Expedition Reveals Thirteen Shipwrecks from WWII Battles off Guadalcanal

From Clifford Davis, Naval History and Heritage Command, Aug. 12, 2025

HONIARA, Solomon Islands – A multinational expedition led by the Ocean Exploration Trust aboard the Exploration Vessel (E/V) Nautilus has completed a groundbreaking archaeological

survey of more than a dozen World War II era shipwrecks in Iron Bottom Sound, August 1, 2025.

During the 22-day mission, which included the visual identification of multiple historically significant vessels, the team surveyed 13 wreck sites, including four ships documented for the first time. Among the newly identified wrecks are the bow of the heavy cruiser USS New Orleans (CA 32) and the Imperial Japanese destroyer Teruzuki, both lost during intense naval battles in the Guadalcanal campaign.

Other vessels surveyed in high resolution include:

USS Vincennes (CA 44)

USS Astoria (CA 34)

USS Quincy (CA 39)

USS Northampton (CA 26)

USS Laffey (DD 459)

USS DeHaven (DD 469)

USS Preston (DD 379)

USS Walke (DD 416)

HMAS Canberra (D33)

Imperial Japanese Navy destroyer Yudachi

and an unidentified landing barge.

“It was wonderful to return to Iron Bottom Sound, where we discovered Japanese, Australian, and American warships over 34

years ago," said Dr. Robert Ballard, President of Ocean Exploration Trust. "This expedition was special, allowing us to film these sites in a manner not possible back then, as well as document other ships, while at the same time sharing our work live to the entire world."

The surveys were conducted using advanced underwater robotic systems, including remotely operated vehicles (ROVs) deployed from Nautilus, and an uncrewed surface vehicle (USV), DriX, operated remotely from a shore-based station in Honiara. The DriX system, developed by the University of New Hampshire, mapped over 1,000 square kilometers of seafloor, producing the highest-resolution maps of Iron Bottom Sound to date and identifying dozens of potential targets.

"The use of our uncrewed vessel allowed a tremendous increase in exploration efficiency as we were able to continuously map and identify potential targets while the Nautilus was deploying its ROVs," said Dr. Larry Mayer, Director, Center for Coastal and Ocean Mapping at the University of New Hampshire. "This technological achievement, combined with the tremendous historical significance of our discoveries, made this one of the most rewarding missions I have ever participated in."

Iron Bottom Sound, situated between Guadalcanal, Savo, and Nggela Islands, was the site of five major naval battles between August and December 1942. More than 111 vessels and 1,450 aircraft were lost during the campaign, with over 20,000 lives lost. Dozens of wrecks still remain undiscovered.

"NOAA Ocean Exploration is dedicated to increasing our understanding of the deep ocean through scientific discovery, technological advancements, and data delivery," said Captain William Mowitt, NOAA Corps, acting director of NOAA Ocean Exploration. "This expedition highlights the importance of such cutting-edge technologies and the strong partnership

component of the Ocean Exploration Cooperative Institute in not only making discoveries that advance science and resource management, but also engaging and educating the public on the wonders of what lies in our ocean depths.”

The expedition streamed over 138 hours of ROV dives live via NautilusLive.org, bringing real-time exploration to millions of viewers worldwide, including veterans, descendants, and historians. Using telepresence technology, more than 130 experts from the United States, Japan, Australia, New Zealand, and other nations contributed remote analysis and historical interpretation during operations.

“This expedition was a great opportunity to remember the valor and sacrifices of sailors who fought with extreme tenacity and skill, on both sides. Sailors don’t start wars, but they do what their governments ask, and in the waters of Iron Bottom Sound, they did their duty to the fullest. Yet, the end result of that terrible war brought not only freedom for the United States and Allies, but for Japan as well,” said Samuel J. Cox, Director, Naval History and Heritage Command, U.S. Navy Rear Admiral (retired). “This survey of the ships of the United States, Australia, and Japan will add immeasurably to the understanding of one of the most costly naval campaigns in history, a campaign that hopefully will never be repeated.”

“As we commemorate the 250th anniversary of the United States Navy, it is altogether fitting that we explore the wrecks of Iron Bottom Sound,” said Frank Thompson, Director of the Naval History and Heritage Command’s Collection Management Division, who represented the Navy aboard E/V Nautilus. “The battles in these waters cost the United States Navy dearly. Those that made the ultimate sacrifice for their country may lay far from home, but they are not, and never will be, forgotten”

This effort was made possible through collaboration with numerous organizations, including Ocean Exploration Trust;

NOAA Ocean Exploration; U.S. Naval History and Heritage Command; the Solomon Islands government; the University of New Hampshire Center for Coastal and Ocean Mapping; University of Rhode Island; Solomon Islands National Museum; Kyoto University; Tokai University; the Defense POW/MIA Accounting Agency; Air/Sea Heritage Foundation; Major Projects Foundation; and the Royal Australian Navy Sea Power Centre.

