NOAA, U.S. Navy award construction contract for new NOAA Marine Operations Center

Release from NOAA

BY Keeley Belva, Dec. 5, 2023

Today, the U.S. Navy, on behalf of NOAA, has awarded \$146,778,932 to Skanska USA, from New York, to design and build a new NOAA facility on Naval Station Newport in Rhode Island. This facility will eventually be the new home of NOAA's Marine Operations Center — Atlantic.

While the details of the facility's design are still being finalized, requirements include having a pier that will accommodate four large vessels, a floating dock for smaller vessels, space for vessel repairs and parking and a building to be used for shoreside support and as a warehouse. Construction is anticipated to be completed by 2027.

"The Biden-Harris Administration's Inflation Reduction Act, a key pillar of Bidenomics, has made it possible for NOAA to make more crucial investments in infrastructure over the coming decade," said U.S. Secretary of Commerce Gina Raimondo. "As we work to combat the climate crisis, building climate resilient facilities, like this one in Rhode Island, is critical to ensuring our infrastructure stands the test of time."

The design and construction of the facility is funded in part by the $\frac{Inflation\ Reduction\ Act}{Inflation\ Reduction\ Act}$ — a historic \$3.3 billion investment to help communities, including tribes and vulnerable populations, prepare, adapt and build resilience to

weather and climate events in pursuit of a climate-ready nation. The act also supports improvements to weather and climate data and services, and strengthens NOAA's fleet of research airplanes and ships.

"By co-locating with Naval Station Newport, we are able to make our ship operations more efficient and increase long-term cost savings through sharing common capabilities," said NOAA Corps Rear Admiral Nancy Hann, director of NOAA Marine and Aviation Operations and the NOAA Commissioned Officer Corps. "We are excited to take this step in creating a state-of-theart marine operations center for NOAA in Rhode Island."

"Naval Station Newport looks forward to continuing its support for the missions of NOAA from our installation waterfront," stated Capt. Henry Roenke, the installation commander. "An expanded NOAA footprint here punctuates the value and diversity of the missions and partners at the base and makes the Naval Station a vital community and asset for military and non-military operations."

The center and ships are an operational component of NOAA Marine and Aviation Operations. The ships in NOAA's Atlantic fleet collect data essential to protecting marine mammals, coral reefs and historic shipwrecks, managing commercial fisheries, understanding climate change and producing nautical charts that help keep mariners safe. NOAA ships also deploy and help maintain buoys that gather oceanographic and weather information and warn of tsunamis.

"I've been proud to work with Secretary Raimondo and her predecessors over several years to secure the commitment and the funding to create this hub for ocean research at Naval Station Newport. This announcement marks another win for the Ocean State, for NOAA, and for local workers as we develop our Blue Economy. Soon we'll be able to put steel in the ground and put Rhode Islanders to work," said Senator Reed, who has worked with NOAA for over a decade to develop a permanent NOAA

homeport and marine operations center in Rhode Island."

"Thanks to Democrats' Inflation Reduction Act and Senator Reed's leadership, we're bringing NOAA's new Atlantic Marine Operations Center to beautiful Newport, Rhode Island," said Senator Sheldon Whitehouse. "This new facility will support our Atlantic fleet in the collection of data that protects marine animals and ocean ecosystems, and advances our understanding of the effects of climate change on the oceans."

"I am thrilled that a brand-new home for NOAA's Atlantic Marine Operations Center is going to be right here in the First Congressional District on Naval Station Newport. This facility will be an economic boon to the Ocean State for years to come," said Congressman Gabe Amo. "Due to the historic passage of the Inflation Reduction Act by Congressional Democrats, Rhode Island will accelerate its leadership in our nation's efforts to combat climate change, build new climate resilient infrastructure, and improve our national security and non-military operations. I want to express my gratitude for the work of Senator Jack Reed and Secretary Gina Raimondo for helping to bring this new facility to our district. I am committed to continuing to work together to support this project as it moves forward."

