

# USS Emory S. Land returns to Guam



From Seaman Apprentice Mario Reyes Villatoro, April 9, 2025

NAVAL BASE GUAM – The submarine tender USS Emory S. Land (AS 39) returned to its homeport in Apra Harbor, Guam, April 9, 2025. Emory S. Land's arrival marked the completion of its expeditionary submarine tender deployment, which began May 17, 2024.

Emory S. Land conducted 17 port calls in the Indo-Pacific region over 11 months, strengthening relations with many allies and partners such as Australia, Japan, Republic of Korea, and Singapore. During its deployment, Emory S. Land played a pivotal role supporting Pillar 1 of the AUKUS security partnership between Australia, the United Kingdom, and the United States.

In the first half of deployment, Emory S. Land conducted a Submarine Tendered Maintenance Period, or STMP, with the Virginia-class fast-attack submarine USS Hawaii (SSN 776) in HMAS Stirling, Western Australia, Australia, from Aug. 22 to Sept. 10, 2024. Royal Australian Navy Sailors who had been attached to the submarine tender since January 2024 took the lead on conducting repairs aboard Hawaii. The STMP was the first time Australians had ever performed maintenance on a nuclear-powered submarine in Australia. Emory S. Land Sailors also worked in conjunction with the Royal Australian Navy's Fleet Support Unit-West, which provides repair and maintenance services to the Australian fleet.

"It is an honor and pleasure to return home to Guam. The entire crew, military personnel and civil service mariners, have performed exceptionally well over the last 11 months and

have lived up to the ship's motto "Tireless Worker of the Sea," and are ready to come home and enjoy quality time back at home with family and friends," said Capt. Kenneth Holland, the ship's commanding officer. "This whole deployment has been an incredible journey, to be able to form closer ties with our allies and interact with the locals by hosting tours of our ship and taking part in community relation events. It's all been a wonderful experience."

Emory S. Land departed from its final port of the deployment, Darwin, Northern Territory, Australia, on April 2nd, 2025. While in port, Emory S. Land provided logistical support to the Virginia-class fast-attack submarine USS Minnesota (SSN 783).

"I was glad we returned to Darwin and got to enjoy Australia again, and it was a great to spearhead support for the nuclear submarine in Darwin for the first time in 27 years," said Chief Gunner's Mate Brett Peterman. "I can't wait to enjoy some rest and relaxation, and to spend time with the family, before getting back into supporting Guam deployed submarines."

During its deployment, Emory S. Land visited Darwin, Cairns, Sydney, Eden, Melbourne, Adelaide, and Perth in Australia; Sasebo and Okinawa in Japan; Palau, Busan, Brunei, Singapore, Thailand, and Subic Bay, Philippines. In each port, Emory S. Land Sailors conducted community relations events by assisting local school programs, participating in beach cleanups, sorting food at foodbanks, and much more.

"It was a unique opportunity to conduct so many community relations events across the region. Reflecting on our tour, I believe the real impact is learning about the difference we've made with our allies around the world during each event," said Religious Program Specialist Seaman Hunter Stewart. "The local community members were always grateful for our team."

Guam is home to the U.S. Navy's only submarine tenders, USS

Emory S. Land (AS 39) and USS Frank Cable (AS 40), as well as four Los Angeles-class attack and one Virginia-class attack submarines. The submarine tenders provide maintenance, hotel services and logistical support to submarines and surface ships in the U.S. 5th and 7th Fleet areas of operation. The submarines and tenders are maintained as part of the U.S. Navy's forward-deployed submarine force and are readily capable of meeting global operational requirements.

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## USS Shiloh Returns to Home Port After Oceania Maritime Security Initiative 2025



USS Shiloh (CG 67) patrolled, and conducted several boarding and intelligence gathering operations in the South Pacific region in support of Oceania Maritime Security Initiative 2025. *Photo credit: U.S. Navy*

| *Commander, U.S. 3rd Fleet.*

From U.S. 3rd Fleet, April 7, 2025

PEARL HARBOR, Hawaii – The Ticonderoga-class guided-missile cruiser USS Shiloh (CG 67) returned to its home port, Joint Base Pearl Harbor-Hickam, April 4, 2025.

Shiloh, in partnership with an embarked Law Enforcement Detachment (LEDET) from USCG Pacific Tactical Law Enforcement Team, conducted several boarding and intelligence gathering operations in the South Pacific in support of Oceania Maritime Security Initiative (OMSI) 2025. OMSI is a Secretary of Defense program that leverages Department of Defense assets transiting the region to increase the USCG's maritime domain

awareness, ultimately supporting maritime law enforcement in Oceania.

From February 2025 to April 2025, Shiloh patrolled the South Pacific, strengthening relationship with partner nations and ensured maritime stability and security in the region. These actions were carried out through the enforcement of provisions of the Western and Central Pacific Fisheries Convention (WCPFC) and bilateral law enforcement agreements it has with specific countries in the region.

Captain Bryan E. Geisert is the commanding officer aboard Shiloh.

“I am proud of what our crew accomplished and the strong partnership with our Coast Guard Shipmates’. It is a critical and unique opportunity to assist in ensuring marine resources are protected through the enforcement of international laws to enhance regional stability.” said Capt. Geisert.

