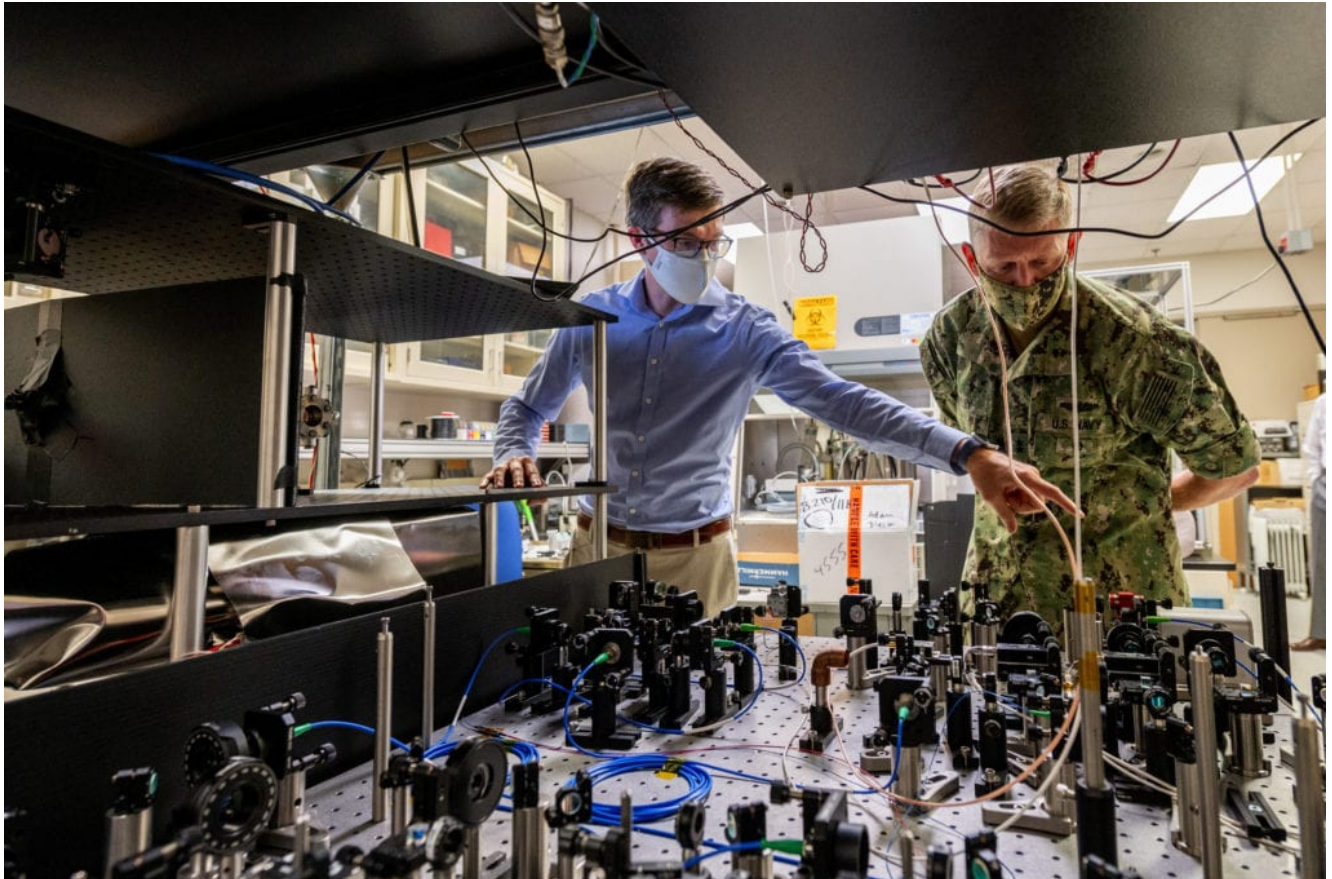


Naval Technology Processes Misaligned, Research Admiral Says



Jonathan Kwolek, Ph.D. (left), a U.S. Naval Research Laboratory research physicist, shows an atom interferometer to Chief of Naval Research Rear Adm. Lorin Selby (right) in 2020 at NRL facilities in Washington, D.C. *U.S. Navy / Jonathan Steffen*

ARLINGTON, Va. – The admiral in charge of naval technology research said he is looking hard at the processes of technology development to see how they can be refined to speed development.