This contract was awarded following a request for proposals that was open from January to August 2023.

NOAA's fleet of 15 research and survey ships are operated, managed and maintained by NOAA Marine and Aviation Operations. Ranging from large oceanographic research vessels capable of exploring the world's deepest ocean, to smaller ships responsible for charting the shallow bays and inlets of the U.S. The fleet supports a wide range of marine activities, including fisheries surveys, nautical charting and ocean and climate studies. NOAA ships are operated by NOAA Corps officers and civilian professional mariners.

Navy to complete rapid delivery of new counter-UAS system to Ukraine



Release from Naval Air Systems Command

NAVAL AIR SYSTEMS COMMAND, PATUXENT RIVER, Md.—The Navy will complete the delivery of a new Counter-Unmanned Air System (UAS) weapon system to Ukraine this month as part of the Department of Defense aid package.

Last year, the contingency operations team for the Direct and Time Sensitive Strike program office (PMA-242) began working an urgent requirement to deliver rocket-launching platforms, known as Vehicle Agnostic Modular Palletized ISR Rocket Equipment (VAMPIRE) systems, to support wartime efforts in Ukraine.

VAMPIRE is a compact, palletized rocket-launching platform that consists of a sensor ball and four-shot Advanced Precision Kill Weapon System (APKWS) launchers designed to mount to any truck with a flatbed. The U.S. Navy and Army have traditionally against air-to-ground targets. With VAMPIRE, the laser-guided rocket can defend against unmanned aerial threats.

"We delivered the first four systems in only six months by leveraging an innovative contracting strategy and working diligently to keep pace with the system's rapid development," said Cmdr. Kevin Raspet, PMA-242 foreign military sales deputy program manager.

PMA-242's Contingency Operations Case Manager Robert Galan said the team had placed a heavy emphasis on speed to the warfighter and was able to explore several contracting authorities to streamline the process and focus on building and delivering an operationally effective system.

In coming weeks, the PMA-242 CO team also plans to deliver the first ever APKWS with proximity fuze warheads, a key enabling technology for the C-UAS mission, Galan said. The proximity fuze incorporates an RF sensor that enables APKWS to target Group 2 and Group 3 UAVs.

"Early reports indicate the weapon system is having an immediate impact in the ongoing Ukrainian wartime effort," said Capt. Alex Dutko, PMA-242 program manager. "This activity is another example of our team responding to urgent requirements with unprecedented speed and agility."

PMA-242 will deliver 14 VAMPIRE systems to Ukraine's ground forces for targeting and neutralizing UAVs and defending against ground threats.

U.S. Navy to start recovery operations for downed Army Blackhawk

Release from U.S. Sixth Fleet Public Affairs

From U.S. Sixth Fleet Public Affairs

MEDITERRANEAN SEA — The U.S. Navy contracted the multi-purpose support vessel, NG Worker, for search and recovery operations of an Army Blackhawk aircraft that crashed into the Mediterranean Sea, Nov. 10. The aircraft was conducting routine training when the crash occurred.

The NG Worker, equipped with the U.S. Navy Supervisor of Salvage and Diving team, is set to depart to the crash location from Augusta Bay, Sicily, in the coming days.

Once on station, salvage experts will deploy a shallow water intermediate search system (SWISS) and towed pinger locator (TPL) to search for the aircraft. The SWISS is a towed side-

scan-sonar (SSS) and the TPL is used to locate emergency relocation pingers on downed military and commercial aircraft. The TPL will use passive sensors to "listen" for the aircraft pinger's frequency.

Recovery of the aircraft will take place using the Deep Drone remote operated vehicle (ROV). Deep Drone is a 4,100 pound ROV designed to meet the Navy's mid-water salvage requirements to a maximum depth of 8,000 feet. Every effort will be made to recover the aircraft and the fallen Soldiers.

NG Worker is a 288-foot offshore supply vessel that is outfitted with advanced, state-of-the-art underwater survey and positioning equipment.