Shiloh is operating in the U.S. 3rd Fleet area of responsibility in support of the security and stability of the Indo-Pacific region. Shiloh is assigned to Commander, Naval Surface Group Middle Pacific, a combat-ready force that protects and defends the collective maritime interest of its allies and partners in the region.

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## **Navy Commissions Attack Submarine USS Iowa**



Sailors attached to the fast-attack submarine USS Iowa (SSN 797) man their newly commissioned submarine during a ceremony

in Groton, Connecticut, April 5, 2025. *Photo credit: U.S. Navy | Chief Petty Officer Joshua Karsten*

By Joe Markowski, Submarine Readiness Squadron 32, April 7, 2025

GROTON, Conn. – Christie Vilsack, Iowa’s sponsor and former First Lady of Iowa, gave the crew the traditional order to “man our ship and bring her to life,” after which Iowa’s sailors responded “aye aye ma’am” before ceremonially running aboard the submarine.

The ceremony culminated a years-long process of commissioning SSN 797, the first submarine and third naval vessel named for the Hawkeye State. The most recent USS Iowa, the highly decorated WWII-era battleship BB 61 (1943-1990), saw action in World War II, the Korean War, and Gulf War. The first BB4 Iowa (1897-1919) saw action in the Spanish-American War and World War I.

Iowa’s commanding officer Cmdr. Gregory Coy, a Walnutport, Pennsylvania native and 2006 graduate of the U.S. Naval Academy, called the event “a historic milestone” during his speech, praising the crew, shipbuilders, and commissioning committee.

“This event is significant for both the life of a submarine and for the amazing people from the Hawkeye State,” Coy said. “To the plank owners, the shipbuilders, the commissioning committee, and our Navy and Submarine Force leaders, this is your submarine.”

Coy took command of Iowa in June 2024 and led the crew from the shipyard and through a series of sea trials, to today’s commissioning and subsequent underway operations.

“I am consistently humbled at what we have accomplished” Coy added. “Today, we become the ‘USS’ Iowa, and I intend to take her to the frontline, continuing the Navy’s overwhelming display of undersea dominance and lethality.”

Iowa's youngest plankowner – an honor given to commissioning crewmembers – Seaman Lilly Runyon shared her excitement, saying “today's a lot bigger than I thought it would be.”

“It's kind of like I'm already used to this,” said Runyon of her sea trials as a PCU. “But now that we're commissioned, it's going to feel a little bit more official and I'm very excited for actual operations and figuring things out.”

Secretary of the Navy John Phelan praised the crew and the shipbuilders during his speech calling the ceremony an “opportunity to show Navy lethality and our unmatched undersea superiority.”

“It is an honor to commission the Navy's newest nuclear-powered attack submarine, here at Groton, the submarine capital of the world,” Phelan said. “USS Iowa will make our fleet stronger and more lethal. As Iowa goes to sea, she does so with one mission: to ensure that America's adversaries never doubt our resolve.”

Adm. Daryl Caudle, U.S. Fleet Forces commander and senior naval officer at the event, called his participation in the event a homecoming to the submarine capital of the world, a place he called “the nation's center of gravity for the steely-eyed killers of the deep.”

“In this coming year, this crew of proud American sailors will put this warship to sea and carry the name ‘Iowa’ to the far-flung corners of the globe projecting combat power for decades to come,” Caudle said. “It is the fearless warriors before me that turn this piece of metal weighing almost 8,000 tons – with hundreds of miles of fiber, cable, and piping systems – into a combat ship, a warship designed to decisively win our nation's battles. Your preparation and execution to get this ship to commissioning day is nothing short of amazing.”

Other platform guests at the commissioning ceremony included Iowa Governor Kim Reynolds; Vice Adm. Robert Gaucher, U.S.

Submarine Force commander; representatives from General Dynamics Corp.'s Electric Boat shipyard, U.S. Sen. Richard Blumenthal and U.S. Rep. Joe Courtney of Connecticut. The master of ceremonies was Lt. Cmdr. Scott Carper, executive officer of the USS Iowa.

Capt. Jason Grizzle, commodore of Iowa's parent Submarine Squadron (SUBRON) 4, likened the success of the crew to the "hard work and dedication that directly mirror people from the Hawkeye State."

"Iowa's motto states that 'our liberties we prize and our rights we will maintain,'" Grizzle explained. "This crew lives by that creed, evidenced today by this fine ship – built, manned, and prepared – in record time, ready to get out to sea where she belongs."

Iowa, whose keel was laid in August 2019 and christened in June 2023, was designed with stealth and surveillance capabilities, as well as special warfare enhancements, to meet the Navy's multi-mission requirements. The submarine is 377 feet long, has a 34-foot beam, can dive to depths greater than 800 feet, and operate at speeds in excess of 25 knots. Iowa has a crew of approximately 135 Navy personnel. It is designed with a reactor plant that will not require refueling during the planned life of the ship, reducing lifecycle costs while increasing underway time. The submarine was built by General Dynamics Electric Boat shipyard facility in Groton, Connecticut.

