Leonardo DRS Opens Advanced Naval Power and Propulsion Facility in Charleston, South Carolina

Investment Underscores Continued Commitment to Support U.S. Navy and Defense Industrial Base

Release From Leonardo DRS

ARLINGTON, VA, January 23, 2026 – Leonardo DRS, Inc. (NASDAQ: DRS) today announced the official opening of its new, state-of-the-art naval power and propulsion manufacturing and testing facility in the Charleston, South Carolina region. The more than 140,000-square-foot facility is a major investment to expand domestic production capacity in support of U.S. Navy submarine and shipbuilding programs, including systems for the Columbia-class ballistic missile submarine program.

The purpose-built facility provides advanced manufacturing, final assembly, integration, and testing space dedicated to large components for Leonardo DRS's naval electric power and propulsion systems. In addition to electric propulsion and power generation systems, the site supports naval steam turbine system design, manufacturing, and testing.

"This strategic investment is a national asset and represents our commitment to supporting the U.S. Navy's efforts to increase production capacity across the submarine and shipbuilding industrial base," said Jon Miller, senior vice president and general manager of the Leonardo DRS Naval Power Systems business unit. "This advanced multi-purpose facility enables us to increase production capacity, streamline our production processes, and rapidly respond to evolving fleet

requirements.”

John Baylouny, president and CEO of Leonardo DRS, added: “The Department of War has been clear about the need to strengthen and expand the defense industrial base, and this investment answers that call. By increasing capacity and modernizing our manufacturing infrastructure, we are ensuring the U.S. military has reliable access to the critical capabilities it needs, when and where they are needed.”

As the Navy fields more power-intensive weapons, sensors, and computing systems, scalable integrated power architectures are essential to mission success. The Charleston facility positions Leonardo DRS to deliver those architectures at scale and with the schedule reliability required for next-generation surface combatants and submarines.

HII Completes Builder’s Sea Trials for USS Zumwalt

From HII

PASCAGOULA, Miss., Jan. 21, 2026 (GLOBE NEWSWIRE) — HII's (NYSE: HII) Ingalls Shipbuilding division successfully completed builder's sea trials for USS Zumwalt (DDG 1000). The Ingalls and Navy team conducted a comprehensive series of at-sea tests following an extensive modernization availability as the Navy's first Conventional Prompt Strike (CPS) platform.

"We have achieved a pivotal milestone with our Navy and industry partners to advance this complex modernization work that will set a precedent for the Zumwalt class," said Brian Blanchette, Ingalls Shipbuilding president. "I'm very proud of the team effort and their critical role to advance the U.S. Navy's first warship with hypersonic capabilities."

USS Zumwalt, the lead ship of the Zumwalt-class destroyers, arrived at the Pascagoula shipyard in August 2023 for modernization. Shortly after arrival, the ship was moved onto land where the Ingalls team completed major technology upgrades. This included integrating the Conventional Prompt Strike (CPS) weapon system and replacing

the original twin 155mm Advanced Gun Systems with new missile tubes. In December 2024, USS Zumwalt was undocked and underwent further preparations for operational readiness.

Additionally, USS Lyndon B. Johnson (DDG 1002) is also undergoing CPS weapon system integration at Ingalls and USS Michael Monsoor (DDG 1001) is scheduled to receive the CPS system during a future availability.

Zumwalt-class destroyers feature a state-of-the-art electric propulsion system, wave-piercing tumblehome hull, stealth design and is equipped with the most advanced warfighting technology and weaponry. These ships will be capable of performing a range of deterrence, power projection, sea control, and command and control missions while allowing Navy to evolve with new systems and missions.

