Lasers Destroy Drones as Additive Manufacturing Builds Them: NPS Accelerates Emerging Technology at JIFX to Fulfill U.S. Navy and DOD's Critical Needs

From Dan Linehan, March 21, 2025

MONTEREY, Calif. – Rapidly fielding emerging technologies and prioritizing investments in AI, drones, and counter-drone systems, among other technologies, are key to military modernization and remaining the strongest, most lethal force in the world.

The Joint Interagency Field Experimentation (JIFX) team at the Naval Postgraduate School (NPS) is meeting this challenge by

executing another highly collaborative week of rapid prototyping and defense demonstrations with dozens of emerging technology companies. Conducted alongside NPS' operationally experienced warfighter-students, the event is a win-win providing insight to accelerate potential dual-use applicationtops.

Conducted in partnership with Camp Roberts, the California Army National Guard post in southern Monterey County, and occurring quarterly, February's weeklong JIFX featured innovative technologies that directly addressed many of the needs designated within DOD's Critical Technology Areas, including: Directed Energy, Trusted AI and Autonomy, Advanced Materials, Integrated Sensing and Cyber, Operational Energy Generation and Storage, and much more.

Even though downpours from a week of heavy storms made for less-than-ideal flight conditions in the unrestricted airspace available for use during JIFX, a single-day record for sorties flown by uncrewed autonomous systems (UAS)—or drones—was broken. On the third day, 85 sorties were flown by 11 different drones at three different tactical locations—McMillan Airfield, the Combined Arms Collective Training Facility (CACTF), and the Forward Operating Base (FOB).

According to JIFX Director, retired U.S. Army Special Forces Col., Michael Richardson, "This February event was the most engaging experimentation week since before the pandemic. Part of that was the weather. The periodic heavy rain and strong winds gave our participating firms the same challenging conditions their technologies will be expected to perform if part of the fleet or force.

"I'm happy to report that all of them rose to the challenge. Several firms accomplished firsts with their systems and nearly everyone collaborated in an ad-hoc experiment or two that demonstrated their capacity to address operational

challenges more effectively together.”

The hard rain and wind did not even deter a laser weapon system (LWS) from zapping a steady stream of static and towed Group 1 UAS. This was the first use of an LWS at JIFX over the course of its nearly two decade-long history.

During the week, 23 industry partners conducted experiments with 24 unique technologies that represented the following research areas:

– Communication and networking

– Countering uncrewed systems (including by laser weapon systems)

– Cyber, cyber security and electronic warfare

– Expeditionary operations (including with additive manufacturing)

– Infrastructure and power

– Precision strike, non-lethal weapons and information operations

– Situational awareness

– Uncrewed aerial systems

– Uncrewed systems design, deployment, operation, networking and control

These technologies were evaluated by DOD stakeholders from Air Force Special Operations Command (AFSOC), Army Futures Command (AFC), Department of the Navy Small Business Innovation Research Experimentation Cell (DON-SEC), Defense Threat Reduction Agency (DTRA), Joint Special Operations Command (JSOC), Navy Special Warfare (NSW), U.S. Central Command (USCENTCOM) and U.S. Transportation Command (USTRANSCOM).

JIFX lowers barriers for emerging technology companies, industry, academia, and researchers to collaborate with the fleet/DOD on solving real-world problems in a DevOps environment with the warfighter. Attending JIFX were 18 NPS officer-scholars and faculty, some of whom were researching counter UAS technology in preparation for an upcoming international exercise.

LASERS VS. DRONES, BATTLEFIELD POWER, AND EXPEDITIONARY ADDITIVE MANUFACTURING

Perched on a firing range hilltop, an LWS fielded by Aurelius Systems blasted Group 1 quadcopters at ranges of 50 and 110 meters—the longest distance that Aurelius had ever engaged a target.

“We’re demonstrating that if there’s a drone out there, then we can enter a sentry mode, scan an area of the sky or backdrop against the ground or a mountain, identify the drone, continue to track it as it moves around and bring the laser to bear on it,” said Michael Laframboise, Aurelius’ founder and chief executive officer (CEO).

The LWS used near-infrared fiber lasers, and the targeted drones were initially affixed to static mounts then later towed along by a moving target gunnery line.

JIFX plays an important role in the steps of Aurelius’ LWS development. “It can be difficult to get access to firing ranges if you’re a small company like ours,” added Laframboise. “We can come out here to test and do live destructive firing.”

Aurelius intends to bring their LWS to the next JIFX event in May. Based on their successes this go-around, they’re planning to use more powerful lasers and live fire at free-flying drones.

On that same hilltop, Chariot Defense pulled up in a pickup

truck with its advanced high-voltage battery system, which only took up half the space in the pickup's bed. To reduce the detectability of the LWS' presence and demonstrate improved portability, the three large, heavy, noisy, inefficient, and high-thermal signature generators running on fossil fuel and powering Aurelius' LWS were disconnected.

"We provided expeditionary power solutions for a number of different experiments," said Adam Warmoth, founder and CEO of Chariot. "More and more, on today's modern battlefield, there's a demand for power—to power computers for AI, to power sensors, to power electronic warfare equipment. That's the kind of equipment you need in today's environment."

Chariot's low-signature battery system emitted very little heat and was smaller, quieter, lighter, and more efficient than just one of the three generators used by Aurelius. It not only powered successful shots of the LWS, but it also had enough remaining juice to fire over 1,000 more blasts.

Several miles away, at McMillan Airfield, Firestorm Labs had set up its mobile expeditionary additive manufacturing station called xCell. Within its two, 20-foot-long shipping container-like sections, equipment fabricated the airframe components of Firestorm's Tempest, a modular Group 2 multimission UAS.

"The idea for xCell came to fruition so that we could manufacture our drone at the edge in a contested logistics environment," said Bill Buel, vice president of hardware at Firestorm. "But during development, we realized there's also a much broader need for xCell as producer for spare parts and other drones. It doesn't even have to be our drones. So, we really embrace that."

The concept of flexibility continued to be exercised with Firestorm's Tempest. It carries payloads of 10–20 pounds over ranges of 100–675 miles at speeds of 75–150 mph, depending on its variable configuration and plug-and-play engine—turbojet

(high speed) or pusher prop (extended range).

“We have taken an operator first approach, and we want to empower the operator to make this truly modular,” Buel continued.

Inside the xCell miniature factory, the interchangeable airframe components piled up—a nosecone with a camera port, fuselage segments for payloads, wing and tail segments. But outside, Chariot arrived on the scene ready to collaborate. A large, bulky generator ran both the printing and assembly sides of xCell.

While the generator could power three to four xCells, the technologists understood that one xCell would require more power output for the complete drone making operations than a single Chariot battery could provide. But Chariot was still able to make a high voltage connection to the assembly side and provide power to run some of its components.

“We were able to power Firestorm’s mobile manufacturing station off our battery, providing increased reliability, decreased fuel usage and the ability to power it at the edge where it matters,” Warmoth added.

NPS OFFICER-SCHOLARS INTEGRATE JIFX

It wasn’t all just high energy lasers, drones (one of which was rocket-assisted), and other wide-ranging, cutting-edge technologies. In preparation for the Bold Machina (BOMA) exercise run by Allied Special Operations Forces Command (SOFCOM) later this year, NPS officer-scholars, who are participating in a BOMA-directed studies program at NPS, visited JIFX as part of their coursework.

NPS Vice Provost of Research and Innovation, Kevin Smith, helped develop the BOMA program and escorted the NPS officer-scholars and faculty members to JIFX.

“JIFX is a tremendous asset to the DON, DOD, and industry partners,” said Smith. “More than simply a field experimentation venue, JIFX provides a low-cost option for industry to receive real-time feedback on emerging tech, both on technology readiness as well as operational relevance. Seeing these types of direct engagements between the warfighters and the companies pursuing solutions to support them is extremely valuable.

“The BOMA-directed study class benefited greatly from the opportunity to directly engage during these JIFX tests to better understand the processes by which technologies can be rapidly evaluated and accelerated for adoption, and is a great example of how JIFX fits into the NPS innovation operating concept.”