Fast-attack submarines are multi-mission platforms enabling five of the six Navy maritime strategy core capabilities – sea control, power projection, forward presence, maritime security and deterrence. They are designed to excel in anti-submarine warfare, anti-ship warfare, strike warfare, special operations, intelligence, surveillance and reconnaissance, irregular warfare and mine warfare. Fast-attack submarines project power ashore with special operations forces and

Tomahawk cruise missiles in the prevention or preparation of regional crises.

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# Sea-Air-Space: Navy Spearheads Historic Investments in Shore Infrastructure



Representatives from government and industry discuss the need to update the nation's aging shore infrastructure, including speeding ship construction through practical reforms. *Photo credit: Erika Fitzpatrick*

The U.S. Navy is modernizing the condition, configuration and affordability of its public shipyards and shore infrastructure, according to Rear Admiral Dean VanderLey, including by departing in some cases from traditional acquisition strategies.

“Our shore infrastructure on our Navy bases primarily [is] where we train our Sailors and maintain our ships and warfare platforms, and so is very critical to the ultimate readiness of our forces,” VanderLey, commander of Naval Facilities Engineering Systems Command, said April 8 in the panel discussion, “Revitalizing Shore Infrastructure: Meeting Modern Naval Demands.”

The Navy’s four public shipyards – Norfolk (Virginia) Naval Shipyard, Portsmouth (Maine) Naval Shipyard, Puget Sound (Washington) Naval Shipyard and Intermediate Maintenance Facility, and Pearl Harbor (Hawaii) Naval Shipyard and Intermediate Maintenance Facility – were first built in the 19th and 20th centuries.

“Now we’re using them to maintain nuclear-powered vessels,” VanderLey said. The youngest, Pearl Harbor, was founded in 1908 – the year the Ford Model T rolled off the assembly plant and was offered for sale at \$850.

“After 100 years, it’s probably time to do something,” quipped panelist Mark Edelson, program executive officer for Industrial Infrastructure at the Department of the Navy. “Everything has gotten bigger and needs more power.”

### **Upgrading and Modernizing**

Fortunately, Edelson said, the Navy has recognized the foundational element of naval installations to all the combat forces, and, in 2018, established the Navy’s Shipyard Infrastructure Optimization (SIOP) to upgrade shore infrastructure. Naval ports and bases face myriad issues, including aging facilities and equipment, insufficient

utilities and information technology, lack of worker amenities, and rising waters in some places and diminishing sources of fresh water in others.

“We’re benefiting from historic investments in the shipyards to get after all of those things,” Edelson said.

SIOP, led by Program Executive Office, Industrial Infrastructure and supported by the Naval Facilities Engineering Systems Command, Naval Sea Systems Command and Commander, Navy Installations Command, to date has finished 44 facilities projects worth nearly \$1.2 billion, according to the Navy. Another 48 projects are under contract for \$6 billion in additional improvements, including construction of four dry docks and upgrades to shipyard utilities.

Some of these projects are hardly straightforward. A recent project to build a new Waterfront Production Facility at the Portsmouth Naval Shipyard required negotiating with the state historic preservation office to retain the building’s original architectural features while modernizing ship servicing capabilities and improving workflow.

“Now the light machine shop, the artisans, the engineers are all in the same building next to two dry docks to get the throughput that we need,” Edelson said.

### **Departing from Tradition**

VanderLey said the Navy is making practical reforms to speed up infrastructure modernization by:

- Prioritizing resources. The Navy is first upgrading the most critical infrastructure, including dry dock improvements to support the “future force,” including USS Gerald R. Ford-class aircraft carriers, and future versions of the Virginia- and Columbia-class submarines.
- Reforming acquisition strategies. The Navy is in some cases

departing from the traditional acquisition process, which typically involves firms bidding on Navy-defined requirements in design and construction. It's now involving contractors earlier, to mold project design, VanderLey said. That's helpful in complex infrastructure projects, he said, when cost and schedule are "less about what you're building than about how you have to build it."

The Navy is also awarding design-build-to-budget contracts, which allow flexibility and speed while controlling costs.

- Alternating construction methods. VanderLey said the Navy is capitalizing on the trend of "industrialized construction" or "off-site construction," where certain parts or modules – child care centers, barracks, or dorms – are prefabricated off-site for later assembly into the overall build. "In Europe about 45% of their construction is done that way; in the United States, it's about 5%," he said.

"We see potential for savings in cost and schedule of roughly 30%," VanderLey added. "So, we're aggressively going after those types of approaches."

Commercial shipbuilding faces similar challenges to the Navy in needing to upgrade its similarly aging infrastructure, in part to recruit and retain workers.

"People need infrastructure too," said Roger Camp, senior director for Business Development, Naval Programs, at Hanwha Defense USA, a subsidiary of South Korean defense giant Hanwha Group, which purchased the Philly Shipyard last year for \$100 million.

He said his firm is exploring ideas to make the maritime facility more attractive to workers, by locating parking closer to the plant, outfitting training areas with virtual reality tools, and expanding – not replacing – production resources through use of AI and robotics.

“We have to have technical infrastructure,” Camp said. “Not just piers not just buildings, but the actual facilities to be able to augment the humans that build our ships.”