The Government of the Solomon Islands issued the marine research permit through its Ministry of Education and Human Resources Development.

“The vast majority of our ocean lies in very deep waters that we know virtually nothing about,” said Dr. Daniel Wagner, Chief Scientist, OET. “These deep-sea explorations highlight how many extraordinary things are still hidden and waiting to be found in the great depths of our ocean.”

For imagery, video, and more information on the expedition, visit: www.NautilusLive.org

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Navy Awards Raytheon $258 Million Contract for SM-2 Missiles

From RTX, Aug. 13, 2025

TUCSON, Arizona – The DoD recently announced that Raytheon has been awarded a $258 million contract for the engineering, manufacturing, and development of SM-2 Block IIICU All Up Rounds. This is a new contract for the follow-on integration and test phase of a development program we've been in contract for. Majority of work will be performed in Tucson, Arizona and is expected to be completed by September 2031.

"This contract signals the increased demand given the critical role these interceptors are playing for the U.S. and our

allies," said Barbara Borgonovi, president of Naval Power at Raytheon. "The SM-2 Block IIICU variant incorporates several upgrades and will provide the U.S. Navy with a more capable and versatile missile for modern naval defense operations."

About SM-2:

- SM-2 is a cornerstone of a ship's layered defense. It provides firepower against high-speed, highly maneuverable anti-ship missiles and aircraft and protects naval assets that give warfighters greater operational flexibility.

- The missile can be launched from the MK-41 Vertical Launcher System (VLS) and MK-57 Advanced VLS. It will remain a primary anti-air warfare effector for USN Aegis destroyers and cruisers for several more decades.

- More than 12,000 SM-2 missiles have been delivered to the U.S. and allied customers. International customers include Australia, Canada, Germany, Japan, Korea, Netherlands, Spain and Taiwan. Chile and Denmark will be the two newest SM-2 missile customers.

- The U.S. Navy confirmed it fired SM-2 to intercept anti-ship missiles and drones in the Red Sea in early 2024 to defend against attacks by Houthi rebels targeting commercial vessels transiting the waterway.

Leonardo DRS Completes First Open-Water Demonstration of Counter-UAS Equipment

Concept USV with integrated Leonardo DRS MEP. (Leonardo DRS)
From Leonardo DRS, Aug. 12, 2025

ARLINGTON, Va., Aug. 12, 2025 – Leonardo DRS, Inc. (NASDAQ: DRS) announced today that is has successfully completed its first series of open-water demonstrations of its advanced maritime Mission Equipment Package (MEP) for counterUAS (CUAS) naval fleet protection.

The DRS maritime MEP is a scalable C-UAS system based on DRS's proven land-based mobile short-range air defense and C-UAS systems. This system is designed to be mounted on a range of small uncrewed surface vessels providing remote ship protection at varying distances, providing a real solution as the Navy looks to autonomous surface vessels to protect ships from air and surface threats.

The initial demonstrations were conducted under realistic sea

conditions and demonstrated the MEP's core integrated systems performance – the detection, identification and tracking of a UAS threat and counter-surface ship tracking. The mission equipment package used in the demonstration included a suite of DRS sensors and command-and-control technologies including the BlackLab passive radio frequency (RF) detection system, STAG electro-optic/infrared (EO/IR) gimbal with advanced thermal cameras, and a tactical data management system using DRS's sensor fusion operating system and AI to support fusion and target recognition using RF and Optical modalities.

"The U.S. Navy faces the same evolving drone threats as our land forces, and we recognize the urgency of delivering a reliable solution to protect the lives of sailors," said Cari Ossenfort, senior vice president and general manager of the Leonardo DRS Naval Electronics business unit. "By leveraging our proven expertise in mobile ground-based counter-UAS and short-range air defense systems, we have rapidly developed and demonstrated a maritime force protection capability that provides sailors with full-spectrum situational awareness and the tools to detect, track, and defeat threats at the tactical edge."

The DRS Maritime MEP is designed for mission-flexibility through modularity and platform agnosticism. It is able to integrate advanced active and passive RF, EO/IR sensors, 4G/5G electronicwarfare systems, and scalable kinetic or nonkinetic effectors using its MOSA open system architecture embedded in the Leonardo DRS operating system.

