# **2017 Spring Conference**Joint Undersea Warfare Technology

Leveraging the USW Force for Undersea Superiority; Sea Floor to Space, Deep Water to the Littorals, and Across the Electromagnetic Spectrum



Agenda
Speaker Biographies
Attendee Information
Attendee Roster

April 24-26, 2017 Admiral Kidd Conference Center, San Diego, CA

# WELCOME TO THE 2017 JOINT UNDERSEA WARFARE TECHNOLOGY SPRING CONFERENCE

Leveraging the USW Force for Undersea Superiority; Sea Floor to Space, Deep Water to the Littorals, and Across the Electromagnetic Spectrum

- Hear and discuss with senior Navy leadership the latest requirements and developments in Undersea Warfare
- View technical presentations related to countering submarine and mine threats to the free and open flow of sea borne commerce
- Join professionals from active duty Navy, key Navy Secretariat, the Pentagon, SYSCOM program offices, Navy & University labs, and the defense industrial base
- · Learn about the latest developments relative to the conduct of power projection from the sea.

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#### SCHEDULE-AT-A-GLANCE

#### WELCOME RECEPTION

Holiday Inn Bayside Monday, April 24: 5:00 pm - 6:30 pm

#### PLENARY SESSION

Admiral Kidd Conference Center Tuesday, April 25: 8:00 am - 5:05 pm

#### **TECHNICAL SESSIONS**

Admiral Kidd Conference Center Wednesday, April 26: 8:00 am - 5:00 pm

#### **NETWORKING RECEPTION**

Admiral Kidd Conference Center Tuesday, April 25: 5:05 pm - 7:00 pm

Please provide your email address on the sign-in sheet at registration to optin for sharing your contact information post-conference. The sign-in sheet will be shared by email to all registered attendees.



## **TUESDAY, APRIL 25**

0800 Call to Order

Mr. Paul Normand, Chairman, NDIA Undersea Warfare Division

Introduction of Speakers

Mr. Wayne Jakubowski, Chairman, Spring NDIA Joint USW Technology Conference

0805 Sponsor Welcome

Mr. Don McCormack, Executive Director NSWC and NUWC

0810 VADM Troy Shoemaker, USN

Commander, Naval Air Forces and Naval Air Forces, Pacific

0845 RADM Frederick "Fritz" Roegge, USN

Commander, Submarine Force, U.S. Pacific Fleet

0920 VADM Charles "Chas" Richard, USN

Deputy Commander, U.S. Strategic Command

0955 Break

1025 RADM Michael Jabaley, USN

Program Executive Officer, Submarines

1100 RDML Dean Peters, USN

Program Executive Officer, Air ASW, Assult, Special Missions

1135 Award Ceremony

1200 Lunch

1315 Introduction of Speakers

Mr. Greg Vaughn, Co-Chairman, Spring NDIA Joint USW Technology Conference

1315 Mr. Craig Shelden

ONI Senior Intelligence Research Analyst

1400 CAPT Mark Bollong, USN

Commodore, Naval Special Warfare Group Three

1430 Break

1500 Mr. Jerry Ferguson

Deputy Commander, Undersea Warfighting Development Center

1530 O-6 Panel

Moderator: Mr. Jerry Ferguson, Deputy Commander, Undersea Warfighting

**Development Center** 

- CAPT David Walt, USN, Commander, Helicopter Maritime Strike Wing, Pacific
- · CAPT Robert Gaucher, USN, Commander, Submarine Development Squadron FIVE
- CAPT Brian Shipman, USN, Officer in Charge, Sea Combat Division
- · CAPT Ronald Shaw Jr., USN, Commanding Office, Naval Oceanography Operations Command

1645 Closing Remarks

1655 Adjourn

1700 Networking Reception

# Thank you to our Breakfast Sponsor!



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### **WEDNESDAY, APRIL 26**

#### 0800 **CONCURRENT SESSIONS**

#### **Aviation USW**

Nimitz Room

PMA-264/PEO(A) S&T Brief

- Captain Douglas Belvin, NAVAIR PMA-264
- Mr. Shawn Slade, Chief, Technology Office, Naval Aviation Enterprise

#### **C4I/Combat Systems/Warfighter Performance**

Harbor Lounge

**Undersea Systems Update** 

CAPT Doug Adams, USN, Warfare Requirements APM-PMS 450, NAVSEA-PEO IWS

#### **Mine Warfare**

Pt. Loma Room

No Session

#### **Undersea Sensors**

Skyline Room

**IWS5 Sonar Update** 

• Mr. Peter Scala, Chief Engineer, USW Advanced Development, PEO(IWS)

#### **Undersea Vehicles**

San Diego Room

Family of UUVs

• Ms. Jenny Roberts, Deputy, Undersea Influence, OPNAV N97

#### 0830 **CONCURRENT SESSIONS**

#### **Aviation USW**

Nimitz Room

PMA-264/PEO(A) S&T Brief

- Captain Douglas Belvin, NAVAIR PMA-264
- · Mr. Shawn Slade, Chief, Technology Office, Naval Aviation Enterprise

#### C4I/Combat Systems/Warfighter Performance

Harbor Lounge

So You Want to be an ASW Vendor?

Ms. Meg Stout, ASW Advanced Development APM, PEO(IWS)

#### **Mine Warfare**

Pt. Loma Room

A Threat Based Approach to Degaussing System Design

• Mr. Joel Milano, Senior Software Engineer, Naval Surface Warfare Center Carderock Division

#### **Undersea Sensors**

Skyline Room

**IWS5 Sonar Update** 

• Mr. Peter Scala, Chief Engineer, USW Advanced Development, PEO(IWS)

#### **Undersea Vehicles**

San Diego Room

How prototyping and Experimentation Using Set Based Design (SBD) Are Being Used In The LDUUV Program

• LCDR Eric Erhard, Future Capabilities Requirements Officer, OPNAV N97

#### 0900 **CONCURRENT SESSIONS**

#### **Aviation USW**

Nimitz Room

PMA-264/PEO(A) S&T Brief

- Captain Douglas Belvin, NAVAIR PMA-264
- · Mr. Shawn Slade, Chief, Technology Office, Naval Aviation Enterprise

#### **C4I/Combat Systems/Warfighter Performance**

Harbor Lounge

**IWS5 Combat System Update** 

• Mr. Lee Agin, Technical Director, PEO IWS 5.0

#### **Mine Warfare**

Pt. Loma Room
No Session

#### **Undersea Sensors**

Skyline Room

PMS-485 Deployable Systems Group: Status and Future Plans

• Mr. John Curtis, Deployable Systems Manager, PMS-485

#### **Undersea Vehicles**

San Dieao Room

Foundation: Unmanned Maritime Systems in Development for the Future Force

• Mr. Howard Berkof, Deputy Program Manager, PEO/LCS

#### 0930 **CONCURRENT SESSIONS**

#### **Aviation USW**

Nimitz Room

Passive and Multi-static Active Mission Planning Tools for Theater ASW

 Ms. Karen Frech, Branch Head, 4.5.14.4 Mission Support, Airborne ASW Systems Engineer Division, NAWCAD

#### **C4I/Combat Systems/Warfighter Performance**

Harbor Lounge

PMS 425 Update

• CAPT Burchard Jackson, USN, *Submarine Combat and Weapons Control Program Manager*, PEO Submarines, PMS 425

#### **Mine Warfare**

Pt. Loma Room

Modular, Open, Low Logistic, Low-Cost UUVs to Support Rapid Mine Assessment

• Mr. Jeffrey Smith, President, Riptide Autonomous Solutions, LLC.