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## Sea-Air-Space: Shipbuilding, Industrial Base Concerns Come to the Fore for SECNAV, Congress



New Secretary of the Navy John Phelan addresses the audience on the final day of Sea-Air-Space. *Photo credit: James Peterson*

Fourteen days into his tenure as the 79<sup>th</sup> secretary of the

Navy, John Phelan said he plans to focus on three things: strengthening the shipbuilding industry and defense industrial base; creating an accountable, adaptable warfighting culture; and improving the health, welfare and training of Department of the Navy personnel.

“My number one priority as SECNAV is readiness,” Phelan said in a breakfast address on the last day of Sea-Air-Space. “I wake up every day focused on our readiness, our ability to fight, and a modernization strategy going forward.”

For decades, the United States has enjoyed the benefits of being the world’s pre-eminent maritime power, he said, but that lack of competition, a bureaucratic inertia and a rigid adherence to the “old way of doing things” has led to complacency, he said.

“China constructed more ships last year alone than we have since World War II,” he said. “Our adversaries are not waiting on us to get our act together.”

Fourteen days in, “I may have underestimated just how complex this job is,” he said. “As everyone in the room knows, leading the Department of the Navy is anything but easy, but I didn’t come here for easy. I came here to solve problems.”

Among those problems are shipbuilding backlogs. Phelan has already visited the government shipyards in Connecticut and plans to visit the rest, public and private, to help understand the scope of the issue.

When he sat down with the shipyard workers, he was struck by their dedication and sense of mission, Phelan said.

“I said to them, you’re not just building ships. You’re contributing to our national security, and the president and I thank you for that. In my view, investing in people is as critical to our success as any weapon system or fighting strategy. We’re facing a serious shortage in our shipbuilding

workforce, which is stressing our performance schedules, exacerbating the strain on our current forces, therefore leading to extended deployments” that put stress on the crews.

“These challenges are not hypothetical. They affect the lives of our Sailors and their families who feel the weight of these pressures every day. The Department of the Navy, working closely with industry, must offer a clear vision for the future of our shipbuilding workforce, one that includes career growth, competitive compensation and a strong sense of purpose,” Phelan said.

Acquisition reform is a perennial challenge for the Department of the Navy and the military at large. Phelan, with a background in business, said he wants to understand why the processes move so slow and why some programs cost so much.

He cited the construction of military barracks that cost \$2 million per key, when his company was able to build a luxury hotel in Hawaii for \$800,000 per key.

“In the coming weeks I’ll review our acquisition systems and identify how we can streamline and reform them. I’ll work across the department and especially with industry to find solutions,” Phelan said. “We’ll restore and maintain operational readiness, fiscal responsibility. In order to do so, I’ll rely on experience and insight from the people around me. I’m not interested in echo chambers. I want honest perspective and real results. General Patton said if everyone is thinking alike, someone’s not thinking.”

Asked how he plans to revitalize shipbuilding and growing the maritime industry, Phelan pointed out he’s still new on the job.

“I would say to that question, stay tuned. I’m on day 14. I intend to meet with all of our major contractors, and those who would like to become contractors. I think we have to really ensure that we have a huge, strong base, but we also

have competition. And I think we need to provide that by expediting some of our processes and making it easier.”



Members of the House Armed Services Committee address the issues facing the maritime services. From left: Moderator Bryan Clark of the Hudson Institute and Reps. Trent Kelly, Jenn Kiggans and Rob Wittman. *Photo credit: James Peterson Congressional Insight*

Some members of Congress with defense oversight duties spoke shortly after Phelan and said rebuilding the defense and shipbuilding industrial base means rebuilding the workforce and giving them steady demand signals.

Reps. Trent Kelly (R-Mississippi), Jennifer Kiggans and Rob Wittman, both Republicans from Virginia, and all of whom are members of the House Armed Services Committee, appeared on a panel and said there are options to revitalize shipbuilding and the industrial base.

“I think that the speech that you just heard from the secretary of the Navy, and what he reiterated from the

president's direction to him, was shipbuilding, shipbuilding, shipbuilding, shipbuilding," Wittman said. "I love it. But the key is, you have to get left of that enterprise. And being to the left of the enterprise means if you're going to do shipbuilding, shipbuilding, shipbuilding, it starts with workforce, workforce, workforce."

The Office of Management and Budget needs to give contractors the ability to move money payable at the end of a contract to the beginning to boost workers' salaries and make the jobs more competitive, Wittman said.

"And listen, Congress can do that, but I can tell you by the time the Congress gets through the NDAA [National Defense Authorization Act] and appropriations and it gets in the hands of the Pentagon, that's a 24-month window. Today, it could happen immediately by OMB allowing in those contracts for that money to be moved to the left."

Kelly said the workers also need a steady demand signal, not working on multiple ships one year and none the next.

"We've got to have consistency," Kelly said. "... If you don't have a consistent demand, you can't pay workers, you can't make infrastructure investments, you can't do any of that."

Kiggans and Kelly also said the Navy shouldn't be so quick to decommission ships at a time when it needs more to counter the burgeoning Chinese navy.

"I need the Navy again to come out and say, I want every ship I have. We're keeping our older ships. Every single one of 'em. Now is not the time to be decommissioning ships that we just sent on deployment," Kiggans said.

