

# Saildrone Unveils Spectre High-speed USV for Naval Operations



A rendering of the Saildrone Spectre with its sail, and in sail-less kinetic strike mode. CREDIT: Saildrone  
Saildrone (Booth 1315) today released the design of the Saildrone Spectre, a 52-meter-long, 250-ton uncrewed surface vessel intended for anti-submarine warfare.

Capable of speeds up to 30 knots, Spectre is the largest, fastest, and most capable Saildrone platform to date, the company said. It leverages the endurance and reliability of the company's Saildrone wing system but is designed to operate without the wing for kinetic strikes.

"Spectre is the result of 25 years of continually pushing the boundaries of what's possible. A unique design evolved through the hard lessons of operational experience in the real world," said Richard Jenkins, Saildrone's founder and CEO. "Spectre is not a craft hurriedly readied to meet a particular RFP,

but diligently evolved over multiple years to meet the operational requirements of our customers and fill critical capability gaps in the ASW domain.”

Cruising at 25 knots with a 25,000 kilogram payload, Spectre has a range of 3,280 nautical miles in flat water and 2,790 nautical mile range in Sea State 4 head sea. Controllable-pitch propellers enable efficient operations throughout the speed range, allowing for controllable acoustic signatures and near-silent slow-speed operations for tow bodies such as thin-line towed arrays and variable-depth sonar systems.

The concealed payload deck provides room for containerized payloads, ranging from dual 40-foot containers, up to five 20-foot containers, or a mixture of configurations. Spectre’s maximum payload capacity is over 70 tons.

“Spectre represents a transformative step forward for naval surface warfare. Its endurance, payload flexibility, and seamless integration with advanced missile and sonar systems will give the U.S. Navy a persistent, low observable USV that can deliver on a spectrum of maritime missions,” said Paul Lemmo, vice president and general manager, sensors, effectors, and mission systems at Lockheed Martin. “Lockheed Martin is proud to partner with Saildrone to bring this capability to life, and we look forward to demonstrating its power at upcoming on-water, live fire demonstrations.”

Spectre performance has been verified and tested at Force Technologies’ tow tank in Copenhagen, Denmark, the company said.

Spectre is constructed from aluminum and will be built in Wisconsin at the Fincantieri system of shipyards, which has the capacity to manufacture five Spectre vessels per year. Construction will begin shortly, with the first vessel

undergoing sea trials in early 2027.

The 43-meter (140-foot) composite Saildrone Wing will be manufactured by American Magic Services (AMS) at the American Magic High Performance Center in Pensacola, Florida. Building on its experience serving the marine, aerospace, and defense industries, AMS is capable of producing five Spectre wings per year.

Working with Lockheed Martin, Saildrone has ensured Spectre design compatibility with a wide range of Lockheed Martin payloads, including thin-line towed arrays such as the TB29 and the Mk70 VLS Launcher. Spectre can carry two Mk70s and is capable of deploying the CAPTAS-4 variable-depth sonar system from Thales/AAC.

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## **Department of the Navy Releases FY27 Budget Request**



From the Department of the Navy, April 21, 2026

WASHINGTON, D.C. – The Department of the Navy released their Fiscal Year (FY) 2027 President’s Budget request today focused on restoring American maritime dominance with a total Navy topline of \$377.5B, an increase of more than \$70.B compared to last year. This generational investment in our future fleet represents a 23% growth over the previous fiscal year and signals a clear commitment to the Golden Fleet Initiative, modernization and readiness.

✘ The budget request is part of President Trump’s historic \$1.5T topline provided for national defense submitted to Congress on April 3, that ensures the United States is able to maintain the world’s most powerful and lethal naval force.

“This is a strategy-driven budget,” said Secretary of the Navy John Phelan. “It’s not about business as usual – it’s about making generational investments in real, usable capability for our warfighters.”

This year’s budget submission was guided by Secretary of the Navy John Phelan’s priorities: strengthening shipbuilding and the maritime industrial base; fostering a more adaptive, accountable, and innovative warfighter culture; and investing in the health, welfare and training of our people. The submission was also guided by Chief of Naval Operations Adm. Daryl Caudle’s Fighting Instructions and the Commandant of the Marine Corps Gen. Eric Smith’s Force Design Strategy.

This budget request will launch a new age of American shipbuilding, bolster munitions supplies, enhance operational strength, sustain the force, and improve the health, welfare and training of our people and their families.

“This is the money that builds the future fleet,” said Deputy Assistant Secretary of the Navy for Budget Rear Adm. Ben Reynolds. “It funds the acquisition of 34 new ships and 123 new aircraft, directly translating dollars into the steel and systems that will guarantee our maritime dominance for decades

to come.”