The development and integration of the maritime Mission Equipment Package is an example of DRS's deep experience as a leading innovator and integrator supporting a wide range of missions for the U.S. military and allies around the world. The company's integration capability extends across all domains to support force protection, computer networking and C5I, as well as naval power and propulsion systems.

U.S. Central Command Bids Farewell to Gen. Kurilla, Welcomes Adm. Cooper

U.S. Central Command's (USCENTCOM) Senior Enlisted Leader, Fleet Master Chief Derrick Walters passes the USCENTCOM flag to the outgoing commander of USCENTCOM, U.S. Army Gen. Michael Erik Kurilla, during a change of command ceremony, 8 August 2025. Multiple Department of Defense officials attended the event as well as distinguished defense leaders from partner nations around the world. (U.S. Central Command Public Affairs photo by Tom Gagnier)

From U.S. Central Command, August 8, 2025

TAMPA, Fla. – U.S. Army Gen. Michael Erik Kurilla, the outgoing commander of U.S. Central Command (CENTCOM),

relinquished command today to U.S. Navy Adm. Brad Cooper during a change of command ceremony held at the Tampa Convention Center. Prior to assuming command, Adm. Cooper served as deputy commander of CENTCOM.

Multiple Department of Defense officials attended the event as well as distinguished defense leaders from partner nations around the world.

Gen. Kurilla assumed command of CENTCOM in April 2022. During his time as commander, he led U.S. military efforts in the Middle East maintaining regional stability and security as well as the enduring defeat of ISIS. He led the planning and execution of over 15 major combined combat operations, including Operations Rough Rider and Midnight Hammer.

“I know that under the leadership of Adm. Brad Cooper, with the support of the Defense Department and Joint Staff, the counsel and contributions of our allies and partners, and support of our headquarters and component teams, the Soldiers, Sailors, Airmen, Marines, Coastguardsmen, and Guardians of Central Command who serve this nation on the front lines of freedom will always succeed,” said Gen. Kurilla. “It has been the honor of my life to have been their commander.”

Adm. Cooper is a 1989 graduate of the U.S Naval Academy and holds a master’s degree in strategic intelligence from the National Intelligence University. As the commander of CENTCOM, Adm. Cooper will have oversight of all U.S. military missions throughout the 21-country area of responsibility which includes the Middle East and Central Asia.

“U.S. Central Command and the entire joint force have performed exceptionally well under the leadership of Gen. Kurilla, helping to bolster partnerships, increase lethality of U.S. forces, and defend Americans and civilians abroad,” said Adm. Cooper. “I am deeply grateful for the opportunity to lead America’s sons and daughters as we support the important

mission of enhancing regional security and stability in the Central Command region.”

NAVSEA Leaders Discuss Advanced Technology Needs

WASHINGTON, DC (August 7, 2025) – Mr. Matt Sermon, Direct Reporting Program Manager, Maritime Industrial Base (MIB), participated in the Strategic Panel at the Maritime Innovation Forum: Advanced Manufacturing: Innovation for Maritime Readiness, that was held at the Capital Turnaround. (U.S. Navy photo by Laura Lakeway)

By NAVSEA Office of Corporate Communications, Aug. 7, 2025

WASHINGTON – Today, Naval Sea Systems Command (NAVSEA) leaders joined more than 360 industry representatives at the Maritime

Innovation Forum to discuss the adoption of advanced technologies to improve shipbuilding and repair performance.

The Maritime Innovation Forum 2025 is a national initiative that showcases transformative technologies aligned with the U.S. Navy's Advanced Manufacturing Strategy.

The forum included a keynote address from Vice Chief of Naval Operations, Admiral Jim Kilby as well as a panel discussion with senior leaders discussing the need to scale innovation. Tom Perotti, executive director and deputy chief engineer of NAVSEA engineering directorate, explained the importance of aligning advanced manufacturing solutions with authorities like Other Transactions (OTs) to quickly address capability gaps and readiness.

"To meet the speed and scale the Fleet demands, we must make advanced manufacturing a foundational capability across the entire shipbuilding enterprise," said Perotti. "Through innovative tools and systems, scalable solutions and authorities like OTs, we are working to solve problems faster while building a more innovative and agile Navy."

Matt Sermon, direct report program manager for the Maritime Industrial Base, echoed this forward-looking approach by highlighting recent successes with additive manufacturing.

