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.

Commandant Gives an Update on Marines Future

Marine Corps Commandant Gen. Eric Smith discusses the 250th anniversary of the U.S. Marine Corps. (Credit: Laura Hatcher)

By Vicky Uhland, *Seapower* Correspondent

Marines don't win wars; they win battles, said General Eric Smith, commandant of the U.S. Marine Corps, during the Tuesday afternoon session "250 Years Strong – Building the Marine Corps of Tomorrow."

"If you're looking for a chain-mail fist, you're looking at the U.S. Army," he said. "If you're looking to get popped in the nose, you're looking at the Marine Corps."

Smith outlined how the Marines are evolving with the changing character of war. The amphibious ready group remains the crown jewel of the expeditionary force, he said, and is currently deploying a three-ship Marine expeditionary unit – one from the East Coast, one from the West Coast and one from Japan. "We could use 5.5 MEUs, but we are committed to an unwavering goal of a 3.0 MEU presence," he said.

Smith said the Marines are also optimizing maintenance schedules to get more out of ships, are targeting investments in service-life extensions and are moving forward with procurement of new, more capable ships.

“Our current investment of 31 amphibious ships is not adequate,” he said, noting that the 2027 defense budget is a significant down payment on a generational investment in ships, but more money is needed.

Another area of emphasis is littoral mobility, mainly in the Indo-Pacific, which Smith called the world’s most challenging environment due to scale and size.

Smith said the Marines are also bolstering their logistics network.

“For decades, we operated with uncontested logistics, but the days of being three steps away from an MRE” or other supplies are over, he said. “As the maritime environment becomes less permissive, the global positioning network comes in.”

Smith said another challenge that “worries me greatly right now” is sufficient magazine depth, which can give commanders freedom of action and reduce operational risk.

Smith also highlighted current areas of achievement, including a clean financial audit for the third year in a row, the only service agency to do so. Barracks 2030 is delivering modern, safe and comfortable living conditions for Marines, and the Marine Corps Total Fitness program is helping make warriors physically, mentally, spiritually and socially resilient, he said.

Smith also answered some audience questions, including:

What can industry do to improve Marine resilience?

“Keep on budget. Don’t sell me what I don’t need. Give me what I’m asking for at a price I can afford,” Smith said.

What in-house innovations are impressing you?

The Drone Dominance task force in Quantico is doing an amazing job with drone technology, Smith said. “We’re still too expensive and haven’t learned all the lessons of Ukraine, but we’re getting faster and faster.”

Senior Leaders Forecast the Future of Maritime Dominance

From left to right: Retired Admiral James Foggo, Vice Admiral Rob Gaucher, retired Captain William Toti and Admiral Karl Thomas discussed their visions of the future of U.S. maritime dominance during the fifth annual CMS breakfast on Tuesday. (Credit: Laura Hatcher)

By Vicky Uhland, *Seapower* Correspondent

The U.S. Department of Defense is at an inflection point in maritime dominance through acquisition reform, said panelists at Tuesday morning's fifth annual breakfast hosted by the Navy League's Center for Maritime Strategy.

The Department of War is not just a moniker, "it represents a sea change in the way we go about business," said U.S. Navy retired Captain William Toti, senior advisor to the deputy secretary of war. "We are mobilizing our industrial base in a way that's never been done probably since World War II. We need everybody in industry to pull along as we go down this lane."

Toti said when he joined the Department of Defense a year ago, he conducted a review and found war preparation was not taken seriously, critical munitions programs had been terminated and 100% of other critical programs were late and over budget.

"There was complacency all over the department and a loss of military dominance," he said. "It was a department that lost its way; it was focused on the wrong things" and a reboot was necessary.

Vice Admiral Rob Gaucher, direct reporting portfolio manager (DPRM) submarines and program acquisition executive (PAE) undersea, said DRPM handles submarine building and the PAE structure maintains existing submarines.