“We are not structurally aligned to move that tech as fast as we need it moving,” said Rear Adm. Lorin Selby, chief of naval research (CNR), speaking March 8 in a webinar of the National Defense Industrial Association’s Pacific Operations Science and Technology Conference. “We’re going to develop the tech,

and I'm convinced that more of this probably will happen on the industry side than the government. It will be a partnership but it's primarily going to be driven by the dollar, the profit of these things coming down the pike. I get concerned about the structural alignment of our processes – that I think are misaligned, with the pace we're trying to get at."

Selby said improvements can come through the budget and executive and legislative action, but "It's in the way we insert tech in the acquisition pipeline from different places" that he is focused on.

"Looking back over the last 20 years or so, we have tried to put in place 'HOV lanes' around the traffic, things like DIU [Defense Innovation Unit] are things primarily intended to go around the congestion," he said. "The problem is they invariably have to start in the congestion or they totally merge back into it just because they have to; that's the way it works. There are some structural issues there that we need to go after.

"Let's face it: we're still operating like it's 1985 or something," Selby said. "It worked great in 1985. For the most part, for big high-ticket things, it still works pretty well today – aircraft carriers, submarines, fighter-bombers. Could you make some tweaks? Yeah, you could. Fundamentally, when you talk about high-tech payloads, the software, the things that are really going to be the game changers – that's where we've really got to look hard at the structure and figure out ways to make some alterations."

Selby, said "there are some things that could be done within the existing lifelines, changing the way some of the A to B to C works. It has become so complex that it's hard for any one program manager to figure out to manage all of this. There are so many relationships. We need to go back to a simpler, more linear approach. We'd actually go faster."

The CNR, a submarine officer who has been a program manager, chief engineer for the Naval Sea Systems Command and head of a warfare center, said his experience give him a perspective of the whole life cycle of technological systems.

“I’ve seen the entire flash of an idea all the way to the disposal of the thing at the end of its life,” he said.

U.S. Will Fight from Guam and for Guam, U.S. Indo-Pacific Commander Says



Sailors deployed from Naval Beach Group 1 navigate Improved Navy Lighterage Systems in Apra Harbor, Guam. U.S. Navy /

Chief Boatswain's Mate Daniel Nguyen

ARLINGTON, Va. – The Navy admiral in charge U.S. Indo-Pacific Command said building up the defenses of Guam is his highest budget priority and reminded observers Guam is not just a base for military operations but a part of the American homeland, and should be defended as such.

Guam, a large island southernmost of the Marianas island chain, is a U.S. territory and has been a U.S. base since before World War II – except for the Japanese occupation during 1941-1944.

“Guam is absolutely critical in maintaining deterrence and stability in the region,” said Adm. Philip Davidson, commander, U.S. Indo-Pacific Command, speaking March 4 during a webinar of the American Enterprise Institute, a Washington think tank. “It is our most critical operating location west of the International Dateline. Funding for the air and missile defense of Guam is my Number 1 priority – most importantly because Guam is U.S. homeland.

“There are 170,000 Americans living in Guam, and their defense is homeland defense,” Davidson said. “Defense Department personnel comprise some 13% of the total population on Guam, a total of nearly 22,000 service members, civilians, contractors and family members that are supporting America's of Guam. That doesn't even include rotational forces [that deploy to Guam].”

Davidson said Guam is a “critical nexus for command and control, for logistics and sustainment, and for power. It has strategic deep-water ports and airfields. We have billions of dollars in military capability in Guam today and there are billions of dollars programmed by the United States to advance those capabilities tomorrow.”

He pointed to an example, Marine Corps Base Camp Blaine, established in November 2020 and built to garrison 5,000

Marines as the first new Marine Corps base established in the Pacific since 1952.

The admiral wants to establish Aegis Ashore missile-defense facilities in Guam to augment the Terminal High-Altitude Area Defense radar system already in Guam and provide 360-degree missile defense of the island and “the full spectrum of detect-to-engage sequence, the sensing, the network and the delivery of fires to support our maneuver.”

He pointed out that an Aegis Ashore facility would accomplish what otherwise would require three Arleigh Burke-class guided-missile destroyers to defend Guam, ships that could be freed to employ their multi-mission capabilities elsewhere.