A total of 18 NPS officer-scholars attended JIFX, though not all were affiliated with BOMA.

“JIFX was a great opportunity for us to get a deeper understanding of how industry is connected to the military,” said U.S. Navy Lt. Charlotte Lohr, a surface warfare officer studying operations research.

Like the others, she joined the BOMA program at NPS on top of her existing studies. She was especially interested by the synchronized operation of the five drones flown by Gambit Defenses on patrol, follow-the-leader, and follow-the-target missions at JIFX.

“No matter your background, we come to NPS with subject matter expertise in our community,” said Lohr. “So, it’s cool to be able to offer our insights to industry. Even though I’m not highly involved with them, I was able to have conversations about how their products could impact the future of my community.”

The NPS officer-scholars in the BOMA program with Lohr are tasked with developing a technological solution for countering

drones that can potentially be fielded during the BOMA exercise, which will be run off the coast of the Netherlands this fall. By attending JIFX, they got firsthand exposure to innovative technology well before it has a chance to become available to the fleet, and they learned about the process of turning emerging technology into operational technology.

“I was impressed at JIFX by their practice of bringing together the warfighter, academia and industry in same place. This speeds up the pace of research and development,” said a Swedish special operations officer studying at NPS and participating in the BOMA program, who also noted that the antenna and battery technologies at JIFX were among those that stood out him.

“Today, it’s so much about personal relationships, and JIFX allows you to establish relationships with industry representing different kinds of technologies all in one place,” said the Swedish officer. “I actually heard different companies working together to leverage their respective products. So, I think JIFX is a really good driver for fast development addressing the problem sets that DOD and the different special forces commands have.”

REAL-WORLD TECHNOLOGY EVALUATORS FILL OPERATIONAL GAPS

The February JIFX event was sponsored by NavalX. NavalX is a U.S. Navy and Marine Corps organization that drives collaboration, discovery, learning, experimentation, innovation, and agility to address critical needs of the military community.

“JIFX is a great platform for NavalX and invaluable to DON and DOD. We get the early look at technologies and capabilities on the horizon,” said Troy Clarke, the Inland Empire Tech Bridge Director for NavalX. “It gives us a regular, quarterly drumbeat to iterate more quickly and lets us get developing technologies into the hands of the end users—the

warfighters—faster. It also draws a collection of at least 30 outstanding evaluators from across the government."

Many of these evaluators are active duty or civilians who've already had long careers in the service. It's this brain trust that individually interacts with the technologists and provides them with vital feedback.

Describing a typical interaction at JIFX, Clarke added, "An evaluator says, 'This is what our warfighters are saying they need. Can you fill the gap? Can you make it do this?' The technologist says, 'Yeah, I could do that.' Then you bring the warfighters in, who say, 'This is how we use it in the field. Okay, now can it do that? And can it do that and that?' This real-world feedback coming from our end users really accelerates our technology fielding capability."

The effective exchange of thoughts and ideas between the evaluators and technologists has led to many impressive solutions coming from JIFX.

"I'm in an operational unit, and, throughout the years, I've attended JIFX," said an NSW Sailor, who has been evaluating technologies at JIFX since 2012. While on deployments, he uses technology developed through JIFX, like the ScanEagle, a sweptwing, propeller-pushed UAS that's often used for reconnaissance.

"Insitu brought it to JIFX and showcased it," continued the NSW Sailor. "An NSW team was out there and part of the initial down select."

Since then, for well over a decade, ScanEagle has been an operational mainstay across the armed services. In fact, in 2009, a ScanEagle deployed by the USS Bainbridge (DDG-96) helped the NSW operation to rescue merchant mariner Capt. Richard Phillips, who was held hostage by pirates inside a motorized lifeboat in the Indian Ocean.

Another JIFX success is the Flying Launch and Recovery System (FLARES), a gangly-looking, quadcopter mothership that can—in midair—release and retrieve a ScanEagle, which has a wingspan of about 10 feet.

“We needed an expeditionary launch and recovery system,” added the NSW sailor. “JIFX had Hood Tech bring FLARES. So, a bunch of us came out and learned how to operate it. We went back to our acquisition people and said, ‘We must have this. It addresses our operational deficiency.’ The normal process would have taken three to five years. Because of JIFX, we had it in less than two years.”

As the list of field technology spawned at JIFX continues to expand, NavalX introduced new technology of its own called the Defense Innovation Navigation Assistant (DINA).

“DINA is being developed to help NavalX, evaluators, end users and companies navigate the defense innovation system,” said Clarke. “We wanted to leverage the power of artificial intelligence, machine learning and data science to help the process of accelerating and fielding usable technology.”

An application that can be run on a phone, DINA records conversations and uploads them for transcription and summarization by NavalX’s AI natural language processing. DINA was initially tested during daily briefings with the technologists at JIFX in November 2024. During JIFX last month, some of the evaluators used DINA during their interactions with the technologists. As development continues, more and more information will be integrated, such as technical product specifications provided by the companies.

When fully developed, NavalX envisions DINA will be an effective tool that further helps NPS and JIFX facilitate and improve the rapid transfer of technological solutions to the warfighters. DINA is just another example of JIFX looking to best meet the challenges of equipping them in the face of the

rapidly changing modern battlefield.

The NSW sailor reflected over his years going back and forth between deployments and attending JIFX events. It’s not easy adding or making changes to mission critical equipment in a timely manner.

“We need to get better with our procurement process,” he said. “We need to be able to keep up with peer-to-peer competition, which means we need to get after new technology faster. We need to innovate. And that’s what JIFX is, allowing collaboration to happen in a controlled environment. It’s innovation at its best.”

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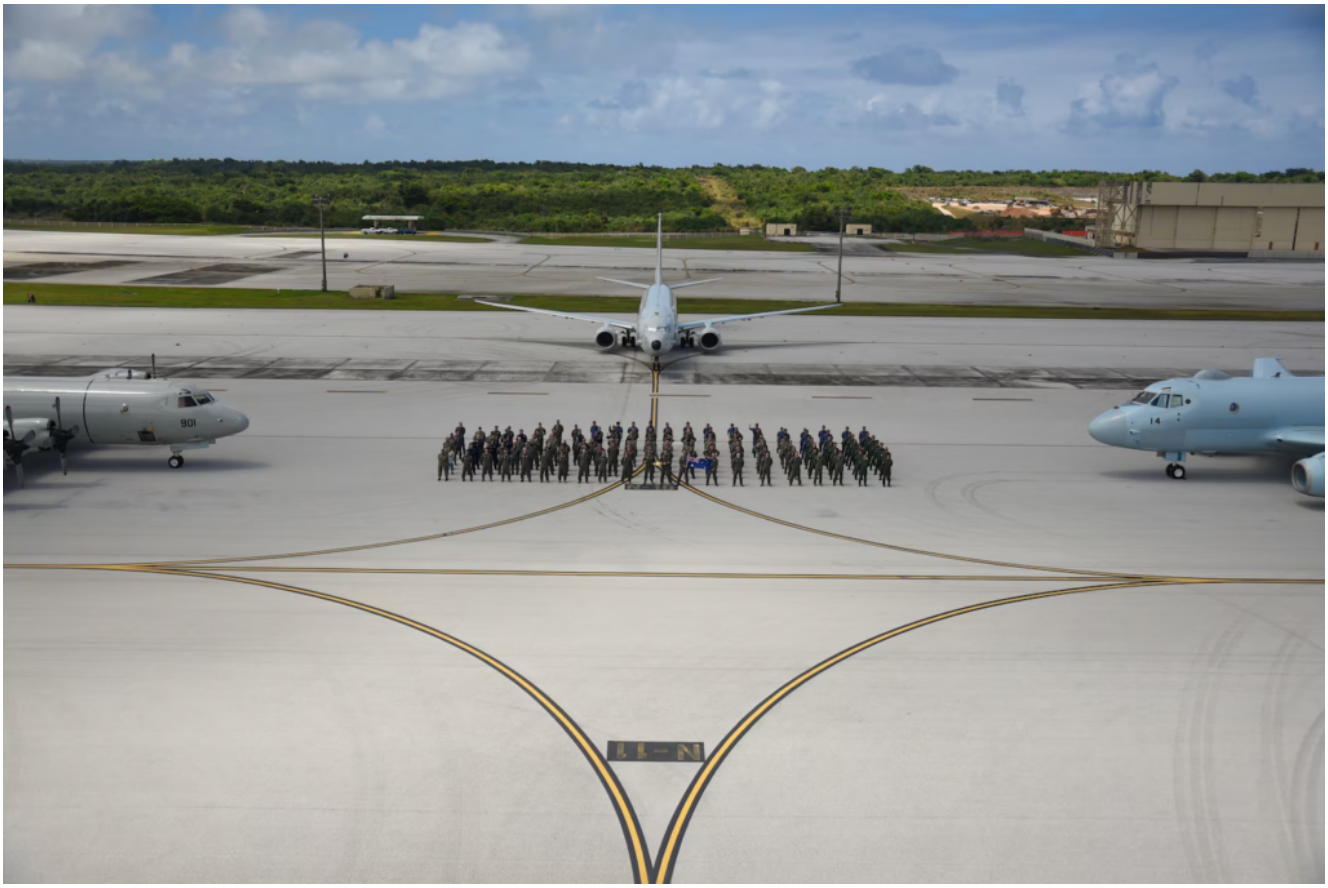
Participation in Joint Interagency Field Experimentation (JIFX) events does not constitute endorsement of participating companies or their products or services by the Naval Postgraduate School, the Department of the Navy, or the Department of Defense.