For submarine building, the first priority is a "forward-looking supply-chain view to find bottlenecks," he said. On the PAE side, he's building out scorecards to measure five specific types of maintenance.

Panelists answered a series of questions about the future of maritime dominance from audience members and the session moderator, retired Navy Admiral James Foggo, dean of the Center for Maritime Strategy. Questions included:

There are going to be three carrier strike groups coming home from the Gulf; how do you get them repaired?

Admiral Karl Thomas, commander of U.S. Fleet Forces Command, said the biggest problem is capacity issues in the shipyard. The main levers include prioritizing maintenance continuum and "ensuring that shipyard workers are turning wrenches," he said.

"Longer deployments mean more maintenance," Thomas said. Maintenance of the USS Gerald R. Ford (CVN 78), which had a major fire on board in March, will exceed 10 months, he said, noting the Navy plans to hire 3,000 more shipyard workers a year to deal with those chores.

What challenges have you learned from Virginia-class submarine procurement maintenance, and how are we postured to overcome those challenges for Columbia and SSN(X)?

Thomas said the gap from "the kill chain from thinking I can manufacture something to when I actually get the ability to get the part" takes more than a year. "We as the Navy have not made it clear to industry" about the manufacturing requirements. This was a huge problem for the Virginia class, he said, and the Navy is leaning into advanced technology to do things quicker.

What is your metric for deciding if industry is supporting the Navy, and what does industry support look like to you?

"Accept the new paradigm [Deputy] Secretary [Steve] Feinberg has put in place. Don't push back. This is how it's going to be," Toti said. "It's OK to think outside the box but not OK to go to Congress. Congress is fully on board; nobody is pushing back on this."

What advice would you give at this point in your careers that would make a difference to a junior Sailor or junior officer?

“The thing that kept me in the Navy to this point is the camaraderie,” Thomas said.

Toti said he’s been “so blessed to have three lucrative careers, and none of them was planned. Enjoy what you’re doing now and don’t worry about the future.”

“There are going to be plenty of bad deals out there, but there are incredibly good deals and things you get to do,” Gaucher said, recommending that young Sailors and officers “take a minute to remember the importance of what you do and what the Navy offers as a career.”

New Microwave Technology Can Disable Drone Swarms, Other Electronic Threats

Epirus’ Leonidas counter-unmanned aircraft system. (CREDIT: Epirus)

By Vicky Uhland, Seapower Correspondent

In a warfighting world increasingly focused on swarming, uncoordinated unmanned systems across both air and sea, there’s a need for defense approaches that are effective against all types of electronic threats.

Epirus (Booth 346) is demonstrating its Leonidas Electronic Protection counter-UAS systems, which use a high-power microwave platform that’s built for the Sixth Domain – a battlespace that relies on robotic and autonomous electronic threats that can overwhelm legacy warfighting defenses.

“Leonidas goes beyond drone threats and targets anything with electronics that’s vulnerable to a microwave pulse,” said Andrew Wargofchik, Epirus’ director of marketing and communications.

Leonidas’s scalable systems range in size from inches to feet

and can defend borders, fixed installations and critical infrastructure. They offer mobile coverage for convoys and expeditionary forces, and integrate directly into vehicles and aerial systems and across ship classes.

Leonidas' microwave technology uses line-replicable amplifier modules (LRAM), tailored to fit different mission profiles and range requirements. They operate off a small generator or internal batteries and never need a recharge, and have unlimited magazine depth. In addition, Wargofchik said Leonidas systems need only one or two operators and because innovations can be made through software updates, the hardware doesn't have to leave the battlefield.

Ship Welding Goes to the Dogs

Path Robotics' Rove robotic welding system, seen here visiting the booth of partner company HII. Credit: Brett Davis

By Vicky Uhland, *Seapower* Correspondent

Welding is a challenge in shipbuilding. There's a critical shortage of skilled welders, and massive ship assemblies, inconsistent fit-up stages and large metal pieces that can't be moved make it difficult to automate welding processes.