"We've seen in just a few years that additive manufacturing can supply select parts for our ships now," Sermon said. "What we want to see in a few more years are entire shipyards, workforce and supply chains integrated by advanced manufacturing processes, technologies and of course, AI."

Throughout the forum, NAVSEA leaders discussed case studies where OT authorities have been successfully leveraged. Since 2020, NAVSEA has awarded more than 600 OT agreements to expedite needed ship construction, maintenance and modernization solutions. NAVSEA's OT successes shared at the

forum included the following:

- LM2500 Gas Turbine Navy Common Core Controller (GTNC3): With over 300 LM2500 engines powering the surface Fleet, GTNC3 standardizes the control system across platforms. Developed under the Maritime Sustainment Technology and Innovation Consortium (MSTIC) OT, GTNC3 addresses longstanding variability in control architecture and strengthens long-term sustainment.

- Strike Up/Down System (SUDS): This innovation supports rearming the MK41 Vertical Launch System at sea. SUDS was developed under the DoD Ordnance Technology Consortium OT and aims to reduce the need for ships to return to the port for rearming and preserve combat readiness.

- High-Density Ribbon Fiber Optic Cable and Shipboard Tooling: This initiative increases fiber density by 12-fold, while maintaining compliance. Developed under the National Shipbuilding Research Program OT with contributions from Ingalls Shipbuilding, Newport News Shipbuilding and others, it enhances shipboard data transfer while simplifying installation.

These projects exemplify how OT agreements fill critical technical gaps across NAVSEA’s acquisition portfolio, delivering faster, more affordable and flexible solutions to the Fleet.

During the afternoon of the forum, there were presentations about innovative technologies in the areas of additive manufacturing and 3D printing, robotics and automation, coatings and surfaces, as well as next-generation digital tools, materials and processes. These presentations showcased

high-impact technology that aligns with the Navy’s modernization goals and industrial expansion priorities.

Through these collaborative efforts, the Maritime Innovation Forum illustrated how technological innovation, alternative agreements and partnerships are directly strengthening the Navy’s maritime readiness and industrial base.

In closing remarks, Rear Adm. Pete Small, NAVSEA’s chief engineer and Warfare Centers commander, reiterated the importance of collaboration and emphasized NAVSEA’s commitment to scaling innovation that delivers results.

“This forum is a testament to what we can achieve when we come together to collaborate on innovative, scalable and real-world solutions to today’s most pressing shipbuilding and sustainment challenges,” said Small. “The demand is here, and NAVSEA is driving it forward with the help of partnerships, innovative technology and advanced manufacturing.”

USS Savannah Returns to Homeport After 12-Month Deployment

Families welcome the Independence-variant littoral combat ship USS Savannah (LCS 28) as it returns to Naval Base San Diego, Aug. 7, 2025. The Savannah returns to its homeport of San Diego following a 12-month rotational deployment to the U.S. 3rd and 7th Fleets. (U.S. Navy photo by Mass Communication Specialist 2nd Class Kassandra Alanis)

From Lt.Cmdr. Ryan Martinez-Slattery

SAN DIEGO – The Independence-variant littoral combat ship USS Savannah (LCS 28) arrived at its San Diego homeport Aug. 7, following a 12-month rotational deployment throughout the U.S. 3rd and 7th Fleet areas of operation. The Savannah operates with a dual-crew, allowing the hull to stay in theater for longer durations.

“I’m honored to welcome home the crew of the Savannah after a long and challenging deployment,” said Capt. Jose Roman, commodore, Littoral Combat Ship Squadron 1. “This warship showed strength in presence in strategically vital waterways and worked closely with our allies and partners across the Indo-Pacific. I know the families here today are just as proud

of their Sailors as I am.”

While on its maiden deployment, the Savannah conducted several multilateral exercises and port visits across the Indo-Pacific, including Cambodia, Singapore, Brunei, Palau, the Republic of the Philippines, and the Republic of the Marshall Islands, enhancing regional maritime cooperation and interoperability.

In October 2024, the Savannah sailed in coordination with Royal New Zealand Air Force (RNZAF) and Royal Australian Air Force (RAAF) P-8 maritime patrol aircraft in the South China Sea. The New Zealand-led multilateral patrol exercise fostered tactical proficiency and reinforced air-maritime integration with key regional partners.

Also in October, during a scheduled port visit to Muara, Brunei, the Savannah welcomed officers from the Royal Brunei Navy (RBN), and the Savannah’s Sailors participated in a sports day with their Bruneian counterparts, strengthening ties and fostering goodwill between navies.