Kelly blamed Navy officials for ignoring congressional directives to keep ships in play.

"We should not retire a ship, any ship, if we don't have a

replacement. Any,” Kelly said. “... And I’ll tell you, I’ve seen this ... but a lot of times when we tell the Navy you’re not retiring a ship, the answer is, is we’ll just make sure it’s broke and we’ll just say it didn’t work, and see, we told you. So, there is no effort to actually make that piece of equipment work. It’s, we don’t want to do it and we’re going to ignore you, Congress, we’re going to ignore you, president, we’re just going to make sure that it doesn’t work.

“We have got to be committed to making sure that everything that we have can be operational at a moment’s notice and that we keep them operational and that we keep training those crews.”

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## **Sea-Air-Space: Fighting from the MOC Requires Standardization, Speakers Say**



Vice Admirals Kurt Thomas, Michael Vernazza and Craig Clapperton and Rear Admiral Susan Bryer-Joyner discuss what needs to be done to fight from the MOC. *Photo credit: Dan Goodrich*

The concept of “fighting from the MOC” will require much greater standardization of Maritime Operations Centers, in training, equipping, resupplying and data management and protection, speakers said at a panel April 7 at Sea-Air-Space.

The MOCs are purpose-built for fleet commanders, but that makes them difficult to coordinate, said Vice Admiral Karl Thomas, the director of Naval Intelligence, who moderated the Monday panel on “Fighting from the MOC.”

“We would like to have them all configured in a standard manner ... so we can modernize them in a better way,” Thomas said. “There’s a little tension in that, but it’s a good tension. In the pace of the fight today, we need to modernize.”

MOCs are how the Navy executes fleet-level warfare and facilitates mission command at lower echelons, but the Navy is

seeking to use them as the centerpiece for the type of distributed warfare likely in the vast Pacific.

“We will treat and resource MOCs like the warfighting systems that they are, capable of operating on a decentralized and global battlefield just like all other weapons systems,” the Navy’s 2024 Navigation Plan says.

Vice Admiral Michael Vernazza, commander of Naval Information Forces, said his team is working with Navy personnel officialsto conduct a manpower review of each MOC, starting in the Pacific, focusing on the exact manning each will need to carry out the seven joint tasks outlined in the chief of naval operation’s Navigation Plan.

“By 2027, all fleet headquarters, starting in the Pacific Fleet, will have ready MOCs certified and proficient in command and control, information, intelligence, fires, movement and maneuver, protection, and sustainment functions as assessed by our MOC Training Teams,” the NAVPLAN says.

## **Investments**

Admiral Susan BryerJoyner, director of the Warfighting Integration Directorate, said the main investment that needs to be made to be ready for 2027 is cloud infrastructure and supporting “zero trust” technology to make sure data going into and from MOCs is protected, and available to commanders who need it.

Data visualization doesn’t need to be standard, “but what does need to be standard is the data that underpins it,” BryerJoyner said.

“Every commander should not be able to pick and choose what data he or she wants to use for a specific warfighting function, because as soon as you start to add that variability in, now different commanders are going to see different things and come to different conclusions,” she said.

“This shift from MOC as a commander’s personalized way of fighting to a more standardized way of feeding into the joint force, is the journey that we’re going on now,” she said.

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## **Sea-Air-Space: Readying our Platforms: Admirals Focus on 80% Combat Surge Ready**



Admiral Jim Kilby, left, moderates the panel “Ready our Platforms” on April 7. *Photo credit: Dan Goodrich*

U.S. Navy type and system commanders discussed their efforts to achieve a combat surge readiness (CSR) of 80% during the opening panel of the Navy League’s 2025 Sea-Air-Space Expo in National Harbor, Maryland.

Speaking in an April 7 panel – moderated by Acting Chief of Naval Operations Admiral Jim Kilby – were Vice Admiral Daniel Cheever, commander, Naval Air Forces; Vice Admiral Robert Gaucher, commander, Naval Submarine Forces; Vice Admiral Brendan McLane, commander, Naval Surface Forces; Vice Admiral Carl Chebi, commander, Naval Air Systems Command; and Vice Admiral James Downey, commander, Naval Sea Systems Command.

“Combat surge ready-certified units meet a minimum condition requirement for material condition, training, manning and munitions,” Kilby said, noting the type commanders on the panel were designated the single accountable officers “to ensure their respective forces achieve 80% CSR.”

Kilby laid out the task for his admirals to achieve 80% CSR despite the scheduling, materials, workforce, maintenance availabilities and operations tempo challenges for the fleet, necessary to ready the fleet to meet potential combat with potential adversaries such as China.

He pointed out that the current drive for readiness began in 2018 when then-Defense Secretary James Mattis directed the service to turn around the dismal readiness of its F/A-18 Super Hornet strike fighter fleet of 250 ready jets and increase the number to 341, a level sustained during the years since. By changing its maintenance practices, the Navy achieved the goal in one year. With that inspiration, other Navy communities, such as the surface and submarine forces, have adopted changes to their maintenance and logistics practices to increase the readiness of warships and submarines.

