ALL HANDS

Celebrating One Hundred Years

MAGAZINE OF THE U.S. NAVY

APRIL 2023

A NOTE FROM THE EDITOR AND STAFF

Every month, we focus on the Navy's mission-focused people and technologies. As we survey how our naval forces continue to train, fight and equip the world's toughest Sailors, we look at our advantage at sea and the capabilities of Sailors deployed around the world.

It is our mission to reach Sailors, so please share this issue, scan the QR codes, and follow our social media channels for the latest information for Sailors by Sailors.

ALL HANDS MAGAZINE

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UNMANNED SURFACE VESSEL TRANSITS STRAIT OF HORMUZ WITH COAST GUARD

From U.S. Naval Forces Central Command Public Affairs

An unmanned surface vessel from U.S. 5th Fleet transited the Strait of Hormuz with two U.S. Coast Guard cutters, April 19, demonstrating the continued operational integration of unmanned and artificial intelligence systems by U.S. maritime forces in the Middle East.

USCGC Charles Moulthrope (WPC 1141) and USCGC John Scheuerman (WPC 1146) transited one of the world's most strategically important straits with an L3 Harris Arabian Fox MAST-13 unmanned surface vessel. The three vessels sailed south from the Arabian Gulf and through the narrow Strait of Hormuz before entering the Gulf of Oman.

"I am proud to be a part of this great partnership between the U.S. Coast Guard and Navy in the Middle East. We often work side-by-side as one team with a common mission to provide security and safeguard the seas," said Lt. Trent Moon, John Scheuerman's commanding officer.

U.S. 5th Fleet established a unit called Task Force 59 in September 2021 to integrate unmanned systems and artificial intelligence into regional maritime operations. Since its launch, the task force has deployed a suite of new unmanned systems from operational hubs in Jordan and Bahrain.

In December, Task Force 59 launched an Aerovel Flexrotor unmanned aerial vehicle from USCGC Emlen Tunnell (WPC 1145) while operating in the Arabian Gulf. The launch marked Task Force 59's first from a U.S. Coast Guard vessel at the time.

"We are on the cutting-edge of integrating advanced unmanned technology into our maritime patrols. Our crews are excited to help lead these efforts with our Navy counterparts," said Lt. Cmdr. Stephen Hills, Charles Moulthrope's commanding officer.

U.S. 5th Fleet is leading regional efforts to increase vigilance in surrounding waters that include more than 5,000 miles of coastline from the Suez Canal, around the Arabian Peninsula, through the Strait of Hormuz and into the Arabian Gulf. The integration of unmanned platforms and sensors alongside crewed ships from the United States and regional partners enhances this capability.

The two Coast Guard cutters and Arabian Fox transited the Strait of Hormuz while operating in support of the International Maritime Security Construct, an 11-nation coalition led by the United States that focuses on maritime operations near key waterways in the Middle East.

THE NAVY'S AEGIS VIRTUAL MAINTENANCE TRAINER

From Kimberly M. Lansdale, Surface Combat Systems Training Command Public Affairs

The future of surface combat systems training is virtual and it has arrived here onboard Naval Support Facility Dahlgren, Va. Surface Combat Systems Training Command (SCSTC) took a crucial step forward in its hands-on combat training capabilities in unveiling its Aegis Virtual Maintenance Trainer (VMT) in the spring of 2022.

Many different factors came into play when identifying a need and the move to VMT as a solution at SCSTC's co-located learning site, SCSTC AEGIS Training and Readiness Center (ATRC). They included cost, training system limitations, space, and technology.

"Traditionally, our learning sites used Technical Training Equipment [TTE] for the training of maintenance technicians," explained Mr. Larry Sharp, SCSTC's director of technical support, N9. "These systems were nearly identical to the ones fielded aboard ships that Sailors were required to maintain. Due to the Navy improving and evolving their equipment to stay ahead of our adversaries, it created multiple versions of the combat systems equipment. TTE was not only expensive to procure and maintain, but also required a lot of space at training facilities. As there was no end in sight to the advent of new systems to train, and a constant constraint on accommodating them, we had to develop a blended training solution to reduce the requirement for TTEs at schoolhouses."

Due to space limitations, only a small number of students could be trained at one time. The number of "reps" and "sets" practiced were limited as well.

"Previous maintenance labs only let an instructor work with a few students at a time having to gather around the same hardware and they only had about 50 work items that could be performed," said Sharp.

Instructors and students had to be extremely careful when practicing maintenance on the trainers. If a mistake was made, equipment was down for days, impacting training and creating a large bill for the Navy.

Moreover, in a world where technology is rapidly evolving, it is vital that the U.S. Navy evolves with it. One way to keep up is to utilize the latest technology to enhance the Navy's training methods. SCSTC's 21st century warfighters require 21st century training capabilities. SCSTC understood that today's warfighters were born into a technology savvy world and current training methods were becoming obsolete.

