5 Ways Shipbuilding Can Be Shipshape Despite Geopolitical Instability

By Vicky Uhland, *Seapower* Correspondent

Shipbuilding is highly affected by geopolitical volatility and there are five key adjustments that will define the new winners in this rapidly shifting environment, according to a new report from McKinsey & Company.

The report, "Seizing the advantage in shipbuilding amid geopolitical shifts," was released during Sea-Air-Space 2026.

"It's a desire to look beyond the everyday headlines of defense budgets and capacity restraints and look more globally at the shipbuilding sector," McKinsey senior partner and report co-author Ryan Brukardt said during a discussion at Sea-Air-Space.

Brukardt and McKinsey Senior Partner Brooke Weddle said there are four main geopolitical factors affecting shipbuilding in the western hemisphere:

- Trade agreements and tariffs
- State-directed industrial policies and incentives
- Import, export and capital controls
- Artificial intelligence and technology.

While all of these can make it difficult for U.S. and European shipbuilders to compete with other countries, the report notes that they can outperform their industry peers with five best practices:

- Rethinking portfolio strategy with future-proof platforms. This involves an unsentimental, analytical assessment of core products, big bets, products with limited market opportunities unless they're linked to a specific program, and reevaluated products, the report says.

Examples of core products include command and control systems or radar and sensor systems. Big bets might be communications systems or digital twins. Opportunistic go-to-market products could be training or self-defense systems. And products that might need to be reevaluated include navigation or propulsion-control systems.

- Accelerating production to meet spiking demand. This includes developing more efficient processes and personnel management by using technological innovations like AI-enabled dynamic scheduling and digitized workflows.

The McKinsey researchers found that using AI to handle scheduling inputs can increase throughput rates by at least 10 to 15 times, Weddle said.

- De-risking supply chains. Starting with the COVID-19 pandemic and extending to the current tariffs, sanctions and regional conflicts, shipbuilders have been dealing with vulnerabilities in their supply chains.

The report recommends two best practices to help address these

vulnerabilities: continuous exposure assessment, including advanced illumination models that help companies identify common sub-supplier choke points and other risks; and mitigation planning such as finding alternative suppliers and considering insourcing capabilities.

- Improving cost structures. The report identified three cost categories that are most affected by geopolitical disruption: materials, external labor and internal labor.

Materials procurement strategies can include creating supplier risk profiles for each country, supplier and commodity. Managing external labor includes developing multi-region vendor pools and shifting toward more modular work packages with standardized scopes of work. Handling internal labor costs requires time, the report found, but can include developing digital work instructions and smoothing out workloads.

- Building organizational capabilities. Many shipyards have trouble attracting and retaining young workers because of limited growth opportunities, low pay and difficult working conditions, the report found. And retirement looms – the report cited data that a third of U.S. aerospace and defense manufacturing employees are over age 55.

“When you compare our shipyards to Korea, it’s not always a great place to be a young or older worker,” Weddle said. “We need to fundamentally rethink what we think about workforce in the shipbuilding environment.”

The report recommends using holistic talent strategies like recruiting people with similar skills from non-shipbuilding sectors; partnering with schools for job-

shadowing initiatives; cutting the time it takes to achieve job proficiency though standardized onboarding boot camps and hands-on learning; rethinking performance measures to identify what roles high-performance employees are best suited for; and determining the underlying causes of attrition by encouraging employee feedback.

“Capital is the constraint in certain places but really, at the end of the day, it’s management practices, appropriate use of technology, and ability to attract and retain talent that are most significant” for gaining competitive advantage in an increasingly geopolitical shipbuilding environment, Brukardt said.