Davidson responded to critics who say that bolstering missile defenses of Guam would make the island a target, noting that “it already is one. China is making no secret of this fact, as evidenced in last fall’s widely circulated PLA Air Force propaganda video which specifically depicted an attack on a mock-up of Andersen Air Force Base in Guam.

“In all, the Guam defense system will allow us to regain the advantage, help us to deter China, and will demonstrate our steadfast commitment to our allies and partners in the region that we are here to stay and to defend what is ours,” he said. “... It is not a de facto status that we only need to be able to fight from [Guam] – we’re going to have to be able to fight for it, and missile defense in the region is critical.”

Coast Guard Set to Retire

Last High-Endurance Cutter, Commandant Says



Members from Coast Guard Cutter Douglas Munro stand in formation on the back of the cutter, July 24, 2020. The cutter's hull day, July 24, correlates with its hull number, 724. U.S. Coast Guard

WASHINGTON —The Coast Guard will retire USCGC Douglas Munro at the end of March, concluding 49 years of Coast Guard service for the cutter and 54 years for the Secretary-class 378-Foot cutters.

In a March 4 message to the Coast Guard, Commandant Adm. Karl L. Schultz said that on March 31 the Douglas Munro would be placed in In-Commission Special Status, which begins the decommissioning process.

The 12 Secretary-class cutters were the mainstay of the Coast Guard's ocean-going fleet until their replacement began 13 years ago by the new Legend-class national security cutters.

Some deployed with carrier strike groups and operated in the Persian Gulf. They had an anti-submarine warfare (ASW) capability until 1992, when it was removed. The same year some were armed with Harpoon anti-ship missiles. The original 5-inch gun mounts were replaced in the late 1980s to mid-1990s with Mk75 76mm guns.

The Douglas Munro, built by Avondale Shipyards in Louisiana, was commissioned on Sept. 27, 1971. It was named Munro until the Coast Guard's new Legend-class national security cutter USCGC Munro was built.

As the high-endurance cutters were decommissioned, they were transferred to foreign navies or coast guards. Hamilton, Dallas and Boutwell have been transferred to the Philippines; Chase and Gallatin to Nigeria; Jarvis and Rush to Bangladesh; Morgenthau to Vietnam; Sherman to Sri Lanka, and Mellon to Bahrain. John Midgette is in Seattle being prepared for delivery to Vietnam. Douglas Munro likely will serve in a foreign navy as well, though transfer has not yet been announced.

Navy Orders 20,000 SSQ-125 Sonobuoys



Aircrew Survival Equipmentman 3rd Class Alyssa Kozak, left, Hospital Corpsman 2nd Class Austin Phillips, center, and Aviation Ordnanceman Airman Siane Nash load sonobuoys onto a P-8A Poseidon anti-submarine warfare patrol aircraft, Dec. 14, 2020. U.S. Navy/ Mass Communication Specialist 2nd Class Austin Ingram

ARLINTON, Va. – The U.S. Navy has ordered 20,000 SSQ-125 sonobuoys for anti-submarine warfare (ASW) training and operations.

The Navy has in recent years placed renewed emphasis in ASW and has increased its capabilities and capacity in view of the increased Russian and Chinese submarine activity and capabilities.

The Naval Air Systems Command awarded ERAPSCO – a joint venture of Sparton Corp. and Ultra Electronics – a \$71.3 million firm-fixed-price contract modification for a maximum quantity of 20,000 SSQ-125s, according to a March 3 Defense

Department contract announcement.

The sonobuoys will be used “in support of annual training, peacetime operations and testing expenditures and maintaining sufficient inventory to support the execution of major combat operations determined by the Naval Munitions Requirements Process for the Navy and Foreign Military Sales customers,” the announcement said.

The SSQ-125 is used by U.S. Navy P-8A and P-3C aircraft and produces electronic (coherent) pulses of various types and lengths that enable Doppler processing to distinguish moving targets (such as submarines) from stationary features of the environment (such as shipwrecks).

The work on the order is expected to be completed in March 2023.

Naval Academy Increasingly Affected by Rising Tides, Superintendent Says



The U.S. Navy Flight Demonstration Squadron, the Blue Angels, fly over the U.S. Naval Academy commissioning ceremony May 20, 2020. The academy's waterfront is being affected by rising sea levels. Video still by U.S. Navy / Petty Officer 1st Class Jess Gray.

WASHINGTON – The waterfront of the U.S. Naval Academy is more frequently being affected by rising sea levels, the academy's superintendent said.