In 2013, as a means to invest in training technologies, devices, and facilities to improve the effectiveness, efficiency, and availability of all surface training, Director, Surface Warfare Division, N96, Office of the Chief of Naval Operations (OPNAV), with the support of Surface Training Systems Program Office (PMS 339), SCSTC, and Surface Warfare Schools Command (SWSC), began to develop the OPNAV program of record, Surface Training Advanced Virtual Environment-Combat Systems (STAVE-CS), which was approved by Congress in December 2018. A key tenant of this program is to immerse trainees in realistic training environments by virtualizing the physical elements of the equipment and operating conditions. Thus, SCSTC, PMS 339, Naval Surface Warfare Center Dahlgren Division (NSWCDD), and industry partners started to design the VMT to support the Aegis Weapon System (AWS) maintenance training at SCSTC ATRC.

"The goal, as always, is to provide the best training to future Aegis warfighters," explained SCSTC ATRC's Enlisted Training Department Head, Lt. Greg Yanase. "The VMT would allow us to provide that in ways that have never been accomplished on this scale in terms of flexibility and adaptability. The foundation we were laying would pay dividends to future training applications and distance learning capabilities."

The STAVE-CS program quickly acknowledged that the training of maintenance technicians could not be accomplished solely via a simulation and as a result, the Part Task Trainers (PTT) were created to provide hands-on tactile training.

"The PTTs focus on training the physical task that supports the virtual environment training," said Sharp. "They are engineered to be more compact than TTEs while teaching the same physical skills required to for Sailors to perform their jobs."

A Job Duty Task Analysis was performed to evaluate the training requirements needed to train operators and maintainers on the system itself. This analysis created the training objectives used for the development and creation of the curriculum. It not only identified the curriculum needed to train the equipment or system, but also identified the best techniques to implement the course of instruction.

"SCSTC ATRC is the pinnacle of training for Aegis technicians," said Yanase. "They are bound to the schoolhouse not only in their foundational knowledge as junior technicians, but as seasoned technicians through our AWS training programs and Aegis Instructor billets. We needed to develop a VMT curriculum to fit not only the needs of our current technicians, but also a curriculum that could be applied to future training operations."

VMT developers required detailed system information commonly referred to Government Furnished Information (GFI) to recreate a working system or component in the virtual environment. GFI is any technical documentation, system schematics, high resolution pictures and videos of the actual equipment and its internal components, and in some cases, includes actual system software. The team spent countless hours collecting data aboard ships while underway to capture every detail needed to create a virtual, identical version of the equipment.

"They captured everything and I mean everything," said Sharp. "Single wires in Ethernet cables, transistors, and valves and even nuts and bolts."

The initial delivery of the VMT took place in the spring of 2022 at the schoolhouse. Both Instructors and students were able to test the equipment during train-the-trainer (TTT) events and provide essential feedback.

"Instructors commented on how the VMT allowed them to train more students at a time and students were impressed with the advanced maintenance and troubleshooting features," said Sharp.

After collecting feedback from the TTTs and making necessary adjustments, the VMT officially came online in May 2022.

Today, students are experiencing an immersive 3D gaming environment with virtual representations of the entire AWS computer network. Virtual equipment interactions are driven by maintenance and troubleshooting procedural documentation. All actions required to fully complete maintenance and troubleshooting procedures are supported in the simulation, including manual fault isolation and reporting and replacing of faulted hardware to restore the simulated systems to combat readiness.

To read the rest of this story, **click here.**

OFFICER RESPONDS TO MEDICAL EMERGENCY ON GROUNDED FERRY

From Douglas Stutz

When the Bremerton-Seattle ferry Walla Walla ran aground on a late-Saturday afternoon due to loss of power, U.S. Navy Lt. Holly Sapien's attention became instantly directed elsewhere.

Although there were no reported injuries due to the vessel ending up on a Bainbridge Island beachfront, April 15, 2023, there was a medical emergency amongst the approximately 600 passengers on board.

Sapien, a Navy Nurse Corps officer assigned to Naval Hospital Bremerton, immediately responded to a call for someone needed with medical background.

"There was a passenger having a grand mal seizure," said Sapien. "I had to get him out of the seat he was in. I had to get him on his side to protect his airway and prevent aspiration."

Sapien, an El Paso, Texas native with almost 10-years of Navy experience, had dealt with grand mal seizure conditions before when working at Naval Medical Center Portsmouth, Virginia.

"That was in a medical environment, with trained medical staff ready to help. This was the first time not in a hospital setting to respond to such an event," noted Sapien, adding that her training automatically kicked in.

Her efforts also reinforced teaching the Navy's Tactical Combat Casualty Care course and holding Basic Life Support training designed to enhance medical readiness in generally austere, combat environments.

"We all take these classes for our professional development but never really know when we're going to actually use the skills," stated Sapien.

Yet respond she did, until turning her patient over to the Bainbridge Fire and Rescue team once they got on board.

"It's nice to be there when needed and be able to jump in and help out to give peace of mind to another when there's no hospital nearby," said Sapien.

The routine ferry trip became anything but nearly 30 minutes into the Puget Sound crossing. Lights started to flicker. The steady thrum of the boat's engine stilled. The vessel was headed towards a beachfront home. "Brace for impact" was announced over the Walla Walla loudspeaker system.