#### **Undersea Sensors**

Skyline Room

TRAPS: A Rapidly-Deployable, Deep-Ocean ASW Solution

· Mr. Shelby Sullivan, STO Program Manager, Defense Advanced Research Projects Agency

#### **Undersea Vehicles**

San Diego Room

Snakehead Large Displacement Unmanned Undersea Vehicle (LDUUV) Technical Update

• Mr. Christopher Egan, LDUUV Technical Program Manager, NUWC Division, Newport

1000 Break

#### 1030 **CONCURRENT SESSIONS**

#### **Aviation USW**

Nimitz Room

Bayesian Passive Sonar Fusion and Tracking for ADAR Sonobuoy Data

• Dr. Jason Aughenbaugh, Research Scientist, Applied Research Laboratories, University of Texas at Austin

#### **C4I/Combat Systems/Warfighter Performance**

Harbor Lounge

Commercial Perspectives Supporting CYBERSAFE

• Mr. Joe Beel, Strategic Programs Manager, Cisco Systems, Inc.

#### **Mine Warfare**

Pt. Loma Room

Surface and Mine Warfighting Development Center (SMWDC) Update

· CAPT Christopher Merwin, USN

#### **Undersea Sensors**

Skyline Room

Constrained Robust Submodular Sensor Selection with Application to Multistatic Sonar Arrays

· Mr. Thomas Powers, University of Washington Department of Electrical Engineering

#### **Undersea Vehicles**

San Dieao Room

A New Family of Man-Portable, Low Cost UUVs

• Mr. Daniel Lawrence, Field Operations, Riptide Autonomous Solutions, LLC.

#### 1100 **CONCURRENT SESSIONS**

#### **Aviation USW**

Nimitz Room

Autonomous Detection and Tracking of Underwater Targets with the TSS2 Sonobuoy

• Dr. Luke Hollmann, Engineering Scientist, Ultra Electronics-USSI

#### C4I/Combat Systems/Warfighter Performance

Harbor Lounge

USW RAFT: An Operational Concept for Reconstruction & Analysis (R&A), Feedback and Training

• Mr. Michael Bauer, Fleet Division, Naval Undersea Warfare Center Division Keyport

#### **Mine Warfare**

Pt. Loma Room

Mine Countermeasures Squadron THREE Update

CAPT Jeff Cronin, USN, Commander, Mine Countermeasures Squadron THREE

#### **Undersea Sensors**

Skyline Room

Enhancing Maritime Situational Awareness in Contested Environments Using a Full-Spectrum Distributed Sensor System

• Mr. Kevin Andryc, Principal Systems Engineer, L3 Technologies-KEO Division

#### **Undersea Vehicles**

San Diego Room

Nonmetallic Hulls for Undersea Vehicles, Payloads and Sensors

Mr. Jack Chapman, Electric Boat Corporation

#### 1130 **CONCURRENT SESSIONS**

#### **Aviation USW**

Nimitz Room

DDVLA (Digital DIFAR Vertical Line Array) Sonobuoy and MFAS (Mid Frequency Active Sonobuoy) Program Overviews

· Mr. William King, Business Development & Programs Manager, SeaLandAire Technologies, Inc.

#### **C4I/Combat Systems/Warfighter Performance**

Harbor Lounge

Design of a Role Pplit and Dual Operator Human Machine Interface for Submarine Electronic Support Measures (ESM)

Dr. Harvey Smallman, Director, Visual Analytics, Pacific Science & Engineering Group

#### **Mine Warfare**

Pt. Loma Room

NPS 2017 & 2018 Mine Warfare and USW Projects

Mr. Richard Williams III, Expeditionary & Mine Warfare Adviser, Naval Postgraduate School

#### **Undersea Sensors**

Skyline Room

Feature-Based Estimation of Vehicle Ego-motion and Motion of External Agents

• Mr. Chris Monaco, *Graduate Research Assistant*, Pennsylvania State University Applied Research Laboratory

#### **Undersea Vehicles**

San Diego Room

The Path to Implementing Cost Effective and Improved Unmanned Undersea Vehicle Systems (UUVs)

- Progress Update
- Mr. Scott Foster, Chief Software Engineer, Leidos

#### 1200 Lunch

#### 1300 **CONCURRENT SESSIONS**

#### **Aviation USW**

Nimitz Room

Fleet Multistatic Active Coherent (MAC) Operations and Future Efforts

 Mr. Rick Fillhart, Multistatic Active Coherent Team Lead, Naval Air Warfare Center Aircraft Division

#### **C4I/Combat Systems/Warfighter Performance**

Harbor Lounge

Improving SONAR Operator Proficiency

CAPT Ronald Toland, Commanding Officer, FLEASWTRACEN

#### **Mine Warfare**

Pt. Loma Room

Noise Control as a Combat System

· Mr. Joseph Osborne, Engineer, Naval Surface Warfare Center Carderock Division

#### **Undersea Sensors**

Skyline Room

Inverse Design of Sound-Absorbing Materials Using Bayesian Inversion

• Mr. Benjamin Goldsberry, *Graduate Research Assistant*, Applied Research Laboratories, University of Texas at Austin

#### **Undersea Vehicles**

San Diego Room

Mobile Anti-Submarine Training Target (MASTT)

CAPT John Newton, Program Manager, PEOSUBS PMS 399 (SOF Undersea Mobility)

#### 1330 **CONCURRENT SESSIONS**

#### **Aviation USW**

Nimitz Room

Next Generation Multistatic Active Coherent (NGMAC) Project

• Dr. David Bromley, Electronics Engineer, Naval Air Systems Command

#### **C4I/Combat Systems/Warfighter Performance**

Harbor Lounge

Heterogeneous Quantum Computing for Optimized Sensor Asset Deployment

• Dr. Joseph Dulny, III, Lead Scientist, Booz Allen Hamilton

#### **Mine Warfare**

Pt. Loma Room

Payloads for Single - Sortie Mine Countermeasures

• Mr. John Dudinsky, Engineer, Naval Surface Warfare Center, Panama City Division

#### **Undersea Sensors**

Skyline Room

Transparent Oceans via Acoustic Daylight: Identifying Silent and Near Silent Underwater Targets

• Mr. Zachary Stillman, Computer Scientist, Naval Air Warfare Center

#### **Undersea Vehicles**

San Diego Room

Modular Off-Board Clandestine Communications and Approach (MOCCA)

· Mr. Jason Rudzinsky, Chief Technology Officer, Applied Physical Sciences Corporation