Kilby said the CSR rates for submarines, surface warships and aircraft carriers today are 67%, 68%, and 70%, respectively.

Cheever noted achieving the 80% for Super Hornet strike fighters was an “all-hands effort all the time” and involved extensive partnering with the defense industry. He defined CSR

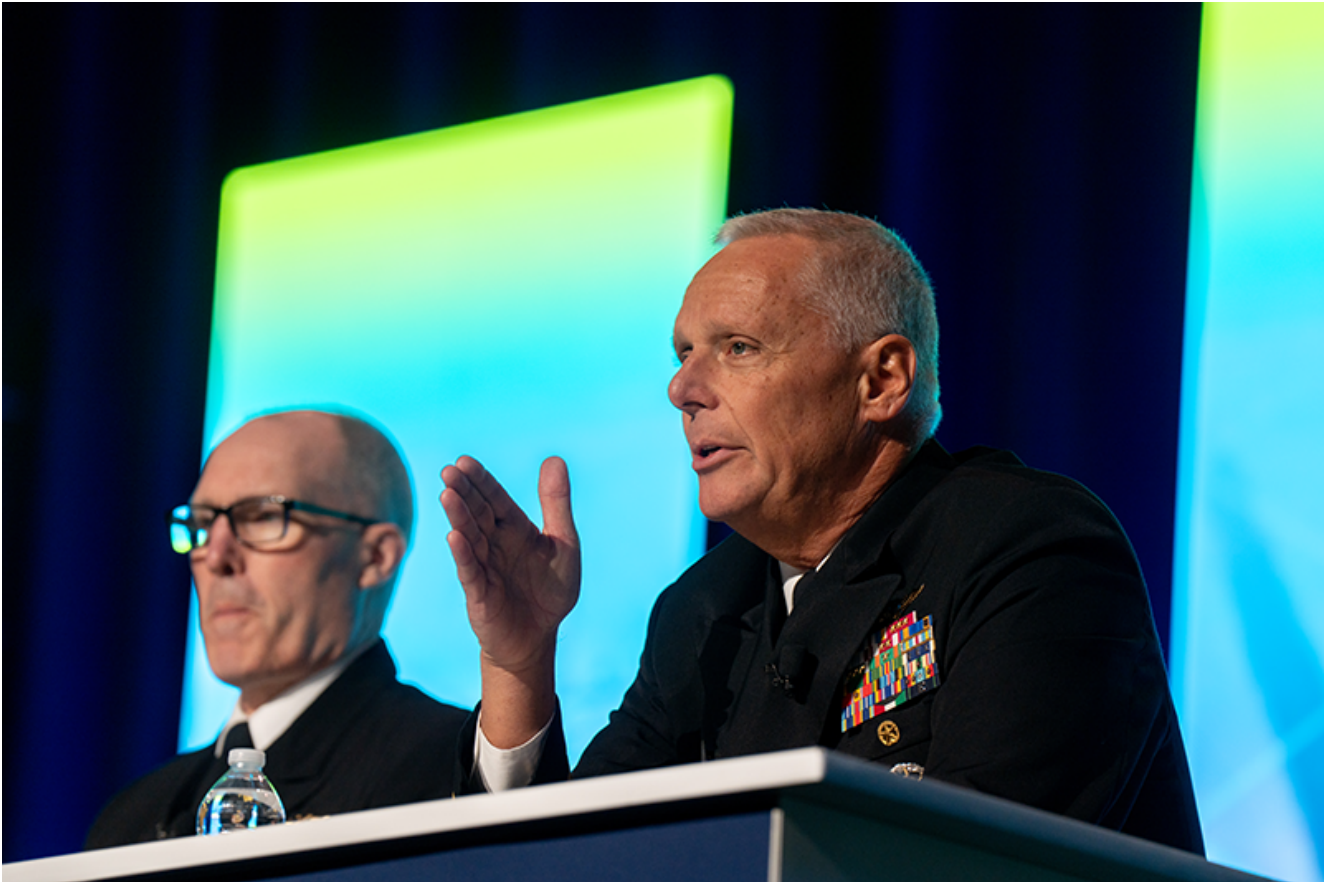
as such: "If we go to war, we have everything we need."

Chebi said the CSR effort has since expanded to included 22 other types of Navy and Marine Corps aircraft and that the effort to achieve the CSR goal was a "team effort" that had to be focused on data versus stories.

He recounted the Navy "had to be told to do that," referring to the strike fighter readiness initiative, but that "we developed the playbook. It worked."

He said the Navy still had challenges with improving CSR in joint programs because it cannot control all aspects of the initiatives.

McLane credited the aviation community with the inspiration for the surface community to similarly focus on readiness. His efforts include CASREP [casualty report, a term for systems degraded or broken] burn-down, restoring ship systems to full capability, and getting ship maintenance availabilities (repair periods) finished on time. An innovative approach to availabilities is to bring ships in more often for shorter period, a method that increases a ship's likelihood of completion on time. A recent set of 100-day availabilities of were completed 100% of the time, he said.