To usher in America’s Golden Fleet Initiative, the Department of the Navy is requesting \$65.8 billion in shipbuilding funds to buy 18 battle force ships and 16 auxiliary ships. This funding will allow the Navy to purchase one Columbia-class submarine, two Virginia-class submarines, one FF(X) Frigate, one Arleigh Burke-class Destroyer, one America-class Amphibious Assault ship, one San Antonio-class Amphibious Transport Dock, six Medium Landing Ships, two John Lewis-class Oiler Tankers, two Submarine Tender Replacements, and one Ocean Surveillance Ship. The request also continues incremental funding for the third Ford-class carrier, CVN 80, and fourth Ford-class carrier, CVN 81. This request will also support the design and development of the Navy’s premier large surface combatant, the BB(X) Battleship.

For aircraft procurement, the Department’s request of \$34.4B billion supports the purchase of 123 aircraft, including 47 F-35s, 12 P-8As, 6 E-2Ds, 22 CH-53Ks, 3 MQ-25s, 5 MQ-9As, as well as modification, spares, and support equipment. This request doubles F-35 procurement and accelerates aircraft procurement to ensure a robust industrial base.

The weapons procurement request of \$22.6 billion includes significant investments in a variety of munitions including Standard Missiles, Tactical Tomahawk Missiles, and Patriot PAC-3s.

The ground procurement request for the Marine Corps for \$6.3B supports units across the Fleet Marine Force, investing in key warfighting capabilities including 32 Navy/Marine Expeditionary Ship Interdiction System (NMESIS) Launchers and 103 Naval Strike Missiles (NSM) that enhance precision fires capabilities and contribute meaningfully to the joint kill chain. The request also invests in ground based air defense, supporting 42 Marine Air Defense Integrated Systems (MADIS)

and 16 Medium Range Intercept Capability (MRIC) systems along with 410 missiles that enable Marines to maneuver and operate under complex aerial threat conditions.

“This budget significantly enhances our ability to be a globally responsive, resilient, and lethal naval expeditionary force in readiness,” said Gen. Smith. “It delivers much-needed investment in amphibious warships and medium landing ships, strengthens our aviation combat element, increases our magazine depth, and takes care of our strategic advantage, our Marines. Together, these investments ensure we are ready to fight today and modernizing to meet the demands of the future fight.”

### *Fostering a More Adaptive, Accountable, and Innovative Warfighter Culture*

The budget request invests smartly in our capabilities – acquiring the new FF(X) frigate to take-on lower priority missions and freeing up our advanced destroyers for high-end combat. Additionally, we are investing heavily in unmanned platforms to provide a strategic hedge and multiply our force. We are making key investments in the Golden Fleet Initiative that will revitalize America’s maritime industrial base and restore American maritime dominance.

The Department of the Navy includes a \$150B request for operations and maintenance, emphasizing our desire to drive platform readiness towards an 80% combat surge ready posture by reducing maintenance delays and applying a disciplined focus across manning, training, modernization and sustainment. This investment supports training, deployment costs and flying hours to ensure our Sailors and Marines remain the most lethal force in the world.

Ensuring the United States maintains the world’s most innovative and capable military, the Department of Navy is investing \$36.2B in research and development. The Department

will continue to focus on a major modernization effort across the force, from strategic deterrence recapitalization to air and surface warfare posturing to counter emerging threats and maintain our decisive edge

“The FY27 budget request is a definitive order to shift our Navy from a peacetime posture to a warfighting footing,” said Caudle. “Operationalizing the Foundry, Fleet and Fight framework, we are ensuring our Sailors have the lethal platforms and the delegated autonomy they need to win decisively. We are not just observing the security environment; we are actively shaping it with credible tailored forces to ensure peace through strength.”

### *Investing in the Health, Welfare and Training of our People*

Our greatest asset continues to be the extraordinary men and women of our United States Navy, Marine Corps and civilian workforce. This budget request dedicates \$70.1B to military personnel, funding an overall military end strength of 621,500 Sailors and Marines, and dedicating \$2.5B to enhance the quality of life for our Sailors and Marines so that they can continue providing the expeditionary force necessary to promote and protect America’s interests at home and abroad. The Department of the Navy is taking direct action to improve unaccompanied housing, deliver healthier and more accessible dining, and expand child and youth programs.

To view the proposed FY27 DoN budget documents, visit: <https://www.secnav.navy.mil/fmc/Pages/Fiscal-Year-2027.aspx>

Media may direct further queries to the U.S. Navy Office of

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# FRCSW Produces First Organic Super Hornet to Undergo Block III Modifications



From Fleet Readiness Center Southwest, April 21, 2026

SAN DIEGO – At Fleet Readiness Center Southwest (FRCSW), innovation is not a buzzword, it's a daily commitment to the warfighter. That commitment reached an historic milestone with the command's completion of its first fully organic F/A-18 Super Hornet Block III modification. For the first time, U.S. military artisans and engineers executed the complete upgrade in-house, marking a pivotal step forward in naval aviation readiness.

This achievement represents more than technical success. It is the culmination of deliberate planning, disciplined execution, and the relentless professionalism of FRCSW's workforce and

partners.