Enter Rove, a quadruped robotic welding system the size of a standard poodle.

Rove is produced by Path Robotics, which specializes in artificial intelligence for manufacturing. Path Robotics' AI program Obsidian delivers autonomous welding inside cells, and Rove takes that one step further, bringing Obsidian into the field. In essence, Rove comes to the ship rather than the ship coming to Rove.

Legged robots aren't a new concept in welding, but they've traditionally been considered too unstable for precision welding. Obsidian gives Rove the ability to maneuver successfully in high-variability environments like shipbuilding.

Rove, which has a welding torch attached to its head, uses cameras and AI to scan a ship and identify where welds are needed. It can evaluate uneven terrain, climb around large ships and reach remote weld points that humans may have difficulty accessing. Path Robotics says Rove can weld with consistent quality, even when metal parts aren't perfectly aligned.

Saronic Technologies, which manufactures autonomous maritime vessels, is one of the first companies to use Rove.

"Building the next generation of autonomous vessels means

rethinking not just how ships operate, but also how they're made," John Morgan, Saronic's head of manufacturing, said in a press release from Path Robotics.

To see a demonstration of Rove, visit the Path Robotics booth, T76 in the Terrace Exhibits area.

As Funding Increases, How Can the Navy and Its Partners Work Together?

A Marine loads an AMRAAM onto an AV-8B Harrier aboard the amphibious assault ship USS Essex (LHD 2). A Department of Defense initiative to expand AMRAAM and other weapons buys helped stabilize the defense

industry. Credit: U.S. Navy | Mass Communication Specialist 3rd Class Isaak Martinez
By Vicky Uhland, *Seapower* Correspondent

In a new era of acquisition, it's important to remember the most pressing operational need for the U.S. Navy is readiness. And the good news is that "today's fleet is more forward than it's ever been in my career. We are absolutely ready," said Rear Admiral Thomas Dickinson during the Monday afternoon panel discussion "Speed to the Fleet."

"Readiness in nonnegotiable. Without it you don't have capability or capacity," said Dickinson, USN program executive officer for integrated warfare systems. "It might not be as sexy as new capability, but readiness is the king."

In a standing-room-only session, Dickinson and panelists from industry and the research community discussed how they can best work together to deliver readiness faster to the fleet, both now and in the future.

"We're moving from a just-in-time to a just-in-case mentality," Dickinson said. "That's the mentality we need. We cannot be ready enough. Urgency and resilience is really the call."

Dickinson said industry partners can help the Navy achieve readiness through detailed, real-time insights and data. In the current warfare environment, "it's a gift to be able to see how we're performing and make improvements. Innovation and learning go hand-in-hand."

But as the Navy ramps up its readiness, it's logical there will be more risk, Dickinson said. That's where data from both the Navy and its partners comes in. "We have to be able to quantify risk, and it has to be based on data," he said. "We're getting better at collecting data quickly."

Industry Viewpoints

Panelist Barbara Borgonovi, president of naval power for Raytheon, said one of the main things helping her company aid the Navy in its readiness initiatives is the landmark agreement with the Department of Defense to expand five critical munitions: The AMRAAM missile; the block IB and block IIA variants of the SM-3 interceptor; the SM-6 missile; and the land attack and maritime strike variants of the Tomahawk cruise missile.

Borgonovi said this multiyear commitment ensures that Raytheon will have consistent demand, which will help the company make investments in suppliers, employees and other sources.

“We’re going to make billions of dollars in investments” in the five critical munitions, she said, noting that some Raytheon programs are increasing capacity by five to 10 times.

From the data standpoint, the Navy’s change in focus from activities to outcomes is altering how it interacts with industry, said Vincent Bauer, research program director, data science integration, CNA.

“The Navy is extremely complex” and its processes can be its biggest bottleneck in working with industry. “Data cuts through that complexity” and helps the Navy become a better customer for industry, he said.

Panelists also answered questions from audience members and session moderator Megan Eckstein, founder of Maeday Communications, including:

What challenges does money solve, and what will it not fix?