The ferry reportedly slowly angled into the beach, coming to rest in a soft landing.

"Once grounded, life jackets were passed out if there was a need to abandon ship," related Sapien. "We waited around for four or five hours before finally deciding to get off on one of the fast ferries called in to assist."

SAILOR TO SAILOR

THE OFFICIAL NEWSLETTER OF MYNAVYHR

MARCH 2023

If you or someone you know is in crisis, call the Veterans Crisis Line.

Veterans Crisis Line

DIAL 988 then PRESS 1

IMPORTANT DATES:

Feb. 1 to Nov. 1: CY 23 PRT Cycle

April 3: Career Development Symposium in Yokosuka, Japan

April 5: Career Development Symposium in Sasebo, Japan

June 6 to June 8: Association of Naval Services Officers Eastern Region Professional Development Symposium: Norfolk, VA.

June 29 to July 1: Sea Service Leadership Associations Joint Women's Leadership Symposium: San Diego, CA.

July 31 to Aug. 4: National Naval Officers Association Annual Leadership, Professional Development and Training Symposium: San Diego, CA.

AWARDS AND APPLICATIONS DEADLINES:

FY24 Advanced Education Voucher Program applications **due May 5**

FY24 Navy Legislative Fellowship Application **due May 12**

Naval History Essay Contest Submission **due May 31**

STA-21 Applications **due July 1**

Medical ISPP Applications **due July 31**

Nurse Corps Medical Enlisted Commisioning Program Applications due **Sept. 1**

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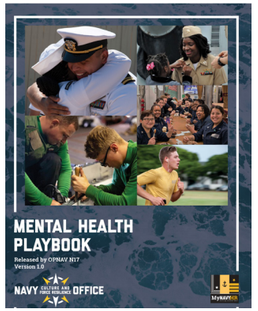


NAVY MENTAL HEALTH PLAYBOOK
NAVADMIN 059/23

NAVADMIN 059/23 announced the release of the Navy's Mental Health Playbook. This playbook is intended to support command leaders in preventing mental health issues from occurring and, when they do, to connect Sailors with the proper mental health care, at the right level, at the right time. With proper use, the playbook should enable everyone in a command to share an understanding of how to conduct mental health preventive maintenance and where to go for additional resources.

NON-COVERED REPRODUCTIVE HEALTHCARE POLICY
NAVADMIN 058/23 ▪ FACT SHEET

NAVADMIN 058/23 provides interim supplemental guidance to ALNAV 017/23 (Command Notification of Pregnancy) and ALNAV 018/23 (Administrative Absence or Travel for Non-Covered Reproductive Health Care). Together, these three messages ensure our Sailors and their families have access to reproductive health care – regardless of where they are stationed in service to our nation – and safeguard the privacy of protected health information.

SKILLBRIDGE PROGRAM UPDATES
NAVADMIN 064/23 ▪ FACT SHEET

NAVADMIN 064/23 announced the launch of the new SkillBridge application portal, via My Navy Education. Additionally, the NAVADMIN updates policies on SkillBridge eligibility and execution.

2024 NURSE CORPS MEDICAL ENLISTED COMMISSIONING PROGRAM
NAVADMIN 074/23 ▪ FACT SHEET

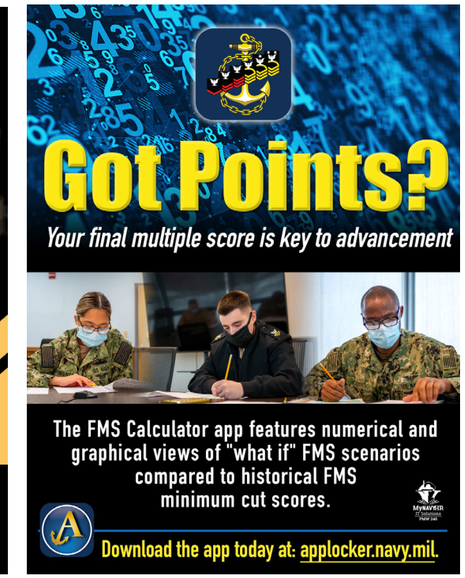
NAVADMIN 074/23 announces the Academic Year 2024 Medical Enlisted Commissioning Program application information. The Medical Commissioning Program is a commissioning pathway for enlisted Sailors that grants up to 36 months to complete a bachelor's of science in nursing. There are two pathways, one for those who possess a RN license and another for those who need to complete their nursing degree. Applications for Annual Year Medical Enlisted Commissioning Program (MECP) must be postmarked by Sept. 1, 2023.