Addressing Challenges Ahead: NAVAIR Leadership Discusses Organizational Changes and Industry’s Role at Sea-Air-Space

From left, NAVAIR Commander Vice Adm. John E. Dougherty IV; Rear Adm. Todd Evans, Commander, Naval Air Warfare Center Aircraft Division and chief engineer with NAVAIR; Vice Commander Capt. Joseph Hidalgo, Commander, Fleet Readiness Centers (COMFRC); and Paul McGinty, director of the NAVAIR Rapid Capability Cell speak during the panel “Start with the Fleet: Readiness, Capability, Speed,” Tuesday afternoon at the Sea-Air-Space 2026 Exposition.
From Naval Air Systems Command, Apr 21, 2026

NATIONAL HARBOR, Md. – NAVAIR personnel kicked off Tuesday at Sea-Air-Space Exposition 2026 with “Start with the Fleet: Readiness, Capability, Speed,” a panel led by NAVAIR Commander Vice Adm. John E. Dougherty IV, who was joined by Rear Adm. Todd Evans, Commander, Naval Air Warfare Center Aircraft Division and chief engineer with NAVAIR; Vice Commander Capt. Joseph Hidalgo, representing Commander, Fleet Readiness Centers (COMFRC); and Paul McGinty, director of the NAVAIR Rapid Capability Cell.

Dougherty began the panel by laying out NAVAIR’s highest

priorities.

“[At NAVAIR we need] to develop our people and grow our culture, to provide the readiness the warfighter needs, to accelerate delivery capability and to elevate our game,” he said. “It’s about focusing on outcomes and transforming our business so that we find better ways to deliver capability to the warfighter. We have got to go quicker, and I know that we’re ready to meet that challenge.

“What we can’t forget is that we’re in a great power competition, and in great power competition, the bar for our performance is raised. The threat is moving very fast in terms of capability and capacity and it’s up to us to get after that.”

Dougherty said the Navy is currently transitioning to Portfolio Acquisition Executive organizations. Under the PAE model, leaders are empowered —and expected— to make disciplined, data-driven trade-offs across cost, schedule and performance, with a clear priority on time to field. Additionally, each PAE is responsible for understanding and actively managing the industrial base supporting their portfolio, including production capacity, supply chain risk and opportunities to expand or diversify suppliers. He encouraged industry partners to “be aggressive” in engaging with naval aviation programs during this time to get input and ideas and keep the production engines running.

“This is a generational opportunity for this industry,” Evans said regarding the acquisition changes. “This industry has been around for a long time, and we’ve always heard ‘go fast, just go faster.’ That is tremendously difficult to change. In order to enable that change, we also have to change.”

“What gets me excited about it for naval aviation is [having a] single, accountable owner,” Dougherty said. “[The way we are organized now] there isn’t really one leader that’s in

charge of making sure that all our capability roadmaps are aligned, that we're putting our dollars toward the most consequential outcomes as we deliver warfighting capability. I like 'portfolio' over 'program management.' It's about integrated warfighting capability. I think there is real opportunity in this PAE structure to drive better warfighting outcomes across all our programs with a capability mindset."

Hidalgo highlighted the depot work done at the various Fleet Readiness Center sites, where most maintenance and sustainment work is performed on aircraft components and engines.

"We're here for the warfighter," Hidalgo said. "COMFRC is one of the sole source places where we can do work that gets it to the warfighter right there on the flight line. We get direct calls back from the warfighters because we're on the flight line and working hand in hand with industry to help us improve anything we need to get done in a more expeditious timeframe."

"On the rapid capability front, we're trying to connect those [warfighter] needs and capabilities to true outcomes," McGinty said, outlining what the NAVAIR Rapid Capability Cell is focused on. "We're partnering with industry early, bringing our resources to bear with the expertise we have resident in our warfare centers and working within the systems and authorities we have … I think the key to this is really connecting to those problem sets, really trying to break down the barriers between what the warfighter needs and what we are asking industry to do and pin us all up in that space together to get after it."

In response to a question about what keeps the panelists up at night, Dougherty said he knows that there is someone in NAVAIR who knows how to do things better.

"I don't know it, but they do, and I need to get that information," he said. "I believe that good ideas come from

the heart of the organization. Our people are our most important asset. We have a world-class workforce here at NAVAIR. They've got fantastic ideas. I worry that there's a lot more of that for us to tap into."

"I want to make sure we are taking care of our people, making sure that they are adequately trained, that they have the equipment they need, and have the components [for aircraft]," Hidalgo said. "The people that we have at FRC are driving to get readiness to the warfighter. That is one of the things that keeps me up at night, making sure we have the things ready for the warfighter."