NAWCAD WOLF innovation ensures radar system readiness

Innovation at the Naval Aviation Warfare Center Aircraft Division Webster Outlying Field (NAWCAD WOLF) Air Traffic Control and Landing Systems (ATC&LS) division is saving time and money for the warfighter by providing organic sustainment services for the Navy’s primary Shipboard ATC air surveillance radar system, the AN/SPN-43C, in support of the Naval Air Traffic Management Systems Program Office (PMA-213).
From Naval air Warfare Center Aircraft Division, St. Inigoes, Md., Jan. 22, 2026

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Faced with diminishing support from the original equipment manufacturer for the aging AN/SPN-43 radar system—a cornerstone of U.S. Navy aircraft carrier operations since the

1960s—NAWCAD WOLF developed advanced in-house capabilities to repair and overhaul critical components. These efforts have addressed obsolescence challenges head-on, keeping the radar system reliable and effective in supporting complex flight operations.

“Ensuring the operational readiness of our critical systems is a top priority for the Navy, and the AN/SPN-43 radar system is no exception,” said Capt. Walter Massenburg, PMA-213 program manager. “The innovative efforts of NAWCAD WOLF exemplify the dedication and ingenuity required to sustain mission-critical capabilities in the face of obsolescence challenges. Their proactive approach not only extends the service life of this essential system but also reinforces the Navy’s commitment to maintaining mission readiness and operational excellence.”

A key element of NAWCAD WOLF’s initiative is the complete overhaul of the AN/SPN-43C pedestal and antenna assembly—a critical subsystem responsible for the precise rotation and stabilization of the radar antenna. Historically a major source of system downtime and maintenance challenges, the pedestal underwent a transformative process involving full disassembly, detailed inspections, repair or replacement of worn components, and reassembly, followed by rigorous testing to ensure peak performance. This proactive maintenance strategy has extended the service life of the AN/SPN-43C, reduced catastrophic failures within the pedestal by 70 percent, and significantly improved system reliability while lowering maintenance costs.

“We continuously refine our processes to increase project efficiency with testing and minimizing outsourcing while developing methods to keep repairs organic,” said AN/SPN-43C government project lead, Tom Ackerson. “With our government team providing organic in-service engineering support, we keep both the repair time and cost low.”

NAWCAD WOLF also acquired, at no cost, data rights for vital

radar receiver components, enabling the team to independently manufacture, repair and modify these parts. This capability mitigates the risk of obsolescence and ensures a reliable supply of spare components, further enhancing the system's sustainability.

Today, NAWCAD WOLF performs the majority of all repair and overhaul activities for the AN/SPN-43C organically, in-house. This capability reduces reliance on external vendors, shortens turnaround times, and provides greater control over quality and cost.

"The ATC&LS division serves as organic repair depot for 92 items in support of the AN/SPN-43C radar," said NAWCAD WOLF executive director, Blaine Summers. "The ability to repair these items versus procuring new items provides a great cost savings to PMA-213 and the Navy."

By sustaining the AN/SPN-43C's operational readiness, NAWCAD WOLF ensures the system remains effective until its planned replacement, the AN/SPN-50, is fully fielded in the coming years.

Marine Group Boat Works Awarded $633,005 Navy Grant to Certify Welders in Shipbuilding

San Diego Shipyard Creates Grant-funded Welding Scholarship that Pays Workers to Learn How to Weld, Secures a Job Following Completion of Their Certification

From Marine Group Boat Works, Jan. 22, 2026

SAN DIEGO (January 22, 2026) – Marine Group Boat Works (MGBW), a full-service shipyard based in San Diego, has been awarded a Navy Grant to establish a maritime welding program designed to expand the skilled labor workforce supporting the U.S. Navy's growing shipbuilding and repair demands. Marine Group was awarded this grant to address workforce constraints by increasing the number of highly skilled welders certified to NAVSEA standards, thereby enhancing production resources for Navy surface ships and critical maritime assets. The Navy Grant covers 75 percent of the total program costs with Marine Group matching the remaining 25 percent.

"For years, the maritime industry has struggled with figuring out who will replace the existing generation of Navy boatbuilders," said Todd Roberts, CEO of Marine Group. "This Navy grant has allowed us to take matters into our own hands by coming up with a viable solution to the workforce problem."