Assigned to U.S. Army Special Operations Command the Blackhawk was carrying five special operations aviation Soldiers when it crashed. All Soldiers on board were killed.

The cause of the crash is under investigation. For information regarding the incident, contact the U.S. Army Special Operations Command Public Affairs office at 910-432-6005, or by email at PAO-USASOC@socom.mil.

Headquartered in Naples, Italy, U.S. Naval Forces Europe-Africa (NAVEUR-NAVAF) operates U.S. naval forces in the U.S. European Command (USEUCOM) and U.S. Africa Command (USAFRICOM) areas of responsibility. U.S. Sixth Fleet is permanently assigned to NAVEUR-NAVAF, and employs maritime forces through the full spectrum of joint and naval operations.

Seabee Memorial Scholarship Association and CEC/Seabee Historical Foundation become Navy Seabee Foundation



Release from the Navy Seabee Foundation

On December 2, 2023, the boards of the Seabee Memorial Scholarship Association and the CEC/Seabee Historical Foundation signed an agreement to merge the two organizations and become the Navy Seabee Foundation. The agreement will take effect on December 31, 2023. This was the culmination of nearly two years of research, discussion and negotiations.

The purpose of the Navy Seabee Foundation is the preservation and protection of the history and heritage of the U.S. Navy Seabees and the U.S. Navy Civil Engineer Corps; the awarding of scholarships to deserving family members of Seabees, CEC Officers, and all who served with the Naval Construction

force; supporting the U.S. Navy Seabee Museum, monuments, memorials, and other heritage sites dedicated to the U.S. Navy Seabees; and supporting current and former members of the Seabee/CEC Community and their families.

The board of directors of the Seabee Memorial Scholarship Association and the board of trustees of the CEC/Seabee Historical Foundation will merge to lead the Navy Seabee Foundation. RADM Kevin Slates, CEC, USN, Ret., and RDML Lou Cariello, CEC, USN, Ret., will serve as chair and vice chair respectively and the new position of Vice Chair, Senior Enlisted Leader will be filled by CMDCM Doug Heiner, USN, Ret. Dan Miller, currently Executive Director of both organizations will continue as Executive Director. The Navy Seabee Foundation will be headquartered in Springfield, Virginia and have an office at the Seabee Heritage Center in Gulfport Mississippi.

From Kevin Slates, "I am thrilled about the combination of the Seabee Historical Foundation and the Seabee Memorial Scholarship Association into a single Seabee nonprofit, and the opportunities it will bring to allow us to better support Seabees and their families. It's long overdue and a huge milestone for all Seabees (past, present, and future)."

From Lou Cariello, "This is a watershed moment in the history of non-profit organizations serving Navy Seabees. The merger of the Seabee Historical Foundation with the former Seabee Memorial Scholarship Association (now Navy Seabee Foundation) represents a golden opportunity to further unify all former and current Seabees and enhance the pride that we have, and future generations will have, for our wonderful Seabee community."

From Doug Heiner "This merger is very exciting because we are streamlining our operations to expand our capabilities and strengthens our commitment to serving Seabees and their families now and into the future." From Dan Miller, "I look forward to continuing the events and activities around the country that bring Seabees and Seabee supporters together. I'm so excited to see what the future holds for the Navy Seabee Foundation."

For additional information contact Dan Miller at danmiller@seabee.org or 859-327-1830.

Sri Lanka Joins Combined Maritime Forces in Middle East as 39th Member



Release from Combined Maritime Forces Public Affairs

December 05, 2023

MANAMA, Bahrain — Combined Maritime Forces welcomed Sri Lanka, Nov. 20th, as the 39th member of the world's largest maritime security partnership.

"We are excited to have Sri Lanka as part of CMF," said Vice Adm. Brad Cooper, CMF commander. "We welcome them into a growing international naval coalition in the Middle East, which protects some of the world's most important waterways."

In accepting the invitation to join CMF, the country's naval commander, Vice Adm. Priyantha Perera, said Sri Lanka "is eager to collaborate with the CMF and other partner nations in joint exercises, patrols and operations...to uphold the principles of the CMF and contribute to its success."