The Block III modification is the third and most advanced phase of the Service Life Modification (SLM) effort for the Super Hornet fleet. FRCSW and its partners approached this modernization in three phases:

- Structural Service Life Extension – Expanding aircraft life from 6,000 to 10,000 flight hours.
- Block III upgrades to deliver network and mission enhancements.
- Block III Advanced Cockpit System (ACS) and comprehensive avionics modernization.

This phased approach allowed FRCSW artisans and engineers to refine processes, sequence work efficiently, and reduce cost and turnaround time (TAT).

[The Block III effort is embedded within the broader SLM program pioneered by FRCSW and Boeing.](#)

The Block III configuration includes significant upgrades including:

- Advanced Cockpit System (ACS) installation
- A new large-area cockpit display
- Comprehensive avionics suite upgrades

- Enhanced aircraft networking capability
- Electrical system modernization to support upgraded systems

The ACS fundamentally transforms the cockpit. Aircraft that once relied on older display technology are now equipped with modern, user-friendly large screen interfaces. This upgrade allows pilots to fully leverage the aircraft's enhanced capabilities, bringing this fourth-generation platform significantly closer to fifth-generation performance at a fraction of the cost.

The modification does not extend the physical life of the aircraft, that is the purpose of the structural SLM, but it ensures the avionics and mission systems remain tactically relevant for the aircraft's service life. Together, structural SLM and Block III modernization form a comprehensive life-extension and capability-enhancement strategy that ensure the Super Hornet will remain a key component of the Navy's carrier air wing well into the 2040s.

The Block III modification is one of the most complex avionics upgrades undertaken at FRCSW in over a decade.

The process essentially guts the cockpit:

- Removal and replacement of structural components
- Extraction and reinstallation of wiring and fiber optics
- Installation of new displays and interface systems

- Electrical upgrades to support modern avionics

The governing Technical Directive (TD) is more than 350 pages long and provides extremely specific instructions, down to how wiring and fiber optics must be routed and secured. FRCSW artisans and engineers work closely with Boeing engineers to ensure every step meets current safety and quality standards.

As aircraft are disassembled, teams frequently discover unplanned issues, corrosion, worn wiring, or legacy damage that must be corrected before modernization can proceed. This adds layers of complexity to an already intricate effort and highlights the need for, and success of, the command partnerships with Boeing and F/A-18 and EA-18G Program Office (PMA-265).

One hurdle the team had to overcome in this effort was that multiple trades must operate in tight cockpit spaces:

- Avionics technicians
- Sheet metal mechanics
- Ordnance specialists
- Engineers and quality assurance personnel

Thus, sequencing becomes a carefully choreographed process. One team's delay affects all others. Planning is everything.

Any new process at FRCSW must meet the same uncompromising safety and quality standards as legacy programs. The command's award-winning safety culture underpins every evolution. That culture was recently recognized with the CNO Aviation Safety Award:

<https://www.dvidshub.net/news/495142/frcsw-wins-cno-aviation-safety-award>

For 3 years, FRCSW has successfully executed structural SLM repairs. Now, with full Block III capability added to its portfolio, the command has evolved into a complete modernization hub for the Super Hornet fleet.

With a current turnaround time of approximately 365 days, reduced from an originally projected 15 months, the command has already exceeded expectations and cost performance has been equally impressive coming in well under budget, all while maintaining strict adherence to safety and quality standards.

Looking ahead, all fleet squadrons are transitioning to full Block III configuration thus this workload will continue well into the 2030's.

While this milestone represents the first fully organic execution of the modification, it is not accomplished in isolation. FRCSW collaborates closely with PMA-265, which oversees F/A-18 programs, and maintains coordination with Boeing during TD validation and engineering alignment.

The true strength of this program lies in integration, engineering, logistics, supply, manufacturing, quality assurance, and production operating as a unified team across the command and the COMFRC enterprise.

This is not simply maintenance. It is modernization. It is capability generation. It is combat readiness built by American hands. FRCSW employees have supported naval aviation for more than a century. From early aviation maintenance efforts to today's advanced Super Hornet and Growler modernization programs, the workforce has consistently delivered.

Integrating structural life extension with full avionics

transformation, FRCSW has ensured that the F/A-18 Super Hornet remains lethal, relevant, and deployable well into the future.

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## **Australia, Canada, and U.S. conduct multilateral operations in South China Sea**



A Royal Canadian Air Force Super Puma assigned to Royal Canadian Navy Halifax-class frigate HMCS Charlottetown (FFH 339) prepares to land on the flight deck of U.S. Navy Whidbey Island-class dock landing ship USS Ashland (LSD 48) during a multilateral exercise with the Royal Australian Navy and Royal

Canadian Armed Forces in the South China Sea, April 18, 2026.  
(U.S. Navy photo by Mass Communication Specialist Seaman Maliq J. Martin)

By CTF-76 Public Affairs, April 20, 2026

**SOUTH CHINA SEA** – Ships from the Royal Australian Navy, Royal Canadian Armed Forces, and U.S. Navy conducted multilateral operations in support of a free and open Indo-Pacific in the South China Sea, April 12-18.

