TECHNICAL SESSIONS

WEDNESDAY						
7:00 am	Registration **Dealey Center Auditorium**			Sponsored by **GENERAL DYNAMICS** Mission Systems		
7:00 am	Networking Breakfast **Dealey Center Outside Plaza**			Sponsored by **L3HARRIS** FAST. FORWARD.		
	Aviation & Combat Systems Glen Sharpe **Session Chair**	**C4I** Dr. Robert Zarnich **Session Chair**	**AUKUS Session**	**Undersea Sensors** Joe Cuschieri **Session Chair**	**Undersea Vehicles 1** Chuck Fralick **Session Chair**	**Undersea Vehicles 2** Brian McKeon **Session Chair**	**Mine Warfare** Kevin Hagen **Session Chair**
	Building 83 Room 318	Building 83 Room 319	Dealy Theater	Building 84 Room 104	Building 83 Room 317	Bledsoe Hall	Building 84 Room 106
8:00	Shawn Slade U.S. Navy		1871311 Undersea Communications and Integration Program Office, PMW 770 **Jon Wrinn** PMW770 **Michael Hutter** PMW 770	1857008 A New Sensing System For The Arctic **D. Benjamin Reeder** Naval Postgraduate School **John Joseph** Naval Postgraduate School	1843235 UUV/ROV Payload Needs for SSW Applications **Walter Smith** Advanced Undersea Systems (PMS394) **Zachary Seither** Advanced Undersea Systems (PMS394)	1866673 DARPA's Ultra-reliable Unmanned Surface Vessel: Defiant **Gregory Avicola** DARPA / TEC Solutions	Development of New Underwater Explosives and Warheads **Daniela Wagus** NSWC Indian Head
8:30 am	Shawn Slade U.S. Navy		1856473 IWS 5.0 Program Status & Plans **Leroy Mitchell** IWS 5.0	1854914 PMS 485 Deployable Surveillance Systems Update **Susan LaShomb** PEOUWS PMS485E **Aaron Bengston** NUWCKPT Detachment San Diego	1880019 Manta Ray and Goblin Program Updates **Kevin Sloan** DARPA	1853645 Does Swarming Make Sense for Underwater Combat Power? **Peter Drewes** SAIC	1872444 NSWC Panama City Division Mine Warfare Training Shape Support Options **Brian Brock** NSWC Panama City
9:00	Virtual Ocean Acoustic Simulation & Stimulation **Sara Groth** Advanced Acoustic Concepts, LLC		Russian Seabed Warfare Capabilities ONI	PMS 485's Mobile Surveillance Systems Future Capabilities **Donald Ringel** NAVSEA PEO UWS PMS 485 **Rabon Cooke** NAVSEA PMS 485	1880019 Manta Ray and Goblin Program Updates Continued **Kevin Sloan** DARPA	1875655 Engaging the Commercial Industry To Shape Autonomy For Security Needs **Matthew Chapman** Oceaneering	1874435 Single Sortie Detect to Engage **Jeff Williams** Ocean Aero

Time							
9:30	1834471 Explainable Readiness Predictions With The Digital Aviation Readiness Technology Engine **Jamal Rorie** Naval Information Warfare Center Pacific		China Seabed Warfare Capabilities ONI	1858426 DARPA Banyan Program **Katherine Woolfe** DARPA **David Pfundstein** DARPA	1864903 Yellow Moray Torpedo Tube Launch and Recovery and REMUS 620: Critical Enablers for the Subsea Battlespace **J. Carl Hartsfield** HII Unmanned Systems **Adrian Gonsalves** HII Mission Technologies	1861764 Environmentally Aware Intelligent Navigation for Unmanned Underwater Vehicles **Nathaniel Mack** Penn State Applied Research Laboratory	Mining and Mine Countermeasures Acquisition Portfolio Update **Robert Dellsy** Mine Warfare Program Office (PMS 495)
10:00 am	**Networking Break** **Dealey Center Outside Plaza**				Sponsored by **Barber Nichols**		
10:30 am	1864934 ASW Using Nontraditional ASW Air Platforms **Rob Kunz** RDA, Inc. **Ron Hidde** RDA, Inc.		1854512 SSN AUKUS Combat System – The Path to A Trilateral, More Agile Future **CAPT Kevin Moller, USN** U.S. AUKUS A&I office **Pascal Gagnon** Australian Submarine Agency (ASA)	1851007 Submarine Sensor System Development **Rich Arnold** PEO IWS 5A	1877605 The Slocum Sentinel Glider – Expanded Capabilities for Enhanced Missions **Thomas Altshuler** Teled	1875698 Harbor and Critical Infrastructure Protection is a Growing Concern Adversaries Ability to Apply Subsea Effects Will Grow **Matthew Chapman** Oceaneering	1867897 Underwater and Seabed EOD **Amanda Bobe** ONR32