#### 1400 **CONCURRENT SESSIONS**

#### **Aviation USW**

Nimitz Room

Randomized Path Optimization for the Mitigated Counter-Detection of UAVs

• ENS Mitchell Heaton, USN, Student, Naval Postgraduate School

#### C4I/Combat Systems/Warfighter Performance

Harbor Lounge

DARPA's Tactical Undersea Network Architectures (TUNA) Program – Enabling the Rapid Reconstitution of Tactical Data Networks in Contested Environments

• Mr. Geno Flores, Branch Head, SPAWAR Systems Center Pacific

#### **Mine Warfare**

Pt. Loma Room

Tactical Decision Aids for Planning, Post-Mission Analysis and Training

• Mr. Mike Shepherd, Enginering Specialist, General Dynamics Electric Boat

#### **Undersea Sensors**

Skyline Room

Advanced 3D Bathymetric SAS SLS

· Mr. Robert Pohland, Program Manager, Northrop Grumman Oceanic and Naval Systems

#### **Undersea Vehicles**

San Diego Room

Adaptive Sampling Methods Applied to Test and Evaluation of Autonomous Systems

• Mr. Paul Stankiewicz, Engineer, Johns Hopkins Applied Physics Lab

#### 1430 **CONCURRENT SESSIONS**

#### **Aviation USW**

Nimitz Room

Transparent Oceans via Acoustic Daylight

• Mr. Zachary Stillman, Computer Scientist, Naval Air Warfare Center

#### C4I/Combat Systems/Warfighter Performance

Harbor Lounge

Theater USW Update to NDIA

• Mr. Michael O'Hare, Principal System Engineer, PEO IWS 5

#### **Mine Warfare**

Pt. Loma Room

Autonomous Detection and Tracking of Unmanned Underwater Vehicles (UUVs) with the TSS2 Sonobuoy

Dr. Luke Hollmann, Engineering Scientist, Ultra Electronics-USSI

#### **Undersea Sensors**

Skyline Room

Neutrally Buoyant Optical Fibers for Undersea Applications

• Dr. Michael Messerly, Lawrence Livermore National Lab

#### **Undersea Vehicles**

San Diego Room

Impact of Langmuir Type Circulations on the Structure, Dynamics, and Persistance of Ship Wakes

• Mr. John Somero, PhD Student, Virginia Tech

1500 Break

#### 1530 **CONCURRENT SESSIONS**

#### **Aviation USW**

Nimitz Room

No Session

#### **C4I/Combat Systems/Warfighter Performance**

Harbor Lounge

Precision Positioning & Data Telemetry

· Mr. Peter St. Jacques, Engineer, Naval Undersea Warfare Center Division Newport

#### Mine Warfare

Pt. Loma Room

Modular Undersea Effectors (MUSE)

• Mr. John D. Dudinsky, Engineer, Naval Surface Warfare Center Panama City Division

#### **Undersea Sensors**

Skyline Room

Finding More in Your Sensor Data

• Mr. Lawrence An, Data Analytics, DAn Solutions

#### **Undersea Vehicles**

San Diego Room

DARPA's Blue Wolf Program

• Mr. Justin Rockwell, Naval Undersea Warfare Center, Newport Division

#### 1600 **CONCURRENT SESSIONS**

#### **Aviation USW**

Nimitz Room No Session

#### **C4I/Combat Systems/Warfighter Performance**

Harbor Lounge

Desktop Virtualization in the United States Navy

• Mr. John Sprague, Client Executive, World Wide Technology, Inc.

#### **Mine Warfare**

Pt. Loma Room

No Session

#### **Undersea Sensors**

Skyline Room

No Session

#### **Undersea Vehicles**

San Diego Room

No Session

#### 1630 Aviation USW

Nimitz Room

No Session

#### **C4I/Combat Systems/Warfighter Performance**

Harbor Lounge

CyberSecurity Analytics Reference Architecture

• Mr. John Sprague, Client Executive, World Wide Technology, Inc.

#### **Mine Warfare**

Pt. Loma Room

No Session

#### **Undersea Sensors**

Skyline Room

No Session

#### **Undersea Vehicles**

San Diego Room

No Session

1700 Adjourn

Please join us in September for the NDIA Joint Undersea Warfare Technology Fall Conference



## Captain Mark J. Bollong

Naval Special Warfare Group THREE

A native of Key West, Florida, Captain Mark Bollong is a graduate of The University of Florida and was commissioned through Naval ROTC. He is a graduate of BUD/S class 185, and has served in several leadership positions in the Naval Special Warfare community such as SEAL Platoon Officer in Charge, SEAL Task

Unit Commander, SEAL Delivery Vehicle Task Unit Commander, SEAL Team THREE Executive Officer, SEAL Team FIVE Commanding Officer, and Naval Special Warfare Group ONE Chief Staff Officer.

He has served as a staff officer at Naval Special Warfare Command as a resource manager, at U.S.

Special Operations Command as an Assistant Assessment Director for Special Programs, and at

SOCAFRICA as the Director of Operations and Chief of Staff.

He has completed twelve deployments to U.S. Pacific Command, Korea, U.S. Central Command, and U.S. Africa Command serving as Deputy Chief of Operations for Task Force-OMAHA (Operation Enduring Freedom), Deputy Commander for the Iraqi Personal Security Detail (Operation Iraqi Freedom (OIF)), Naval Special Warfare Task Unit Commander-Philippines (Operation Enduring Freedom-PI), Future Operations for Task Force-17 (OIF), Deputy Commander for Combined Joint Special Operations Task Force-Arabian Peninsula (OIF), Commander of Special Operations Task Forces-West in Ramadi (Operation New Dawn), and a brief stint as Special Operations Command Forward-Central Africa (Operation Observant Compass). He assumed command as the Commodore of Naval Special Warfare Group THREE on July 14, 2016.

He holds a Master of Science degree in Defense Analysis (Special Operations Low-Intensity Conflict) from the Naval Postgraduate School.

His personal decorations include the Defense Superior Service Medal, Bronze Star (four awards), Defense Meritorious Service Medal, Meritorious Service Medal, Joint Commendation Medal, Navy and Marine Corps Commendation Medal (three awards), and as well as various deployment, unit, and campaign medals.



## Mr. Jerry F. Ferguson

Deputy Commander, Undersea Warfighting Development Center

Mr. Ferguson is the Deputy, Undersea Warfighting Development Center. UWDC is the Navy's Warfighting Center of Excellence for Undersea Warfare, and is headquartered in Groton, Connecticut with detachments in San Diego, Norfolk, and Yokosuka, Japan. UWDC is

responsible for training, assessment, tactical development, and analysis of Undersea Warfare capabilities including Submarines, UUV, Strike Group and Theater ASW, and integrated Fleet Operations. He was appointed to the Senior Executive Service in December, 2004 when he was selected as the Deputy for the then-newly established Fleet Antisubmarine Warfare Command. Mr. Ferguson

led the development of the integrated Antisubmarine Warfare training continuum that remains in use for all Navy Strike Groups. His Fleet Integrated Prioritized Capability List, which delineates fleet requirements to the CNO, has become standard practice force wide.