Vice Admiral Daniel Cheever makes a point during the morning panel on Monday. *Photo credit: Dan Goodrich*

Addressing problems with amphibious assault ship availabilities, McLane said a focus on planning 120 days in advance is inadequate, recommending locking in the plan 500 days in advance and awarding the contract 350 days in advance. Noting recent problems with quality assurance, he recommended involving the original equipment manufacturers rather than necessarily hiring the lowest bidder.

### **Ships Ahoy**

Downey, speaking of new construction ships, noted 12 ships were delivered in 2024, and 92 ships were under contract, 56 of which were under construction. He said he is focused on planning milestones, trying to order materials two years ahead of the construction start of a ship. For improving availabilities, more predictive data are needed, he said.

Gaucher said his goals are to complete submarine availabilities on time and make them ready for combat. He

noted the Navy's four shipyards have room for 10 attack submarines in maintenance but currently have 17 submarines in or awaiting availabilities.

The "just-in-time" parts delivery concept does not work well in practice for the submarine force, he said, recommending instead a "just-in-case" stockpiling concept for parts.

Gaucher said the Navy's shipyards need more structural engineers, not just mechanical and electrical engineers.

He also said the submarine force's inventory of Mark 48 torpedoes has increased by two per boat, and he expects another increase by two within six months.

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**Sea-Air-Space: New Pit-Stop Approach Can Cut Engine Overhaul from Months to Days, FMD Says**



Fairbanks Morse Defense workers overhaul an engine using the "pit stop" method. *Photo credit: Fairbanks Morse Defense*  
Imagine if a Navy ship could pull into a pit stop like a race car, get its engine overhauled and be back on the seas in less

than a month. That's what the team at Beloit, Wisconsin-based Fairbanks Morse Defense (Booth 1537) envisioned years ago, and now it's a reality.

"Maintenance has traditionally taken way too long and cost too much money," said Keith Haasl, FMD's president of service and technology.

Haasl notes that a traditional Navy ship engine overhaul, including disassembly, inspection, repair, and reassembly, can take up to nine months. But FMD's pit-stop approach can take as little as 26 days for ship service generators and 38 days for main propulsion engines.

Haasl said FMD did its first pit stop in early 2024 on a ship service generator. Since then, FMD has overhauled eight generators and three main propulsion engines on landing ship, dock-class vessels using the new approach.

"It's been really successful. The fleet likes it. Our partners at NAVSEA [Naval Sea Systems Command] like it, and we sure like it," Haasl said. "It's revolutionized the way the Navy is doing maintenance and how NAVSEA is structuring their Class Maintenance Plans."

## **Rethinking Strategy**

Basically, FMD's pit-stop approach involves rethinking the entire engine overhaul strategy.

Historically, ship engines have been overhauled using an "open and inspect" method. "It was really like incremental discovery. You open up the engine on the ship, take the measurements, inspect it, write the report, go to the customer for approval, get the replacement parts, install them, and then reassemble the engine," Haasl said. "All of this is going on while there's sanding and painting and welding on the ship, which increases the risk of engine contamination."

The pit-stop approach begins with technicians bringing a standardized kit of original equipment manufacturer parts, which are replaced onsite no matter what the engine's condition. These parts are included in the kit because they're essential to engine performance.

The parts that are removed from the ship's engine are taken to the FMD facility, where they're refurbished, inspected, and certified in a controlled environment. These parts are then used in the next standardized kit for an engine overhaul on another ship. This helps save time and costs by avoiding supply-chain issues and ensuring replacement parts are always available as needed.

The pit-stop approach also reduces engine overhaul time and costs in other ways.

"We're doing work pier side, so there are no docking costs. The costs of parts are significantly lower because we're remanufacturing parts that might have been replaced with new parts under the old method," Haasl said. "All of those efficiencies we can gain are tremendous."

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## **Sea-Air-Space: Textron Offers the Tsunami USV Family for Multi-Purpose Navy Use**



Tsunami, a small USV, is a joint effort by Textron Systems and Brunswick Corp. *Photo credit: Textron Systems*

Textron Systems (Booth 1827, D1), originator of the Common Unmanned Surface Vehicle (CUSV) in U.S. Navy service, has developed a less expensive USV that could be used for a variety of missions and could even be considered attritable.

Textron is teamed with Brunswick Corp., a small craft manufacturer, to offer Tsunami, family of deployable, small, scalable, gasoline-powered outboard-engine craft, with hull lengths ranging from 14 to 42 feet long. Certain of the models have a payload capacity of 1,000 pounds, ranges between 600 and 1,000 nautical miles, and operable in Sea State 4.

“We are the originator of the common uncrewed surface vehicle, the CUSV, for the Navy which was successfully adapted to become the Navy’s first unmanned surface vehicle program of record and which is being fielded to the littoral combat ship fleet now [for mine countermeasures],” said David A. Phillips, senior vice president, Air, Land & Sea Systems, Textron Systems, in a briefing to reporters. “Surface warfare that

doesn't necessarily require the power and the weight necessary in a mine countermeasure system."

Phillips noted several mission sets that an inexpensive unmanned craft could take on, including port security, port surveillance, escort and training.