Australia, India, Japan, Korea, U.S. Complete Multinational Exercise Sea Dragon 2025



250313-N-ER662-0384 ANDERSEN AIR FORCE BASE, Guam (March 13, 2025) Participants from the Royal Australian Air Force (RAAF), Indian Navy, Japan Maritime Self-Defense Force(JMSDF), Republic of Korea Navy(ROKN), and the United States Navy pose for a group photo alongside a ROKN P-3 Orion (left), RAAF P-8A Poseidon (center), and JMSDF Kawasaki P-1 (right) during Exercise Sea Dragon 2025 at Andersen Air Force Base , Guam, March 13, 2025. (U.S. Navy photo by MCC Matthew Cole).
From Commander, Task Force 72 Public Affairs, March 19, 2025

ANDERSEN AIR FORCE BASE, Guam – Exercise Sea Dragon 2025 successfully concluded at Andersen Air Force Base, Guam, marking the completion of two weeks of intensive multinational anti-submarine warfare training, March 18, 2025.

Hosted by Commander, Task Force (CTF) 72, the exercise brought together participants from the Royal Australian Air Force (RAAF), Indian Navy (IN), Japan Maritime Self-Defense Force (JMSDF), Republic of Korea Navy (ROKN), and the United States Navy.

Two U.S. Navy P-8A Poseidon aircraft from Patrol Squadron (VP)

16 and Patrol Squadron (VP) 47 participated in the exercise. Allied and partner aircraft participating in this exercise included the RAAF P-8A Poseidon, JMSDF Kawasaki P-1, ROKN P-3 Orion, and IN P-8I Neptune. SD25 focused on enhancing ASW proficiency and multinational collaboration in the Indo-Pacific.

Exercises like SD25 demonstrate the U.S. Navy's commitment to regional security and strengthening maritime partnerships with allied and partner nations.

"CTF 72 was proud to host Sea Dragon 2025 from Andersen AFB, Guam," said Lt. Cmdr. Dan O'Keefe, assigned to Theater Security Cooperation, CTF 72. "This annual, multilateral ASW exercise included a competition phase and provided an opportunity for continuous multilateral ASW prosecution against simulated targets."

SD25 featured a structured training format to include a mobile ASW training target, the MK-30 "SLED" for tracking drills, and a U.S. Navy anti-submarine warfare exercise (ASWEX) where exercise participants tracked a live U.S. Navy submarine. This structure enabled aircrews to develop their ASW expertise progressively while ensuring seamless, international mission coordination.

"Operating alongside partner nations' maritime patrol forces strengthens security and cooperation, contributing to a free and open Indo-Pacific," said O'Keefe. "The high level of coordination and skill displayed throughout the exercise underscores our commitment to shared regional security."

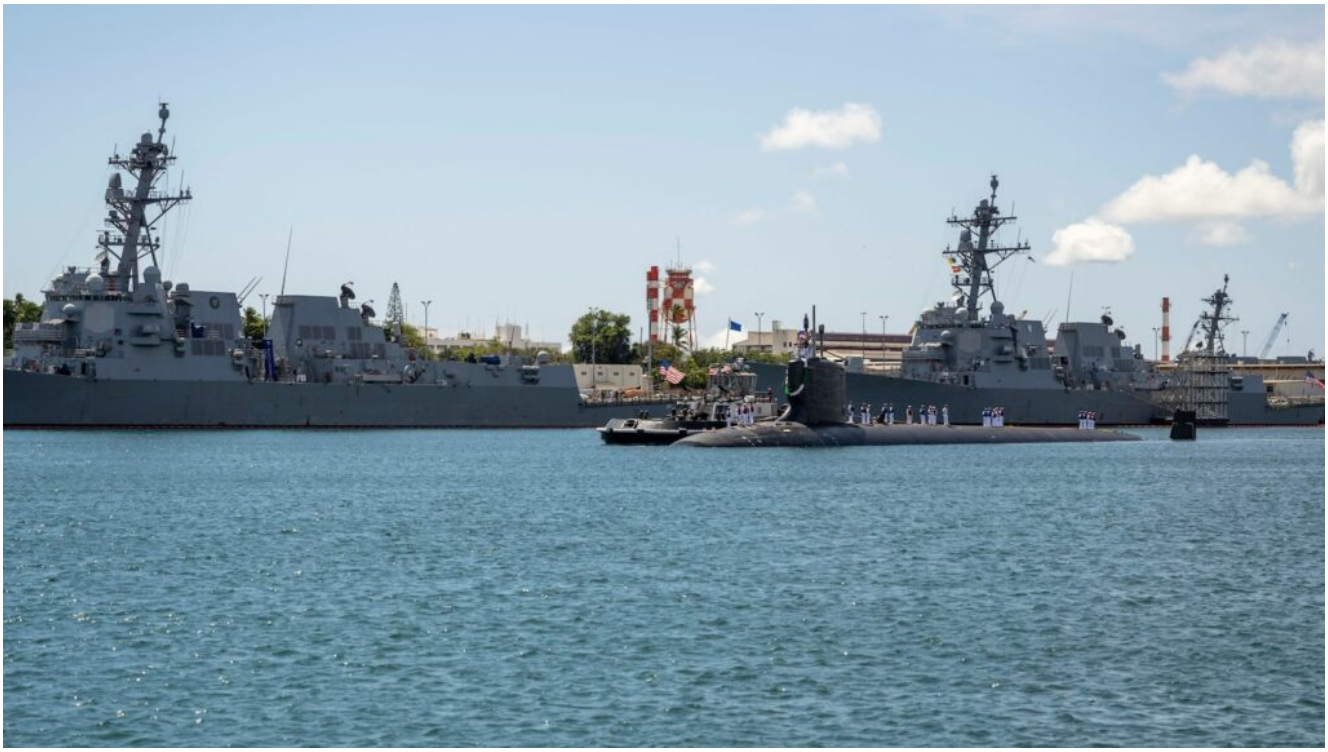
As with previous years, SD25 included a competitive component in which each nation's performance was assessed and graded to earn the Dragon Belt award, testing each nation's ASW tactics and response effectiveness in a realistic scenario.

This year, the RAAF emerged victorious, securing the Dragon Belt for 2025.

The “War Eagles” of VP-16, part of CTF 72, are stationed in Jacksonville, Florida, and are currently deployed to Misawa Air Base in Misawa, Japan. The “Golden Swordsmen” of VP-47, also part of CTF 72, are stationed in Whidbey Island, Washington, and are currently deployed to Kadena Air Base in Okinawa, Japan. Throughout the deployment, both squadrons will continue conducting maritime patrol, reconnaissance, and theater outreach operations in the U.S. 7th Fleet area of operations.