In October, 2006 Fleet Antisubmarine Warfare Command merged with the Navy Mine Warfare Command to form the Naval Mine and Antisubmarine Warfare Command where he continued to serve as the Deputy. NMAWC was the Navy's Warfighting Center of Excellence for Mine Warfare and Antisubmarine Warfare and conducted integrated Undersea Warfare training and assessment Navy-wide.

In September, 2015 the ASW team from Naval Mine and Antisubmarine Warfare Command shifted to become part of the new Undersea Warfighting Development Center.

Prior to joining the civil service, Mr. Ferguson served as an Active Duty Navy Officer. Afloat, he served as an OIC of several Direct Support Elements aboard U.S. Pacific Fleet Submarines. He commanded USS HARRY W. HILL (DD-986), and served as Operations Officer for Commander, Cruiser Destroyer Group THREE / USS CARL VINSON (CVN-70) Battle Group. As Commander, Destroyer Squadron FIFTEEN, Mr. Ferguson commanded the Yokosuka, Japanbased escorts for the USS INDEPENDENCE (CV-62) and USS KITTY HAWK (CV-63) Battle Groups.

He served in a number of shore staff assignments, including Director, ASW Requirements Division (N74) for the Chief of Naval Operations. As N74, he led the development of the Navy's initial USW Mission Capability Package which blended ASW and Mine Warfare requirements and programs. During his last year as N74, he served simultaneously as Head, Warfare Integration Branch (N702) for the then-new Warfare Integration Division (N70) and oversaw the development of Mission Capability Packages for all naval warfare areas.

He concluded his Active Duty service as Chief of Staff for Commander, Carrier Group One. COMCARGRU 1 conducted advanced warfare training for all West Coast Carrier and Expeditionary Strike Groups.

Mr. Ferguson earned a Bachelor's Degree from Eckerd College and a Master's Degree from Georgetown University.

He was awarded the Navy Meritorious Civilian Service Medal and Navy Superior Civilian Service Medal. His active duty decorations included the Legion of Merit (five awards) and Meritorious Service Medal (four awards).



# **CAPT Robert Gaucher**COMSUBDEVRON FIVE

Originally from Pittsfield, MA, Captain Gaucher graduated from the United States Naval Academy in 1991 with a Bachelor of Science degree in Systems Engineering. He is married to the former Renea Wilder and has two daughters, Alexandra (Ally) and Katherine (Kate).

His operational assignments include service in both fast attack and ballistic missile submarines including service as a Division Officer onboard USS FLYING FISH (SSN-673), Navigator/Operations Officer onboard USS OKLAHOMA CITY (SSN-723), and Executive Officer onboard USS MARYLAND (SSBN-738) (BLUE). During these tours he completed three strategic deterrent patrols as well as deployments to the Arctic, Caribbean, North Atlantic, and Mediterranean.

Captain Gaucher commanded USS CITY OF CORPUS CHRISTI (SSN 705) in Apra Harbor, Guam. During his command tour, CITY OF CORPUS CHRISTI completed two Western Pacific mission cycles and a Homeport Change to Pearl Harbor, while earning two Meritorious Unit Commendations and the Submarine Squadron Fifteen Battle Efficiency 'E'.

His staff assignments include instructor duty at Naval Nuclear Power School, Flag Aide to Commander Submarine Forces, Current Maritime Operations Branch Head at U. S. Pacific Command, and Director of Operational Support Branch on the Chief of Naval Operations staff.

He earned a Master's of Science Degree in Engineering Management from the University of Central Florida in 1998. In addition, he completed the Naval Postgraduate School Executive Business Course in Monterey, CA, and is a Massachusetts Institute of Technology Center for International Studies Seminar XXI fellow.

Captain Gaucher served on teams which have been awarded four Battle Efficiency E's, three Meritorious Unit Commendations, two Joint Meritorious Unit Awards, the CNO Safety Award, and the Arleigh Burke Trophy.

Captain Gaucher's personal awards include the Legion of Merit, Defense Meritorious Service Medal, Meritorious Service Medal (3 awards), Navy Commendation Medal (4 awards), and Navy Achievement Medal (4 awards). His additional awards include the David Lloyd Award for outstanding leadership and the AFCEA Award for excellence in Command, Control, and Tactical Planning.



# RADM Michael E. Jabaley Program Executive Officer for Submarines

A native of Jackson, Mississippi, Rear Adm. Michael Jabaley graduated with high honors from Vanderbilt University in 1984 with Bachelor of Science in Mathematics and Computer Science, and was commissioned via Officer Candidate School in Newport, Rhode Island.

Jabaley holds a master's degree in engineering administration from Virginia Tech, a master's degree in business administration from the Naval Postgraduate School, and is a graduate of the Command and Staff Course of the Naval War College and of the Joint and Command Staff Officer School of the Armed Forces Staff College (National Defense University).

Jabaley's sea tours include assignments aboard USS Drum (SSN 677), USS Ohio (SSBN 726), USS City of Corpus Christi (SSN 705) and command of USS Louisville (SSN 724) from May 2002 to August 2004.

On shore, Jabaley has served on the staff of commander, Submarine Group 8 in Naples, Italy; as a technical assistant to the director, Naval Nuclear Propulsion; on the staff of the Joint Chiefs of Staff as an operations officer in nuclear operations; as senior inspector of the Tactical Readiness Evaluation Team and Force Navigator on the staff of commander, Submarine Force, U.S. Pacific Fleet; and as deputy commander, Submarine Squadron (SUBRON) 1 in Pearl Harbor.

Jabaley served in the Virginia Class Submarine Program Office from 2006 to 2012, the last four years as program manager, delivering four of the Navy's newest fast attack submarines.

Jabaley was selected for flag rank in 2011. His flag assignments include Naval Sea Systems Command (NAVSEA) vice commander, command of Naval Undersea Warfare Center and NAVSEA deputy commander for Undersea Warfare. Jabaley was selected for his second star in March 2015 and relieved as program executive officer (PEO) Submarines in October 2015. His portfolio includes the Ohio Replacement SSBN and Virginia SSN programs, which are the 2nd and 3rd largest programs in the Department of Defense.

His awards and decorations include the Legion of Merit and the Bronze Star. He is the first recipient of the Naval Submarine League's Vice Admiral J. Guy Reynolds Award for Excellence in Submarine Acquisition. He is proudest of the accomplishments of his crew in earning the SUBRON-3 Battle Efficiency Award, awarded to USS Louisville in January 2004, and the accomplishments of his staff in earning the David Packard Excellence in Acquisition Award, awarded to the Virginia Program Office in October 2008.



#### Mr. Donald McCormack

Executive Director, Naval Surface Warfare Center and Naval Undersea Warfare Center

Donald F. McCormack, a member of the Senior Executive Service since September 2001, is the Executive Director (ED) for Naval Surface Warfare Center (NSWC) and Naval Undersea Warfare Center (NUWC), both Echelon III

commands within Naval Sea Systems Command. In this position, Mr. McCormack is responsible for leading more than 20,000 civilian scientists, engineers, technicians and support personnel within nine divisions located across the country to perform research, development, test, and evaluation for the future Navy, and to provide in-service engineering and logistics support for the operating fleet.