Vice Adm. Sean Buck, testifying March 2 before the House Appropriations Committee's Defense subcommittee, said that rising sea level is causing more high-tide flooding of the academy's campus.

The Naval Academy, in Annapolis, Maryland, is located at the estuary of the Severn River at the Chesapeake Bay.

"We're built on a lot of reclaimed land, Buck said. "We're at the confluence of one of Maryland's major rivers and the Chesapeake Bay, and we're also affected throughout the entire day, 365 days of the year, by the prevailing winds that have existed for centuries, easterly and southeasterly winds which, when you combine that weather with sea-level rise, with subsidence, which is pretty significant in the Chesapeake Bay

area ... we are continuously experiencing negative effects of high tide almost on a regular basis.”

Buck said in the entire decade of the 1990s the academy experienced 41 events of high-tide flooding.

“Now, we’re experiencing 41 instances of high-tide flooding per year,” he said. “As we look at all of the projections from all of the science, and those who are looking at this, especially on the East Coast looking at it for naval infrastructure, it is projected by 2050 that we will see this high-tide flooding negative effect every single day of the year.”

Buck said some of the effects of the flooding are flooded-out roads – including commuting routes – parking lots, and entrances and exits to some of the campus buildings.

Buck said his predecessor formed the U.S. Naval Academy Sea-Level Rise Advisory Council in 2015, comprised of Naval Academy scientists and engineers and stakeholders in the Naval academy team, the city of Annapolis, and the state of Maryland. He said the council is informed by the Army Corps of Engineers and other experts who are working on a study expected to be completed by the end of 2021 “to help us create a military installation resiliency plan.

“They are going to present to us different courses of action – engineering solutions – that we can take around the yard,” he said, noting the solutions might include building up sea walls, creating earthen berms, raising the level of roads and upgrading storm water drainage.

Second Navy Squadron Ready for F-35C Transition



An F-35C Lightning II carrier variant joint strike fighter launches from the flight deck of the aircraft carrier USS Nimitz (CVN 68). U.S. Navy / Mass Communication Specialist Seaman Shauna C. Sowersby

ARLINGTON, Va. – The second Navy strike fighter squadron (VFA) slated for transition to the F-35C Lightning II strike fighter has made its last flight in the F/A-18E Super Hornet.

The Warhawks of VFA-97, based at Naval Air Station Lemoore, California, flew the Super Hornet for the last time on Feb. 26. For more than a year, the squadron has operated older F/A-18Es in an adversary role to help train sister VFA squadrons in aerial combat.

The Warhawks will receive transition training at Lemoore from VFA-125, the fleet replacement squadron for the F-35C.

VFA-97 will become the Navy's second fleet F-35C squadron. The first, VFA-147, is scheduled to deploy later this year with

Carrier Air Wing Two on USS Carl Vinson (CVN 70).

VFA-97 had operated the F/A-18 Hornet since 1991, and the F/A-18E Super Hornet since 2013.

Marine Fighter Attack Squadron 314 (VMFA-314) also has completed transition to the F-35C and is scheduled to deploy on a carrier in fiscal 2022.

Navy Orders Four Additional CMV-22B Osprey COD Aircraft



A CMV-22B Osprey from the “Titans” of Fleet Logistics Multi-Mission Squadron (VRM) 30 approaches the flight deck of Nimitz-class nuclear aircraft carrier USS Carl Vinson (CVN 70). U.S. Navy / Mass Communication Specialist 3rd Class Aaron

T. Smith

ARLINGTON, Va. – The U.S. Navy has ordered four additional CMV-22B Osprey carrier-onboard delivery aircraft, according to a Feb. 26 Defense Department contract announcement.

The Bell Boeing Joint Project Office, Amarillo, Texas, was awarded a \$309.6 contract modification by the Naval Air Systems Command for the four CMV-22Bs,” the announcement said.

The Navy’s CMV-22B replaces the C-2A Greyhound for the Carrier On-Board Delivery (COD) mission. Its mission is to transport personnel, mail, supplies and cargo from shore bases to aircraft carriers at sea. Forty-four of the 48 Navy program of record aircraft will be delivered under the June 2018 multiyear procurement contract.