11:00 am	1848141 Digital Electronics Systems Engineering (DESE) Return on Investment (ROI) Calculation Methods for Major DoD Platforms **Steve Carslon** Cadence **James Chew** Cadence Design Systems	1869053 The Electronic Guard Book (E-Guard): A tool for Expediting Submarine Escape Time Calculations **Jeffrey Bolkhovsky** Naval Submarine Medical Research Laboratory	1853768 Combat Systems Improvements to ASW Systems for Surface and Submarine Platforms **Rich Arnold** PEO IWS 5A	1856518 ONR Anti-Submarine Warfare S&T Overview **Michael Vaccaro** Office of Naval Research **Tracey Fischer** ONR	1864937 Increasing Submarine Capability with Minimal Increases in Submarine Size **Brian Pering** Huntington Ingalls Industries Newport News Shipbuilding	1880022 Innovating in Submarine Construction and Maintenance **Kevin Sloan** DARPA	1872625 Mining Improvements to Increase Operational Agility **Andrew Blair** NSWC PCD
11:30 am	1867443 Jargon Aware Artificial Intelligence for Anti-Submarine Warfare Training **Thomas Murray** Signal Systems Corporation	1870209 C2 Considerations for Theater Mine Warfare Sustainment using Low-Profile Vessels (LPVs) **Don Brutzman**	Chinese and Russian Submarine Platforms Update ONI	1858473 ONR Code 32 ASW S&T Future Roadmap **Tracey Fischer** ONR **Michael Vaccaro** Office of Naval Research	1854223 Programming by Demonstration for Dual Arm Manipulation **Kelly Sprehn** Draper	1840135 Insights into Autopilot Design for Undersea Vehicles Using Nonlinear Control Theory **Daniel Kustaborder** The Applied Research Laboratory	1848125 As Synthetic Aperture Sonar in MCM Operations Becomes Tactically Common Then Contact Management Becomes A Challenge Given The Level of Detail Allows Detecting Virtually Every Object On The Sea Floor. **Terry Miller** AAC
12:00 pm	**Networking Lunch** **Base Gymnasium**				Sponsored by **LOCKHEED MARTIN**		
1:00 pm	COCO UW ISR **CAPT Jon Haase, USN** Navy Expeditionary Mission Program Office (PMS 408)	1856019 400 ft At-Sea Antenna for Expanded Communications **Gregory Niehaus**	Russian SSN / SSGN Ops and Tactics (Sonobuoy Evasion Emphasis) ONI	1848145 Operational Hold Time Performance Against High-End Peer Submarines during Out of Area Deployments	1861186 Advancing the Undersea Fight with Lethal Uncrewed Undersea Vehicles (Update on Extra Large Uncrewed	1864193 Insight: A Foundation for Undersea Vehicle Introspective Health Management (IHM)	Mine Countermeasure Mission Module Program Update **Ed Sujecki**

Time							
		RDA, Inc.		**Jeffrey Cares** Alidade Incorporated	Undersea Vehicle Capability and CONOPS) **Brian Quarles** The Boeing Company, Maritime and Intelligence Systems **Brian Grubel** The Boeing Company, Maritime and Intelligence Systems	**Mark Shanks** Metron, Inc. **Micah Eassa** Metron, Inc.	LCS Mission Modules Program Office (PMS 420)
1:30 pm	AI Driven Multi-Agent Mission Planning and Autonomy **CAPT Jon Haase, USN** Navy Expeditionary Mission Program Office (PMS 408)	1832207 Enhancing Machine Learning Model Cross-Device Applicability to Capture Encryption Keys from Power Expenditure **Ian Garrett** Virginia Tech	Russian SSN / SSGN Ops and Tactics (Sonobuoy Evasion Emphasis) Continued ONI	1861824 Inertial Navigation System Inspection and Detection of Evolving Roles (INSIDER) **Jamie Winterton** Boston Fusion Corporation **Julia Mertens** Boston Fusion Corporation	1876800 TALON: Torpedo Tube Launch ROV **John Pfeifler** Lockheed Martin **Matt DeLuca** Lockheed Martin	1854067 Project Mazu-Applications of Subsea Pulsed Power **Nate Gonzales** General Dynamics Mission Systems	1861223 Impact of a "Combined Arms" Approach to Enabling the Submarine Force's Operational Tasking **Jim Clancy** JHU/APL