“I’m incredibly proud of this crew, not only for their operational expertise over many months in a challenging environment, but for the leadership and commitment they displayed in working with our partner nations,” said Cmdr. Robert Schmidt, commanding officer of the Savannah. “These partnerships are vitally important to regional security, and this crew represented the best ideals of the U.S. Navy.”

In December 2024, during a port visit in Sihanoukville, Cambodia, the Savannah hosted Commander, U.S. Indo-Pacific Command Adm. Samuel Paparo and a delegation from the Royal Cambodian Navy for a tour of the ship and embarked MH-60R Seahawk helicopter. Discussions highlighted the strategic utility of the littoral combat ship and its contributions to maritime security in the region. The Savannah was the first

U.S. Navy ship in eight years to conduct a port visit in Cambodia.

The port visit included the Savannah Sailors serving the community at a local food pantry and soup kitchen and participating in a friendly volleyball match with Cambodian naval personnel, reinforcing partnership and professional rapport.

“It was a great experience interacting with their sailors and realizing how much we had in common,” said Electronics Technician 3rd Class Giovanni Pennisi.

In May, the Savannah participated in Exercise Balikatan 2025, the 40th iteration of the premier annual defense exercise held between the Republic of the Philippines and the United States. The Savannah’s crew led five days of live-fire exercises; tactical maneuvering drills; search and rescue; casualty evacuation; and Visit, Board, Search and Seizure (VBSS) scenarios alongside the Philippine Navy, Philippine Coast Guard, Philippine Air Force, and the Japan Maritime Self-Defense Force.

The Savannah’s deployment exemplifies the Navy’s commitment to integrated deterrence, regional maritime security, and enduring alliances and partnerships throughout the Indo-Pacific.

Littoral combat ships are fast, optimally manned, mission-tailored surface combatants that operate in near-shore and open-ocean environments, winning against 21st-century threats. LCS integrate with joint, combined, manned and unmanned teams to support forward-presence, maritime security, sea control, and deterrence missions around the globe.

USNS Comfort Arrives at Final CP25 Mission Stop in Trinidad

PORT OF SPAIN, Trinidad (August 5, 2025) The Mercy-class hospital ship USNS Comfort (T-AH 20) arrives in Port of Spain, Trinidad during Continuing Promise 2025, August 5, 2025. (U.S. Navy photo by MC2 Rylin Paul)

By USNAVSOUTH/4TH FLEET PUBLIC AFFAIRS

PORT OF SPAIN, Trinidad – The Mercy-class hospital ship USNS Comfort (T-AH 20) arrived in Port of Spain, Trinidad, August 5, 2025, for the final mission stop of Continuing Promise 2025 (CP25). The Comfort team will work alongside Trinbagonian medical professionals to provide medical care, including adult care, pediatric care, dental services, optometry, women's

health services, and various ancillary support services.

“Our presence in Trinidad and Tobago on this mission is strategically significant, allowing us to address immediate needs and solidify a vital relationship for future collaborations,” said Capt. Ryan Kendall, commodore of Destroyer Squadron 40 and CP25 mission commander. “Building on Continuing Promise’s history of fostering strong ties with partner nations, this engagement underscores the United States’ deep commitment to the well-being of the Trinbagonian people.”

This visit marks the fifth time the CP mission has provided support in Trinidad and Tobago, and the third time with Comfort. During Comfort’s time in Trinidad, patients can receive treatment at the medical site, and surgical operations will occur aboard the ship in the Port of Spain. In addition to Trinbagonian medical professionals, medical personnel from Canada, Costa Rica, the Dominican Republic, and Ecuador will work together to provide medical services.

“I will be working in patient administration, doing vitals and surgical screenings,” said Hospital Corpsman 3rd Class Joshua Bird, assigned to Comfort. “I’m excited to help patients. We are going to be giving a lot of help to people who need it.”

Comfort’s medical care extends beyond human patients during this mission stop, providing critical veterinary services to animals in need. A U.S. Army veterinary element from the 248th Medical Detachment Veterinary Service Support aboard Comfort will conduct subject matter expert trainings and veterinary services at various locations in Trinidad.

“I’m excited to teach the canine handlers of Trinidad how to perform basic canine tactical combat casualty care,” said U.S. Army Pvt. Angel Bautista, a veterinary technician. “Hopefully

what they learn, they will teach other people about performing canine medical care.”

Comfort service members will conduct side-by-side medical exchanges and teach a tactical combat casualty care course to Trinbagonian health professionals. These exchanges will empower Trinbagonian field experts with enhanced skills and knowledge through expert instruction and practical application.