Marine Group partnered with the Maritime Institute in San Diego to develop and deliver a highly customized curriculum, combining accredited technical instruction with the rigorous quality and safety standards required for Navy shipbuilding and repair projects. The shipyard then offers a scholarship that pays new and existing eligible employees to

learn how to weld while covering the costs of course materials and instruction throughout the entire NAVSEA welding certification process. Upon successful certification, graduates transition into full-time welding positions at Marine Group which comes with competitive pay, medical and 401K benefits.

“Maintaining skilled workers has not been the issue for us because of the amazing benefits a career in maritime provides,” said Roberts. “It’s finding ones who are open to a job outside the status quo of going to a four-year college and giving them the resources and training they need to get started.”

The primary objective of the program is to certify as many welders as possible to NAVSEA standards, ensuring graduates are immediately qualified to weld on Navy vessels. The program has already demonstrated exceptional results, with the first class of participants achieving a 100 percent passing rate, and all students fully certified and currently assigned to one of Marine Group’s boatbuilding projects—two Jordan patrol boats for the Navy’s Foreign Military Sales and a Range Support Vessel for the Navy’s Program Executive Office. Coupled with Marine Group’s average retention rate of 92%, which is about 35 percent higher than the maritime industrial base’s average (cited as low as 57% for skilled workers according to the Navy’s Talent Pipeline Program), the investment in its production team will increase shipyard efficiency while simultaneously adding to the industry’s workforce. Certifications give employees greater confidence in their ability to successfully handle more complex welding tasks and transferable skills that will benefit them throughout their career in manufacturing wherever they go.

“At the core, the program brings awareness to the benefits of working on the waterfront and that you can easily make great money and support a family just by working with your hands,” said Roberts. “The success of the inaugural class and the

increase in applicants interested in the program validates our approach and underscores the importance of industry partnerships in meeting the Navy's future workforce needs."

Marine Group remains committed to advancing workforce development initiatives that support national defense, strengthen domestic shipbuilding capabilities, and provide long-term career opportunities within the maritime industry. For information on the welding program and how to apply, check the following information page: https://www.marinegroupbw.com/welding/

Coast Guard, CBP, Homeland Security Partner Agencies Interdict Drug Smuggling Vessel

A Coast Guard Station San Juan boat crew and Homeland Security Task Force – San Juan Region partner agencies completed the custody transfer of three apprehended smugglers and the offload of sixteen bales of cocaine which

weighed 506kgs/1,115.54 pounds which were valued at more than $7 million. The apprehension and seizure followed the interdiction of a drug smuggling vessel in Atlantic Ocean waters north of Puerto Rico, Jan. 14, 2026. (U.S. Coast Guard photo)
From U.S. Coast Guard Southeast District, Jan. 22, 2026

SAN JUAN, Puerto Rico – A Coast Guard Station San Juan boat crew working with Homeland Security Task Force – San Juan Region partner agencies interdicted a drug smuggling vessel and apprehended three men in Atlantic Ocean waters north of Puerto Rico, Jan. 14, 2026.

During the interdiction, law enforcement agents seized 16 bales of cocaine weighing a combined total of 506kgs/1,115.54 pounds, which are estimated to have a wholesale value of more than $7 million.

During patrol efforts, a Coast Guard Air Station Miami HC-144 Ocean Sentry aircrew detected a suspicious 25-foot blue and white panga type go-fast vessel in international waters north of Vega Baja, Puerto Rico. Coast Guard watchstanders in Sector San Juan diverted the cutter Joseph Tezanos and a Station San Juan 45-Response Boat Medium boat crew to interdict the suspect vessel. A Customs and Border Protection Air and Marine multi-role enforcement aircraft also responded and maintained aerial surveillance of the suspect vessel. Once on-scene, the Station San Juan boat crew, with the support of the CBP aircrew and the cutter Joseph Tezanos, successfully interdicted and took positive control of the suspect vessel. Following the interdiction, the Coast Guard boat crew embarked the three smugglers and recovered sixteen bales of contraband which tested positive for cocaine from the vessel. The contraband and suspects were later transferred to HSTF law enforcement partners in San Juan, Puerto Rico.