"We have been in constant collaboration with Navy and commercial customers as to what a system like this might bring them in terms of operational flexibility [and] emerging mission sets," he said. We continue discussion with the Navy – all elements of the Navy to include fleet as well as our particular programs in which we work. And we've been hearing an increased expression of interest in a small, rapidly deployable, unmanned surface vehicle that can support a variety of missions beyond mine countermeasures."

Brunswick, builder of recreational watercraft of such product lines as Boston Whaler, Bayliner and Mercury Marine, has craft adaptable to Textron's vision and has established supply lines.

"Brunswick's portfolio of reliable high-performance vessels – their watercraft, propulsion systems, control systems – and manufacturing capacity and their global footprint along with our mature autonomy technology and systems integration capability was really the perfect combination to allow us to develop an accessible, rapidly deployable, and what I call a modular open systems architecture oriented family of vehicles or systems," Phillips said.

"Brunswick's technologies are already in mass commercial production and globally available. That allows us to reduce costs, risk, and production time when integrating and ultimately delivering these vessels. Their global footprint and mature resilience supply chain provides our customers with an unmatched support and aftermarket service."

Brunswick "has invested in and developed a built-in drive-by-

wire system for us to ramp our higher levels of operationally relevant autonomy that we've developed and delivered to the U.S. Navy and that we've proven through mine countermeasure unmanned surface vehicles and that we fielded operationally with the Navy and demonstrated through exercises like RIMPAC and FLEX," he said.

Phillips said the Tsunami could be fielded rapidly.

"We recognize the need for a ready-now solution that harnesses the capability and capacity of the U.S. industrial base," he said. "That's important at being able to scale and being able to rapidly deploy systems when our customer wants them. ... Speed. Speed to market. Speed to contract. Speed to delivery. Leveraging this mature production capability enables rapid production without the costs and risks of developing boutique manufacturing capability and scaling mass production. These watercraft are already in production."

The Tsunami craft is adaptable to swarming tactics, according to Textron.

"We've also done some testing in that realm," Phillips said. "Although I'm not going to go into certain mission scenarios, the swarm is important and controlling multiple systems is important. We've done that for many years with our aircraft systems. We understand swarming of systems. We also understand the complexity associated with that. We have designed this system and we have demonstrated this system to operate multiple watercraft. I won't get into how many."

The low cost of the Tsunami is key to the craft being attritable, Phillips said.

Asked by *Seapower* if the USVs used by Ukraine against the Russian navy were part of the inspiration for the Tsunami, Phillips replied that "it certainly informed us of that emergent need. ... I am not presupposing what one of our customers might use our system for."

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# Navy to Commission Submarine Iowa

From the U.S. Navy Office of Information, Apr. 4, 2025

GROTON, Conn. – The Navy will commission the 24th Virginia-class fast-attack submarine, the future USS Iowa (SSN 797), during a 10 a.m. EST ceremony Saturday, April 5, at Naval Submarine Base New London, Conn.

Iowa Governor Kim Reynolds will deliver the principal address. Additional speakers are set to include Secretary of the Navy John Phelan; Adm. Daryl Caudle, Commander, Fleet Forces Command; the Honorable Richard Blumenthal, U.S. Senator from Connecticut; the Honorable Joe Courtney, U.S. Representative from Connecticut; and Mark Rayha, president, General Dynamics Electric Boat.

The submarine's sponsor is former Iowa first lady Christie Vilsack, an educator with a 50-year career in public service. She and her husband, the Honorable Tom Vilsack, former Secretary of Agriculture, live in rural Iowa and continue to support domestic and international education and agriculture programs. In keeping with Navy tradition, she will give the crew the order to "man our ship and bring her to life." With the hoisting of the colors and commission pennant, Secretary Phelan will formally place the ship in active service.

The future Iowa is the fifth naval vessel named for the state and, once commissioned, will be the third placed in service. Battleships named for the Hawkeye State include USS Iowa (BB 4), which commissioned in 1897 and saw action in the Spanish-American War and World War I, and the highly decorated USS Iowa (BB 61), which commissioned in 1943 and served in World

War II and the Korean and Vietnam Wars.

Each Virginia-class submarine is 7,800-tons and 377 feet in length, has a beam of 34 feet, and can operate at more than 25 knots submerged. It is designed with a reactor plant that will not require refueling during the planned life of the ship, reducing lifecycle costs while increasing underway time. Iowa is designed with stealth, surveillance capabilities and special warfare enhancements to meet the Navy's multi-mission requirements. Its keel was authenticated on Aug. 20, 2019, and it was christened on June 17, 2023.

The submarine was built under a unique teaming agreement between General Dynamics Electric Boat and HII-Newport News Shipbuilding; both companies build certain portions of each submarine and then alternate deliveries. SSN 797 is the 13th Virginia-class submarine delivered by GDEB.

The commissioning of USS Iowa symbolizes the Navy's 250-year commitment to innovation and maritime dominance. From seabed to space, the Navy delivers power for peace – always ready to fight and win. Iowa's cutting-edge capabilities represent the Navy's dedication to maintaining a powerful maritime force for the future. This ceremony celebrates not just the commissioning of the Navy's newest warship, but the Navy's enduring legacy and commitment to shaping the future of maritime power.

The commissioning ceremony will be streamed live at: <https://www.dvidshub.net/webcast/35621>.