Beyond providing crucial medical care and training, this mission stop offers service members a unique opportunity to forge lasting connections with the community of Trinidad. The mission stop features several impactful community outreach events, including a sports competition and the donation of essential sports equipment. Furthermore, the United States Fleet Forces Band “Uncharted Waters” will collaborate with Trinidad and Tobago’s musical talent in a series of dynamic performances.

“We visited in 2023, and we are looking forward to continue our collaboration with the Trinidad and Tobago Defence Force Steel Orchestra, along with the National Steel Symphony Orchestra of Trinidad and Tobago, whom we have worked with in the past,” said Ensign Christopher McGann, band director assigned to “Uncharted Waters.”

Lastly, the Seabees assigned to Naval Mobile Construction Battalion (NMCB) 11 will work with Trinidad and Tobago Defence Force engineers to improve and repair projects at the Lochmaben R. C. Primary School in Fullerton, Trinidad.

CP25 marks the 16th mission to the region since 2007 and the eighth aboard Comfort. The mission will foster goodwill, strengthen existing partnerships with partner nations, and encourage the establishment of new partnerships among countries, non-federal entities, and international

organizations.

U.S. Naval Forces Southern Command/U.S. 4th Fleet supports U.S. Southern Command’s joint and combined military operations by employing maritime forces in cooperative maritime security operations to maintain access, enhance interoperability, and build enduring partnerships to enhance regional security and promote peace, stability, and prosperity in the Caribbean, Central, and South American region.

LSE 2025 Concludes: A New Benchmark in Global Naval Integration

U.S. Navy Adm. James W. Kilby, Chief of Naval Operations (Acting) (center), speaks with Capt. Nathan Diaz, commanding officer of the Ticonderoga-class guided-missile cruiser USS Normandy (CG 60) aboard the USS Normandy during Large Scale Exercise (LSE) on August 5, 2025 (U.S. Navy photo by Mass Communication Specialist 1st Class Nathan T. Beard)
From U.S. Fleet Forces Command

NORFOLK, Va. – Sailors and Marines from across the globe participated in the U.S. Navy- and U.S. Marine Corps-led Large Scale Exercise (LSE) 2025, July 30-Aug. 8.

LSE 2025 marks the most comprehensive demonstration of global maritime coordination to date, testing the services' ability to command and control forces across the full spectrum of conflict in a contested, high-end fight. Using a globally integrated live, virtual and constructive maritime exercise model, the 10-day event addressed complex simulated scenarios while enhancing interoperability, refining tactics, and strengthening collaboration for thousands of Sailors and Marines operating around the world.

For the first time, all 10 Fleet Maritime Operations Centers (MOCs) operated together, synchronizing real-time effects and exercising command and control across 22 time zones and six combatant commands. The exercise replicated the complexity, friction, and operational tempo of global conflict.

"At its core, LSE 2025 is about readiness. It allows us to refine how we command and control forces on a global scale, how we align efforts with interagency teammates, allies and partners, and how we generate and sustain combat power under pressure," said Vice Adm. John Gumbleton, acting commander, U.S. Fleet Forces Command. "One of our top priorities is validating the Global Maritime Response Plan, proving we can shift from steady-state operations to a full warfighting posture at speed, whenever and wherever we're needed."

For the first time, LSE 2025 incorporated operational-level participation from key allies and partners, including Canada, Japan, and NATO forces, strengthening coalition integration and interoperability in contested environments. The exercise also included interagency and joint elements, reinforcing the principle of integrated deterrence across domains.

A cornerstone of LSE 2025 was the validation of the Global Maritime Response Plan (GMRP)—demonstrating the Navy's ability to rapidly shift from day-to-day operations to full-scale warfighting. This required a coordinated effort across the entire enterprise, from OPNAV, Type Commands (TYCOMs), and Systems Commands (SYSCOMs) to the Navy Reserve Force.

"This was more than a Navy and Marine Corps event. It was a unified effort across allies, joint forces, and interagency partners," said Gumbleton. "Exercises like LSE 2025 showcase the strength of integrated deterrence and the value of building warfighting trust across every level of command."

LSE 2025 moved beyond coordination to full integration, embedding joint capabilities from the outset and enabling commanders to deliver decisive effects at the operational level.