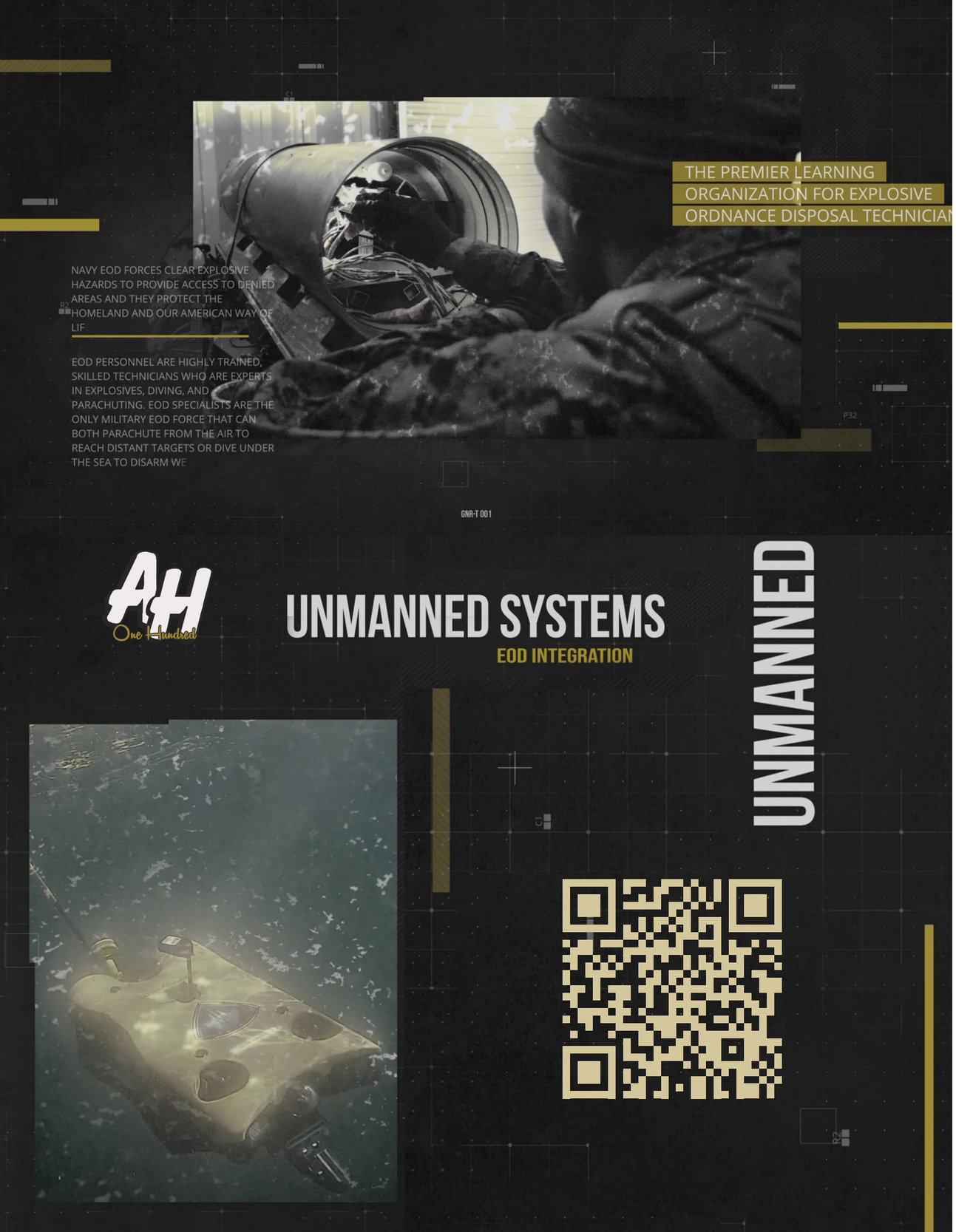
2024 NAVY LEGISLATIVE FELLOWSHIP CALL FOR APPLICATIONS
NAVADMIN 066/23

This NAVADMIN solicits applications for the 2024 Navy Legislative Fellows Program. The Legislative Fellows Program allows naval officers, senior enlisted, and Department of the Navy civilians to broaden their understanding of the legislative process and the operation of the U.S. Congress through a year-long, full-time assignment to the office of a member of the House of Representatives or the Senate. The Legislative Fellows Program also enhances the ability of the Navy to fulfill its role in the national policy development process.

SEA SERVICE AFFINITY GROUP ANNUAL CONFERENCES AND SYMPOSIUMS
NAVADMIN 069/23

This NAVADMIN announces the support of the Navy for fleet participation and attendance at the Sea Service Affinity Group (SSAG) conferences and symposiums. SSAG national conference dates and locations are as follows: Association of Naval Services Officers Eastern Region Professional Development Symposium: 6 to 8 June 2023, Norfolk, VA. Sea Service Leadership Associations Joint Women's Leadership Symposium: 29 June to 1 July 2023, San Diego, CA. National Naval Officers Association Annual Leadership, Professional Development and Training Symposium: 31 July to 4 Au 2023, San Diego, CA.





SECNAV UNVEILS CONCEPTS FOR NAVY MUSEUM

From NHHC Public Affairs

Secretary of the Navy Carlos Del Toro unveiled conceptual renderings from five architecture firms at the National Museum of the U.S. Navy, finalizing the Navy's Artistic Ideas competition, an effort to explore the possibilities for the planned Navy museum.