“This successful narcotics interdiction highlights the efficient interoperability and strength within the Coast Guard, Customs and Border Protection Caribbean Air and Marine

Branch and our Homeland Security Task Force partner agencies to interdict drug smuggling vessels and secure the nation's Eastern Caribbean maritime borders from this threat." said Cmdr. Matthew Romano, Coast Guard Sector San Juan chief of response. "I commend the professionalism and coordination between all partners who contributed to this the interdiction. We are proud to stand the watch alongside our Department of Homeland Security, Department of Justice and our local law enforcement partners as we continue to relentlessly combat illicit trafficking throughout the waters of Puerto Rico and the U.S. Virgin Islands."

U.S. Navy Installations, Fleet Commands Strengthen Readiness with Annual Force Protection Exercise

From Commander, Navy Installations Command, Jan. 22, 2026

Exercise Reinforces Integrated Defense, Warfighting Readiness, and Homeland Security

WASHINGTON, D.C. - From January 26 to February 6, 2026, Navy installations across the continental United States will participate in the annual Citadel Shield-Solid Curtain (CS-SC26) exercise. Conducted by Commander, U.S. Fleet Forces Command (USFFC) and Commander, Navy Installations Command (CNIC), this two-week exercise is a cornerstone of the Navy's commitment to generating a combat-ready fleet prepared to

defend the homeland and prevail in conflict.

“Force protection is everyone’s responsibility whether in competition or crisis, and Citadel Shield-Solid Curtain is a critical test of our preparedness and responsiveness,” said Adm. Karl Thomas, commander, U.S. Fleet Forces Command. “This exercise tests more than just our security forces, and is a measure of our entire force to say something if they see something, an opportunity to flex our command and control structure, and validates that our platforms and people are ready to respond decisively against a variety of threats.”

CS-SC26 is designed to forge warfighters and ready our platforms for a complex security environment. The exercise begins with Citadel Shield, a field training exercise led by CNIC that focuses on the readiness and response of Navy Security Forces. It is followed by Solid Curtain, a command post exercise spearheaded by USFFC that integrates command-and-control elements to synchronize the Fleet’s response to threats against shore-based infrastructure. Together, these events test and validate the Navy’s ability to deter and respond to threats in real-time.

As in past exercises, the training will improve defenses against improvised explosive devices, small unmanned aerial systems, and active shooter threats to name a few. This year’s exercise, however, has been enhanced to prepare installations to defend against modern and emerging threats. Scenarios will emphasize operational protection, surveillance detection, protection of critical infrastructure, and response to potential kinetic attacks, which aim to strengthen commanders’ understanding of risks to respond to real-world events quickly and effectively.

The exercise will also execute the Ashore Navy Security Operations Exercise Program (NSOXP), which will enhance threat detection from both land and sea. The NSOXP is a structured

training system providing commanders with standardized force protection scenarios and evaluation tools to assess watch standers and small units, ensuring readiness for real-world threats.

The exercise scenarios are designed to be both realistic and challenging, testing the seamless interoperability between Navy commands, other military services, and our essential municipal agency partners.

“Our forces must adapt faster than our adversaries,” said Vice Adm. Scott Gray, commander, Navy Installations Command. “By realistically simulating complex threat environments, we ensure our Navy security forces and partners are forged into a unified, all-domain team. This training is critical to protecting our people, our infrastructure, and the Fleet’s ability to project power from a secure home front.”

Citadel Shield-Solid Curtain is a regularly scheduled training event, not a response to any specific threat. Its purpose is to ensure the Navy is ready to fight and win, anywhere, anytime.

While the exercise may lead to some increased traffic or minor delays in base access, every effort is made to minimize disruptions to local communities. Residents near installations may observe or hear security-related activities. Local law enforcement and first responders have been coordinated with to ensure safety and smooth operations throughout the exercise.