"Integrating with our naval counterparts, especially at the MOC, enables the Navy and Marine Corps team to exercise command and control of the most lethal fighting force in the world, said Brig. Gen. Thomas M. Armas, deputy commander, Fleet Marine Force, Atlantic, Marine Forces Command, Marine Forces Northern Command. "The Marine Air-Ground Task Force (MAGTF), known as a Marine Expeditionary Unit (MEU), embarked on a three ship Amphibious Ready Group (ARG), provides numerous options when campaigning or responding to crisis. LSE 25 provides a venue to practice synchronized and innovative command and control in order to ensure guaranteed max effective results when our nation needs it most."

Large Scale Exercise 2025 provided a pivotal opportunity to test and refine the Navy and Marine Corps' ability to operate in a globally contested environment. By integrating advanced warfighting concepts, allied capabilities, and real-time operational coordination, the exercise reinforced the maritime services' commitment to maintaining strategic advantage, deterring aggression, and ensuring security and stability across the world's oceans.

U.S. Fleet Forces Command is responsible for manning, training, equipping and employing more than 125 ships, 1,000 aircraft, and 103,000 active-duty service members and government employees, and providing combat-ready forces forward to numbered fleets and combatant commanders around the globe in support of U.S. national interests.

Adm. Caudle Relinquishes Command of U.S. Fleet Forces Command

U.S. Navy Adm. Daryl Caudle, speaks during the relinquishment of command ceremony for U.S. Fleet Forces Command (USFFC) aboard Naval Station Norfolk on August 6, 2025. USFFC is responsible for manning, training, equipping and providing combat-ready forces forward to numbered fleets and combatant commanders around the globe. (U.S. Navy photo by Mass Communication Specialist 1st Class Nathan T. Beard/Released)
Release From U.S. Fleet Forces Command

NORFOLK, Va. – Admiral Daryl L. Caudle relinquished command of U.S. Fleet Forces Command (USFFC) during a ceremony held aboard Naval Station Norfolk, Aug. 6, 2025.

Presiding over the ceremony was U.S. Air Force Gen. Gregory Guillot, commander, North American Aerospace Defense Command and U.S. Northern Command, who praised Caudle's visionary leadership, operational focus, and relentless dedication to enhancing Fleet readiness during a period of rising strategic competition.

"For the last three and a half years, [Adm. Caudle] has served

simultaneously in four critical positions – Joint Force Maritime Component Commander, Strategic; Commander, United States Naval Forces – Strategic Command; Commander, United States Naval Forces – Northern Command; and Commander, United States Fleet Forces Command," said Guillot. "In each role, Admiral Caudle served with distinction – persistently advocating for modernization while emphasizing fleet readiness and wartime preparedness."

During his tenure, Caudle led a force of more than 138,000 Sailors, over 120 ships and submarines, 1,500 aircraft, seven task forces, and five carrier strike groups. His leadership was instrumental in key initiatives that reshaped the Navy's approach to training, readiness, and force integration.

Among his many accomplishments, he reshaped Atlantic Fleet operations through the One Atlantic initiative, breaking down legacy command-and-control silos and improving homeland defense while enhancing the Navy's ability to respond to high-velocity threats in the Atlantic, Arctic, and high north.

Caudle championed the development of Live, Virtual Environments, and Constructive Scenarios (LVC), culminating in the establishment of the Hefti Global LVC Operations Center in 2024. The state-of-the-art facility integrates live and simulated training environments, greatly enhancing warfighter preparedness in high-end conflict scenarios.

Also, Caudle led the Navy's participation in the Chief of Naval Operations-directed Large Scale Exercises 2023 and 2025, which spanned 22 time zones, component commands, U.S. numbered Fleets, and this year, for the first time, including allies and partners – marking the most extensive naval exercise in more than a generation.

Caudle's focus on homeland defense led to the creation of Maritime Command Elements East and West, streamlining command-

and-control for maritime homeland defense and disaster response operations.

Caudle drove combat-proven readiness across the Fleet, ensuring all deploying units met the highest standards of lethality and performance, demonstrated during major naval engagements in the Red Sea as part of Operations Prosperity Guardian and Poseidon Archer.

In his remarks, Caudle expressed that his proudest accomplishment was the three-year effort that culminated in the Global Maritime Response Plan, a process that leverages combat surge ready units and response conditions to control our escalation of readiness and forces across the spectrum of conflict.

“Leading this extraordinary team has been an honor,” Caudle said. “Your dedication, resilience, and pursuit of excellence have been the driving force behind everything Fleet Forces Command achieved in propelling our Navy forward. You are executing a vital role in force development, force generation and force employment, and that is no doubt a relentless effort.”

As Caudle concludes a tour marked by historic achievements, he leaves behind a legacy of innovation, integration, and strategic foresight that will guide U.S. naval operations for years to come.