CMF is comprised of a headquarters staff and five combined task forces focusing on defeating terrorism, preventing piracy, encouraging regional cooperation, and promoting a safe maritime environment. The naval partnership upholds the international rules-based order by supporting security and stability across 3.2 million square miles of water encompassing some of the world's most important shipping lanes.

Navy Announces Completion of P-8A Poseidon Salvage Operation



Release from Commander, 3rd Fleet Public Affairs

KANEOHE BAY, Hawaii — The Navy completed salvage operations of the P-8A Poseidon in Kaneohe Bay on Dec. 3, the on-scene commander told reporters Dec. 4.

"The aircraft is out of the bay, and the salvage operation is complete," said Rear Adm. Kevin P. Lenox, who is also commander of Carrier Strike Group 3. "The team worked smoothly through the weekend under ideal conditions and everything happened according to the plan."

After staging all of the required equipment on Thursday, Nov. 30, and Friday, Dec. 1, Navy Mobile Diving and Salvage Unit (MDSU) 1, working alongside local and off-island specialists, and Naval Sea Systems Command (NAVSEA) Supervisor of Salvage (SUPSALV) arrived before sunrise on Saturday, Dec. 2, to begin inflating the salvage roller bags used to extract the aircraft from the water. Under the close observation of divers, the

aircraft was lifted higher in the water and off any coral by 8:30 a.m. The aircraft was rotated and floated into position next to the runway by 10:30 a.m.

"The team spent a lot of time using bags of different sizes — inflating and deflating — to make small adjustments to the aircraft," said Lenox. "Sometimes it took an hour to get everything right just to move the aircraft five feet."

Once on land, the salvage crew reinforced the bags and wheels, locked down the gears on the pulling machines, and placed absorbent material between the aircraft and the bay as a precaution. They continued pulling the aircraft on bags up the ramp to a flat area on the runway. The team then lowered the plane onto jacks, swapped out all six tires, inspected the landing gear — assessed it as sound, and then towed the aircraft to the washrack for a freshwater rinse.

"I again want to thank Marine Corps Base Hawaii (MCBH), Navy Supervisor of Salvage, SMIT Salvage, and Center Lift for their safe and professional execution of the salvage operation," said Lenox.

Additionally, Dec. 3, divers from the Hawaii Dept. of Land and Natural Resources Division of Aquatic Resources conducted a preliminary dive to observe the site, and plan to continue their underwater assessment Dec. 4.

"Yesterday, we were able to get into the water with our federal partners for about two and a half hours," said Kim Fuller, aquatic biologist with the Hawaii Dept. of Land and Natural Resources' Division of Aquatic Resources, during the Dec. 4 joint press conference. "We were able to delineate the majority of what we believe is the primary impact of the airplane. Our assessment was just preliminary, so right now we're just working to understand the extent of the damage and spatial delineation of the impact."

The Navy and Marine Corps remain committed to working with

appropriate local and federal authorities to ensure the correct actions are taken to understand, measure, and mitigate any impacts to the local habitat.

"We will continue the work that needs to be done to characterize the state of the coral and damage that was done in the area," said Col. Jeremy Beaven, commanding officer, MCBH. "In my role as the commanding officer, I have oversight responsibilities and obligations that I take on willingly. And, I will certainly be working with our state partners and agencies, again, in deference to their expertise."

The aircraft is in a parking spot where it will be available for the investigating teams and where Maritime Patrol and Reconnaissance Wing Ten will begin the reclamation and repair process.

"The Navy is conducting a thorough investigation of the mishap to determine the cause and prevent similar mishaps in the future," said Lenox.

The P-8A crew, assigned to Whidbey Island, Washington-based Patrol Squadron (VP) 4 "Skinny Dragons," was on a detachment in support of maritime homeland defense when the aircraft overshot the runway and ended up in Kaneohe Bay Nov. 20. There were nine crewmembers on board — three pilots and six crewmembers (two officer and four enlisted). All crewmembers safely evacuated the aircraft and no injuries were reported. The incident is under investigation.