2:00 pm	1827177 Data Distribution Service (DDS) Use in Undersea Autonomous Vehicles and Combat Systems **John Patchin** RTI **Paul Pazandak** RTI	1854226 Long Range Acoustic Communications **Jeffery Hoyle** Elbit America	1861329 PMS 406 Updated on UUV Programs and Enabling Capabilities **CAPT Matt Lewis, USN** PEO Unmanned and Small Combatants, Navy Unmanned Maritime Systems (PMS 406)	1861244 Advanced Submarine Sensor Surface Warfare Utility **Jonathan Sass** Johns Hopkins University Applied Physics Laboratory			1847351 Counter UUV Effectors **Matthew Searle** Oceanetics, LLC
2:30 pm	1842206 Busting the Myths of Applying State of the Practice Digital Electronic Systems Engineering To the Navy's Undersea Warfare Enterprise **James Chew** Cadence Design Systems	1840036 Scalable Event-Triggered Data Fusion for Acoustic Communications **Gregory Sinsley** Penn State Applied Research Laboratory	1874938 Universal Launch and Recovery of UUVs **Eric Hendricks** NIWC Pacific **Jason Bench** NIWC Pacific	1861881 Non-Acoustic Detection of Unmanned Underwater Vehicles **Seth Meiselman** U.S. Naval Research Laboratory **Geoffrey Cranch** U.S. Naval Research Laboratory			1877016 Review of NPS Research Projects in Mine and Undersea Warfare **Rick Williams** Naval Postgraduate School
3:00 pm	**Networking Break** **Dealey Center Outside Plaza**			Sponsored by **Barber Nichols**			
3:30 pm	1831947 Exploring Knowledge Retrieval Techniques in SWFTS Using Open Domain Large Language Models **William Matuszak** SeaCorp **Matthew Corser** NUWC	1863226 Challenges and Opportunities for Enabling Submarine Operations in the Arctic **Michael Brawner** General Dynamics Electric Boat **Joshua Malaro** General Dynamics Electric Boat	1880042 PMS415 Updates **CAPT Gene Severtson, USN**	1863789 Automated Machine Learning Neural Network Model Architecture Search Framework for Underwater Acoustic Signal Detection & Identification **Ira Morgan** Applied Research Laboratories University of Texas at Austin			1852424 KnowGeo: Underwater Acoustic Sensor Network **Colin Funai** Raytheon BBN Technologies

4:00 pm	1874802 Future Naval Power Systems Considerations for Combat Weapon Systems **Elvis Crespo** Booz Allen Hamilton	1862350 Collaboration for Undersea Decision Advantage (CUDA) **Todd Cloutier** Monterey Technologies, Inc.	Russia / China Torpedo / Counter Developments ONI	1856462 Automated Detection of Novel Targets In Synthetic Aperture Sonar Imagery Using Training Data Generated by Simulation **Joshua Humberston** Sandia National Laboratories	1875667 Engaging the Seabed and Performing Careful Identification and Access To Critical Areas of Concern **John Zimmerman** Oceaneering	1853375 ROMULUS: Remote Operational Monitoring Unit Leveraging UUV Simulation **Thomas Stubbs** Integer Technologies, LLC **Josh Knight** Integer Technologies, LLC	Navy Expeditionary Mine Countermeasures Program Update **CAPT Jon Haase, USN** Navy Expeditionary Mission Program Office (PMS 408)
4:30 pm	1847432 Hybrid Drone: The World's Only Multi-domain (Marine, Ground, Air) Autonomous Vehicle **Scott Kempshall** HyALTA Aeronautics, Inc.	1875725 Oceaneering's Onshore Remote Operation Centers **Matthew Chapman** Oceaneering	Russia / China UxV (Platforms + Ops) ONI	1875843 Transparent Oceans Using Coordinated Autonomous Network Sensors **Andrew March** MIT LL **Nicholas Beaird** MIT LL	1854227 At-Sea Testing of a Blended Wing Glider **Scott Mahar** General Atomics	1854187 Submarine High Energy Laser Weapon System **Michael Pero** Naval Surface Warfare Center Dahlgren Division	Airborne Laser Mine Detection System and Airborne Mine Neutralization System Fleet Operations **LCDR Rob "OG" Swain, USN** Helicopter Sea Combat Squadron 21 **LT Charles "Handyman" Thomas, USN** Helicopter Sea Combat Squadron 21
5:00 pm	**Conference Adjourns**						