Prior to being named ED in March 2014, Mr. McCormack held the position of Technical Director (TD) for NUWC since November 2004 and performed additional duties as Acting TD for NSWC since April 2012.

From 2003 to 2004, Mr. McCormack served as the Director for Undersea Warfare Command and Control (USW CC) Systems Product Area. In this role, he became the Naval Sea Systems Command (NAVSEA) focal point, leader, and advocate for all USW CC Systems and represented the product area to customers. From 2002 to 2003, Mr. McCormack served as Executive Director of NUWC Newport Division and was responsible for the overall planning and direction of the scientific and technical activities related to the U.S. Navy's USW systems. From September 2001 until May 2002, Mr. McCormack was Director for Weapon Systems, responsible for a broad program of exploratory and advanced development, test and evaluation, Fleet introduction, and complete life cycle support for undersea weapon systems.

During his career, Mr. McCormack has been the recipient of many awards for outstanding performance, receiving the Distinguished Presidential Rank Award in 2010 and the Meritorious Presidential Rank Award in 2005. In July 1998, he received a Meritorious Civilian Service Award for his technical excellence while assigned to the NAVSEA Submarine Technology Office. In August 2001, he received his second Meritorious Civilian Service Award for his management excellence while serving as the acting Deputy Program Manager at PMS404. Mr. McCormack was the recipient of the Department of the Navy Superior Civilian Service Award in 2008. That same year, he received the Society of Women Engineers' Rodney D. Chipp Memorial Award and the Rhode Island Federal Executive Council's Bud Gifford Leadership Award. He received the University of Massachusetts Dartmouth Alumni Association Achievement Award in 2012.

Mr. McCormack earned his Bachelor of Science in electrical engineering from the University of Massachusetts Dartmouth in 1985.



#### RADM G. Dean Peters

Program Executive Office for AIR ASW

A native of Louisville, Kentucky, Rear Adm. Dean Peters graduated from the U.S. Naval Academy in 1985. Peters has earned post-graduate degrees in aeronautical engineering and telecommunications and is a graduate of the U.S. Naval Test Pilot School, Class 102.

After earning his wings as a naval aviator in 1986, he flew the SH-2F Seasprite in support of multiple detachments deployed to the North Atlantic, Persian Gulf and Gulf of Mexico, completing anti-submarine warfare, surface warfare and counter-narcotics operations embarked on four different ship classes. He served as detachment officer-in-charge aboard USS Thomas C. Hart (FF 1092).

Peters' subsequent flying assignments included tours as a test pilot, instructor pilot and squadron department head.

As commanding officer of Air Test and Evaluation Squadron (HX) 21, the squadron accomplished more than 11,000 flight test hours and was the 2006 recipient of the Chief of Naval Operations (CNO) Safety Award.

Peters has served in numerous acquisition billets, including assignments as the MH-60R Seahawk avionics lead within the H-60 program office, deputy program manager for the Vertical Takeoff and Landing Unmanned Aerial Vehicle program and assistant program manager for systems engineering for all Navy and Marine Corps unmanned air vehicles.

From November 2007 through July 2011, Peters served as program manager, H-60 helicopters program office (PMA-299), providing worldwide support for the Navy's H-60 Seahawk helicopters and user communities. During his tenure, the program delivered more than 150 helicopters, fielded numerous upgrades and supported the first three carrier strike group deployments of the MH-60R and MH-60S. From August 2011 to July 2014, Peters commanded the Presidential Helicopters Program Office (PMA-274), successfully leading the program through Milestone B and contract award for the Engineering and Manufacturing Development program. In October 2014, Peters became

commander, Naval Air Warfare Center Aircraft Division and the assistant commander for research and engineering, Naval Air Systems Command.

Peters assumed his current position as the program executive officer for Air Anti-Submarine Warfare, Assault & Special Mission Programs, PEO(A), in March 2016.

He has more than 3,800 flight hours in fixed wing and rotary wing aircraft.



### VADM Charles "Chas" Richard

Deputy Commander, U.S. Strategic Command

A native of Decatur, Alabama, Vice Adm. Charles Richard graduated with honors from the University of Alabama in 1982 and has earned master's degrees with honors from the Catholic University of America and the Naval

War College.

His flag assignments include command of Submarine Group 10 in Kings Bay, Georgia, and the deputy commander of Joint Functional Component Command for Global Strike at U.S. Strategic Command (USSTRATCOM).

His operational assignments include command of USS Parche (SSN 683) as well as Submarine NR-1, then the U.S. Navy's only nuclear-powered, deep-submergence submarine. He also served aboard USS Portsmouth (SSN 707), USS Asheville (SSN 758) and USS Scranton (SSN 756).

Richard's recent staff assignments include service as the executive assistant and naval aide to the under secretary of the Navy; chief of staff, Submarine Force Atlantic; and command of Submarine Squadron (SUBRON) 17 in Bangor, Washington. Other staff assignments include director of resources on the staff of the under secretary of defense (policy); squadron engineer on the staff of SUBRON-8 and duty on the deputy chief of naval operations (submarine warfare) staff (OP 213). He has also served as a member of Chief of Naval Operations' Strategic Studies Group XXVIII, studying the integration of unmanned systems into naval force structure.

Richard previously served as the director, Undersea Warfare Division (N97) in Washington, D.C., and was responsible for the planning, programming and budgeting for acquisition, operational readiness and modernization of the submarine force and its support.

Richard assumed duties as deputy commander of United States Strategic Command in September 2016.

He has been privileged to serve on commands that have been awarded the Presidential Unit Citation, Joint Meritorious Unit Award, Navy Unit Commendation, Meritorious Unit Commendation and the Battle Efficiency "E" awards.



### RADM Frederick "Fritz" Roegge

Commander, Submarine Force U.S. Pacific Fleet

Rear Adm. Fritz Roegge is an honors graduate of the University of Minnesota with a Bachelor of Science in Mechanical Engineering and was commissioned through the Reserve Officers' Training Corps program. He earned a Master of

Science in Engineering Management from the Catholic University of America and a Master of Arts with highest distinction in National Security and Strategic Studies from the Naval War College. He was a fellow of the Massachusetts Institute of Technology Seminar XXI program.

His sea tours include USS Whale (SSN 638), USS Florida (SSBN 728) (Blue), USS Key West (SSN 722) and command of USS Connecticut (SSN 22). His major command tour was as commodore of Submarine Squadron (SUBRON) 22 with additional duty as commanding officer, Naval Support Activity La Maddalena, Italy.

Ashore, he has served on the staffs of both the Atlantic and the Pacific Submarine Force commanders; on the staff of the director of Naval Nuclear Propulsion, Naval Sea Systems Command (NAVSEA 08); on the Navy staff in the Assessments Division (N81) and Military Personnel Plans and Policy Division (N13); in the Secretary of the Navy's Office of Legislative Affairs; as the head of the Submarine and Nuclear Power Distribution Division (PERS 42) at the Navy Personnel Command (NPC); and as an assistant deputy director in both the Strategy and Policy (J5) and the Regional Operations (J33) Directorates on the Joint Staff.