When asked how NAVAIR is changing the contracting process in order to speed projects along, Dougherty said the organization is always "looking for ways to accelerate that timeline."

"Our contracts team on the government side does pretty good on hitting their timelines. The ask that I would have for industry is to hit the timelines and get proposals back Negotiations can take too long, for sure, so there's room for improvement."

Dougherty said industry is needed now to help with current needs as well as any coming future fight.

"That future fight is maybe not so distant, if you look at the geopolitics in the world," he said. "I would double-down on my message of urgency and double-down on the message that we have many operational needs. I need to connect you to those operational needs better and I want your thoughts.

"We're in great power competition and we intend to win. And we're going to get after it with you."

HII Accelerates ROMULUS USV Program: Four New ROMULUS Vessels Head into Production

From HII, April 21, 2026

NATIONAL HARBOR, Md., (April 21, 2026) – HII (NYSE: HII), America's largest military shipbuilder and global leader in autonomous maritime systems, announced today plans for the production of four ROMULUS 151 vessels to be built by Breaux Brothers Enterprises in Louisiana in addition to the ROMULUS 151 currently under construction.

The announcement signals a rapid shift toward initial production, as HII pushes to accelerate delivery of autonomous surface capability to the U.S. Navy and

allied partners.

“ROMULUS represents a shift in how we deliver unmanned capability to the fleet,” said Andy Green, executive vice president of HII and president of HII’s Mission Technologies division. “We are combining shipbuilding experience, scalable manufacturing, proven autonomy, and strong industry partnerships to move quickly from prototype to operational deployment. The progress we are seeing today – including these initial production vessels – reinforces that we are on a disciplined path to deliver meaningful capability at speed and at scale.”

Built for Scale and Mission Flexibility

ROMULUS is a modular family of AI-enabled USVs designed to meet current and emerging requirements for the U.S. Navy, U.S. Marine Corps, joint forces, and allied partners. The platform supports a wide range of missions, including intelligence, surveillance and reconnaissance (ISR), mine countermeasures, strike operations, counter-unmanned systems, and the launch and recovery of unmanned underwater and aerial vehicles.

Engineered for serial, repeatable production, ROMULUS vessels combine endurance, global reach, and modular adaptability. The family is designed to scale across multiple vessel sizes while maintaining a common manufacturing approach and autonomy baseline.

Advancing a Scalable Manufacturing Model

The ROMULUS program is supported by HII’s expanding unmanned vessel production ecosystem, including its assembly facility at Breaux Brothers Enterprises and the High-Yield Production Robotics (HYPR) initiative. Together, these efforts are designed to transition unmanned vessel production from prototype builds to high-rate, digitally enabled manufacturing.

In March, HII released a plan outlining an expanded ROMULUS assembly facility at Breaux Brothers and introduced HYPR as HII's initiative to apply industrial robotics and digital quality systems to unmanned platform manufacturing. By integrating automation, advanced tooling, and standardized workflows, HII aims to reduce unit costs, improve schedule predictability, and enable program-level delivery of unmanned systems aligned with evolving fleet needs.

"ROMULUS is engineered from the outset for scale," Green added. "By aligning design, autonomy, and manufacturing, we are creating a production model that delivers predictable outcomes and positions us to meet growing demand for autonomous maritime capability."

One Day Before Departure, Phelan Touted Need for New Budget, New Business Practices, New Battleship

Then-Secretary of the Navy John Phelan delivers a keynote address just hours before unexpectedly departing the job. *Photo credit: Laura Hatcher.*

Editor's note: This story appeared April 21 in Seapower's Show Daily at Sea-Air-Space. On April 22, Pentagon Spokesman Sean Parnell announced on X that John Phelan was leaving the administration; other media reports said he had been forced out. Undersecretary of the Navy Hung Cao is now acting secretary of the Navy. This article is about his keynote speech at Sea-Air-Space.

On the day the Pentagon released a $1.5 trillion fiscal 2027 defense budget, Navy Secretary John Phelan addressed Sea-Air-Space and said the Department of the Navy needs a budget, not a series of continuing resolutions from Congress.