Houthi Attacks on Commercial

Shipping in International Water Continue



Release from U.S. Central Command

USCENTCOM

Dec. 3, 2023

Release Number 20231203-01

FOR IMMEDIATE RELEASE

SOUTHERN RED SEA — Today, there were four attacks against three separate commercial vessels operating in international waters in the southern Red Sea. These three vessels are connected to 14 separate nations. The Arleigh-Burke Class destroyer USS CARNEY responded to the distress calls from the

ships and provided assistance.

At approximately 9:15 a.m. Sanaa time, the CARNEY detected an anti-ship ballistic missile attack fired from Houthi controlled areas of Yemen toward the M/V UNITY EXPLORER, impacting in the vicinity of the vessel. UNITY EXPLORER is a Bahamas flagged, U.K. owned and operated, bulk cargo ship crewed by sailors from two nations. The CARNEY was conducting a patrol in the Red Sea and detected the attack on the UNITY EXPLORER.

At approximately 12 p.m., and while in international waters, CARNEY engaged and shot down a UAV launched from Houthi controlled areas in Yemen. The drone was headed toward CARNEY although its specific target is not clear. We cannot assess at this time whether the Carney was a target of the UAVs. There was no damage to the U.S. vessel or injuries to personnel.

In a separate attack at approximately 12:35 p.m., UNITY EXPLORER reported they were struck by a missile fired from Houthi controlled areas in Yemen. CARNEY responded to the distress call. While assisting with the damage assessment, CARNEY detected another inbound UAV, destroying the drone with no damage or injuries on the CARNEY or UNITY EXPLORER. UNITY EXPLORER reports minor damage from the missile strike.

At approximately 3:30 p.m. the M/V NUMBER 9 was struck by a missile fired from Houthi controlled areas in Yemen while operating international shipping lanes in the Red Sea. The Panamanian flagged, Bermuda and U.K. owned and operated, bulk carrier reported damage and no casualties.

At approximately 4:30 p.m., the M/V SOPHIE II, sent a distress call stating they were struck by a missile. CARNEY again responded to the distress call and reported no significant damage. While en route to render support, CARNEY shot down a UAV headed in its direction. SOPHIE II is a Panamanian flagged bulk carrier, crewed by sailors from eight countries.

These attacks represent a direct threat to international commerce and maritime security. They have jeopardized the lives of international crews representing multiple countries around the world. We also have every reason to believe that these attacks, while launched by the Houthis in Yemen, are fully enabled by Iran. The United States will consider all appropriate responses in full coordination with its international allies and partners.

Navy Reserve Launches Mobilization and Deployment Support Command (MDSC)



Release from Commander, Navy Reserve Forces Command Public

Affairs

Dec. 1, 2023

By Commander, Navy Reserve Forces Command Public Affairs

Mobilization and Deployment Support Command (MDSC) officially launched during a ribbon-cutting ceremony on Naval Station Norfolk, December 1, 2023.

MDSC reflects the Navy Reserve's rapid alignment with the concept of Adaptive Mobilization, a process intended to improve warfighter readiness by enabling the Navy to respond with speed, agility and quantity of personnel in support of large-scale contingencies and to improve processes and procedures that will ensure effective mass mobilization capability.

"MDSC is being established to provide oversight of all Reserve Component (RC) mobilizations and Active Component (AC) Individual Augmentee (IA) mobilizations," said Rear Admiral Michael J Steffen, Commander, Navy Reserve Forces Command. "This is a wholesale re-imagining of the legacy, centralized mobilization process and is the realization of the Reserve's shift from operational support through a centralized center of excellence to strategic reserve via adaptive, distributed mobilizations."

The establishment of MDSC coincides with the disestablishment of Expeditionary Combat Readiness Center (ECRC), which transferred to Navy Reserve Forces Command (CNRFC) in January 2022.