Participants included Royal Australian Navy Anzac-class frigate HMAS Toowoomba (FFH 156), Royal Canadian Air Force Super Puma helicopter, Royal Canadian Navy Halifax-class frigate HMCS Charlottetown (FFH 339), and U.S. Navy Whidbey Island-class amphibious dock landing ship USS Ashland (LSD 48) with embarked Marines from Task Force Ashland.

During the exercise, ships conducted tactical maneuvers, helicopter cross-decks, and personnel exchange during the combined transit through the South China Sea.

“We embrace any chance to engage with our allies and friends in the region to learn from each other and build upon our strong relationships,” said Cmdr. Adam Peebles, commanding officer of Ashland. “These exercises provide an opportunity to increase interoperability, information-sharing, and access with our allies and partners across the globe. The Sailors and Marines of Task Force Ashland are dedicated to supporting regional security and committed to ensuring a free and open Indo-Pacific.”

This operation builds on numerous other engagements, such as Exercise Rim of the Pacific (RIMPAC) 2024, where the three U.S. allies were part of 29 nations training to foster and sustain cooperative relationships among participants critical to ensuring the safety of sea lanes and security on the world’s oceans.

Multilateral operations such as this provide valuable opportunities to improve combined readiness and promote peace and stability in the Indo-Pacific. The U.S. Navy regularly operates alongside our allies in the Indo-Pacific region as a demonstration of our shared long-term commitment to the region.

Ashland and embarked Marines from Task Force Ashland are a flexible crisis response force, purpose-built to integrate with allies and partners in support of a free and open Indo-Pacific. Their forward deployment to U.S. 7th Fleet demonstrates the unwavering U.S. commitment to regional security and stability.

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

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## **Kaine Discusses AUKUS Agreement During SASC Hearing**

From the Office of Senator Tim Kaine, D-Virginia, April 21, 2026

WASHINGTON – Today, during a Senate Armed Services Committee (SASC) hearing on U.S. posture in the Indo-Pacific, U.S. Senator Tim Kaine (D-VA) asked Admiral Samuel J. Paparo, Jr., USN, Commander of United States Indo-Pacific Command (INDOPACOM), about the progress of the Australia-U.K.-U.S.

(AUKUS) agreement.

“I was in Australia recently ... 37 events in seven days in four cities,” **said Kaine**. “I heard a lot. Answered some tough questions on our end. And I was impressed, but I wonder – are you satisfied with the pace of upgrades to [HMAS] Stirling that could support the increased rotational presence of *Virginia*-class submarines?”

**Admiral Paparo responded**, “From a shore power standpoint and for the capability that they have, with a tender and Marine Security Detachment, we could move submarines to Stirling today. That’s been the progress at Stirling. I laid eyes on it multiple times. The commitment is there. The progress is there. The place where we have to make the most progress is in the defense industrial base to deliver the capability, but our partners in Australia [and the] U.K. through Pillar One and Two ... has been full throttle. It’s now as much up to industry as anyone else to deliver.”

During the hearing, Kaine also discussed today’s [announcement](#) that the Japanese government will allow the sale of more weapons abroad and the benefits to U.S. defense agreements with Japan and security in the Indo-Pacific.

**Full video of the exchange is available [here](#).**

Kaine, who is Ranking Member of the SASC Subcommittee on Seapower and also a member of the Senate Foreign Relations Committee (SFRC), has been a strong champion of AUKUS in Congress. In February, Kaine held a [series of bilateral meetings](#) with Australian local, state, and federal lawmakers and defense industrial base partners in Sydney, Adelaide, Perth, and Darwin to discuss the AUKUS partnership. Kaine has helped get signed into [law](#) provisions to [implement](#) and [strengthen the AUKUS agreement](#). He has played a key role in securing more resources for the [submarine](#)

[industrial base](#), including additional funding for the [Virginia-class submarine program](#).

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# Leidos, HavocAI Join Forces to Advance UAV Interoperability Across Domains



One of HavocAI's USVs, displayed on the Gaylord Pier. Credit: Erika Fitzpatrick.

By Erika Fitzpatrick, Seapower Correspondent

Leidos (Booth 1125) and HavocAI (D 17) have teamed to test a new fleet of autonomous uncrewed surface vehicles that offer unique capabilities in multidomain environments, company leaders said April 20 at Sea-Air-Space 2026.

“Warfare is changing rapidly,” said Cindy Gruensfelder, president of Leidos Defense, a global defense contractor with 9,000 employees. “It’s really requiring systems to connect together even more than normal and collaborate across all domains.”

She noted that the Navy can best deploy USVs that are integrated within a larger ecosystem that enables real-time collaboration with greater reach. She said the new partnership pairs Leidos’s proven autonomy at scale with HavocAI’s “all-domain collaborative autonomy” to deliver the Navy autonomy at speed and scale.