Phelan also defended the controversial planned Trump-class battleship, saying it brings a needed capability and would anchor the new "high-low" Golden Fleet concept outlined the day before by Chief of Naval Operations Admiral Daryl Caudle, speaking from the same stage.

Phelan also echoed Caudle in saying doing business with the Navy must change, which is why the service recently announced a new portfolio acquisition executive (PAE) structure, appointing five senior leaders to act as single accountable officials for key domains to accelerate capability delivery and keep a lid on costs.

Phelan said he will soon testify on the budget on Capitol Hill and will tell lawmakers a continuing resolution – a budget carrying forward current levels of spending – "would have extremely negative consequences for the DoN. It's like running a business and not being able to charge what your competitors do," he said. "Continuing resolutions impose constrained short-term funding conditions that force legacy program tradeoffs and impact our ability to innovate and therefore our readiness over time."

The Golden Fleet initiative "is about delivering the fleet of the future through three mutually reinforcing pillars. One, to maintain and enhance maritime dominance. Two, revitalize the maritime industrial base and three, change how the Department of the Navy does business," Phelan said.

The initiative includes the proposed Trump-class battleship, or BBG(X), certain to be a target of some in Congress.

"I know the question many of you and the pundits are asking, why battleships, and why now? The answer is straightforward and grounded in the realities of high-end conflict in shaping the next large surface combatant," he said.

Phelan said he has discussed the issue with top admirals and commanders and said they don't want to have to choose between air defense, anti-ship warfare, anti-submarine warfare or long-range strikes.

"Battleship strike groups will offer commanders more options than what exists in today's fleet," he said. The ships would be "built to fight and stay in the fight by sustaining fires,

maintaining pressure and outlasting any adversary … these are not capabilities you can fully distribute across smaller systems alone."

Phelan said he has heard the critiques of the proposed battleship, that it would be too vulnerable, too expensive, too big. "We've heard that before about carriers and about submarines and yet when it matters most, those are the platforms that combatant commanders call for."

However, he said the battleship would be just a "small part" of the Golden Fleet and would operate as part of a distributed network that would include smaller ships, crewed and uncrewed.

"This is not about replacing the fleet … the strategic reality is that manned platforms combined with unmanned systems, acting interchangeably, is the most powerful winning combination."

Reviews from Carriers to Barracks

In a roundtable interview with reporters after the keynote speech, Phelan said the Navy is studying all aspects of how it does business, from planning the battleship to building barracks for Sailors more efficiently.

Phelan said the Navy is reviewing CVN 82 and 83, the next Ford-class carriers "to review the costs, the designs, the systems, to make sure that they make sense and they have all the systems and requirements that we want going forward," a study he said should wrap up next month.

"I think one of the things we have to do a better job of in the Navy is kind of what I call total cost of ownership. So, what does it really cost to sustain and maintain these things? … To be honest, we're reviewing every program, so the carrier's just one of them.

"We're doing the same thing in maintenance. We're doing the

same thing on infrastructure. We're doing the same thing on milcon [military construction]. I'm still trying to understand why barracks cost, you know, on average more than $1,500 a foot, right? That's insane."

The budget proposal aims to improve the military industrial base to, among other things, improve submarine production rates. Phelan said that will be a challenge bigger than improving the production rate of surface ships.

"The submarines [are] a challenge because it's one of the most complicated things I have seen, having been in there and looking at it, and I've been to a lot of places, including SpaceX, etc. This thing's an underwater space station in effect, if you really look at it, particularly the Columbia."

Phelan said he has walked a lot of shipyards and "I see a lot of machinery from the 1960s and I see 1980s practices. For example, when a welder runs out of materials, they're not right next to 'em. They're sometimes in another building a mile away. Bathrooms are not in the same building. These are things that slow down time on the deck plate."

Phelan also said the Navy is looking at having some of its ships built by foreign partners, an idea President Trump has raised as a possibility.

