan, Session Chair	Undersea Sensors & Mine Warfare Shelby Sullivan, Session Chair	Undersea Sensors Joe Cuschieri, Session Chair	Undersea Vehicles Tom Ruzic, Session Chair
Room 106	Dealy Classroom	Dealey Theater	Bledsoe Hall
24969 Multi-shot Mine Neutralization - USV Based Mine Countermeasures Timeline Reduction CAPT Elliott Donald, USN (Ret) SAAB	24874 OMI for Explainable AI/ ML in MF PAS Michael Lubke ARL:UT	24886 Improved Sonar Aiding of Inertial Navigation Systems in GPS-Denied Environments Jerry Mullison Teledyne RD Instruments	24926 Alternatives for Submarine Torpedo Tube Launch and Recovery (TTL&R) of UUVs Jeffrey Smith SAAB, Inc.
NETWORKING LUNCH			
24983 Airborne Mine Countermeasures CDR Michael Lanzillo, USN Helicopter Mine Countermeasures Squadron 15	24951 SMD System Joy St. Amant Naval Surface Warfare Center (NSWC) Panama City	24887 Demonstration of Textured Ceramic Model 30 Flexensional Projector Jason Osborn BAE Systems	24944 The DIVE-LD: A Transformational LDUUV for Advanced Subsea Applications Pat Taylor Anduril Industries
24984 Naval Surface and Mine Warfighting Development Center Update Wesley Cooper Naval Surface and Mine Warfighting Development Center	24941 Compact Encapsulated Effector (CENCAP) - Future Naval Mine John Van Kirk NSWC	24904 Textured Ceramic's Based 3-inch SONAR Countermeasure Jonathan Zook QorTek, Inc.	24936 Advanced Ordnance Package Development for Next Generation Torpedoes Eric Volkman Northrop Grumman
24985 Navy Mine Warfare Resource Sponsor Update CAPT Michael Eagan, USN Navy Mine Warfare (OPNAV N952)	24892 NPS C2 Capstone 2022: C2 Preparations for Theater Mine Warfare Donald Brutzman Naval Postgraduate School (NPS)	24943 Understanding the Impact of AC Poling on the Mechanical and Electrical Stability of Relaxor PIN-PMN-PT Single Crystals Adam Heitmann Naval Undersea Warfare Center Division Newport	24912 Dynamics of Water Entry Dr. Nathan Speirs Naval Undersea Warfare Center, Newport
24986 Maritime Terrain Shaping Area Denial Maj Matt Massman, USMC Marine Corps Combat Development Command	24972 PEO Unmanned and Small Combatants Update Dr. Sam Taylor PEO Unmanned and Small Combatants	24901 Compact Towed Reelable Active Passive Sonar for Unmanned Anti-Submarine Warfare Jeffrey Hoyle Elbit Systems of America	24931 UUV Communications Matthew Atwood NUWCNPT/PMS406/PMW770
NETWORKING BREAK			
24878 Operational Gaps in Navy Mining Capabilities Tracey Williams PEO USC / PMS-495	24913 The Evolution of Mine Countermeasures Technologies from Short-duration, Unmanned to Persistent, Unattended Operations Dr. Todd Holland Naval Surface Warfare Center - PCD	24965 Acoustic Vector Sensors Dr. Alex Sell Leidos	24973 Undersea Weapons Update ONI

	Aviation Systems Glen Sharpe, Chair	C4I Paul Rosbalt, Session Chair	Combat Systems & Warfighter Performance Paul Rosbalt, Session Chair
	Room 318	Room 319	Room 317
4:00 pm		24929 Simplifying the Transfer and Use of TPCP Software Bloat Mitigation Tools Matthew Halligan Naval Undersea Warfare Center Div Newport	24909 Prioritization of Test and Evaluation (T&E) ensures Fleet readiness and overmatch in the Undersea Domain Edwin Rahme VIRGINIA Class Submarine Program Office (PMS450)
4:30 pm		24934 Terahertz Imaging Results from a Large-Scale Data Collection Field Test in 2022 Dr. Patric Lockhart NUWC Division Newport	24916 Medical research and development approaches for supporting future psychological readiness of the U.S. Navy submarine force via supportive technologies and assessments Dr. Ben Lawson Naval Submarine Medical Research Laboratory
5:00 pm	CONFERENCE ADJOURNS		

Mine Warfare Kevin Hagan, Session Chair	Undersea Sensors & Mine Warfare Shelby Sullivan, Session Chair	Undersea Sensors Joe Cuschieri, Session Chair	Undersea Vehicles Tom Ruzic, Session Chair
Room 106	Dealy Classroom	Dealey Theater	Bledsoe Hall
<p>24884</p> <p>Mine Warfare</p> <p>CDR Brad Penley, USN Navy Special Warfare Command</p>	<p>24881</p> <p>Supercavitating Small Caliber Ammunition as A Means to Defeat Underwater Threats</p> <p>CDR Tucker Campion, USN (Ret) DSG Tech USA</p>	<p>24945</p> <p>The Multi-Tone Sinusoidal Frequency Modulated Waveform for Active Sonar Systems</p> <p>Dr. David Hague Naval Undersea Warfare Center Div. Newport</p>	<p>24907</p> <p>Underwater Vehicle Radiated Noise Reduction</p> <p>Dr. Scott Hassan NUWC DIVNPT</p>
<p>24897</p> <p>FY 23 Mining Research Projects at NPS</p> <p>RDML Rick Williams, USN Naval Postgraduate School</p>	<p>21908</p> <p>Volumetric Low Frequency Broadband Synthetic Aperture Sonar for Deeply Buried Mines and Seabed Infrastructure</p> <p>Dr. David Raudales U.S. Naval Research Laboratory</p>	<p>24924</p> <p>Real-Time Lidar for Undersea Applications</p> <p>Dr. Layne Churchill Georgia Tech Research Institute</p>	<p>24893</p> <p>Designing for Target Strength Signatures</p> <p>Dr. Thomas Bowling Naval Surface Warfare Center Carderock Division</p>
<p>CONFERENCE ADJOURNS</p>			