The defense sector has dived headlong into the USV space in the hopes of securing some of the billions of dollars the military is expected to allocate for small, medium, and large USVs in the coming years.

The Navy’s 2025 shipbuilding plan calls for spending \$40 billion per year to create a 381-ship battle force by 2054, about 85 more ships than it has now, and an additional 130 unmanned surface and undersea vessels. This combined fleet would result in a “more lethal and distributed naval force,” the Navy has said.

To expand access to innovation, more traditional defense firms like Leidos are pairing with upstart players such as HavocAI, a Providence, Rhode Island-based aerospace and defense company founded in 2024.

HavocAI specializes in collaborative autonomy, CEO and cofounder Paul Lwins said at the event.

“What that means is making thousands of autonomous systems

work together and work with the humans to do very sophisticated things,” Lwin said.

So far, Lwin said, HavocAI’s 100 or so USVs have shown they can work together. The company also acquired an aerial drone company to integrate those types of systems with autonomous surface vessels.

This fall, the Leidos-HavocAI team will conduct an on-the-water operational evaluation of about 10 UAVs at disparate locations. The test aim to prove the hybrid vessels are interoperable at sea, undersea and in the air, across far-flung locations.

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## **CH-53K lifts CH-53K expanding capabilities**



A CH-53K from Air Test and Evaluation Squadron 21 (HX-21) performs a recovery rigging evaluation of a CH-53K Engineering Development Model without engines, most gearboxes and tail pylon. This expansion of the aircraft's capabilities, including understanding the flight characteristics and load dynamics in such a heavy lift, ensures the Marine Corps can safely execute a Tactical Recovery of Aircraft and Personnel (TRAP) mission in the future. U.S. Navy Photo by Erik Hildebrandt.

From Naval Air Systems Command, Apr 20, 2026

NAS PATUXENT RIVER, Md. – The CH-53K King Stallion helicopter, under the direction of H-53 Heavy Lift Helicopters Program Office (PMA-261), achieved a major milestone by successfully lifting another CH-53K King Stallion. The test, performed by Air Test and Evaluation Squadron 21 (HX-21), is part of the CH-53K aircraft recovery rigging evaluation and a critical step toward developing new operational capabilities and procedures for the CH-53K fleet.

“This is a capability we hope will never be needed in the fleet,” said Col. Kate Fleeger, Program Manager, PMA-261. “However, the continued expansion of the aircraft’s capabilities ensures a faster response to emerging requirements and highlights its ability to perform.”

The primary purpose of the evaluation was to validate the specialized rigging and procedures required to safely recover a downed or disabled CH-53K aircraft, a capability that is not yet standardized in the U.S. Navy’s official salvage manuals. During the test, the team aimed to understand the flight characteristics and load dynamics involved in such a heavy lift, ensuring that the Marine Corps can safely execute a Tactical Recovery of Aircraft and Personnel (TRAP) mission in the future.

“The insights and data gathered from this test will directly inform updates to the Aircraft Salvage Operations manual, providing the fleet with standardized procedures for a dual-point external lift of a CH-53K,” said Fleeger.

The lifted aircraft was an Engineering Development Model (EDM) used in the King Stallion program early years of test. The three engines, most gearboxes and the tail pylon were removed prior to the lift to reduce weight to approximately 28,000 lbs., still well within the CH-53K’s current external lift envelope of 36,000 lbs. The EDM will continue to serve the program as it will be transferred to Marine Heavy Helicopter Training Squadron 302 (HMHT-302), New River, North Carolina, where it will be used as a Ground Operations Aircrew Trainer, helping to educate and train the next generation of King Stallion aircrew and maintainers.

This test underscores the remarkable lift capabilities of the CH-53K and highlights the innovative efforts of the CH-53 Test team at HX-21 to continuously evaluate new fleet capabilities.

[PMA-261](#) manages the cradle to grave procurement, development, support, fielding and disposal of the entire family of H-53 heavy lift helicopters.

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# Changing Polar Region Presents New Challenges and Opportunities for Navy, Coast Guard, Industry



Coast Guard Cutter Storis (WAGB-21) transits past West Seattle on its way to its temporary homeport at Coast Guard Base Seattle, Oct. 3, 2025, after its August 2025 commissioning in Alaska. The cutter is the Coast Guard's first polar icebreaker acquired in over 25 years, but more icebreakers are

on the way. Credit: U.S. Coast Guard | Petty Officer 3rd Class Daylan M. Garlic-Jackson

By Erika Fitzpatrick, Seapower Correspondent

The U.S. military and allied nations are ramping up their strategic offensive and defensive capabilities in the Arctic to confront an expanding presence from adversaries such as China, Russia, Iran and North Korea, said Vice Admiral Doug Perry, U.S. Navy Commander of Joint Force Command Norfolk, at Sea-Air-Space on Monday, April 20.