U.S. 7th Fleet is the U.S. Navy’s largest forward-deployed numbered fleet, and routinely interacts and operates with allies and partners in preserving a free and open Indo-Pacific region.

USS Vermont Returns Home from First Western Pacific Deployment



Joint Base Pearl Harbor-Hickam, Hawaii, March 16, 2025 – The Virginia-class fast-attack submarine USS Vermont (SSN 792) returns to Joint Base Pearl Harbor-Hickam, Hawaii after a scheduled deployment, March 16, 2025. Vermont is the third U.S. Navy ship named after the Green Mountain State. Vermont was administratively commissioned in April 2020 and is the first Block IV Virginia-class fast-attack submarine. (U.S. Navy photo by Mass Communication Specialist 1st Class Scott Barnes)
From Petty Officer 1st Class Scott Barnes, March 18, 2025

JOINT BASE PEARL HARBOR-HICKAM, Hawaii – The Virginia-class fast-attack submarine USS Vermont (SSN 792) returned to Joint Base Pearl Harbor-Hickam March 16, following a seven-month deployment, the submarine's first deployment to the Western Pacific. 104 Sailors assigned to Vermont earned their first Sea Service Deployment Ribbon, since the submarine's departure from Pearl Harbor in August 2024.

"The crew exceeded even the highest expectations, from job accomplishment to professional development," said Command Master Chief Robert Antrim, Vermont's chief of the boat. He continued, "Our senior Sailors were patient with our first-time deployers and took the time to train and mentor them on

both job-specific and personal preparations. I’m immensely proud of how well the team performed together despite the lower level of deployment experience.”

During the deployment, Vermont’s crew conducted port visits to Busan, South Korea, Yokosuka, Japan, and Apra Harbor, Guam.

“I’m proud of our team and how hard they worked to get ready for Vermont’s maiden Western Pacific deployment,” said Cmdr. Michael Lilleberg, Vermont’s commanding officer. “They performed well during every aspect of the deployment, accomplishing all tasking, and providing the operational commander flexibility and lethality with which to prepare and shape the battlespace.”

Vermont saw 20 Sailors advance to the next pay grade, and 32 Sailors earned various submarine qualifications during the deployment. In a historic achievement, Royal Australian Navy Lt. Cmdr. James* earned his U.S. Navy Submarine Warfare Device, or “dolphins”, in a ceremony as part of Vermont’s December 2024 port visit to Commander, Fleet Activities Yokosuka.

“My most memorable achievement this deployment was having the opportunity to qualify as assistant navigator. I really enjoy the navigation aspect of my rate. Being able to qualify what is, essentially, the most senior position for navigation on my first tour and deployment was a lot of hard work, but very satisfying to achieve,” said Electronics Technician, Submarine, Navigation 2nd Class Jorge Lopez.

Vermont is the third U.S. Navy ship named after the Green Mountain State. Vermont was administratively commissioned in April 2020 and is the first Block IV Virginia-class fast-attack submarine.

*Per Royal Australian Navy protocols, submariners’ last names are not publicly released.

Hegseth Says Campaign Against Houthis Will be ‘Unrelenting’ Until Hostilities Cease

March 17, 2025 | By Matthew Olay, DoD News

During a media interview yesterday, Defense Secretary Pete Hegseth said the U.S. military will continue to tactically engage Iranian-backed Houthis until they stop acting aggressively against U.S. ships in the region.

Hegseth commented on the topic following President Donald J. Trump’s order for U.S. Central Command to launch multiple airstrikes against Houthis in Yemen, March 15, 2025.

“Freedom of navigation is basic; it’s a core national

interest," Hegseth said, adding that the current campaign is about restoring deterrents in the region in addition to freedom of navigation.

"The minute the Houthis say, 'We'll stop shooting at your ships [and] we'll stop shooting at your drones,' this campaign will end but, until then, it will be unrelenting," he continued.

Hegseth also said the airstrikes were meant to draw Iran's attention.

"The message is clear to Iran … Your support of the Houthis needs to end immediately. We will hold you accountable as the sponsor of this proxy, and I echo [the president's] statement [that] we will not be nice about it," Hegseth said.

The Houthis have been acting aggressively in the Red Sea region since October 2023, when a U.S. Navy destroyer had to intercept three land-attack cruise missiles fired by the Houthis toward Israel.

Since then, the Houthis have launched over 100 drone and missile attacks targeting American and allied ships in the Gulf of Aden and the Red Sea, resulting in many commercial ships having to alter their routes to avoid the region at a tremendous commercial cost.

Hegseth likened the severe economic impact of the Houthi aggression in the region to "being held hostage by a terrorist organization" and then pointed out that the Trump administration has indeed labeled the Houthis as such.

"To the Houthis: [the airstrikes weren't] a one-night thing … This is about stopping the shooting at assets in that critical waterway to reopen the freedom of navigation, which is a core national interest of the United States," Hegseth said, before again reemphasizing that Iran needs to "back off" from enabling the Houthis.

Hegseth said Iran and its additional military proxies – including Hamas and Hezbollah – are in a "weakened state."

"But it doesn't mean they still don't have the desire [for aggression]," he said, adding that Iran will never be allowed to have a nuclear weapon.

"Iran must get that clear message and negotiate the end of their pursuit for nuclear weapons because … President Trump has said clearly that they will not get a bomb," Hegseth said.

Vestdavit Sees Successful Sea Trials For First Davits Delivered To Us Navy Oilers At Gd Nassco

From Vestdavit

Efficient installation and commissioning of onboard equipment is critical in the newbuild construction process – and this has been demonstrated with successful sea trials for the first davits installed by Vestdavit on a series of US Navy fleet refuelling vessels being built by General Dynamics NASSCO.

The pair of high-specification PLRH-5000 rescue boat davits were subject to rigorous operational testing in the recent trials performed with USNS Robert F. Kennedy, or T-AO 208, that is the fourth and latest so-called T-AO oiler to be delivered in the series of John Lewis-class vessels under construction at the San Diego-based shipbuilder in the US.

“Our davits performed as expected, which can be attributed to the proven robustness of this technology in naval operations as well as Vestdavit’s long-standing competence in davit installation that contributes to smooth-running newbuild deliveries,” says Vestdavit’s Managing Director Rolf Andreas Wigand.

Additional davit order

The leading Norwegian supplier of boat-handling systems has recently also secured a further purchase order from GD NASSCO for the PLRH-5000, taking its tally to seven ships covering T-AO 208 to T-AO 214 for which Vestdavit will provide a total of 14 such davits – two per vessel.

The US shipbuilder, which specialises in design and construction of naval as well as commercial vessels, has so far been contracted to build 10 T-AO oilers under the extensive newbuild programme.

The davits will be used for launch and recovery of seven-metre RHIBs to support refuelling operations by the oilers for US Navy carrier strike group ships operating at sea under the Military Sealift Command, with each of the 742-feet vessels having capacity to carry 157,000 barrels of oil and a sailing speed of 20 knots.

Rapid and reliable deployment

This demands that such boat-handling systems are capable of rapid and reliable deployment of daughter craft for mission-critical operations under challenging conditions, with a high level of redundancy to ensure they keep operating efficiently when time is of the essence and lives may be at stake, according to Magnus Oding, General Manager of US subsidiary Vestdavit Inc., who attended commissioning of the davits at the shipyard.

He points out the PLRH-5000 davits are also equipped with

sophisticated motion compensation and safety features to optimise the efficiency of launch-and-recovery operations.

These include shock absorbers for removing peak loads, constant tension for safe and efficient recovery in rough sea conditions, and guiding arms that act as an anti-pendulation device to keep the RHIB steady.

Proven supplier to naval market

These advanced specifications are underpinned by Vestdavit's proactive strategy of product development and innovation to meet client requirements through over 40 years of davit deliveries to the demanding naval segment that forms its core market, with a track record of supplying robust systems with proven performance in real-life operations for most Nato navies worldwide.