"We are going to study that and take a hard look at it," he said. It might make sense for foreign shipyards to build support ships, or to build modules for combatant ships. The United States will be looking at ships that are rapidly producible and could "hit the fleet fast, so that would tend to lead you more to the Koreas, Japans of the world," he said. "I guess I would say everything's on the table. We just need to look at it, understand it, understand the implications be

OMB’s Vought: Industry Must Share Blame for Shipbuilding Woes

OMB Director Russell Vought discusses shipbuilding investment in the closing keynote of Sea-Air-Space. *Photo credit: Laura Hatcher*

The shipbuilding industry must share the blame for delays in shipbuilding and the Trump administration is willing to look beyond the traditional industry if it can’t produce products on time and within budget, OMB Director Russell Vought said at the closing keynote of Sea-Air-Space 2026.

Vought – who also served in his role in the first Trump administration – said, “during the first term, I came to

believe that we had a demand signal problem. My view was that we, the government, we the customer, had failed to deliver a consistent demand signal to industry over successive appropriation cycles, and it was because of this inconsistency that production rates could not be more ambitious. I no longer believe that, because if you look back over the last administration, Congress provided sustained resources for shipbuilding but productivity went down, not up."

Vought said the problem has been a long time coming and has two major sources.

"First was the now legendary 'last supper' meeting in which Bill Clinton's secretary and deputy secretary of defense convened the CEOs of America's largest defense companies and told them essentially to merge or die," Vought said. "This decision, based on an end-of-history mindset, represents a strategic mistake of staggering proportions that it resulted in 105 large defense firm being reduced down to essentially seven major primes, with a resultant loss in capacity and competition."

The second major influence that exerted what Vought called a major negative impact on the operations of large defense firms in the 1990s was the transition from "founder engineers" in the C suite, "men who understood the founding culture of their organizations," with executives who were "heavily influenced by the philosophies coming out of consulting firms that placed an absolute priority upon ownership, interest in stock prices and dividends to the detriment of both the customer, which is to say the government, and the workforce."

The latter reason is why President Trump signed an order prohibiting companies from paying dividends or conducting stock buybacks "until such time as they are able to provide a superior product on time and on budget."

The administration is also willing to look overseas and to

non-traditional shipbuilding yards for ships, Vought said, citing an agreement with Finland for 11 new icebreakers that would include four built in Finland and the rest built in U.S. shipyards after they modernize their facilities.

“This overall effort will not only produce ships for our Coast Guard but also result in American shipyards with more heavy industrial capacity into the future. These icebreakers will help to put the heavy back into America’s heavy industry, but they will also result in shipyards that can compete for other programs to include surface combatants into the future,” Vought said.

The new defense budget includes sizable investments for buying new ships – 18 battle force ships and 16 support ships for the Navy, more for the Coast Guard and Army and other agencies – but Vought warned traditional shipbuilders to step up or they may be procured elsewhere.

“Most of these ships can be built to commercial standards in a number of our nation’s shipyards that are not already tasked and behind schedule with Navy contracts,” Vought said. “Some of these ships need to be bought in large numbers and could attract direct foreign investment that will meet the president’s goal of both adding capacity and competition to the U.S. shipbuilding sector.

“To be clear, we need more ships and we need them right now. We hope this year’s budget on top of the 82 ships we already received in [fiscal] ‘26 in the one Big Beautiful Bill convey that sense of urgency on the part of President Trump and his administration. If we cannot get the ships we need from traditional sources at cost and on time, we will get them from other shipyards.”

Coast Guard Poised to Meet Great Expectations


COAST

U.S. Coast Guard Commandant Admiral Kevin E. Lunday addresses the service's successes and challenges at Sea-Air-Space. *Photo credit: Laura Hatcher*

The U.S. Coast Guard is quickly allocating an unprecedented $24.6 billion funding infusion provided to the Department of Homeland Security agency in last year's budget reconciliation bill. At the same time, the armed services branch is shuttered, caught in the political crossfire over the actions of another DHS entity, Immigration and Customs Enforcement.

In describing this bizarre situation to a Sea-Air-Space 2026 audience on April 22, the 28th Coast Guard Commandant, Admiral Kevin E. Lunday, looked to Charles Dickens, who opens "A Tale of Two Cities" with the famous lines, "it was the best of times, it was the worst of times. …"

"We want to get those worst of times out of here," he said in a conversation with ABC News correspondent Kyra Phillips on the closing day of the conference. Lunday urged Congress to fund the Coast Guard to "ensure our readiness but pay our people."

