TECHNICAL SESSIONS

WEDNESDAY, MARCH 20

7:00 am

Registration
COURTYARD MARRIOTT

Sponsored by
GENERAL DYNAMICS
Mission Systems

7:00 am

Networking Breakfast
ADMIRAL KIDD CENTER LAWN

	Artificial Intelligence & Machine Learning Session Chair: Glen Sharpe	**Find, Fix, Track, Target (F2T2)** Session Chair: Joe Cuschieri	**Find, Fix, Track, Target (F2T2) 2** Session Chair: Paul Rosbolt	**Kinetic/Non-Kinetic** Session Chair: Chuck Fralick
	Point Loma	Skyline A	Skyline B	Nimitz
8:00 - 8:25 am	IWS 5.0 AI/ML Investments: Lessons Learned and Future Initiatives **Margaret C. Stout** NAVSEA PEO IWS 5.0 Undersea Warfare Systems **Chad Hawes** JHU/APL	Learning from the Classics for the Future Fight **Jeffrey Cares** Alidade Incorporated	UxV Presentation ONI	Future Torpedo Efforts **Christopher Polk** Undersea Weapons Program Office (PMS 404)
8:30 - 8:55 am	Project Harbinger: Artificial Intelligence for Acoustic Applications **James McGee** UWDC **Jeff Anderson** Undersea Warfighting Development Center	Reducing the MCM Operations Timeline Through Innovative Ideas, Efficient Material Solutions and Automation **Vic Leung** PMS 495		U.S. Navy Subsea and Seabed Warfare (SSW) Strategy and Mission Packages **Dr. Eric Hendricks** NIWC Pacific **Dr. Cherry Wakayama** NIWC Pacific
9:00 - 9:25	Context- and AI-Based	IWS 5.0 Program Status	General Atomics	The 4th Generation

am	Point Loma	Skyline A	Skyline B	Nimitz
	Reasoning for Identification onBOard UxVs (CARIBOU) **Jamie Winterton** Boston Fusion Corporation **Rob Ceres** Boston Fusion Corporation	& Plans **Leroy Mitchell** Program Executive Office, Integrated Warfare Systems (IWS 5.0)	Blended Wing Glider **Scott Mahar** General Atomics	UUV: Designing for Adaptability and Scale **Kevin Sloan** DARPA
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9:30 - 9:55 am	Owning Project OVERMATCH Enabling Electronic Systems Designs and Supply Chain **Ezra Hall** Aerosapce and Defense **Steven Carlson** Aerospace and Defense	Undersea Fixed Surveillance Systems - Future Systems Plans, Concepts, and Advanced Capabilities **Robert Barton** IUSS Fixed Surveillance Systems, PMS 485	Joint Autonomous Remote Vehicle Integration System (JARVIS) Abstract **Richard Byers** Naval Surface Warfare Center Panama City Division	Overview of the Naval Mines Portfolio: The Need for a Wide Range of Platforms or Systems Capable of Delivering In-service and New Mines **Eric Gonzalez** PMS 495
10:00 am	**NETWORKING BREAK** Admiral Kidd Center Lawn			
10:30 - 10:55 am	Assessing Ocean Floor Morphology with AUVs **Joshua Miner** Naval Postgraduate School	Potential Adversary Sub Ops / Deployments ONI	Intelligent Navigation Manager **Michael Ricard** C. S. Draper Laboratory **Katherine Levinson** C. S. Draper Laboratory	PMS 406 Kinetic and Non-Kinetic Effects from UUVs **CDR David Ferris, USN** PMS 406
11:00 - 11:25 am	Advancing MIW & SSW ATR through Project AMMO **David Barsic** Johns Hopkins University	Potential Adversary Sensor Updates ONI	Capable and Reliable Autonomous Under Water Vehicles for the Great Power Competition Era	Sub-launched UAS Study **Bryan Clark** Hudson Institute