The CMV-22B differs from the MV-22B by having a high-frequency radio, extra fuel capacity, improved fuel dump capability, improved lighting for cargo handling and a public address system. The aircraft can carry up to 6,000 pounds up to a range of 1,150 nautical miles. It is capable of internally carrying the F-135 engine power module for the F-35 Lightning II.

The CMV-22B made its first flight on Dec. 19, 2019 at Bell Flight’s Amarillo, Texas assembly facility and later flew to Naval Air Station Patuxent River to continue flight testing in February 2020. The first CMV-22B squadron, VRM-30, is working up a detachment to deploy on board USS Carl Vinson (CVN 70).

Operational Test and initial operation capability are scheduled for 2021; full operational capability is scheduled for 2024.

DoD Adds Two Mark VI Patrol Boats to Ukraine Aid Package



A Mark VI patrol boat, shown here in the Arabian Gulf in March 2020. U.S. Army / Pfc. Christopher Cameron

ARLINGTON, Va. – The Department of Defense has added two more modern patrol boats for Ukraine in a new security assistance package.

“The Department of Defense announces a new \$125 million package for the Ukraine Security Assistance Initiative that includes training, equipment, and advisory efforts to help Ukraine’s forces preserve the country’s territorial integrity, secure its borders, and improve interoperability with NATO, the department said in a March 1 release. “This action reaffirms the U.S. commitment to providing defensive lethal

weapons to enable Ukraine to more effectively defend itself against Russian aggression.

“The USAI package includes two additional armed Mark VI patrol boats to enhance Ukraine’s capacity to patrol and defend its territorial waters,” the release said. “To date, the U.S. has committed a total of eight Mark VI patrol boats.”

The Mark VI boats are being built by SAFE Boats International LLC of Bremerton. Washington.

The U.S. State Department has approved the possible foreign military sale of up to 16 Mark VI patrol boats and related equipment to Ukraine for an estimated cost of \$600 million, the Defense Security Cooperation Agency (DSCA) said in a June 17, 2020, release.

The patrol boats will be operated by the Ukrainian navy to defend territorial waters and other maritime interests. They each will be armed with two MSI Seahawk A2 gun systems and two Mk44 cannons and equipped with electro-optical/infrared sensors and loud-speaker systems.

The sale will “improve Ukraine’s capability to meet current and future threats by providing a modern, fast, short-range vessel,” the DSCA said.

Mark VI patrol boats are used by the Navy Expeditionary Combat Command for escort of high-value ships, coastal patrol, and other maritime security missions.

Admiral Praises Marine Corps’

Last Hornet Carrier Deployment



An F/A-18C Hornet, from the “Death Rattlers” of Marine Fighter Attack Squadron (VMFA) 323, makes an arrested landing on the flight deck of the USS Nimitz (CVN 68). Nimitz, flagship of Nimitz Carrier Strike Group, is currently conducting routine operations in U.S. 3rd Fleet. U.S. Navy / Mass Communication Specialist 3rd Class Charles DeParlier

ARLINGTON, Va.—The last deployment of the F/A-18C Hornet on an aircraft carrier ended last week with the return of the “Death Rattlers” of Marine Fighter Attack Squadron 323 (VMFA-323) from a deployment with Carrier Air Wing 17 on board USS Nimitz (CVN 68).

The Death Rattlers returned to their home base, Marine Corps Air Station Miramar, California on Feb. 25, the day before Nimitz arrived at San Diego to offload CVW-17 personnel before heading to its homeport of Bremerton, Washington.

Rear Adm. James Kirk, commander, Carrier Strike Group 11 and the Nimitz Carrier Strike Group, told reporters in a Feb. 26 teleconference that VMFA-323, despite flying the oldest jets deployed on a carrier, “performed fantastic yeoman work.

Obviously with older aircraft, they do have challenges, but they rose to those challenges. Those maintainers did a great job, and those Marine pilots executed those missions, whether it was in support of Operation Inherent Resolve, Operation Octave Quartz, or Operation Resolute Support, or the just-presence missions we did or the operations we did during dual-carrier ops in the South China Sea with the Ronald Reagan Strike Group of the TR [Theodore Roosevelt] Strike Group.

“That Marine squadron met the mark, hit the mission,” Kirk said.