Citing an emergency authority, the White House directed DHS to cut checks to personnel across the agency, including affected members of the Coast Guard, a temporary solution that most agree is not a substitute for annual appropriations.

Promise Amid the Peril

Despite the funding stoppage, Lunday said it's still an "amazing time for our service."

That's in part thanks to the nearly $25 billion from the reconciliation bill, which is funding long-deferred shipbuilding and modernization efforts at the agency, which Lunday has led since Jan. 15, 2026.

Lunday said the Coast Guard relies on an aging fleet – including 50-year-old cutters – to conduct much of its work.

For instance, this year these stalwart vessels freed frozen shipping lanes in the New England, New York and Great Lakes regions so ships could deliver essential cargo like home heating oil and other goods.

“Keeping commerce moving is a constant, constant effort,” he said. “In fact, it’s one of the most important, but maybe one of the things that is not aways seen.”

These operations have continued amid a decades-long downward spiral in readiness, Lunday said. He said the Coast Guard requires about $20 billion in annual funding but has in recent years received just under $13 billion per year.

To reverse that trajectory, Lunday’s team knew they needed to get the new cash out the door quickly. To do this, the service created an acquisition “super highway” to accelerate the shipbuilding acquisitions process.

The Coast Guard has already obligated $9 billion of the new money, with three new heavy icebreakers and 11 new Arctic security cutters set to roll off the U.S. shipyards starting in 2028.

“No one is moving that fast,” Lunday said.

Topline Annual Appropriations

However, it’s critical that Congress also support the president’s fiscal 2027 budget request of $15.6 billion to build on the one-time cash injection from the reconciliation bill, he said. The plus-up in yearly funding is necessary for homeports, hangars, facilities and other infrastructure to support the roughly 100 new assets funded through the bill, he said.

That includes funding to train, hire and support the families of roughly 1,300 additional personnel needed to crew the new vessels.

“And the ’27 budget request goes a long way to do that,” he said. “But we’re going to need to continue to see that topline growth, not only in the operating funds but continued investments in capital assets to be able to meet the demands of the American people.”

The Coast Guard is currently comprised of about 41,000 active-duty military and 8,700 civilian employees, 6,200 reservists and 26,000 auxiliary volunteers.

Compared to its size, Lunday said the Coast Guard delivers “unprecedented value” to the nation, saving lives, protecting the maritime borders, keeping trade routes safe and free, and providing disaster assistance worldwide. Some of these operations in 2025 involved:

- Saving 5,220 people and assisting more than 19,000 through search-and-rescue missions.
- Diverting a four-person crew far inland to help respond to the July 4 Central Texas floods, which ultimately killed 135 people.
- Deploying USCG cutters Storis, Healy and Waesche to protect U.S. sovereignty in the Arctic by chasing off five Chinese research vessels that traversed U.S. waters.
- Ensuring the safe maritime passage of $1.8 billion tons of cargo, a 13% annual increase.
- Seizing a record-breaking 511,000 pounds of cocaine trafficked to the United States by cartels.

As the 236-year-old service begins its promising next chapter, Lunday said he hopes the funding lapse can end so he can refer to a different Dickens’ tome: “Great Expectations.”

Defense Industry Needs Steady Budgets, Congressional Speakers Say

Speakers at the congressional breakfast on the last day of Sea-Air-Space. *Photo credit: Laura Hatcher*

Speaking at the annual congressional breakfast at Sea-Air-Space, members of Congress with defense oversight agreed that sustained funding to meet increased demand signal is the best way forward.

In recent years, Congress has resorted to continuing resolutions for government-wide funding instead of passing separate funding bills, which freezes spending at current levels and amounts to a cut in real dollars.

This occasionally results in supplemental spending bills, such as the “Big Beautiful Bill” that passed last year and added

money for shipbuilding and other defense needs.

However, “reconciliation is not the way to do it,” said Rep. Donald Norcross (D-New Jersey). Defense spending is currently “going the right way,” he said, but “top line yes, reconciliation no.”

Rep. Ronny Jackson (R-Texas), agreed that reconciliation funding leads to difficult math, as subsequent budgets are based on previous spending, so a budget cut often follows a reconciliation boom.