/ Applied Physics Laboratory		**Lance Page** Draper **Meredith Pitchon** Draper	

Time				
11:30 - 11:55 am	Supporting Commanders' Operational Planning and Decision-Making for Submarine Security Using Bayesian-Based Artificial Intelligence and Data Fusion **Jeremy Werner** DOT&E	PMS 485 Deployable Surveillance Systems Update **Susan LaShomb** Deployable Surveillance Systems, Maritime Surveillance Systems Program Office	Undersea Communications and Integration Program Office **CAPT David Kuhn, USN** PMW 770	Deep Sea Expeditionary with no Decompression (DSEND) Dive Suit-Extending the Reach of Navy Divers **Chad Klinesteker** Johns Hopkins Applied Physics Lab
12:00 pm	**NETWORKING LUNCH** ADMIRAL KIDD CENTER LAWN		Sponsored by L3HARRIS™	

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1:00 - 1:25 pm	Propelling Undersea Warfare Performance with a Precision Learning System (PLS) **Evan Oster** Aptima, Inc.	Non-Traditional Signature Susceptibility Characterization **Thomas Miller** Division 74, Naval Surface Warfare Center, Carderock **Anne Fullerton** Department 70, Naval Surface Warfare Center, Carderock		Naval Postgraduate School Naval Mining Research Projects **Rick Williams** Naval Post Graduate School
1:30 - 1:55 pm	Deep Dive: Leveraging AI in Subaquatic Strategies for Underwater Warfare	Vector Sensor Based System for ASW, cUUV, and Oceanographic Research Applications	Accelerating the Kill Chain **Jim Pietrocini** KBR	USW Weapons Update ONI

	Excellence **Jonathan Hard** H2L Solutions, Inc.	**Mark Paulus** NUWC Keyport		
2:00 - 2:25 pm	Leveraging Reinforcement Learning to Emulate OPFOR in Operational Wargames **Connor Ahern** Booz Allen Hamilton **Kaimi Kahihikolo** Booz Allen Hamilton	Laser Transduction for Underwater Communications **Megan Driggers** Naval Undersea Warfare Center- Division Newport	Expendable Unmanned Underwater Vehicles for Tactical Navy Applications **Ben Marsan** Applied Research Laboratories, The University of Texas at Austin	Potential Adversary Tactics Updates ONI
2:30 - 2:55 pm	Semantic Segmentation of Sub-bottom Profiling Data for Subseafloor Sediment Classification **Justin Diamond** University of Washington	Expanding Undersea Overmatch with Attritable Payloads **Jeffery Hoyle** Elbit America	Self Assessment for Active Terrain Aided Navigation **Amanda Marie Agustin** Naval Postgraduate School	Unmanned ASW: Find Fix, Track, Target, and Engage and Assess AGILE SHARK **Mark Kenny** Ultra Maritime

3:00 pm
NETWORKING BREAK ADMIRAL KIDD CENTER LAWN

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3:30 - 3:55 pm	AI/ML in Undersea Warfare: Myths, Realities, and Solutions for Human-AI/ML Integration **Maia Cook** Pacific Science & Engineering Group, Inc. (PSE)	Revolutionary Flexibility in Airborne Acoustic ASW Shrinks Kill Chain **Danny Willis** Boeing	Using In-house Commercial Digital Electronics Systems Engineering Capabilities To Develop, Sustain, and Modernize "At the Speed of Relevance" The Enabling Electronics Systems For Project OVERMATCH	Non-Kinetic and Unconventional Effectors **Matthew Searle** Oceanetics, LLC Corporation

Time				
			James Chew Cadence Design Systems **Jeff Sanders** Cadence Design Systems	
4:00 - 4:25 pm	Adversary Sensor Updates ONI	Acoustic Signal Sensing Using Fiber Optics in Air Launched Passive Sonobuoys **Brian Kenney** Battelle Memorial Institute **Nicholas Romano** Battelle International	Safe, Pressure-Tolerant Subsea Batteries Extend Endurance for Improved Underwater Find, FIx, Track, Target **Leon Adams** Southwest Electronic Energy	Applications of Increased Autonomy in Acoustic Air ASW **Bradley Riddle** Signal Systems
4:30 - 4:55 pm	Threats to Industry ONI		Revolutionizing Underwater Warfare: The Impact of American Lithium Energy's Advanced Battery Technology on Unmanned Underwater Systems **William Hadala** American Lithium Energy Corporation	Undersea Acoustic Risk Analysis Decision Aid for Anti-Submarine Warfare **Steve Psaras** Marine Acoustics, Inc.