For more details on any potential local impacts, residents are encouraged to visit their respective Navy installation’s website and social media channels.

Penn State Project with NSWC Dahlgren Division Explores Safer, Smarter Ordnance Handling

ATLANTIC OCEAN – U.S. Navy Gunner’’s Mate Seaman Desmond Summers removes a Mark 45 5-inch round from an ammunition bin aboard the guided missile destroyer USS Arleigh Burke (DDG 51) Feb. 26, 2014, in the Atlantic Ocean. Onboard today’s naval warships, some of the most critical weapons tasks still depend on human muscle. Automating projectile handling could make the task safer and more efficient. (U.S. Navy photo by Mass Communication Specialist 2nd Class Carlos M. Vazquez II/Released)

By Kristin Davis, NSWCDD Corporate Communications, Jan. 21, 2026

DAHLGREN, Va. – While modern naval warships field advanced

weapons systems, many essential ordnance-handling tasks still depend on human muscle. Sailors manually move heavy projectiles and propellant charges through cramped, hot and constantly moving spaces.

The work is labor-intensive – and inherently dangerous.

Engineers at Naval Surface Warfare Center Dahlgren Division are exploring how commercial robotics systems can be adapted to automate projectile handling, making the process both safer and more efficient. While some technology already exists, the end-of-arm tool – a component that directly interfaces with the ordnance – must be customized for each weapon system, said Matt Lehr, Mechanical Design and Integration lead for the Gun Weapon Systems Mechanical Design Branch of the Integrated Engagement Systems Department at NSWCDD.

This past fall, NSWCDD partnered with Penn State, sponsoring a capstone project in which engineering students took on the task of developing such a tool. They had one semester to research existing robotic grippers and effectors, design a custom end-of-arm tool, build and test prototypes and refine their product.

The project brought a fresh perspective to NSCWDD engineers working to make ammunition handling safer, faster and more sustainable for today's fleet – while giving students the chance to tackle a real-world defense challenge.

There were surprises along the way – and ultimately, success.

But before any of that work could begin, the project started the same way many real-world engineering challenges do: with a team of strangers.

Hands-on innovation

None of the students knew each other at first.

"Starting a big project with random people you don't know was

definitely a new experience," said Jackoy Gayle, an electrical engineering senior at Penn State.

But they quickly organized into team roles and divided up tasks based on their experience and areas of expertise. Victoria Walker, a mechanical engineering student who has analyzed acoustic data from unmanned underwater vehicles and built a robotic dog, would serve as project manager.

Walker was immediately drawn to the project. She plans to study robotics in graduate school and has already worked on unmanned underwater vehicles for Naval Surface Warfare Center Carderock Division. Still, the end-of-arm tool was different from anything she'd worked on before.

"At Carderock, it was a lot of code processing and data. This was very hands-on," she said.

It was also the first time Walker and the other students had relatively free rein to engineer a solution to a problem.

"In school, we receive really structured projects," she said. "Dahlgren gave us parameters and told us to come up with what we thought would work best. We started by coming up with a ton of different solutions for the end-of-arm tool."

Among them: an electromagnetic gripper to retrieve projectiles from their inventory and place them into a loading system. They nixed the idea; such a gripper would only be compatible with certain materials.

"We talked to others at the university and settled on a vacuum gripper," Walker said.

It was an out-of-the-box solution that surprised Lehr.

"I was initially skeptical of the vacuum approach," Lehr said. "But it allowed the team to keep the design compact, which is needed for the system to be able to deposit the projectile into the narrow receptacle of the handling system."

The engineering challenges weren’t theoretical – they showed up immediately in the lab. Gayle, the electrical engineering student, discovered that the electronic prototyping platform he utilized was rated for 5 volts but the equipment he needed to run was more than twice that. He solved the problem by using a relay. When air began to leak through the vacuum system once it reached a certain level, he resized the tubing. And with no real-life projectile to work with, Gayle earned a metal shop certification so he could resize their dummy ammunition.