Naval Research Hydrogen Tech

Goes Tactical

August 6, 2025

Release From Nicholas E. M. Pasquini, U.S. Naval Research Laboratory Corporate Communications

U.S. Naval Research Laboratory (NRL) has prototyped a Hydrogen Small Unit Power (H-SUP) system to reduce detectability and improve readiness of Marine Corps in expeditionary warfare operations.

NRL's H-SUP is a portable fuel cell electric generator with greater energy per weight than batteries and lower audible and thermal signatures than combustion generators.

"This is more than a power system. It's a capability that supports distributed operations and extends mission range.

That’s strategic value,” said NRL Principal Investigator Kevin Cronin. “At NRL, we champion long-term modernization while working hand in glove with end-users across the services. Our investment today with the Marines in low-signature power intends to shape the future of how Marines fight – more independently, more efficiently, and with less logistical burden.”

The use of hydrogen in key applications can lead to increased electrical efficiency and energy density, increased operational range, reduced thermal and audible signature, and reduced maintenance requirements; ultimately increasing lethality of the force and decreasing logistical sustainment requirements.

“Warfighter feedback is a critical component of the technology development process and will be used to inform requirement definition and future research and development activities,” said Capt. Joshua Ashley, U.S. Marine Corps, Expeditionary Energy Office (E2O) Science and Technology Analyst. “The E2O serves as the link between the warfighter and the lab, providing feedback to refine the system and accelerate acquisition.”

The Marine Corps established the E2O to conduct research and development in technologies, which can be the difference between mission success and failure, while reducing energy consumption with the goal of increasing reach, persistence, and lethality. E2O works closely with the combat and technology development communities and serves as the proponent for Expeditionary Energy in the force development process.

“H-SUP isn’t just innovative – it increases lethality by keeping us powered and hard to find,” Ashley said. “We ensure this technology meets the needs of Marines on the ground – quiet, efficient, and reliable power that supports expeditionary operations.”

By evaluating H-SUP in operational scenarios, the team is reducing risk and accelerating requirements development of technology that increases endurance and improves the autonomy of small units.

H-SUP was field tested at Marine Corps Base Camp Lejeune in July 2022, Marine Corps Air Station Yuma in February 2025, Marine Corps Training Area Bellows in March 2025, an Army event at Fort Polk with the 101st Airborne in May 2025, and most recently at Marine Corps Air Ground Combat Center Twentynine Palms in May 2025.

“Our mission at NRL is to advance science that solves today’s problems while anticipating tomorrow’s threats,” Cronin said. “Hydrogen fuel cells fit both categories.”

NRL and E2O are translating feedback from Marines to refine the system for usability, survivability, and integration. This leads to adoption, not just prototypes.

“My role at NRL is to turn advanced science into operational capability,” Cronin said. “We built H-SUP not just to work in the lab, but to serve Marines in the field. Through collaboration with partners and direct feedback from users, we’re pushing this from prototype to practical.”

The fuel cell system in H-SUP was originally developed for use in unmanned vehicles. The high specific energy content of hydrogen enables increased range and endurance for those systems. This has been demonstrated in the Naval Air Warfare Center Aircraft Division’s H2 Stalker program, where this same fuel cell was integrated into the Stalker VXE30.

H2 Stalker provides greater combined power and energy to weight than alternate Stalker VXE30 configurations, enabling improved range, endurance, and dash metrics compared to the

baseline VXE30. H2 Stalker successfully completed multiple flight tests and demonstrations in various environmental conditions.

“We’re pushing technology into the hands of warfighters through real partnerships with industry and acquisition commands,” Cronin said. “In addition, the fuel cell in the H-SUP can also be used to power unmanned aerial vehicles to extend mission endurance. Lastly, fuel cells can support multiple aspects of the U.S. Marine Corps concept of Expeditionary Advanced Base Operations.”

NRL has developed fuel cell technology and the H-SUP system with sponsorship from the Office of Naval Research, Office of the Secretary of Defense Manufacturing Science and Technology Program, Naval Air Systems Command, and the USMC E2O; in addition to collaboration with industry partners, Northwest UAV and Noble Gas Systems.

About the U.S. Naval Research Laboratory
NRL is a scientific and engineering command dedicated to research that drives innovative advances for the U.S. Navy and Marine Corps from the seafloor to space and in the information domain. NRL is located in Washington, D.C. with major field sites in Stennis Space Center, Mississippi; Key West, Florida; Monterey, California, and employs approximately 3,000 civilian scientists, engineers and support personnel.