Following the SECNAV's October announcement of the preferred location for the Navy's planned museum, Naval History and Heritage Command moved forward with its conceptual development phase and initiated the ideas competition in an effort to explore the full realm of artistic ideas that might be incorporated into a new museum.

The competition sought concepts and ideas for the planned project from a broad range of individuals and architecture firms. Following the initial announcement in December, 80 firms expressed interest in participating; 37 firms then submitted qualifications, and finally, the Navy selected five architecture firms as finalists: Bjarke Ingels Group, DLR Group, Frank Gehry Partners, Perkins & Will and Quinn Evans.

Since January, the firms developed their unique submissions of conceptual ideas to include a museum entrance, an atrium, a ceremonial courtyard, and the incorporation of some of the Navy's larger artifacts, like a Corsair aircraft, a Swift Boat, and the sail of a submarine.

"We are pleased to display five visions for the future of the National Museum of the U.S. Navy," said Secretary of the Navy Carlos Del Toro, "while each concept is different, all of them show how we might celebrate our Navy's accomplishments, honor our veterans and point the way toward the Navy's future."

The Navy envisions a future museum that would offer greater public access that could include a new building and the potential renovation of existing historical buildings. The planned museum campus would consist of approximately 270,000 square feet and include about 100,000 square feet of net gallery space.

"The concepts unveiled today are a crucial step in exploring what is possible for the new National Museum of the U.S. Navy," said NHHC Director Samuel J. Cox, U.S. Navy rear admiral (retired). "We'll tell the story of the Navy's history as it continues to unfold, and the ideas developed by our finalists herald a new way of honoring that history by inviting visitors to participate."

"These concepts mark an important step in the museum building process," according to Charles Swift, Acting Director of the Museum of the United States Navy, who oversaw the competition.

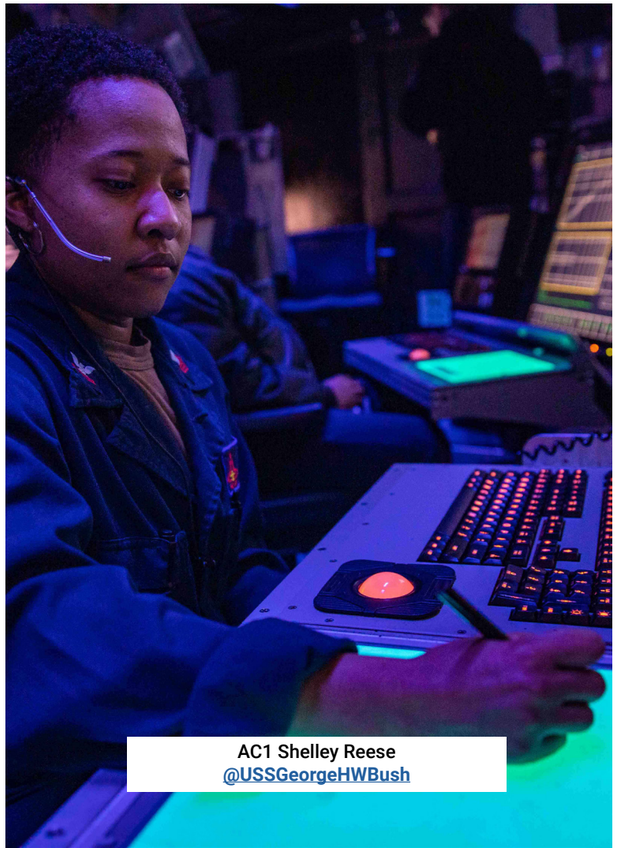
"These ideas and concepts show what might be possible for a new museum," said Swift. "We have a number of steps we need to complete before determining a final design, and that first step is having a conversation with America: our Navy, our veterans and our nation, about what we've presented today."

The firms' concepts are available here.

PHOTOS FROM THE FLEET

The Naval Service—forward deployed and capable of both rapid response and sustained operations globally—remains America's most persistent and versatile instrument of military influence.

BMSN Danielle Dixon
@ussarleighburke_ddg51



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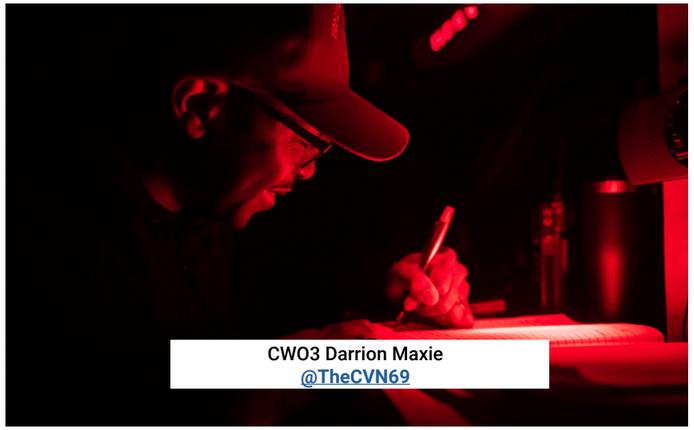

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USS ZUMWALT BRIDGE TEAM BUILDS TRUST

From Mass Communication Specialist 1st Class Kevin Leitner

When it comes to navigation teams on the bridge of ships underway, communication, trust, and teamwork are vital skills to have for a successful mission.