From concept to proof of capability

Over the course of the semester, students had regular meetings with NSWCDD engineers as they designed and 3D-printed a custom vacuum manifold fitted with suction cups, paired with a simple vacuum system and pressure reservoir. Early prototypes successfully lifted a 40-pound model projectile. Later versions successfully handled a 70-pound model – the equivalent of a Mark 45 5-inch gun round.

To take it a step further, the team integrated the tool with a robotic arm, demonstrating that it could lift and place a projectile into a loading bay – a key step toward automating future magazine-to-gun workflows.
From Lehr’s perspective, the students more than met the intent of the project.

“They did a wonderful job and accomplished a lot within the time and budget they were given,” he said. “They developed a prototype end-of-arm tool, integrated it with a robot, demonstrated projectile manipulation and proved the design could pick up a round in both vertical and horizontal orientations.”

In a fitting finale to the project that bridged academic innovation with real-world Navy impact, the team attended the Capstone Project Showcase at Penn State College of

Engineering’s Learning Factory, where their end-of-arm tool took second place.

“We’re really proud of it,” Walker said. “It worked, we were able to demonstrate it worked, and we were able to show that on a specific robot. We’re proud of how far we came, and I think another team in the future could make it even better.”

Looking ahead

If the project is funded for further refinement, the prototype could be improved to ensure it would be capable of operating in harsh environments, Lehr said. “We would also add redundancy features to ensure there is no possibility of a mishap in the event of a fault.”

While many other portions of automation must be developed before fielding a complete system, this project represents an important first step toward reducing risk and physical strain for Sailors.

“This type of technology could be used in the deep magazine to withdraw projectiles and feed them into the ammunition hoist,” Lehr said. “This would allow the system to keep up a high rate of fire over long durations without fatiguing the crew.”

Similar robotic tooling could one day be applied to propelling charges and other ordnance, forming the backbone of semi-automated or fully-automated weapons handling systems across the fleet.

If matured and fielded, the impact on Sailors and the Navy could be significant.

“The goal is to provide Sailors with tools that reduce their workload,” Lehr said. “From a Navy standpoint, automation can reduce the demands for crew size, allowing more assets to be fielded for a given force and enabling that force to be prioritized for other tasking.”

For the Penn State engineering students, the experience offered a rare opportunity to work on technology that could one day be used by Navy warfighters.

“I’m grateful for the team, the support we had from NSWCDD and the chance to work on something that really matters,” Gayle said.

Secretary of War Announces General Officer Nominations

From the Department of War, Jan. 20, 2026

Secretary of War Pete Hegseth announced Jan. 20 that the president has made the following nominations:

Marine Corps Lt. Gen. James H. Adams III for reappointment to the grade of lieutenant general, with assignment as director, Defense Intelligence Agency, Joint Base Anacostia-Bolling, Washington, D.C. Adams is currently serving as deputy commandant for Programs and Resources, Headquarters, U.S. Marine Corps, Pentagon, Washington, D.C.

Marine Corps Lt. Gen. Melvin G. Carter for reappointment to the grade of lieutenant general, with assignment as director's advisor for Military Affairs, Office of the Director of National Intelligence, Washington, D.C. Carter is currently serving as deputy commandant for Information, Headquarters, U.S. Marine Corps, Pentagon, Washington, D.C.

Marine Corps Lt. Gen. Robert C. Fulford for reappointment to the grade of lieutenant general, with assignment as commanding general, II Marine Expeditionary Force, Camp Lejeune, North Carolina. Fulford is currently serving as deputy commander, U.S. European Command, Stuttgart, Germany.

Marine Corps Lt. Gen. Benjamin T. Watson for reappointment to the grade of lieutenant general, with assignment as commanding general, III Marine Expeditionary Force and commander, Marine Forces Japan, Okinawa, Japan. Watson is currently serving as deputy commandant, Training and Education, and commanding general, Training and Education Command, Quantico, Virginia.