Roegge completed his first flag officer assignment as the deputy commander, Joint Functional Component Command for Global Strike at U.S. Strategic Command. He then served concurrently as commander, Submarine Group 8; commander submarines, Allied Naval Forces South; deputy commander, 6th Fleet; and director of Operations and Intelligence (N3), U.S. Naval Forces Europe-Africa. Most recently he served as director, Military Personnel Plans and Policy Division (N13) with a concurrent period as director, Total Force Manpower Division (N12) on the Navy staff.



### Captain Ronald R. Shaw Jr.

Commanding Officer, Naval Oceanography
Operations Command

Captain Ron Shaw was born in Tacoma, Wash. He entered the United States Naval Academy in 1988, graduating in 1992 and was commissioned as an Ensign in the United States Navy.

CAPT Shaw attended flight school in Pensacola,

Fla., until 1994 when he was medically disqualified from pilot training. He was re-designated as an Oceanography Officer (1800) and reported to Naval Support Force Antarctica. As a flight meteorologist, CAPT Shaw deployed to McMurdo Station, Antarctica for three summer seasons while also serving as officer in charge of a detachment in Christchurch, New Zealand.

After returning from his last Antarctic deployment, CAPT Shaw enrolled at the Naval Postgraduate School in Monterey, Calif., and earned a Master of Science degree in Meteorology and Physical Oceanography. Upon graduation in early 2000, he reported to the Naval Pacific Meteorology and Oceanography Center in San Diego, Calif., serving as a senior ship router and Assistant Operations Officer. He was promoted to Lieutenant Commander in 2001.

In October 2002, CAPT Shaw served onboard USS JOHN C STENNIS (CVN-74) home ported in San Diego, Calif., for a 33-month tour as the OA Division Officer. He qualified as Officer of the Deck (OOD) Underway and served as Sea and Anchor and General Quarters OOD during a deployment to the Western Pacific and Indian Ocean in 2004.

In June 2005, CAPT Shaw reported to Stennis Space Center, Miss., where he enrolled in the University of Southern Mississippi's Hydrographic Science program. He completed the one-year program, graduating with a Master of Science degree in Hydrographic Science and then reported to Fleet Survey Team as Executive Officer.

After being promoted to Commander, he departed Fleet Survey Team and arrived at the Naval War College in Newport, R.I., in February 2008, where he completed a Joint Military Operations paper on amphibious hydrography that was later accepted for publication in September 2009 by the U.S. Naval Institute Proceedings magazine.

In March 2009, after graduating with distinction, CAPT Shaw moved to Hawaii for duty on the staff of the U.S. Pacific Command. During his three-year tour as Senior Meteorology and Oceanography Officer, he also served as an alternate executive assistant for the J3 Director of Operations while completing his Joint Officer Qualification.

In June 2012, CAPT Shaw assumed command of Fleet Survey Team at Stennis Space Center, Miss. While furthering the command mission of conducting precise hydrographic surveys across the globe, he also pioneered the concept of afloat support to forward deployed amphibious forces. CAPT Shaw was selected for promotion to Captain in June 2013. Following

his tour at Fleet Survey Team, he reported to Naval Personnel Command in Millington, TN, for duty as Senior Oceanography Assignment Officer. In 2014 CAPT Shaw screened for major command and reported in August 2015 as Commanding Officer of the Naval Oceanography Operations Command at Stennis Space Center, Miss.

CAPT Shaw's military decorations include the Defense Meritorious Service Medal, two awards of the Navy Meritorious Service Medal, four awards of the Navy and Marine Corps Commendation Medal, two awards of the National Defense Medal, Humanitarian Service Medal, Armed Forces Service Medal, the Antarctic Service Medal, and the Global War on Terrorism Medal.



### **CAPT Brian Shipman**

Sea Combast Division, Navy Surface & Mine Warfighting Development Center

Captain Brian Shipman is a native of Dallas City, Illinois. He attended the University of Illinois at Champaign-Urbana, earning a Bachelors Degree in Industrial Engineering and was commissioned through the Naval ROTC program in 1989.

Sea duty assignments for Captain Shipman include his initial assignment in USS NIMITZ (CVN 68) where he served as Radio Division Officer, First Division Officer and Electrical Division Officer. In 1993 he reported to USS CHOSIN (CG 65) as Strike Officer. Upon completion of Department Head School, he was assigned to USS MILIUS (DDG 69) where he served as Weapons Officer and Combat Systems Officer, and then to Commander THIRD FLEET in the J7 Training and Readiness directorate. From 2002–2004, Captain Shipman served as Executive Officer in USS HOWARD (DDG 83) and he commanded USS DECATUR (DDG 73) from 2007–2009. He reported to Destroyer Squadron TWENTY ONE in May 2012 as Deputy Commander then served as Squadron Commodore from September 2013 to March 2015

Ashore, Captain Shipman attended the Naval Postgraduate School in Monterey, California, earning a Masters Degree in Operations Analysis in 1997. He reported to Naval Personnel Command in 2004, serving as Pacific Fleet Cruiser/Destroyer Placement Officer and then as Placement Branch Head. In June 2009 he reported to Aegis Ballistic Missile Defense in Dahlgren, Virginia, initially assigned as Director, Joint Maritime Operations and Integration and then as Chief of Staff. He stood up Sea Combat Division in 2015 as the first Officer in Charge.

Captain Shipman's personal awards include the Defense Superior Service Medal, Legion of Merit, Meritorious Service Medal (3rd Award), Navy-Marine Corps Commendation Medal (4th Award), the Navy Achievement Medal and various campaign ribbons.



#### VADM Mike Shoemaker Commander, Naval Air Forces and Naval Air Forces. Pacific

Vice Adm. Mike Shoemaker, a native of St. Petersburg, Florida, graduated with honors from the U.S. Naval Academy in 1982 with a Bachelor of Science degree in Systems Engineering and was designated a Naval aviator in July 1984.

Shoemaker's operational assignments include tours with Light Attack Squadron (VA) 105, USS Forrestal (CV 59); Carrier Air Wing (CVW) 3, USS John F. Kennedy (CV 67); Strike Fighter Squadron (VFA) 105, USS Dwight D. Eisenhower (CV 69), USS Enterprise (CVN 65) and USS Harry S. Truman CVN 75); CVW-17, USS George Washington (CVN 73); Carrier Strike Group (CSG) 9, USS Abraham Lincoln (CVN 72) and CSG 3, USS John C. Stennis (CVN 74). Shoemaker commanded VFA-105, VFA-106 (F/A-18 Fleet Replacement Squadron), CVW 17, CSG 9 and CSG 3.

His shore assignments include VA-174 and instructor duty with VA-122 and VFA-106. He also served as aide to the vice chief of Naval Operations and commander, U.S. Pacific Command; was assigned to Navy Personnel Command (head of Aviation Officer Placement - PERS-433); and, was the executive assistant to Commander, U.S. Pacific Fleet. As a flag officer, he served as assistant commander, Navy Personnel Command for Career Management (PERS-4) and later as commander, Naval Air Force Atlantic from June 2013 to January 2015. He has completed the Naval War College Non-Resident Program and is a graduate of the Joint Forces Staff College.