Sailors aboard the Zumwalt-class guided-missile destroyer USS Zumwalt (DDG 1000) sharpened those skills while attending the Bridge Resource Management (BRM) course at the Navigation, Seamanship, and Ship Handling Trainer (NSST) in San Diego.

The week-long course gives students the ability to remove themselves from the ship environment and have focused discussions on various topics that will improve their ability to navigate their ship when the time comes.

"These opportunities are priceless," said Capt. Matthew Hall, commanding officer of Zumwalt. "To be able to have my navigation teams here for an entire week, focusing on nothing other than this course has been very rewarding. I believe the teams will be stronger, and ultimately make us better at what we do."

While on the bridge, the navigation teams must be able to communicate efficiently so that they can safely navigate the ship no matter what scenario they encounter.

"Communication is key in every single situation you will be in while on the bridge," said Lt. j.g John O'Connell, the Navigator aboard Zumwalt. "Every watch stander on the bridge must be on the same page so that there is no ambiguity and so everyone has the confidence to act when they are needed to do so. BRM helped a lot with improving the communication among our teams. Whether you are an ensign that just checked in, or our commanding officer who has been in for just under 30 years, we are all part of this class having open discussions establishing the ability to communicate with everyone."

When standing watch on the bridge, face-to-face communication is essential for the teams to get a true understanding of what is really happening during every event while it is taking place.

"While on the bridge, you get that face-to-face dialogue between watch standers, allowing those individuals to be able to look at someone's face and really engage in whether or not that person truly understands the commands that they are receiving," said Chief Quartermaster Martez Smith, the Assistant Navigator aboard Zumwalt. "BRM gives you the chance to really see how your navigation teams work together and a chance to build solid relationships within your team."

Along with strong communication, there must be trust within the navigation teams to have safe and successful evolutions.

"Trust and teamwork are inherently intertwined within these teams," said Lt. Cmdr. Marina Nanartowich, the Plans and Tactics Officer aboard Zumwalt. "You may have a decent team on the bridge, but without trust among the team, they will not be a high performing team and will not extend beyond the boundaries of that specific team. BRM opens a lot of conversations that allow us to share our perspectives and obtain the wisdom from our commanding officer, as well as the senior mariners that are leading the course. Those conversations inherently help us build the trust that is needed to have successful teams once we return to the ship."

Not only do the teams have to trust each other, each team must also have the complete trust of their commanding officer to be successful.

"Trust, based on professional competency and credibility, lies at the heart of what we do," said Hall. "Effective BRM, for each and every team entrusted with the safe navigation of the ship, is critical to building that competency."

Having that trust between the crew and commanding officer helps the navigation teams stay focused on the job at hand.

"Without the trust of your commanding officer, sometimes your team may not be able to stay focused on the big picture," said O'Connell. "If we are unable to keep our focus on the mission at hand, we will be less likely to achieve our goals, big or small. Gaining that trust is critical to completing the overall mission and will, in time, give us the tools we need to win the fight."

Zumwalt recently conducted several turnovers within the crew and this course came at just the right time for the crew to get acclimated with their new teams.

"We just went through a change of command, so we have a new commanding officer, and I am the new navigator onboard," said O'Connell. "There is going to be a shift in the course of Zumwalt's future and this class was timed incredibly well to help us build these teams up before we head out on various missions."

Building connectedness on our ships is imperative, and as the fleet continually builds on teamwork, trust, and communication, this course has become an invaluable resource for navigation training and ship cohesion.

"Navigation overall is part of what we do and is definitely a high stress job," said Hall. The BRM course is incredibly important to go through because if you are not working as a team, something can go wrong, and that is when missions fail. BRM gives us the time to build our communication and trust within our teams and set us up for success in the future."

KEEPING THE SAILOR OUT OF THE MINEFIELD

From Mass Communication Specialist 2nd Class Carson Davis/All Hands Magazine

The Navy has many advanced capabilities. From Navy Lt. Don Walsh, delving to the bottom of the Mariana Trench in 1960, to naval aviators like Neil Armstrong, taking humanities first steps on the moon, the Navy has been a constant leader in innovation. These feats were accomplished by men, not machines. However, thanks to the invention of the Autonomous Benthic Explorer, the first autonomous submersible, humanity has been able to safely explore the depths. Heralding these innovations using unmanned systems, are the Navy Explosive Ordnance Disposal Mobile Team Units (EODMU).

According to Lt. Andrew Couillard, Commander, Explosive Ordnance Disposal Mobile Unit (EODMU) 1, Navy EOD eliminates explosive threats, allowing the fleet and the nation to fight wherever, whenever, and however it chooses. The Navy's portfolio of unmanned underwater vehicles and remote operated vehicles makes it the first choice for remote detection and neutralization of ordnance.

"This type of technology is imperative to the safety of the Sailors because we could theoretically remove the diver out of the minefield for certain types of scenarios," said Couillard. He went on to say, that even though there are instances where they will have to put the diver in a minefield, they try to increase the diver's safety by utilizing ROVs, as much as possible.