Marine Corps Lt. Gen. Calvert L. Worth Jr. for reappointment to the grade of lieutenant general, with assignment as commander, U.S. Marine Corps Forces Command/commanding general, Fleet Marine Force Atlantic/commander, Marine Forces North, Norfolk, Virginia. Worth is currently serving as commanding general, II Marine Expeditionary Force, Camp Lejeune, North Carolina.

Marine Corps Maj. Gen. Joseph A. Matos III for appointment to the grade of lieutenant general, with assignment as deputy commandant for Information, Headquarters, U.S. Marine Corps, Pentagon, Washington, D.C. Matos is currently serving as commander, Marine Forces Cyberspace Command; commander, Marine Forces Space Command; commander, Joint Force Headquarters-Cyber; commander, Marine Corps Information Command, Fort Meade, Maryland.

Marine Corps Maj. Gen. Andrew M. Niebel, for appointment to the grade of lieutenant general, with assignment as deputy commandant for Installations and Logistics, Headquarters, U.S. Marine Corps, Pentagon, Washington, D.C. Niebel is currently serving as director, Logistics Division, Installations and Logistics, Headquarters, U.S. Marine Corps, Pentagon, Washington, D.C.

Charles River Analytics Advancing Predictive Maintenance Capabilities for Naval Systems

Advanced predictive maintenance and logistics technologies will enable the Navy to transition from reactive to proactive maintenance strategies.

From Charles River Analytics, Jan. 20, 2026

Charles River Analytics is developing advanced predictive maintenance and logistics technologies for the United States Navy's ship systems. The technology helps ensure reliability across the entire lifecycle of complex assets, including ships, fleets, and equipment. The work is sponsored by the Naval Sea Systems Command (NAVSEA) and supported through a series of contracts totaling $6.6 million over 8.5 years. The multidisciplinary team is using system modeling, hybrid AI reasoning, and cognitive systems engineering to create software services that predict system performance and proactive maintenance needs.

Traditional prescriptive maintenance relies on fixing or replacing degraded parts on rigid schedules. This reactive approach can lead to wasted resources, late or premature maintenance, and operational delays. Logistics and timely availability of parts are especially critical for long-duration or hard-to-reach assets, such as ships at sea, where system failures can have severe consequences and teams have small windows of opportunity to complete any necessary repairs.

"By predicting when failures occur, you can optimize resource and labor allocation by prioritizing the failures or degradations that are most pressing or most impactful for the mission," says Kenny Lu, Machine Learning Scientist at Charles River Analytics.

The Navy is shifting toward a more proactive approach that uses data to forecast maintenance needs before catastrophic failure. The Charles River team is supporting this effort by developing software that provides on-platform, real-time prognostics and real-time diagnostics, including actionable insights for operators and maintainers. The solution features a back-end analytics engine that uses a statistical modeling technique called probabilistic programming to forecast

failures and assess risk. It is based on a hybrid AI approach that combines domain expertise with available sensor and log data. The system translates complex technical data into clear recommendations through a front-end decision support interface, delivering user-friendly guidance to maintenance personnel in an intuitive format.

“We’re not framing the information from a system engineering perspective, but from a perspective where maintenance staff can interpret the maintenance picture,” says Mandy Warren, UX Senior Scientist at Charles River Analytics. She adds, “Our end users greatly appreciate that they don’t need the same understanding as the engineer who architected the system; they only need to know what’s relevant and what they need to do in that moment.”

These predictive analytics technologies enable junior technicians to quickly identify potential problem areas and prioritize maintenance tasks, ultimately allowing the Navy to deploy technical specialists strategically when advanced knowledge is required.

The team is addressing a fundamental challenge with predictive systems and AI by helping users understand how the system arrives at its conclusions.