Shoemaker has accumulated over 4,400 flight hours, primarily in the A-7E Corsair and the F/A-18C Hornet and has 1,066 carrier-arrested landings. His personal decorations include the Legion of Merit (6), Defense Meritorious Service Medal, Meritorious Service Medal (3), Air Medal (3) (one individual award with combat "V" and two strike/flight awards) and other personal, campaign and service ribbons.

Shoemaker became Naval Aviation's 7th "Air Boss" in January 2015



# CAPT David P. Walt Commander, Helicopter Maritime Strike Wing, Pacific

A native of Dallas, Texas, Captain David Walt graduated from The University of Texas at Austin in 1993 with a Bachelor of Arts degree in Government and earned his commission through the Naval Reserve Officer Training Corps.

Captain Walt's sea assignments include an initial operational tour as a Surface Warfare Officer in USS YORKTOWN (CG 48). While serving in YORKTOWN, he deployed with NATO Standing Naval Forces Atlantic where he participated in Operation SHARP GUARD enforcing United Nations sanctions against Serbia-Montenegro. In 1996, Captain Walt was selected for lateral transfer and was designated a Naval Aviator in July 1998. He reported for duty in the Light Airborne Multi-Purpose (LAMPS) Mk III Community flying the SH-60B SEAHAWK with the "Vipers" of HSL-48. During this tour, Captain Walt deployed in USS TAYLOR (FFG 50) and USS McINERNEY (FFG 8) conducting Maritime Security Operations in support of Operation SOUTHERN WATCH and JIATF South Counter-Narcotics operations.

In 2004, Captain Walt reported to the "Proud Warriors" of HSL-42. As Officer-in-Charge of Detachment TEN, he deployed to the SOUTHCOM AOR in USS SAMUEL B. ROBERTS (FFG 58) in support of UNITAS and PANAMAX exercises. Returning from deployment, he served as Squadron Maintenance Officer and was recognized as Helicopter Maritime Strike Wing, U.S. Atlantic Fleet "Officer of the Year" for 2006. Captain Walt commanded the "Warlords" of HSL-51 from June 2011 to September 2012 during which time HSL-51 earned the 2012 Battle Efficiency Award for operational excellence.

Ashore, Captain Walt participated in the Washington DC Intern Program completing assignments with the Navy's Office of Legislative Affairs (OLA), the Joint Chiefs of Staff Logistics Directorate (J4), and the Chief of Naval Operations' Air Warfare Division (OPNAV N78). During this tour he also served as a White House Social Aide for President George W. Bush. Prior to command, Captain Walt served in U.S. European Command's J5 Strategy, Policy, and Assessments Directorate (EUCOM J5) as a Strategy Action Officer responsible for strategy formulation and staff direction of military/political policy and planning. Captain Walt's most recent assignment was to the Navy staff where he represented Navy equities throughout the Defense Department's 2013 Strategic Choices and Management Review and served as Executive Assistant to the Director of the Chief of Naval Operations' Assessment Division (OPNAV N81 and NOOX).

Captain Walt assumed the duties as Commander, Helicopter Maritime Strike Wing, Pacific in January 2017.

A 2015 graduate of the National War College, Captain Walt also holds a Master's degree in Organizational Management from George Washington University. His personal decorations include the Defense Meritorious Service Medal, Meritorious Service Medal (four awards), and the Navy and Marine Corps Commendation Medal along with various other unit and campaign awards.

# UNDERSEA WARFARE DIVISION LEADERSHIP

#### **Division Chairman**

Mr. Paul Normand General Dynamics Electric Boat

#### Division Vice Chairman

RDML Mark Kenny, USN (Ret) Adaptive Methods

#### Division Deputy Chairman

Mr. Michael Tucker Adaptive Methods

# Spring Conference Chairmen

Mr. Wayne Jakubowski Oceaneering International, Inc.

#### and

Mr. Gregory Vaughn GMV Consulting

#### **Division Liaisons**

Policy Issues

Deputy Chief of Naval Operations for Warfare Systems, N9

Technical Issues

Commander, Naval Undersea Warfare Center

#### ABOUT UNDERSEA WARFARE DIVISION

The Undersea Warfare (USW) Division concentrates on the Navy's key core competency mission of countering submarine and mine threats to the free and open flow of sea borne commerce and to the conduct of power projection from the sea. The division is very broadly based. All Navy platforms and elements of the Navy force structure are involved in undersea warfare: submarines, surface combatants, fixed and rotary wing aircraft, surveillance units, and the Navy's command and control infrastructure. The USW Division has five active Technical Committees: Sensor Systems, Mine Warfare Systems, Undersea Vehicles (including weapons), Aviation, and C4I and Combat Systems.

The world's national economies are interdependent, requiring an uninterrupted flow of goods and resources. Of this, 90% of the world's trade is by sea. The United States supports global trade and defends the rights of all nations to freely navigate the world's oceans, seas and waterways, while respecting sovereign territorial waters. Maintaining sea control helps guarantee the free flow of commerce and supports global maritime security.

SEA SHIELD is a supporting pillar for the freedom of maritime action and communication in the open ocean; U.S. Naval Undersea Warfare Forces need to be agile, forward-deployed, persistent, adaptable and ready. USW capability opens doors for expeditionary operations, power projection from the sea, and the ability to wage strike warfare to influence events ashore. It is an indispensable enabler for the SEA STRIKE pillar of support to joint force/coalition operations in the maritime and land environment.

The goal is that U.S. USW forces must be able to shape the subsurface battlespace through presence and deterrence, and when this fails, defeat an aggressor's submarine threat in order to render that actor unable to continue effective operations in that environment. To this goal, NDIA's USW Division works closely with the Navy to expand our working relationships, be a strong advocate for industry and its ability to assist the Navy to achieve its goals, and to be an integral part of the naval and university labs that attack technical issues.

#### UNDERSEA WARFARE DIVISION MISSION

To promote the exchange between government and industry of technical information and expansion of research and development in areas related to Undersea Warfare. To this end, the Undersea Warfare Division will serve as a communications conduit by providing a variety of ways for both government and industry to act in concert to solve problems, identify affordable solutions, meet specific requirements, and support both government and industry with advice on undersea warfare policies and acquisition planning.

#### **OBJECTIVES**

To achieve success in carrying out the MISSION, the following objectives govern the operations of the division:

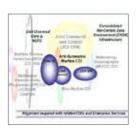
- Focus on critical undersea warfare areas related to the development, productions, testing, and logistic support of underwater combat systems including mines, torpedoes, manned and unmanned underwater vehicles, countermeasures, sensors, weapon control, handling equipment; and the integration of systems aboard aircraft, ships, and submarines which have an undersea warfare mission;
- Provide periodic forums for government and industry personnel at all levels to exchange information and views in seeking possible approaches to the solution of undersea warfare problems:
- Conduct studies and prepare reports in response to requests from the Navy to recommend solutions to specific problems or issues related to undersea warfare.