As a major client, the US Navy has been the source of similar repeat orders for Vestdavit such as those for the dual TDB-7000 davit-type that have been delivered for three Expeditionary Sea Base (ESB) ships also contracted at GD NASSCO.

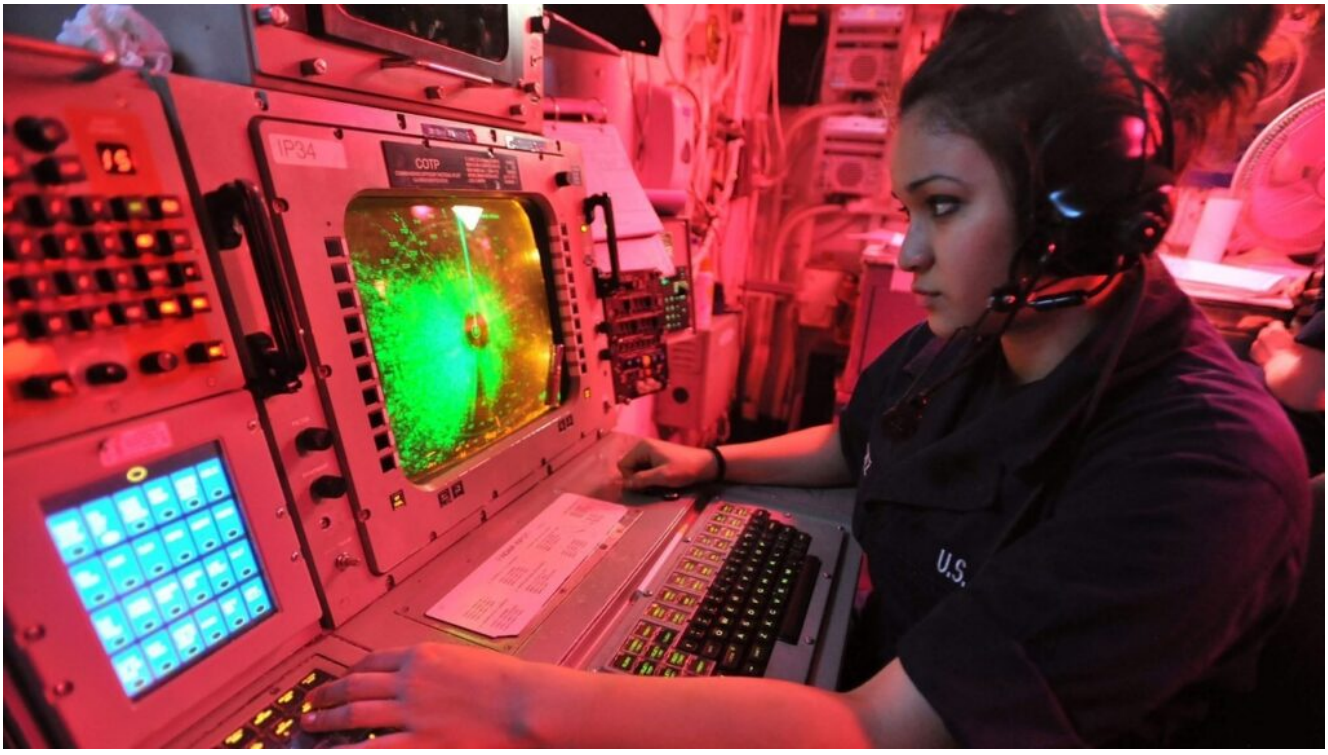
Ease of installation

Oding says a key factor in securing such awards is Vestdavit's ability to deliver systems designed for ease of installation, with the PLRH-5000 supplied as a fully self-contained and skid-mounted davit that is quick to install. "All that is required is to weld it to the deck, fill oil and connect the power," he explains.

Furthermore, its davits are certified according to all relevant class standards based on verification of design, materials and safety, and thorough testing at the fabrication stage, which minimises any commissioning issues during vessel construction.

Wigand concludes: “Our strong delivery model ensures we can supply tried and trusted systems that meet the highest performance standards for naval operations, with a compact footprint that enables them to be easily incorporated into newbuild designs.”

HII to Expand Shipboard, Shore-Based Training Support for U.S. Navy and Coalition Forces



From HII

MCLEAN, Va., March 18, 2025 (GLOBE NEWSWIRE) — HII (NYSE: HII) announced today that its Mission Technologies division was

awarded a $147 million contract to support shipboard and shore-based combat training services for the U.S. Navy.

Under the five-year task order, HII will provide engineering support for every aspect of training systems under the U.S. Naval Surface Warfare Center Dahlgren Division, Dam Neck Activity (NSWCDD DNA), including associated hardware, software, subsystems and elements. Tasks will range from integrated training system hardware and software installation, system certification and testing to troubleshooting, repair and lifecycle sustainment.

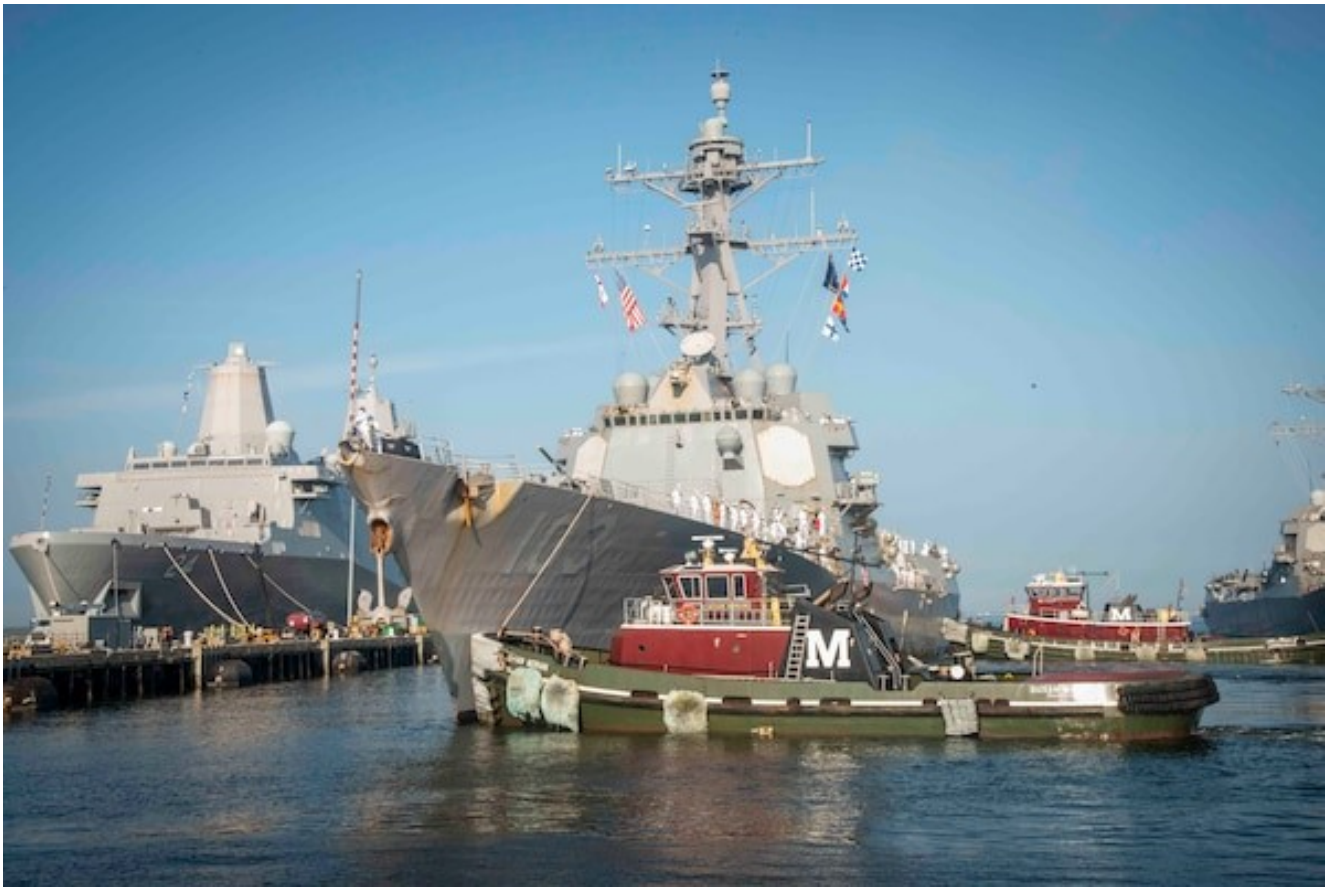
“Providing full-cycle support for U.S. Navy, joint, coalition and Department of Defense training systems requires a seamless, well-orchestrated approach and close collaboration with the Navy customer to make sure we’re providing the best quality service possible,” said Michael Lempke, president of Mission Technologies’ Global Security group. “We look forward to expanding our relationship with NSWCDD DNA and ensuring our military fleets remain mission-ready through warfare systems superiority.”