The deployment of Marine Corps F/A-18A and F/A-18C squadrons on carriers over the last two decades was a manifestation of the TACAIR Integration Plan, originally designed to provide one Marine VMFA squadron for each of 10 carrier air wings. Because of heavy commitments to wars in Afghanistan and then Iraq, the plan never fielded more than four VMFAs in the carrier air wings. With the transition of some VMFA squadrons to the F-35B and F-35C Lightning II strike fighters, the number of VMFAs on carriers dwindled to just one, VMFA-323.

The program is alive, however, with VMFA-314 – the Corps’ first F-35C squadron – preparing to deploy with a carrier air wing in 2022. The Corps is procuring 67 F-35Cs, a number that will allow it eventually to field four VMFAs equipped with the type in carrier air wings.

VMFA-323 will continue to operate the F/A-18C and will form a fleet replacement detachment to assume the role of training pilots and maintainers for Marine Corps F/A-18C/D squadrons after the fleet replacement squadron, VMFAT-101, is deactivated during fiscal 2023, as the Hornet training load decreases as the type is retired in 2030. According to the Marine Corps’ latest training plan, promulgated in 2019, VMFA-323 will be the Corp’s last active-duty Hornet squadron and will upgrade to the F-35B.

The Death Rattlers were activated in 1943 with F4U Corsair fighters and flew combat missions against Japanese forces during World War II. They flew Corsairs again in the Korean War and F-4B Phantom II fighters in the Vietnam War. They flew Phantoms from carriers after the Vietnam war and were one of the Corps' first Hornet squadrons. Together with VMFA-314, they made the Corps' first carrier deployment in the type, flying in combat from USS Coral Sea (CV 43) in 1986 against Libyan targets during Operations Prairie Fire and El Dorado Canyon.

The last F/A-18C carrier deployment of a Navy squadron ended in April 2018 with the return of Strike Fighter Squadron 34 (VFA-34) with Carrier Air Wing Two from USS Carl Vinson (CVN 70). VFA-34 was the Navy's last active-duty deploying squadron to operate the legacy Hornet and has since upgraded to the F/A-18E Super Hornet.

The Navy is divesting itself of the legacy Hornets as fast as procurement of the F/A-18E/F and F-35C permit. The Blue Angels flight demonstration squadron recently completed the transition to the Super Hornet and soon the Navy's sole reserve VFA squadron will make the transition.

Navy Orders 15th
Expeditionary Fast Transport
from Austal



Expeditionary Fast Transport vessels, USNS Spearhead (T-EPF 1), USNS Choctaw County (T-EPF 2) and USNS Fall River (T-EPF 4) shown at Joint Expeditionary Base Little Creek-Fort Story in this 2015 photo. U.S. Navy / Brian Suriani

ARLINGTON, Va. – The U.S. Navy has awarded Austal USA a contract to build the 15th Spear-head-class expeditionary fast transport (EPF).

The Naval Sea Systems Command awarded Austal a \$235 million “undefinitized” contract action modification on Feb. 26, 2021, for the detailed design and construction of EPF 15, the company said in a release.

The EPF, designated T-EPF in service to the Military Sealift Command, originally was designated a joint high-speed vessel, but has proven versatile in performing a number of roles in support of regional combatant commanders. Those roles have included humanitarian assistance, disaster relief, maritime security, surveillance, command and control, and counter narcotics, among others.

“With a draft of only 13 feet and waterjet propulsion, the EPF is able to access austere and degraded ports with minimal external assistance providing flexibility to fleet and combatant commanders,” the Austal release said. “With its maneuverability, large open mission bay and ability to achieve speeds greater-than 35-knots, the EPFs have the capability to support additional missions such as special operations and medical support.”

The Spearhead class originally was intended to be 10 ships: five for the U.S. Army and five for the Navy. The five Army ships later were reallocated to the Navy. The lead ship was delivered in December 2012. As the utility and success of the ships was demonstrated in operations, Congress has approved an increase in the number of hulls authorized, now at 15 ships. Austal has delivered 12 to the Military Sealift Command to date.

EPF 15, like EPFs 13 and 14, will include an expeditionary medical capability. The EPFs are operated by civilian mariners of the Military Sealift Command.

“At its core, the EPF is designed to be highly capable, flexible and affordable,” said Rusty Murdaugh, Austal USA’s chief financial officer and interim president. “With this baseline, we’ve been able to deliver multiple ships that are performing different missions for the U.S. military. The award of EPF 15 allows the Navy to leverage a hot production line and highly trained workforce to continue producing ships that are meeting the needs of warfighters today and into the future.”