The Navy is making generational investments for critical munitions and new entrants, Dickinson said. But “money is unfeeling and unthinking. It doesn’t hire talent; it doesn’t drive outcomes over process. We are on the hook to maximize the use of those taxpayer dollars.”

The key, he said, is to create a culture and conditions to best spend new acquisitions money. “It comes down to leadership at the end of the day.”

Borgonovi said threats are going to continue to evolve for weapons systems, so industry needs to stay flexible, including learning from operational use and making investments in data sets.

“We’ve been given an opportunity that allows us to fill in the lines,” she said “We have a lot of flexibility to get to the outcome we want.”

What’s good for a production line is stability; what’s good for the fleet is innovation. How do you balance this?

Borgonovi said Raytheon has seen “incredible engagement” with the Navy on sharing data from Operation Epic Fury. She said her company’s focus is on having the ability and capacity to meet multiple needs for customers, including design scalability and composable designs.

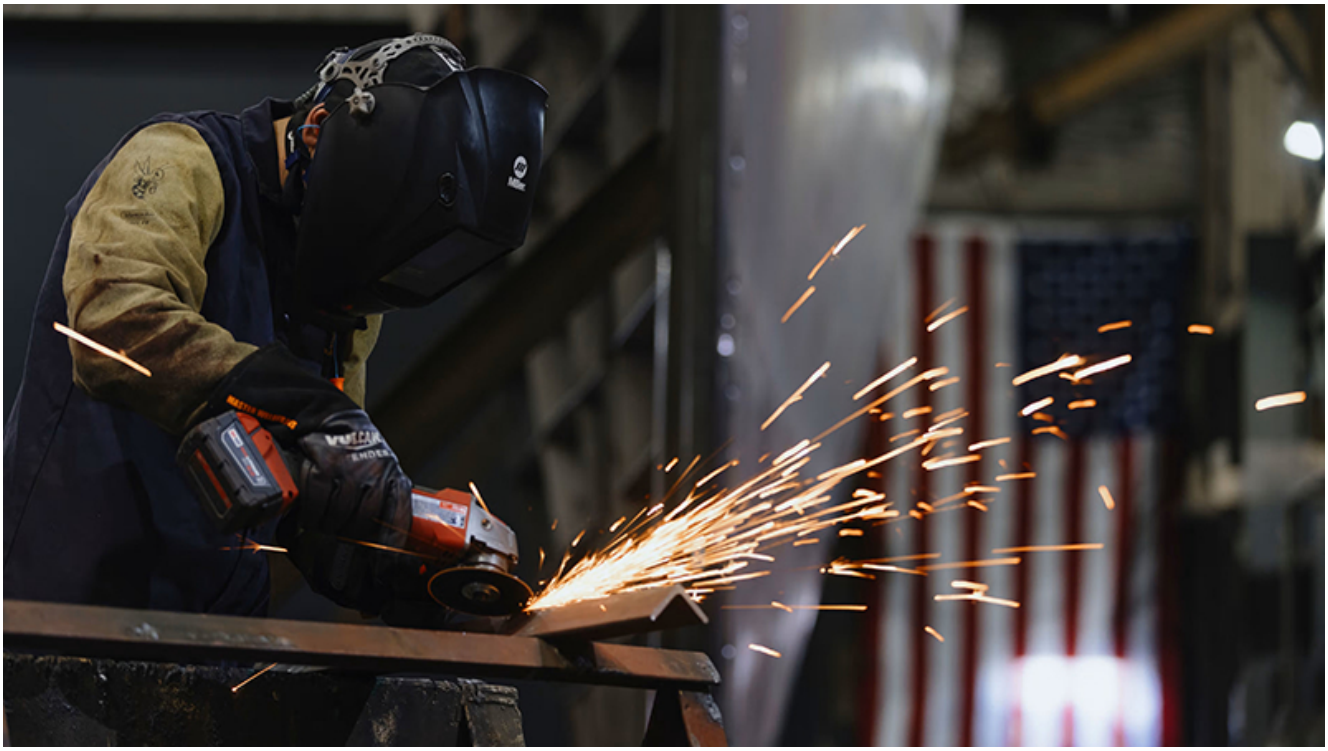
Dickinson said the Navy wants to be in an environment where software rather than hardware is driving capability. “It puts us in a much better place to be agile and address threats,” he said.