HII supports the U.S. naval fleet across various bases and operational theaters worldwide.

A photo accompanying this release is available at: http://hii.com/news/hii-to-expand-shipboard-and-shore-based-training-support-for-the-u-s-navy-and-coalition-forces/.

The company was awarded this task order under the SeaPort Next Generation multiple award contract indefinite delivery/indefinite quantity vehicle. Work will be performed at multiple locations in the U.S. and overseas.

USS Truxtun Deploys from Naval Station Norfolk



NAVAL STATION NORFOLK (Aug. 10, 2020) – The Arleigh Burke-class guided-missile destroyer USS Truxtun (DDG 103) returns to Naval Station Norfolk following a seven-month deployment. As part of the Dwight D. Eisenhower Carrier Strike Group, Truxtun operated in the U.S. 5th and 6th fleet area of operations to maintain maritime stability and security and ensure access, deter aggression and defend U.S., allied and partner interests. (U.S. Navy photo by Mass Communication Specialist 2nd Class Jacob Milham/RELEASED)
From U.S. 2nd Fleet Public Affairs, March 15, 2025

NORFOLK, Va. (Mar. 15, 2025) – The Arleigh Burke-class guided-missile destroyer USS Truxtun (DDG 103) departed Naval Station Norfolk for a scheduled independent deployment today.

The ship's departure comes after months of training, maintenance, and certification events, which ultimately

prepared the ship for a multitude of operations. Ultimately enhancing the Navy's ability to detect and counter threats when directed.

"Being ready to fight and win isn't just a goal, it's a way of life for Truxtun Sailors. This crew is unmatched in their perseverance and dedication to the ship's warfighting readiness and tactical proficiency," said Cmdr. James Koffi, Truxtun's commanding officer.

"I am confident that our team will perform to the highest standards of excellence, providing sustained credible combat power and remaining a warship ready for tasking anywhere when called upon around the globe."

Truxtun, stationed in Norfolk, Va., is a multi-mission guided-missile destroyer with air warfare, anti-submarine warfare, naval surface fire support, and surface warfare capability. Its ship's company includes approximately 300 Sailors, with an additional 40 embarked air wing personnel assigned to the "Vipers" of Helicopter Maritime Strike Squadron 48.

"The maritime environment presents complex challenges, and the Navy demands well-trained and capable warfighters, and Truxton will deliver when called upon," said, Vice Adm. Doug Perry, commander, U.S. 2nd Fleet. "These Sailors are adaptable, and our Navy has charged them to press forward and challenge threats against our nation, Allies and partners."

Truxtun last deployed in 2023 with the George H.W. Bush Carrier Strike Group. During this time, the ship operated in U.S. 5th and 6th Fleet areas of operation and participated in Exercise AMAN, Exercise Juniper Oak 23-2, and International Maritime Exercise 2023.

"Our Navy, our crew, and our ships combine to make the U.S. a capable force," said Perry. "For 250 years, the Navy has been

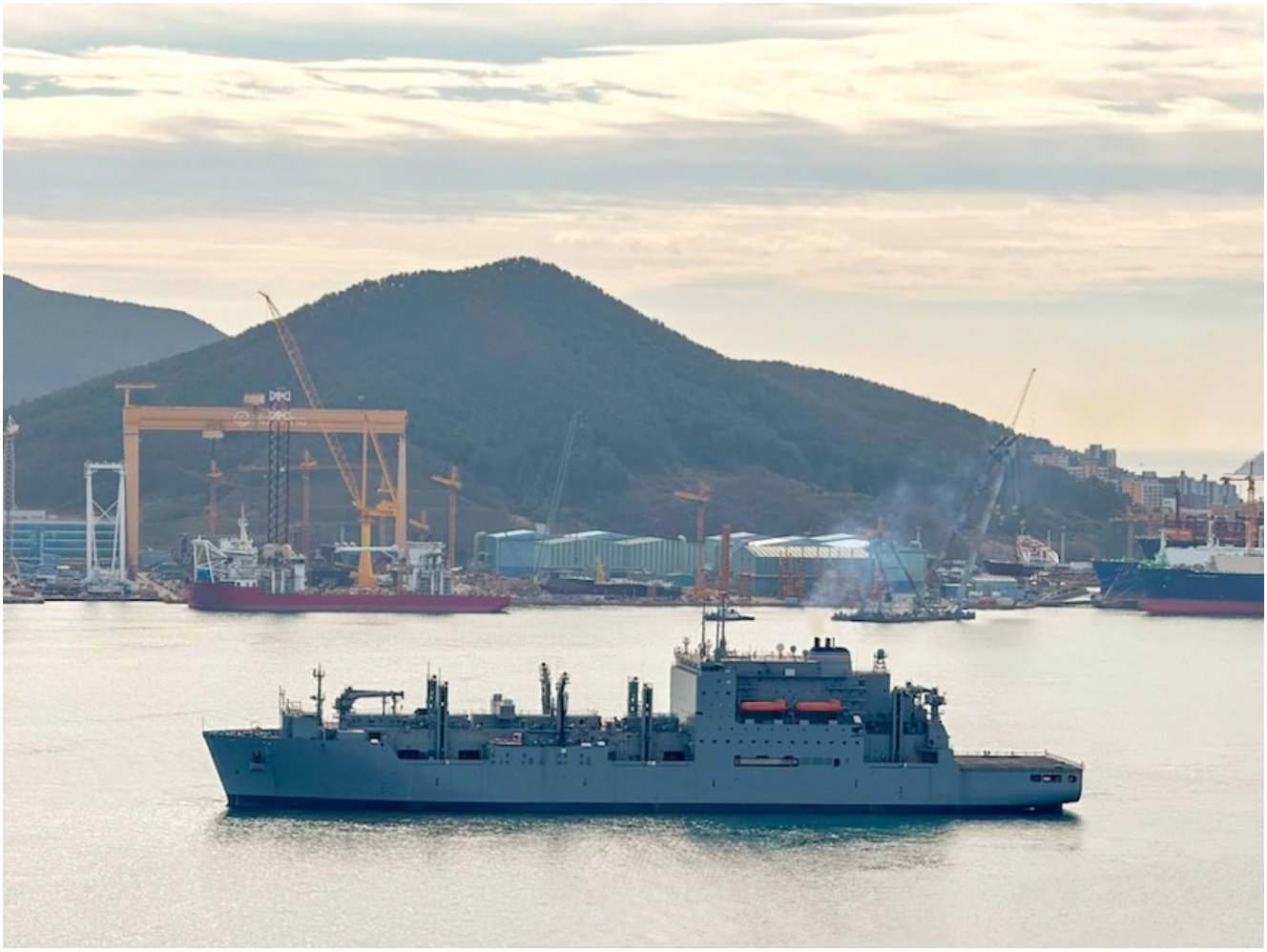
a force to be reckoned with, and we stand ready to fight. I am confident in Truxtun delivering when called upon."

Truxtun was commissioned on April 25, 2009. The ship is named for Commodore Thomas Truxtun, who was selected as one of the Navy's initial six captains on June 4, 1798.

U.S. 2nd Fleet, reestablished in 2018 in response to the changing global security environment, develops and employs maritime ready forces to fight across multiple domains in the Atlantic and Arctic in order to ensure access, deter aggression and defend U.S., allied, and partner interests.