“We have to take reconciliation numbers and budget numbers and add them together, or we will be going in the wrong direction,” Jackson said.

And while government speakers have Sea-Air-Space have made some requests of industry to build systems they need and have plans to maintain them, Rep. Joe Courtney (D-Connecticut) said government owes industry something as well: contracts to indicate demand signal.

“Four years ago we authorized the block VI contract for Virginia [the Virginia-class submarine],” he said. “We still do not have a contract as we’re sitting here this morning.”

Nothing sends a more powerful signal to the shipyards and the supply chain than a contract, he said. “I know it’s being worked on right now, but I can’t say it enough, we’ve got to get this thing wrapped up … if we’re serious about doing this, let’s get it signed, and for Columbia [class subs] too.”

Caudle: ‘Era of Platform-Centric Thinking is Over’

CNO Caudle met with reporters the morning of his luncheon keynote address.

By Brett Davis, Editor-in-Chief

Ongoing operations against Iran are the “early expression of the Golden Fleet design” the Navy is pursuing, which will require a new way of doing business with the defense industry, Chief of Naval Operations Admiral Daryl Caudle said at the opening luncheon at Sea-Air-Space 2026 on Monday, April 20.

The Golden Fleet Initiative “integrates a high-low mix of crewed and uncrewed platforms,” including uncrewed surface and underwater vehicles, into “tailored force packages” for combatant commanders, he said.

All of these will be “enabled by advanced manufacturing, artificial intelligence, directed energy and containerized capabilities,” he said, “because the era of platform-centric thinking is over.”

The low side would be attritable uncrewed systems that could be built and deployed rapidly, and the high side would be the main battle force, including submarines, destroyers and the new battleship, which would begin design work under the new Pentagon budget.

“It creates a continuous engine that can produce, adapt and employ combat power faster than any adversary, levering the hedge strategy in order to optimize our Navy,” Caudle said.

His message to the industry officials in the room was simple: “Build systems that integrate. Build systems that scale. Build systems that sustain in contact. And build them fast.”

To that end, Caudle said he has introduced the Fleet Introduction Operating System, or FIOS.

“Under FIOS, when the Navy receives a new capability, subsequent updates and upgrades should be as seamless as updating an app on your phone,” he said. “That means common interface standards. It means modularity. Open architecture. Virtualization with digital twins. Familiar look and feel. Modern training content that matches the style of what we are doing … FIOS is how we end the era where the fleet is the integration lab. If a capability shows up, it’s ready to fight, day one.”

Sailor Concerns

Earlier in the day, Caudle met with reporters to discuss his priorities and to push back on recent news reports about poor Sailor food during Operation Epic Fury.

“Nutrition for Sailors has been one of my top priorities,” he

said, as he wants to treat Sailors “like world-class athletes.”

He said at least some of the photos sent to media reports appear to have been taken on shore facilities, not at sea, and all ships in the operation had at least 10 days’ worth of food, and most had more than 30.

“But in no way, shape or form has there been a time, at least in this deployment, where they’ve not meant the nutritional requirements” of Sailors, Caudle said.

Sailors occasionally might grumble about individual meals but otherwise he had heard no food complaints until the story broke.

The food is just part of the Navy’s push to better the lives of its service members, which Caudle said will be reflected in the pending defense budget request.

The Navy tries to get a quick jump on unsafe living conditions if there is a “tactical” issue, he said, but a recent unhealthy leak situation at the Red Hill facility in Hawaii led to a pilot program where responses to public works issues have been moved from Naval Facilities Command, a systems command, to a local captain and region commander to align solving those issues with the base command.

“public work divisions is not only base operations stuff … but it’s also tied into NAVFAC, so it’s not that easy just to split that out, so we had to figure out how to do that, so we’re working that with the mid-South region now down in Norfolk and Hampton Roads.”

The Navy has been pushing to improve unaccompanied housing for Sailors. “When the budget rolls out, that the administration and secretary of the Navy are certainly behind funding barracks and getting more and better quality situations there … you’re going to see that in the budget and you’re going to

see that as a high priority for us," he said.