“We’re building the system with the idea of being able to collect performance data over time, to make sure that the output is explainable, and that the provenance of the forecasting is constantly updating, so that the operator knows that they can trust the predictions of our system,” said Samuel Mahoney, Vice President and Chief Product Officer at Charles River Analytics.

After more than eight years of development and testing, the system is now transitioning from research to operational use, and a prototype will soon be deployed on a Naval ship. By reducing unnecessary maintenance, the technology frees up the

Navy’s resources for mission-critical needs while increasing operational readiness through early failure prediction and prevention.

Charles River Analytics is also exploring opportunities for its predictive maintenance and logistics technology beyond the Navy to other military and commercial domains, including ground and air autonomy, oil and gas, power grids, and industrial maintenance. The focus is on making complex analytics accessible to non-engineers through improved trust and a user-friendly interface.

Visit cra.com to learn more about advanced predictive maintenance and logistics and our other human-machine teamingand probabilistic programming capabilities.

This material is based upon work supported by the Naval Sea Systems Command under Contract No. N00024-25-C-S174 and N00024-25-C-S175. Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the Naval Sea Systems Command.

U.S. Maritime Security Cooperation and Attaché Symposium concludes in Naples, Italy

U.S. service members attending the January 2026 Maritime Security Cooperation and Attaché Symposium gather for a group photo at U.S Naval Support Active Naples, Italy, Jan. 12, 2026.

By Mass Communication Specialist 2nd Class Caleb Foote, Jan. 21, 2026

NAPLES, Italy – U.S. Naval Forces Europe-Africa (NAVEUR-NAVAF) hosted the U.S. Maritime Security Cooperation and Attaché Symposium (MSCAS), an annual symposium hosting more than 80 U.S. Navy and Marine Corps attachés, Personnel Exchange Program Officers, and U.S. 6th Fleet liaison officers stationed throughout Europe and Africa, from Jan. 12-15, 2026, in Naples, Italy.

The four-day symposium featured discussions with senior U.S. Navy leadership and naval attachés on the importance of developing relationships with ally and partner nations, advocating for U.S. naval operations and activities in Europe and Africa, and strengthening coordination and collaboration between the naval forces and embassy staff.

“This is an important forum for our Maritime Security Cooperation and Naval Attaché communities to align with policy objectives, share best practices, and highlight opportunities to enhance collective maritime security in both Africa and Europe,” said Adm. George Wikoff, commander, U.S. Naval Forces Europe-Africa.

The symposium also featured discussions facilitated by Raymond P. Owens III, director, Navy International Programs Office, Office of the Secretary of the Navy, and Cmdr. Nick Avila, N51 Division Lead; and a Task Force Commander roundtable led by Vice. Adm. J.T. Anderson, commander, U.S. 6th Fleet.

“In working together, our goal is to try to create an environment where integration, interoperability, and interchangeability can help our, allies and partners,” said Vice Adm. J.T. Anderson, commander, U.S. 6th Fleet. “Testing tactics, techniques and procedures for their own capabilities in conjunction with their neighbors and their allies. I think that’s where we can help sustain something that is an enduring synchronized effort and not just episodic events. “

In 1872, Secretary of the Navy George M. Robeson ordered Commander Francis M. Ramsay to report to the U.S. Minister in England, as, “Naval Attaché to his Legation.” This is the first known historical reference to an assignment as a U.S. Naval attaché, according to a 1946 article maintained by the U.S. Naval Institute.

Generations later, U.S. naval attaché ally and partner collaboration continues. They serve as key military advisors to their ambassadors on all naval matters, act as liaisons between the U.S. Navy and their host nation, collaborate to improve military interoperability between allied and partner naval forces and support U.S. military theater security cooperation and security assistance programs in their respective countries.

For more than 80 years, NAVEUR-NAVAF has forged strategic relationships with Allies and partners, leveraging a foundation of shared values to preserve security and stability. Headquartered in Naples, Italy, NAVEUR-NAVAF operates U.S. naval forces in the U.S. European Command and U.S. Africa Command areas of responsibility.