For more U.S. 2nd Fleet news and photos, visit facebook.com/US2ndFleet, https://www.c2f.usff.navy.mil/, X – @US2ndFleet, and https://www.linkedin.com/company/commander-u-s-2nd-fleet.

USNS Wally Schirra Completes Major Maintenance at South Korean Shipyard



GYEONGSANGNAM-DO, Republic of Korea—Military Sealift Command's (MSC) Lewis and Clark-class dry cargo ship USNS Wally Schirra (T-AKE 8) departs Hanwha Ocean shipyard after a seven-month overhaul at Gyeongsangnam-do, Republic of Korea, March 12, 2025. (Courtesy photo)

GYEONGSANGNAM-DO, Republic of Korea – Military Sealift Command's (MSC) Lewis and Clark-class dry cargo ship USNS Wally Schirra (T-AKE 8) completed a seven-month regular overhaul (ROH) at Hanwha Ocean, Gyeongsangnam-do, Republic of Korea, March 12, 2025.

The ROH marks the first time that a Republic of Korea shipyard has bid on and won an ROH contract of this scale for an MSC vessel. The ROH is much larger work vice voyage repairs (VRs), which are conducted routinely in the Republic of Korea.

"The Republic of Korea's ability to conduct large-scale maintenance to USNS ships within the Indo-Pacific Theater demonstrates the strong strategic partnership between the

Republic of Korea and the United States," said Rear Adm. Neil Koprowski, Commander, U.S. Naval Forces Korea. "Maintenance in Theater reduces downtime and costs, while enhancing operational readiness. This is a landmark achievement to be celebrated as a symbol of our strengthened partnership and ironclad commitment to the ROK-U.S. alliance."

ROH conducted aboard Wally Schirra in the Republic of Korea included dry docking, and more than 300 work items that addressed hull corrosion and a full rudder replacement.

"Hanwha addressed extensive deterioration and damage to the hull, propeller, rudder, and rudder post/steering gear," said Cmdr. Patrick J. Moore, commanding officer, MSC Office-Korea. "Notably, Hanwha engineers reverse-engineered the damaged rudder, completely replacing the unit when blueprint were not available. This saved significant time and resources in getting Wally Schirra back to sea, a testament to their resilient supply chains, advanced automations, and skilled workforce."

Wally Schirra is one of the many ships that are part of the U.S. Navy's Combat Logistics Force (CLF). CLF are the supply lines to U.S. Navy ships while at sea. These ships provide virtually everything Navy ships need including fuel, food, fleet ordnance, dry cargo, spare parts, mail, and other supplies.

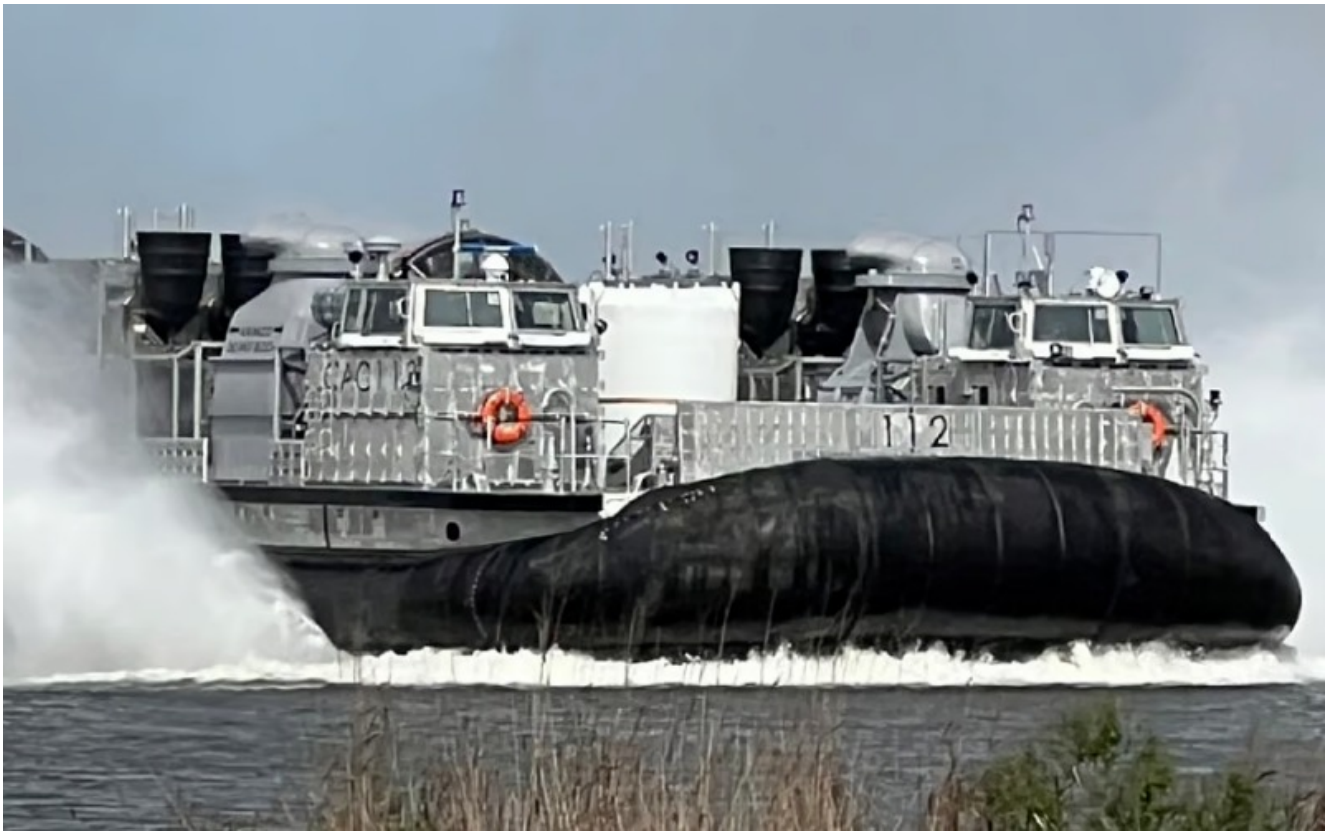
"We appreciated the opportunity to complete this maintenance in the Republic of Korea, which will ensure Wally Schirra is ready for any tasking," said Moore. "The addition of ROH capability for MSC ships in the Republic of Korea's shipping industry adds additional means to deliver repair of military logistics vessels in order to sustain the readiness necessary to support Fleet operations."

CLF ships enable the Navy fleet to remain at sea and combat

ready for extended periods of time. In addition to U.S. Navy ships, CLF ships also resupply international partners and allies operating in the Indo-Pacific Region.

MSC Far East supports the U.S. 7th Fleet and ensures approximately 50 ships in the Indo-Pacific Region are manned, trained, and equipped to deliver essential supplies, fuel, cargo, and equipment to U.S. forces and coalition partners, both at sea and on shore.

Navy Accepts Delivery of Ship to Shore Connector, LCAC 112



LCAC 112 was delivered to the Navy on March 13. US Naval Sea Systems Command (NAVSEA) photo.

By Team Ships Public Affairs, March 13, 2025

NEW ORLEANS – The U.S. Navy accepted delivery of Ship to Shore Connector, Landing Craft, Air Cushion (LCAC) 112, from Textron Systems, March 13.

Delivery of LCAC 112 follows completion of acceptance trials and represents the official transfer of the craft from the shipbuilder to the Navy. During acceptance trials, the Navy's Board of Inspection and Survey tested the readiness and capability of the craft to effectively meet requirements.

This addition to the fleet enhances Navy's amphibious capability, providing a vital asset for rapid deployment and logistical support.