MDSC will retain the Mobilization Center of Excellence role to train, oversee and execute the Navy's mobilization processes and continue to deploy steady-state IA Sailors across the globe, while adjusting processes and procedures to encompass the Navy's focus on Adaptive Mobilization in support of largescale contingencies and mass mobilization requirements.

According to Steffen, MDSC will continue to set the standard across all Distributed Activation processing sites to provide deployment ready and mission capable warfighters to effectively implement the strategic, operational and tactical objectives of the Navy.

"With the drawdown in missions supporting the Global War on Terror, the return of strategic competition and the new reality of multi-domain warfare, MDSC's new mission and capabilities now align to the Navy's focus in decentralizing the mobilization processing from a singular center at MDSC to the regional REDCOMs and other strategic locations," said Steffen. "Our Reserve Force is laser-focused on warfighting readiness and our swift transformation will further sharpen our focus on one thing, and one thing only... our ability to fight and win."

USS RAMAGE RETURNS TO HOMEPORT FOLLOWING 6TH FLEET DEPLOYMENT



Release from Carrier Strike Group 12 Public Affairs

By Carrier Strike Group 12 Public Affairs

04 December 2023

NORFOLK, Va. — The Arleigh-Burke class guided-missile destroyer USS Ramage (DDG 61) — part of Carrier Strike Group (CSG) 12, Gerald R. Ford CSG returns to Norfolk, VA after a 7-month deployment to the US Naval Forces Europe area of operations, Dec. 03, 2023.

The Gerald R. Ford Carrier Strike Group remains on deployment in the Eastern Mediterranean as part of the Pentagon's response to the Oct. 7th Hamas attacks on the Gaza strip. While abroad, the USS Ramage served as an air defense unit for the strike group off the coast of Israel, and closely monitored Russian Federation Navy units for signs of

aggression.

A recent contract for the maintenance of Ramage was awarded to BAE systems in Jacksonville. The crew's early return to Norfolk provides an opportunity to prepare for an imminent homeport change to Mayport, Florida.

"I'm looking forward to Florida. It feels closer to home than any place I could be stationed," says Fire Controlman Third Class Tyler Allen Wade Dickey from Refugio, Texas. "This crew is the best team I've ever been a part of. There's isn't anything we can't accomplish together."

In 214 days, the crew of the Ramage accomplished 40 replenishments at sea, logged over 400 helicopter landings, sailed over 50,000 miles, and prepared over 190,000 meals.

While deployed with Carrier Strike Group 12, the Ramage crew conducted maritime security operations and engaged with allied and partner nations. In May, the crew of the Ramage was able to quickly replace critical acoustic equipment and celebrate the Battle of the Atlantic 80th Anniversary in Liverpool, UK. In June, members of the Ramage crew volunteered to clear debris from a public park and planted 100 decorative plants around the municipality of Bar, Montenegro. The July visit to Durres, Albania allowed Ramage leadership to meet with local senior security officials. During the August port visit to Limassol, Cyprus the support of local contractors allowed the crew to complete an intensive week of scheduled upkeep.

The Gerald R. Ford CSG remains flexible to conduct operations wherever needed. In September, Arleigh-Burke class guided-missile destroyer USS Ramage (DDG 61) and Ford-class aircraft carrier USS Gerald R. Ford (CVN-78) shared a port visit in Trieste, Italy prior to conducting dual-carrier operations with ITS Cavour (CVH 550) and Italy's 2nd Naval Division.

"Throughout our deployment, we've conducted joint operations with the British, Spanish, Italian, French, Hellenic, and

Turkish Navies." says Cmdr. Tim Yuhas, commanding officer of the USS Ramage. "These strong strategic relationships between the U.S. and our allies maintains our superior readiness and are critical to our ability to respond to any contingency in the Mediterranean."

Strengthening partnerships during the deployment to the Naval Forces Europe area of operations builds enduring relationships and emphasizes our shared commitment to promoting safety and stability within the region, while seeking opportunities to enhance our interoperability as NATO allies.