# AVIATION USW Chairman Mr. Glen Sharpe glen.sharpe@lmco.com Lockheed Martin

The Aviation Committee focuses on the capability, integration and synergies that the

airborne Undersea community brings to the fight. Because of the wide range of "aviation platforms," from wide-body fixed wing to rotary winged, as well as the gambit of unmanned systems, the committee is interested in articulating the contributions and potential of these weapons systems. Desired technical subjects cover the broad areas of signal processing, human factors, training, undersea capable weapons, sensors, man-machine interface, littoral and large area search as well as the networking required to make all of this happen. The presentations cover a range, including theoretical discussions by academic institutions and laboratories, reports on experimental systems and systems being developed for Fleet introduction, and discussions of Navy programs of record.



#### C4I & COMBAT SYSTEMS

Chairman
Mr. Paul Rosbolt
prosbolt@spa.com
Systems Planning and Analysis,
Inc.

The C4I & Combat Systems Technical Committee focuses on Communications, Information Exchange, Data Fusion and Command and Control enablers for the ASW Kill Chain F2T2EA (Find, Fix, Track, Target, Engage and Assess). Committee presentations are given by academia, government and industry and cover a broad range of topics from theoretical discussions to updates on technology, programs of record and test results. A special focus for this year's conference will be Information Assurance/Cyber–Security as it relates to Undersea Warfare.



# MINE WARFARE Chairman Mr. Jon Tobias jtobias@ita-intl.com ITA International

The Mine Warfare (MIW) Committee provides the opportunity for Industry, Government,

and Academia to exchange information and express their views in addressing technical, programmatic and operational issues and activities in the MIW community. The Committee addresses threats, programs, operations, CONOPS, and future technologies across the MIW spectrum of mine hunting, mine sweeping, neutralization, command and control, mining and other areas of interest.



#### **UNDERSEA SENSORS**

Chairman Mr. Michael Janik michael\_f\_janik@raytheon.com Raytheon Integrated Defense Sustems

The focus of the Undersea Sensors Committee

is to provide guidance to the U.S. Navy about the application of cutting edge technology. Abstracts submitted to this section should relate to the following: underwater acoustic transduction and acoustic sensor arrays, electro-optic sensors, magnetic sensors, electrostatic sensors, chemical sensors, gravity sensors, signal processing, test and evaluation, operational use/sea test results, and theoretical studies. This list is not exhaustive but representative of the disciplines and associated sciences.



# UNDERSEA VEHICLES Chairman Mr. Tom Ruzic Tom.Ruzic@hii-nns.com Newport News Shipbuilding

The Undersea Vehicles Committee focuses on both large and small hull undersea vehicles

(both manned and unmanned) and unmanned surface vehicles. Technical subjects cover the broad areas of weapons, unmanned vehicles, defensive systems and hull, mechanical and electrical systems. The technical committee presentations range from theoretical discussions by academic institutions and laboratories, reports on experimental systems and systems being developed for Fleet introduction, to discussions of Navy programs of record.

#### WARFIGHTER PERFORMANCE

Chairman Mr. John Linderman john.linderman@jhuapl.edu The John Hopkins University-Applied Physics Lab

This special session on Warfighter Performance is intended to address evolving operational needs and solutions in the area of USW Warfighter Performance which employ a combination of components such as technology, HSI, Serious Games, Virtual Worlds, and other emerging concepts. Presentations in this session will address approaches that effectively combine cross discipline techniques and methodologies to provide real capability to the Warfighter across all USW Warfare Domains/Enterprises (i.e., Submarine, Surface, Air, and MIW Enterprises).

Human Systems Integration (HSI) – Improving data visualization techniques and enhancing intuitive decision making; improving the reliability of critical information Operator Capability

Training - Establishing linkages between theory, experiments, and training system design; integrating M&S to increase realism as well as cost efficiency of onboard submarine training capability

Health and Wellness - Reducing or countering the negative effects of fatigue, stress, illness, etc.; improving on-board environment with respect to atmosphere, nutrition, exercise, noise exposure, etc.

## **BUS SCHEDULE**

Due to heightened security measures, it is in your best interest to take the shuttle buses provided. The use of POV is strongly discouraged and may result in entry delays and the risk of not being allowed access. The Admiral Kidd Conference Center is within walking distance (5 minutes) of the Holiday Inn Bayside, but credentials are required to access the base at the gate or security office.

# Tuesday, April 25, 2017

6:30 AM - 8:30 AM	Bus will shuttle (as filled) from the Holiday Inn Bayside to the Admiral Kidd Conference (AKC) Center.
11:00 AM - 4:00 PM	Shuttle bus departs the AKC Center for the Holiday Inn Bayside. Shuttle will depart at 11:00, 12:00, 1:00, 2:00, 3:00, and 4:00.
4:45 PM - 6:00 PM	Bus will shuttle as filled from the Admiral Kidd Conference Center to the Holiday Inn Bayside.
6:00 PM - 7:30 PM	Bus will shuttle from the Admiral Kidd Conference Center to the Holiday Inn Bayside. Drop-offs only.

# Wednesday, April 26, 2017

6:30 AM - 8:30 AM	Bus will shuttle (as filled) from the Holiday Inn Bayside to the Admiral Kidd Conference (AKC) Center.
11:00 AM - 3:00 PM	Shuttle bus departs the AKC Center for the Holiday Inn Bayside. Shuttle will depart at 11:00, 12:00, 1:00, 2:00, and 3:00.
4:00 PM - 5:30 PM	Bus to begin shuttling from the AKC Center to the Holiday Inn Bayside.  Drop-offs only.

#### **Emergency Information**

In case of emergency, dial 911.

#### Security

For security purposes, we respectfully ask that you check any personal items (luggage, computer bags, coats, etc.) with your hotel bellman, or leave them at your hotel. On-site at the conference, you must carry a valid photo ID with you at all times.

Conference badges are to be worn at all times during event. No badge = no access to ANY event venues.

#### **Attire**

Industry: Business Casual Active Duty Military: Khakis Military Speakers: Khakis Civilian Speakers: Coat and Tie

#### Attendee Agenda

Please write your name at the top of your attendee agenda. A limited number of the handouts were printed to ensure one (1) for each registered attendee. If you lose your handout, the registration desk may not be able to give you a replacement until the conclusion of the conference.

If any part of your information is incorrect on the Attendee List in this handout, please stop by the conference registration desk so we can update our database. We appreciate you letting us know of any errors.

#### Attendee Opt-In

Please provide your email address on the sign-in sheet at registration to opt-in for sharing your contact information post-conference. The sign-in sheet will be shared by email to all registered attendees.

#### Surveys

We appreciate the comments and suggestions of our attendees. An electronic survey will be sent after the conclusion of the conference. We ask that you take a moment to complete the survey, as we strive to make each event better than the last.

#### **Hotel Parking**

Holiday Inn Bayside

Self-parking (outdoor) is available for hotel guests and conference attendees. Self parking rate is \$5 per day.

American Cab American Express, Visa, and Mastercard (619)234-1111 Silver Cab (619)280-5555 American Express, Visa, MasterCard, Discover Flat Rate (normally 10% lower than meter

Flat Rate (normally 10% lower than meter price); ask the Flat rate price when you book (Meter will be running) You will get the lower of the two prices Meter/Flat rate.