To execute its mission, ExMCM Companies often have support from other ratings. Aerographer's Mates are one of several rates responsible for the maintenance and operation of sonar detection equipment like the MK 18 Mod 2 Kingfish. The Kingfish is a UUV that uses sonar detection to map the seafloor. Aerographer's Mate 2nd Class Bradley Shackleton operates and maintains this equipment to assess underwater threats.

"THE FUTURE IS AUTONOMOUS. FOR US WE NEED TO LEVERAGE THESE UNMANNED SYSTEMS AND COMMUNICATION SYSTEMS TO MAKE SURE THAT THEY ARE NETWORKED AND COMMUNICATING WITH ONE ANOTHER TO OPERATE IN THESE DISAGGREGATED UNITS OF ACTION."

LT. ANDREW COUILLARD
COMMANDER, EXPLOSIVE ORDNANCE DISPOSAL MOBILE UNIT (EODMU) 1

"My primary job duties are to ensure that the Kingfish are properly pre-checked before they go out into the water, and when they come back, we repurpose, check, and make sure the fish ran well," said Shackleton. They also do a post mission analysis, by looking at the sonar data gathered by the UUVs and determine the difference between mine-like objects and manmade objects.

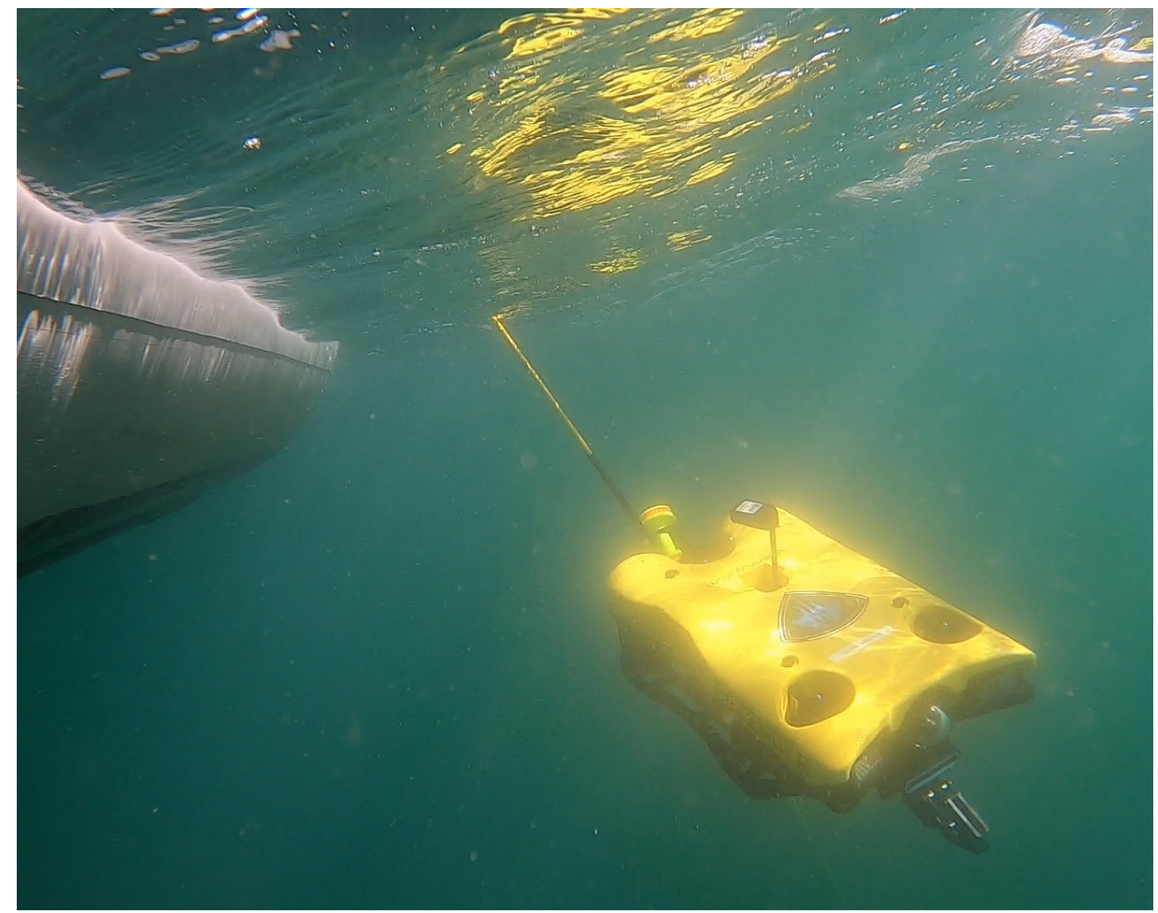
The Kingfish sweeps the water column and seafloor giving operators, like Shackleton, a clear view of what is in the water. The ability to remotely identify contacts speeds up the verification process keeping the water free from explosive hazards. It is key in securing safe naval amphibious capabilities. The use of sonar images and their confidence levels are invaluable in determining the order of importance for threats. Assessing these threats with automated systems keeps EOD personnel safe when investigating objects detected by sonar imagery.