Lockheed Martin to Integrate PAC-3 MSE Into Aegis Combat System

An artist's rendering of a PAC-3 MSE in flight. Credit: Lockheed Martin

The U.S. government announced a contract with Lockheed Martin (Booth 901) for the development, integration and testing of PAC-3 Missile Segment Enhancement (MSE) into the Aegis Combat System for the first time.

This move places the U.S. Navy among the ranks of PAC-3 MSE users around the world, including the U.S. Army and 16 partner nations, giving Navy warships "a razor-sharp defense

that helps keep America's freedom of the seas unchallenged," the company announced Tuesday.

PAC-3 MSE is a key integrated air and missile defense capability for the U.S. and its allies. The U.S. government awarded Lockheed Martin a multi-million contract to continue munitions acceleration efforts and deliver a record number of PAC-3 MSE interceptors in 2026. This new contract builds on the framework agreement Lockheed Martin signed with the U.S. Department of Defense to rapidly accelerate the production and delivery of PAC-3 MSE.

"By integrating PAC-3 MSE's capabilities into Aegis, the Navy is taking a decisive step forward in defending America's fleet and our global interests against the most advanced threats," Jason Reynolds, vice president and general manager of Lockheed Martin IAMD, said in a press release. "Lockheed Martin is driving the innovation behind this effort – bringing together advanced, combat-proven systems in new ways to accelerate capability and deliver a decisive advantage in maritime defense."

Before receiving government funding, Lockheed Martin said it made internal investments to integrate the system with Aegis and the MK41 Vertical Launching System.

"This integration further expands the capability of Aegis to engage missile threats at multiple layers, enabling a more comprehensive and effective defense against evolving threats, ensuring the warfighter has the strategic advantage," Chandra Marshall, vice president of Lockheed Martin Multi-Domain Combat Solutions, said in the release.

PAC-3 MSE hit-to-kill technology that delivers exponentially more kinetic energy on the target than can be achieved with blast fragmentation mechanisms, the company said. PAC-3 MSE is combat proven against ballistic and cruise missiles as well as

hypersonic and airborne threats.

Greenroom Robotics Wants to Put its Brains on Your Boat

Harry Hubbert, COO for the relatively new Australian company Greenroom Robotics. Credit: Brett Davis

By Brett Davis, Editior-in-Chief

New small- and medium-sized uncrewed surface vessels are emerging from the waves everywhere at Sea-Air-Space, and one small Australian company is marketing its software to operate them.

“We are a pure software company,” said Harry Hubbert, chief operating officer for Greenroom Robotics (Booth 1537 in the

Australian pavilion), formed in 2017 when its founders met at the Australian Maritime College in Launceston, Tasmania, and bonded over a passion for ocean adventures and maritime robotics (the company's name is a surfing term referring to the inside of a barrel produced by a wave).

The company has four products: GAMA, a navigation and control system; Lookout +, an AI-powered optical radar that's fully passive and can be used in contested environments, according to James Griffin, sales engineer at Greenroom; MIS-SIM, a mission simulator for training and planning; and MAROPS, a digitized mission management system. The products can work alone or together.

The company's software has been used on a retrofitted Aermidale-class patrol boat with Austal in Australia; a high-speed, agile uncrewed surface vessel from Subsea Craft in Australia, the United States and the United Kingdom; a EGS Survey USV in Australia and about 30 other vessels around the world, Hubbert said.

"You can come to us with a boat that's 25 or 30 years old, and we can make it into a fully autonomous boat," Griffin said, or companies can bake the software into new USVs being developed.

There are many USVs on display at the show this year and Greenroom Robotics has been talking to them, and the Navy push with the new Medium USV program and others is helping, Hubbert said.

"The United States is a really big focus for us, given the scale of the operation over here but also the clear need," Hubbert said. "The U.S. government's been great at actually defining that they want this and this is what they want to do, and we happen to meet a lot of their requirements, so it's been a good opportunity for us here."

The AUKUS agreement between the U.S., U.K. and Australia has

eased the regulatory burden, “cracked the door open and allowed us to get moving a little bit faster,” Hubbert said, but the self-funded company is also setting up a shop in the U.S. and hiring Americans to help navigate the defense market.