CSG-12, Gerald R. Ford CSG, is on a scheduled deployment in the U.S. Naval Forces Europe-Africa area of operations, employed by U.S. Sixth Fleet to defend U.S., allied, and partner interests.

The Gerald R. Ford Carrier Strike Group is comprised of its flagship and namesake, the Ford-class aircraft carrier USS Gerald R. Ford (CVN-78), Carrier Air Wing Eight (CVW-8), Destroyer Squadron Two (DESRON-2), the Ticonderoga-class guided-missile cruiser USS Normandy (CG-60), and the Arleigh Burke-class guided-missile destroyers USS Ramage (DDG 61), USS McFaul (DDG 74), and USS Thomas Hudner (DDG 116).

The squadrons of CVW-8 embarked aboard Gerald R. Ford are the "Tridents" of Helicopter Sea Combat Squadron (HSC) 9, the "Spartans" of Helicopter Maritime Strike Squadron (HSM) 70, the "Bear Aces" of Airborne Command and Control Squadron (VAW) 124, the "Ragin' Bulls" of Strike Fighter Squadron (VFA) 37, the "Blacklions" of VFA-213, the "Golden Warriors" of VFA-87, the "Tomcatters" of VFA-31, the "Gray Wolves" of Electronic Attack Squadron (VAQ) 142, and the "Rawhides" of Fleet Logistics Support Squadron (VRC) 40.

Headquartered in Naples, Italy, NAVEUR-NAVAF operates U.S. naval forces in the U.S. European Command (USEUCOM) and U.S. Africa Command (USAFRICOM) areas of responsibility. U.S. Sixth

Fleet is permanently assigned to NAVEUR-NAVAF, and employs maritime forces through the full spectrum of joint and naval operations.

U.S. Navy deployment puts Leidos autonomy on display



Unmanned surface vessel Seahawk arrives at Sydney Harbor as part of Integrated Battle Problem 23.2. Photo: U.S.

Navy/Ensign Pierson Hawkins

Release from Leidos

November 28, 2023

A U.S. Navy task group including four unmanned surface vessels (USVs) <u>reached Sydney Harbor</u> late last month after crossing the Pacific Ocean for the first time and visiting several <u>western Pacific ports</u>.

Each of the fleet's unmanned vessels (<u>Seahawk</u>, <u>Sea</u> <u>Hunter</u>, <u>Ranger</u> and <u>Mariner</u>) are designed and outfitted with state-of-the-art Leidos autonomy technology.

The <u>deployment</u>, named Integrated Battle Problem (IBP) 23.2, marks a number of historic milestones in naval autonomy.

Retired U.S. Navy Vice Admiral <u>David Lewis</u>, Leidos Sr. Vice President for Maritime Operations, said it's the first time these vessels have operated together as a task group, traveled beyond Hawaii, crossed the International Date Line, crossed the Equator and visited a Western Pacific foreign port.

Before IBP 23.2, they operated extensively in the Caribbean Sea and Panama Canal and on numerous Eastern Pacific tours.

Lewis said he sees many comparisons to President Theodore Roosevelt's voyage of the <u>Great White Fleet</u>, a group 16 U.S. Navy battleships that sailed around the world from 1907-1909 in a display of American naval power.

• "In many ways, this deployment is showing the world that the U.S. Navy has embraced autonomy, the next generation of maritime high technology," he said. "This isn't just a few ships out on a short cruise. This deployment brings together autonomy and multidomain task group operations. I see it as the operational debut of 21st century American technology on the world stage, which is what the Great White Fleet represented in its day."

Lewis added that the deployment signals a transition of advanced technology out of the laboratory and prototype stages and into the heart of today's most stressing maritime operational environment, the Western Pacific.

Gerry Fasano, Leidos Defense Group President, emphasized the

significance of USVs actively enhancing the fighting envelope of U.S. Navy surface combatants in an organized Surface Action Group.