What does the industrial base need to look like to support the modern wartime environment?

Borgonovi believes suppliers and the military need to share data across all companies involved, not just a single contractor.

Bauer noted the defense industry works differently than the consumer industry. “Just-in-time isn’t the kind of production system we need in missions,” he said, as a wartime environment creates the ability for production surges and opens new pathways to invest in the future.

New U.S.-Korean ASV on Track to Be On Water This Fall



An image of a Korean shipbuilder Anduril released upon announcing its teaming with HD Hyundai. Credit: Anduril Industries.

By Vicky Uhland, *Seapower* Correspondent

In October, Anduril Industries (Booth 130) is set to debut its first ship in a new class of autonomous surface vessels in collaboration with HD Hyundai and Edison Chouest Offshore.

Anduril's 60-meter, 500-plus-ton ASV is aimed the U.S. Navy's medium unmanned surface vessel (MUSV) program, which focuses on building a distributed, autonomous surface fleet that can nimbly coordinate operations in order to deter threats.

MUSV is in response to the growing expense of using manned platforms to defend commercial shipping and maintain sea control, said Cory Emmons, Anduril's general

manager of surface dominance.

Emmons said because of lead-ship building difficulties from legacy production models in the U.S., Anduril chose to partner with Hyundai to cut production time. Anduril is also partnering with Edison Chouest Offshore for U.S. ship production, while Hyundai will mostly build ships for Anduril's global clients.

"The U.S. Navy has been clear: Scale is what matters. A single autonomous ship doesn't move the needle," according to an Anduril blog. "Commercial shipbuilders are essential to this effort because they already operate at scale, producing large numbers of reliable vessels efficiently, on time and on a disciplined budget."

Production on Anduril's first ASV began in November, and Anduril has been conducting daily at-sea testing of vehicle autonomy, mission autonomy and container payloads on a surrogate vessel using the company's high-assurance software. "We're analyzing all potential hazards on the [sea] surface," Emmons said.

Along with potential naval applications, Emmons said Anduril's ASV fleet could be used commercially for sea bed and continental shelf exploration for oil and gas companies. "It's an emerging market," he said.

Sea-Air-Space: CMS Breakfast Panel Discusses How to Make

Future Shipbuilding Shipshape

Navy, Coast Guard and industry officials discuss the rebuilding of the United States' shipbuilding industry.
Photo Credit: Dan Goodrich

During his March 4 joint address to Congress, President Donald Trump vowed to establish a new office of shipbuilding within the White House and "resurrect" America's shipbuilding industry.

Implementing that vision poses both opportunities and challenges, said military and shipbuilding leaders during the April 8 Sea-Air-Space Center for Maritime Strategy Breakfast session, "Navigating Tomorrow: Forging a New Era in Innovation and Shipbuilding."

U.S. Navy Admiral Daryl Caudle, commander of U.S. Fleet Forces Command, said one issue is there is a set of strategic assumptions regarding shipbuilding that most people take for granted, and those assumptions "limit intellectual honesty and our perspective about the size, scale and scope of our challenges."

Caudle said the largest assumption has to do with combat

shipbuilding capacity. He said it’s commonly thought the attack on Pearl Harbor awoke a sleeping shipbuilding giant, but “the only reason we were able to achieve that level of production was because of the groundwork of two years earlier.”

Caudle said there’s a tendency to focus on the decay of U.S. shipbuilding capacity since World War II, but before the war, the U.S. contributed a relatively small amount of global shipbuilding.