“We have to acknowledge that is not a situation we want to allow to continue, to the detriment of free nations and certainly [of] the United States,” Perry said during a polar issues panel moderated by [Dr. Abbie Tingstad](#), professor of Arctic Research at the Center for Arctic Study and Policy at the U.S. Coast Guard Academy.

The Arctic polar region is primarily ocean, surrounded on its edges by the eight member states of the Arctic Council: Canada; the Kingdom of Denmark, which includes Greenland and the Faroe Islands; Finland; Iceland; Norway; the Russian Federation; Sweden; and the United States, where Alaska includes a 1.5-million-square-mile exclusive economic zone in its surrounding waters.

Council decisions are achieved in agreement with six “permanent participants” that represent Aleut, Arctic Athabaskan, Gwich’in, Inuit, Saami, and Russian Indigenous people, who have inhabited the Arctic for millennia and are about 10% of the 4 million Arctic residents.

The Arctic in the last four decades has warmed three times faster than the worldwide average, according to a 2024 Arctic Council report, by its Arctic Monitoring and Assessment Programme. The has led to new concerns, collaborations, and potential conflicts among Arctic nations, all touched on by the Sea-Air-Space panelists.

For instance, Russia is revitalizing assets throughout the high north, including air bases; granting oil and gas rights to China; and refilling liquid natural gas tankers that are now built for the Arctic's northern sea route. Although some of the Russian Federation's long-range aviation is focused elsewhere, Perry said its northern fleet is "large unimpacted by the Ukrainian fight."

### **A More Arctic NATO**

Those are emerging threats, Perry said, but on the plus side: "Also what has changed in the last couple years is that Finland and Sweden joined NATO."

With the exception of Russia, Perry works directly with these and other Arctic nations in his other role as the director of the U.S. 2nd Fleet Combined Joint Operations from the Sea Centre of Excellence (CJOS COE), established in May 2006. Representing 13 nations, CJOS is the only such center based in the United States and one of 27 NATO-accredited COEs worldwide to collaborate on maritime-based joint operations.

Perry said Arctic allies and partners in his geography under NATO are shoring up defenses against new Russian capabilities; increasing domain awareness and readiness through synchronized, scheduled exercises; and providing deterrence through an enhanced presence in the region.

Cooperation is key because it's an "ugly endeavor" to operate ships, icebreakers and submarines in the harsh Arctic climate "all the time," Perry said, adding that it's not feasible to operate foot patrols across Greenland and Canada. "It's not achievable and it would be really expensive."

But allies must be a regular show of force in the region. "That's where the missiles are going to fly – they're going to fly over the polar region," Perry said, "whether they're coming from North Korea or China or Russia, and so we need to

understand how to defend against that.”

### **Icebreakers on the Way**

And “the icebreakers are coming,” said an excited Vice Admiral Nathan Moore, deputy commandant of Operations at the U.S. Coast Guard. “For us in the Coast Guard, that is something that we have not been able to say – well, ever.” Two of three planned heavy icebreakers, being built at “world record speed,” should be operational in fiscal 2028.

This bigger fleet – including 11 Arctic Security Cutters – expands USCG patrol capabilities amid a 37% rise in U.S. Arctic maritime traffic, including of foreign military vessels traversing the area. “There’s a lot of icebreaker capacity coming,” Moore said. He added that allies have broadened their focus beyond search and rescue and pollution response to safety and sovereignty.

USCG still has to designate Arctic-trained personnel to command the new vessels and figure out how to supply, maintain and sustain the fleet in the remote region. For instance, Dutch Harbor, on Alaska’s Amaknak Island in Unalaska, is seven or eight days away by sea from the deep waters of the high north.

That’s why it’s essential to maintain relationships with allies, who operate deep water ports and bases the United States needs to use, Perry said.

Although there are challenges, the United States and partner nations still have immense knowledge that positions them well to compete in the region, said retired Navy Vice Admiral Bill Merz, a former submarine commander who is now senior vice president of Aerospace and Defense Technologies at Oceaneering.

“It’s a fascinating place to operate,” Merz said of the Arctic, teaming with life and spectacular visuals above and

below the ice. But the operational environment is ever-changing and dangerous, he said, describing a cacophonous riot of crashing and shifting floes of varying thicknesses in areas that are almost impossible to map.

### **Leverage the Magic**

Allied Arctic nations can partner with industry to gain even more intelligence of the region. The U.S. oil and gas industry, he said, has unparalleled experience operating on the ocean floor for long stretches, including with uncrewed vehicles that can function without human intervention for months. “So, there’s a lot of magic there,” he said.