Once an object is detected by a UUV, the Command-and-Control Node then tasks the EOD or the unmanned systems personnel for a re-acquire identification mission. The purpose of the mission is to verify if the detected object is or is not an explosive hazard.

Experienced unmanned systems operators can navigate their way to safely assessing and rendering safe ordnance with sonars Their ability to find and fix the location of an explosive hazard can give an ExMCM Company the opportunity to take apart live ordnance. This capability, known as exploitation, is a process to learn more about the nature of explosives, the country of origin, and how they work.

"The future is autonomous," said Couillard. "For us we need to leverage these unmanned systems and communication systems to make sure that they are networked and communicating with one another to operate in these disaggregated units of action."

U.S. Naval capabilities to detect and eliminate underwater threats are rapidly advancing thanks to the development of this remote technology. Remote and unmanned systems are the future of mine disposal and detection. Due to the sonar capabilities of UUVs mapping the seafloor and remote systems operators dealing with explosive threats, keeping Sailors out of the minefield is becoming more prevalent than in the past. These systems maintain our maritime advantage and give the Navy an edge when it comes to undersea warfare and mine detection.



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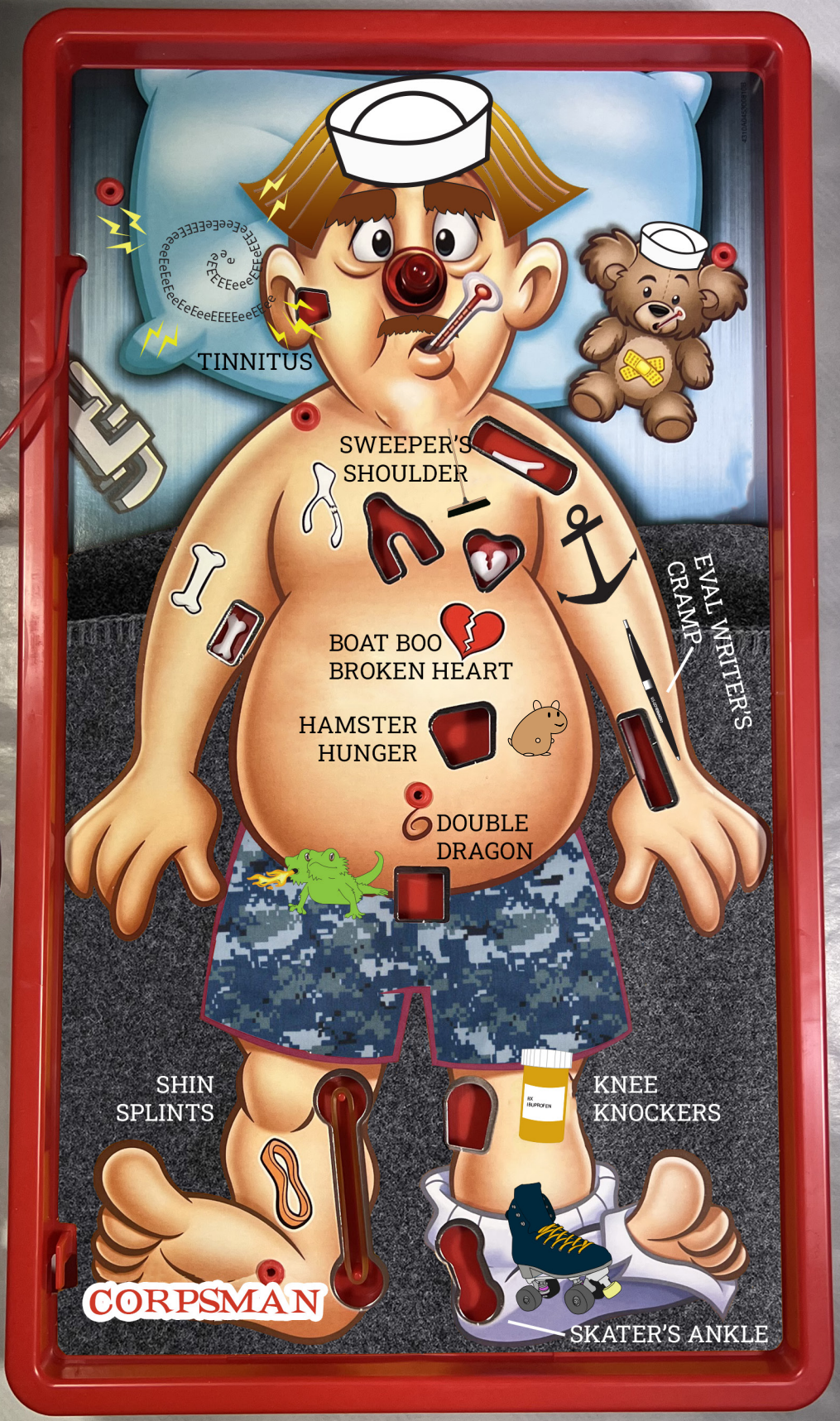

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