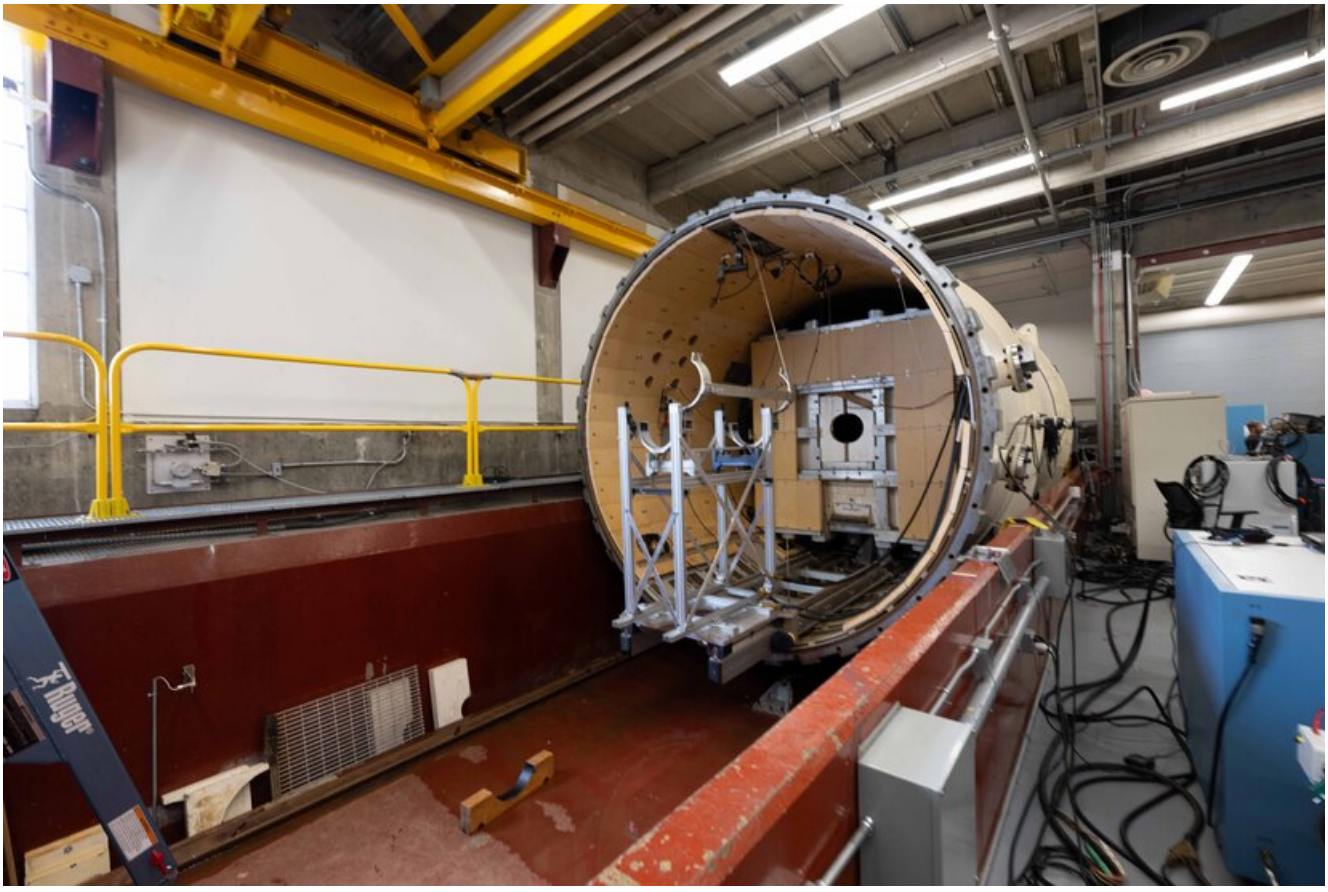
"This new craft will provide the Navy and Marine Corps team with unparalleled capability in amphibious warfare, ensuring we remain agile and responsive to emerging threats and global challenges," said Angela Bonner, program manager for Amphibious Assault and Connectors Programs, Program Executive Office, Ships (PEO Ships). "The introduction of LCAC 112 into our fleet marks another significant milestone in our ongoing efforts to maintain and enhance operational readiness."

The current LCAC is built with configurations, dimensions, and clearances similar to legacy LCACs—ensuring that it is fully compatible with existing well deck-equipped amphibious ships. LCACs can carry an approximate 60 to 75-ton payload and primarily transport weapon systems, equipment, cargo, and assault element personnel through a wide range of conditions, including over-the-beach.

"The successful delivery of LCAC 112 demonstrates the strong partnership between the Navy and Textron Systems," said Bonner. "This advanced craft will significantly enhance operations, providing a critical link in our ability to project power and support joint operations across the globe." Textron Systems is currently in serial production of LCACs 113-125.

PEO Ships, one of the Department of Defense's largest acquisition organizations, is responsible for executing the development and procurement of all destroyers, amphibious ships and craft, and auxiliary ships, including special mission ships, sealift ships and support ships.

Sound-Absorbing Chamber Allows Navy to Test Torpedoes Indoors



March 13, 2025 | By Katie Lange, DoD News

The Navy has various methods of testing torpedoes and other underwater weapons, including at tracking ranges. One unique Navy facility in Keyport, Washington allows experts to test

these systems indoors.

The Weapons System Test Facility at Naval Undersea Warfare Center Division was built in the 1980s to conduct land-based testing and evaluation of various undersea weapons capabilities including torpedoes and the sensors attached to them.

“Back the Cold War, they running every torpedo on our test ranges. Every single one that’s produced … before deploying it to the fleet. Obviously, there’s a lot of cost and schedule associated with that,” said Will Buck, the deputy division head of the Undersea Systems Acquisition and Assessment Division that runs the facility.

To save time and money, the Navy built the facility that contains a pressure chamber that’s 45 feet long and 12 feet in diameter. The chamber can hold 40,000 gallons of water that Buck’s team of about 20 people can pressurize and heat up or cool down to test torpedoes, sensors and unmanned underwater vehicles in their operational environments.

“It only takes about 30 minutes to fill and drain the tank, turn the wrench and test again,” Buck said. “So, it just helps us quickly move through test evolutions to make sure that Navy systems are working the way they’re supposed to.”

While the facility was first set up in the 1980s, it sat dormant for about 20 years after an accident in 1996 at a similar U.S. facility led to its closure. About a decade ago, Buck and his team knew the space could be useful, so they got approval to revitalize and modernize it.

Typically, undersea weapons find their targets through sounds created underwater. The current facility includes an anechoic chamber – a box within the primary pressure chamber that absorbs sound waves – that can simulate the acoustics of an undersea environment.

Buck's team tests weapons in the chamber to find answers to questions such as, what direction the sounds are traveling, if they're loud enough and if they'll be heard far enough away.

There were other questions the team considered. "What's the directivity of this source? How long is the pulse? How loud is it? What frequency is it?" Buck said. "We're trying to make sure that meets the performance requirements of the system," Buck said.

If those parameters aren't up to par, the risk for a weapon to miss its target is higher, he said.

The team has tested several Mark 48 and Mark 54 torpedoes in the pressure chamber, as well as torpedo warning systems parts, the Gavia UUV and submarine sonar known as the high-frequency chin array.

"We can put almost any kind of naval system – I mean, outside of a submarine or something really, really big – and we can recreate the physical characteristics it's going to operate under and provide high-confidence data in how it's going to react, how it's going to perform and what changes, if any, are going to be made to the system before it goes out into the hands of the fleet."

Buck said his versatile team constantly gets to flex its design and engineering muscles with the wide variety of work it's asked to do, especially with all the new technological capabilities that are coming onto the scene.

"Everything we're doing with UUVs is relatively modern and novel," Buck said.

Buck, who's been at NUWC Division, Keyport, for more than a decade, has a bachelor's degree in physics and a master's degree in acoustics. He said for many in his field of work, there aren't a lot of opportunities outside of academia, so the Navy has been a great place for him to put those skills to

work and make a real difference.

“They value competent and well-thought-out ideas and will put investment behind that,” Buck said of his division. “We’ve come a long way as a result. I’ve loved being here.”

The facility has partnered with various institutions on some of its work, including the Applied Research Lab at Pennsylvania State University. Several of the members of the team have published their work and presented at scientific conferences, helping them to stay engaged with academia.