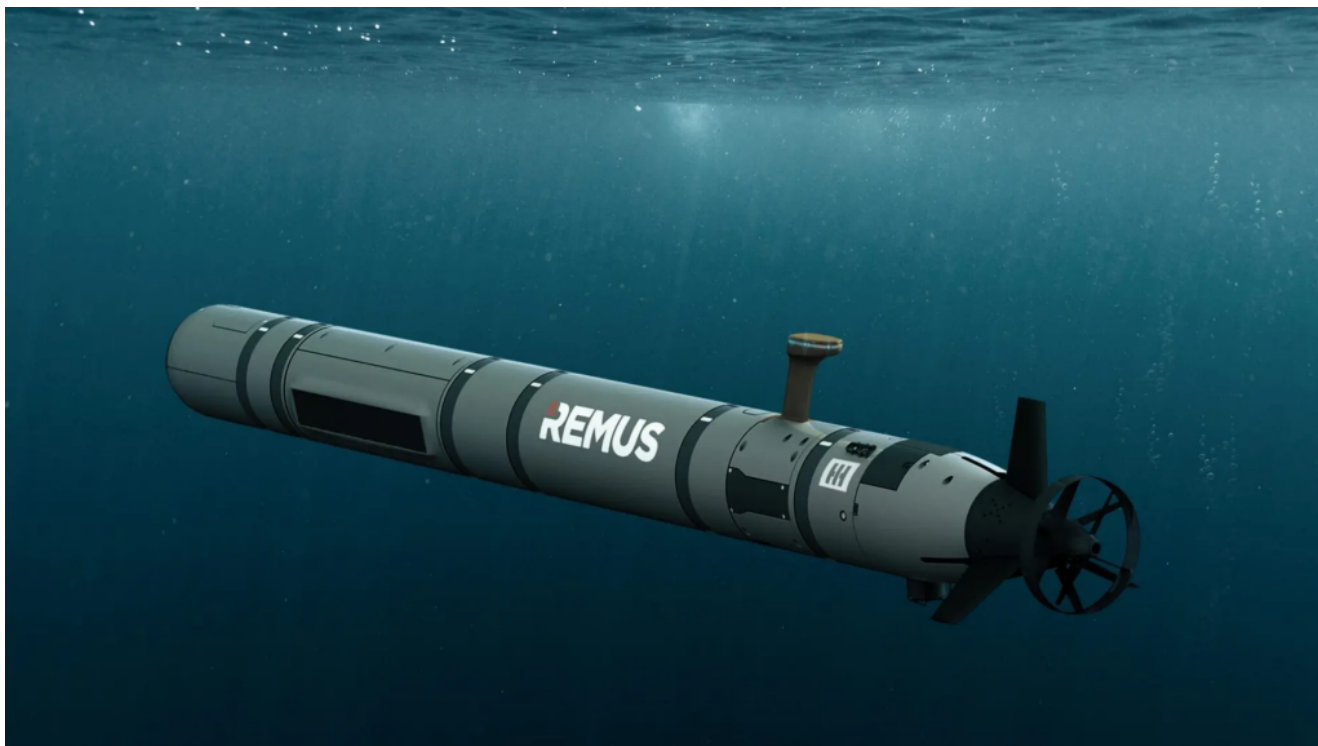
He conceded that China’s Navy is disciplined and will be a regional player eventually. “But I tell you, they got a lot to learn,” Merz said. “There’s a difference between showing up at the Arctic and living and sustaining yourself in an environment where ... communications are horrible, navigation’s tough” and there’s very little, if any, infrastructure.

“That understanding is a tremendous advantage that we have and that we need to take advantage of,” he said. “And as we bring industries and the navies together, that’s a powerful partnership.”

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# **Launched From Submarines, Trusted by 30 Navies: REMUS**

# Marks 25 Years Beneath the Surface



From HII

NATIONAL HARBOR, Md., April 20, 2026 (GLOBE NEWSWIRE) – HII (NYSE: HII) today celebrated the 25th anniversary of the REMUS unmanned underwater vehicle (UUV) family during the 2026 Navy League Sea-Air-Space Exposition, marking a quarter century of innovation, reliability and mission versatility that has made REMUS the world's leading autonomous underwater vehicle platform.

Originally funded by the Office of Naval Research (ONR) and developed by the Woods Hole Oceanographic Institution (WHOI) in Woods Hole, Massachusetts, REMUS began as a research vehicle designed to advance ocean science and undersea exploration. Over the past 25 years, HII has expanded that pioneering technology into the most widely produced and adopted autonomous unmanned underwater systems in the world, supporting defense, commercial and scientific missions.

“REMUS has endured for 25 years because it was designed to evolve,” said Duane Fotheringham, president of the Unmanned Systems group in HII’s Mission Technologies division. “Its reliability, modularity, and open architecture allow operators to quickly adapt the platform to new missions while maintaining the performance and trust customers rely on.”

Today, more than 750 REMUS vehicles have been delivered to over 30 nations. They are currently used by 14 NATO navies, including the U.S., United Kingdom, Norway and Germany, as well as allied partners across the Indo-Pacific. REMUS vehicles support mine countermeasures, intelligence, surveillance and reconnaissance (ISR), and seabed mapping missions. More than 90% of all REMUS systems deployed in the past 25 years remain in active service, a testament to their durability, reliability and lifecycle value.