“I bring these up to show we have faced the odds before,” he said, adding he’s quite confident solutions are available as long as people are open and honest about the problems, the scale of those problems, and are proactive in solving them without having to undergo a crisis like Pearl Harbor and 9/11.

“Shipbuilding has taken on a prominence and importance we haven’t seen in a century. Coast Guard shipbuilding continues to move, but not move fast enough,” said U.S. Coast Guard Acting Commandant Admiral Kevin Lunday.

He said America is demanding more of its Coast Guard, “but we are less ready than in any time in our history since World War II.”

Admiral Daryl Caudle, left, Admiral Kevin Lunday and Rick Hunt share thoughts during the panel.
Photo credit: Dan Goodrich

Lunday said Coast Guard fleet cutters and boats are at "significant decline," and there's a shift to almost complete corrective maintenance of the fleet. "No ship gets underway today without stripping another for parts," he said. "The pace of modernization has not kept pace with the rate of change."

However, there are positives on the horizon, Lunday said, citing the U.S. Coast Guard Force Design 2028's transformative capabilities, along with significant government support. "I've not seen this level of support from [the Navy] secretary and the Office of Budget and Management certainly in my career, and maybe in our history," he said.

Shipbuilding Perspective

A trio of shipbuilders closed out the panel presentations. Retired U.S. Navy Vice Admiral Rick Hunt, president of Fincantieri Marinette Marine, addressed shipbuilding from the

perspective of the end user, including Sailors on a ship and operational commanders.

“I think the focus has to be on platforms that deliver top-level requirements, like combat systems, range, speed, durability and endurance,” he said. But there are challenges to achieving that. “Top of my list is readiness,” he said.

For instance, Hunt said maintenance is a key issue for surface warfare, and condition-based maintenance can be revolutionary. Cyber resilience is also important. “I think that’s where the next war starts and maybe the next war ends,” he said.

Hunt said he believes there needs to be continual engagement between the military and industry when it comes to shipbuilding.

“The primes, the subs and the suppliers – we need to bring all those guys in,” he said. “We can’t have a serial, time-consuming, somewhat bureaucratic process to identify things we need to change and understand the impacts of change. Remember, Sailors are the ultimate customers.”

Kari Wilkinson, executive vice president of HII and president of Newport News Shipbuilding, said she believes “now is the time to challenge what we think about the business. We do things in shipbuilding as we have since the beginning of time.”

But there is now the opportunity to use tools like algorithms and AI and integrate across portfolios, she said.

Mark Rayha, president of General Dynamics Electric Boat, said he’s heartened by the different attitude toward shipbuilding espoused by the current administration. “We talk a lot about the time we’re in – we need to do more; we need to deliver more,” he said.

Sea-Air-Space: DoD Yearns to Embrace AI, But How?

Shield AI co-founder Brandon Tseng, right, discusses AI with DoD officials including Marine Corps Major General Farrell Sullivan, left, and Brian Campo, U.S. Coast Guard. *Photo credit: Dan Goodrich*

Imagine if in 10 years the U.S. Department of Defense had one million aircraft, drones and other platforms powered by artificial intelligence. And, what if by 2045 that number had increased to 100 million?

That’s the vision of former Navy Seal Brandon Tseng, who co-

founded the AI technology company ShieldAI in 2015. Tseng, along with representatives from the Navy, Marines and Coast Guard, discussed how best to incorporate AI into the DoD during the Monday afternoon session “Transforming Defense: The Power of AI and Robotic Autonomous Systems.”

Tseng believes for the armed forces, AI is as game-changing as nuclear and stealth capabilities. He said AI can currently accomplish about 98% of DoD missions and urged the audience to envision a DoD that’s no longer limited by the number of human personnel.

Of course, that can be easier said than done.

Rear Admiral Kurt Rothenhaus, chief of naval research, said the Navy and its fleet commanders are “hungry” to leverage industry AI capability for war fighting, readiness and operations, but there’s “a lot of learning and discovery that still needs to be done. We want to learn not just the kit, but also how you approach problem-solving.”