• "The integration of autonomous surface vessels with manned combatants on display in this deployment will give fleet commanders much-needed enhancements to maritime domain awareness, accelerating the speed and lethality of existing maritime kill chains," says Fasano.

An historic learning opportunity: Lewis said the deployment will reveal a lot about how autonomous vessels operate on deployment.

"We have significant knowledge about cruisers, destroyers and submarines, which we've deployed for decades," he said, "but when you do things you've never done before, like deploy a Surface Action Group of autonomous warships across the vast Pacific, unexpected things will happen, and that's the point. We're going to learn a lot, and that's a very good thing."

Lewis also emphasized the importance of cohesive and continuous maintenance for autonomous systems to support naval operations.



The task group of IBP 23.2 crossing the Pacific Ocean. Photo: U.S. Navy/Ensign Pierson Hawkins

Ray Sheldon, Gibbs & Cox President, said before the deployment, Ranger and Mariner had logged nearly 100,000 miles in supervised autonomy near U.S. shores.

"The Western Pacific has some of the roughest seas in the world," says Sheldon, "so they're being put to the test like never before. They're being asked to operate dependably over a great deal of sheer distance and operational time. All four vessels have a remarkably high reliability record, but not necessarily when exposed to rough waters on the high seas, and that can make a big difference. It's a harsher operating environment than anything we've tested, but these are the types of conditions we've been preparing for."

Dan Brintzinghoffer, Leidos Vice President and Division Manager in the Leidos Maritime Business, said that because the deployment will last for several months, his team has positioned hundreds of spare parts aboard Ranger and Mariner.

"Whether it's harsh operating conditions, severe weather or other mission factors, it's safe to say we will learn a lot during the extended time at sea," says Brintzinghoffer. "We know we will experience individual systems issues and learn from those occurrences. The question is, as you stress the system of systems, how do the vessels respond? Normally, there is crew onboard to assist if there are any system issues, but this assistance now must come in the form of an autonomous or semi-automated response. We believe we have the right parts, technology and software in place to keep system availability high."



Clockwise from top left: Unmanned surface vessels Seahawk, Ranger, Sea Hunter and Mariner. Photos: Leidos

Meet the fleet: <u>Sea Hunter</u>, a fully autonomous vessel, was the first of the four ships to be completed in 2015. In 2019, <u>Fortune</u> called Sea Hunter "the first of a new class of warships that use artificial intelligence in place of a crew."

<u>Seahawk</u>, also fully autonomous, was the second. Like Sea Hunter, Leidos designed Seahawk to be completely autonomous from the hull up. The company supervised construction of the vessel, which joined the Navy's <u>Surface Development Squadron</u> One in 2021.

"Seahawk and Sea Hunter are autonomous down to the pump, motor and engine, capable of self-reconfiguration and decisionmaking about how to operate apart from human guidance," says Lewis.

Ranger, a large semi-autonomous platform, is a fast supply vessel (FSV) converted to operate autonomously by Leidos subsidiary Gibbs & Cox. Leidos purchased Ranger partially completed, selected the shipyard and oversaw the reconstruction effort.

<u>Mariner</u>, also semi-autonomous, is the newest ship in the fleet, a converted FSV that incorporates lessons learned from Ranger into its mechanical and electrical designs to make them more reliable and conducive to autonomy.

"Ranger and Mariner, while not as autonomous as Seahawk and Sea Hunter, can navigate effectively without a crew, but because they weren't originally designed for autonomy, they aren't quite at the same level," said Lewis. "However, these are platforms with substantial capacity. They've done surveillance missions, but they also have the potential to be weapons platforms."

Looking ahead: Beyond the deployment, Lewis sees fully autonomous mission planning as the ultimate form of naval autonomy.

"If the vessel was on a wartime mission and took damage or encountered severe weather, for example, the truly autonomous ship can replan itself to carry out the mission despite damage or equipment casualties without human reprogramming," he said. "That's a huge challenge, and it's something we're working on implementing every day at Leidos."