Among REMUS’s notable capabilities and recognition:

- **The REMUS family supports modern naval operations with unmatched reliability.** Its autonomous systems enable independent and teamed operations. In a recent breakthrough, REMUS 600 vehicles were successfully launched and recovered from the torpedo tubes of an HII-built U.S. Navy *Virginia*-class submarine, extending mission reach while reducing exposure risk and enhancing stealth for submarine forces.
- **REMUS’ open-architecture design enables rapid integration of new payloads as missions evolve, maximizing platform modularity while controlling lifecycle costs.** The REMUS product line includes multiple variants designed for specific mission profiles and operating depths. Vehicle designations reflect operational depth capability and generational improvements, from the compact REMUS 130 optimized for

shallow-water operations, to the REMUS 6000 designed for deep-sea exploration and recovery operations. REMUS 620, a medium unmanned underwater vehicle (MUUV), features modernized electronics, modular upgrades, and endurance of up to 110 hours with a range of approximately 275 nautical miles.

- REMUS vehicles have played critical roles in high-profile global search operations, including the deep-ocean search for Air France Flight 447, post-tsunami maritime surveys in Japan, and the historic discovery of the USS *Indianapolis* (CA 35) in the Philippine Sea.
- Research institutions and environmental organizations continue to rely on REMUS vehicles for oceanographic research, marine archaeology, and ecosystem monitoring. The National Oceanic and Atmospheric Administration (NOAA) is currently deploying REMUS 620 vehicles to map seafloor habitats impacted by the Deepwater Horizon oil spill, while universities and marine laboratories use the systems to conduct long-duration environmental surveys.

### **The U.S. Navy's Lionfish Program**

The U.S. Navy's current Lionfish UUV is based on HII's REMUS 300 platform, a modular, open-architecture small unmanned underwater vehicle (SUUV) engineered for multi-mission adaptability. The program was developed in collaboration with the U.S. Navy and the Defense Innovation Unit (DIU) to accelerate the adoption of dual-use commercial technologies in U.S. Department of Defense programs.

Lionfish has been recognized as the U.S. Navy's first successful transition from an Other Transaction Authority

(OTA) prototype to full-rate production. It is also the first – and currently *only* – cyber-compliant UUV.

### **Strategic Partnerships and Future Capabilities**

HII continues to invest in next-generation capabilities and strategic partnerships that expand how unmanned systems operate across the maritime domain. In a recent initiative, HII and Babcock International Group signed a strategic agreement to integrate REMUS UUVs with Babcock's submarine weapon handling and launch systems, enabling autonomous launch and recovery of UUVs through submarine torpedo tubes and unlocking new deployment options for allied submarine forces.

In the U.S. Navy's future fleet, and together with HII's ROMULUS unmanned surface vehicle (USV), REMUS systems enable integration of manned and unmanned platforms.

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## **Nacelle Improvement Elevates Bell Boeing V-22 Readiness**



From Bell Textron

*Bell announces results of Nacelle Improvement Program showing dramatic reduction in maintenance hours and maintainer time to improve readiness*

AMARILLO, Texas (April 20, 2026) – [Bell Textron Inc.](#), a Textron Inc. (NYSE: TXT) company, announced initial results and benefits from more than 10,000 flight hours of Air Force Special Operations Command (AFSOC) CV-22 Ospreys with the Nacelle Improvement (NI) Program. The first of nine CV-22s with the 20<sup>th</sup> Special Operations Squadron at Cannon Air Force Base received the NI upgrade in 2021, and the program has produced a 75 percent reduction in maintenance hours resulting in a significant boost in operational readiness and maintainability.

The V-22 Osprey nacelle houses critical power components to the V-22's vertical take-off and landing capabilities and transition to forward flight. The NI program is a targeted upgrade designed to modernize the V-22's nacelles. By

simplifying wiring, enhancing structural components, and integrating fleet maintainer-informed feedback, NI improves the Osprey's reliability, readiness, and sustainability for any mission for the next 30 years.

"Since the initial rollout, the CV-22 Nacelle Improvement has saved AFSOC more than 24,000 maintenance hours, equating to a savings of more than 1,000 days of maintainer time that can be used toward other high-priority needs," said V-22 Joint Program Office Principal Military Deputy Program Manager and CV-22 Senior Materiel Leader. "CV-22 readiness saw more than a 10 percent increase; meaning more mission capable CV-22s on the flightline, which allows for further training and improved safety."

Bell completes the NI modification at its Amarillo Assembly Center (AAC), which actively produces V-22s for the U.S. Department of War. The AAC assembles all variants of the Bell Boeing V-22 model – MV, CMV, and CV.

"The Nacelle Improvement Program enhances the V-22s reliability, flexibility, and global reach for combat and humanitarian missions alike," said Kurt Fuller, senior vice president, Military Fielded Programs, Bell. "We are pleased to see these remarkable results from the NI program and look forward to continued collaboration to enhance focus on V-22 safety, sustainability, and readiness."