Rothenhaus said the Navy recognizes AI is like electricity – ubiquitous. But a key issue regarding naval AI operations is that “we operate in one of the harshest environments in the world, in the ultimate no-fail world of war at sea. It’s a different frame of reference than the commercial sector.”

Major General Farrell Sullivan, director of the USMC’s Capabilities Development Directorate and Department of Combat Development and Integration, said AI could help with two key USMC operational problems: supporting the closing of kill webs and making unmanned systems more survivable in a contested environment.

In the Coast Guard, Brian Campo, USCG chief data and artificial intelligence officer, said AI can be integrated into many missions that rely on massive amounts of data, including search and rescue and managing ports.

“We don’t have a lot of autonomous capabilities, but we are expanding,” he said. “We have a need and thirst for data.”

Campo said the breadth of the Coast Guard’s missions is growing rapidly, beyond what even an expanded workforce can handle. He noted autonomous systems could operate in places where massive Coast Guard cutters can’t, and AI data collection could help commanders better decide how to engage a ship in port and conduct law-enforcement activities.

Shelf Life

But there are also concerns about incorporating more AI into DoD operations. Tseng addressed one of them, noting that costs will “come massively down” as AI becomes more widespread. He said in order for the DoD to become a “good buyer” of AI technology, it has to rethink purchasing a 20-year capability.

For instance, he said, the Air Force uses smaller time frames for AI purchases compared to fighter jet purchases. And the Army is trying to buy AI platforms every two years, because that’s the average shelf life of an AI system.

Campo said training personnel to use AI is another challenge.

“We can’t make an AI officer at the O5, O6 level in two to five years. How do we bring in and train talent?” he asked.

At the USCG Academy, Campo said the goal is to offer trainees the opportunity to automate the tasks they do every day, and build a governance framework that helps them embrace AI in their jobs.

He also urged AI vendors to think about how to deliver their products as services.

“I want to buy a capability; I don’t necessarily want to buy a product,” he said, noting the Coast Guard may prefer to buy data rather than the platform used to deliver it. “What I really would love to understand is how can industry deliver

the service I actually care about without the services I don’t specifically have a need for?”

To better implement AI in the short term, Sullivan said he’s considering two main levers: making existing platform more lethal, survivable, integrated and affordable; and creating more disruptive capabilities.

“We need better software pipelines, training mechanisms and algorithms,” he said. “We have a sense of urgency to get after it. At the end of the day, AI is going to give a fire-team element the combat power of a battalion-sized element. Human-led operations and maneuvers are going to be massively augmented by AI.”

Sea-Air-Space: HII, HHI Forge New International Collaboration

HII Executive Vice President and President of Ingalls Shipbuilding Brian Blanchette, left, and Won-ho Joo, chief executive of the naval and special ship business unit at HHI, sign the MOU. *Photo credit: HII*

In an April 7 morning ceremony, executives from leading shipyards in the United States and South Korea signed a memorandum of understanding designed to strengthen both companies' technology exchange and productivity.

Details are limited on the MOU between U.S.-based HII (Booth 923) and Korea-based HD Hyundai Heavy Industries (HHI), but "we're open to wherever this relationship can take us," Brian Blanchette, HII's executive vice president and president of Ingalls Shipbuilding, said during the signing ceremony. "By working with shipbuilding allies and sharing best practices, we believe this MOU offers real potential to help accelerate delivery of quality ships."

Blanchette said the MOU will initially focus on technology exchange and component outsourcing for destroyers. "HD has an excellent supply exchange for destroyer programs, and we're

looking to leverage lessons learned," he said.

Won-ho Joo, chief executive of the naval and special ship business unit at HHI, said both companies share a commitment to cutting-edge technology. Blanchette said there isn't a firm timeline in terms of milestones for the MOU, but the companies plan to host a delegation in the near future to have a conversation about next steps.