Coast Guard to Reduce Flag Officer Positions by 25%

By Richard R. Burgess, Senior Editor

ARLINGTON, Va. — The U.S. Coast Guard has been ordered to reduce the number of admirals by at least 25% before next year, the service announced.

In a May 25 directive from Acting Commandant Adm. Kevin Lunday, the service announced that the reductions were part of its Force Design 2028 initiative.

“As part of Force Design 2028, the Secretary of the Department of Homeland Security has determined that there is redundant executive oversight in our force structure which hinders efficient decision making and Service effectiveness,” The opening statement of the announcement said.

“As a result, and consistent with similar efforts within the Department of Defense, the Secretary has ordered a reduction of no less than 25% of flag officer positions by 1 January 2026,” the announcement said. “The positions to be eliminated and the plan to reorganize the flag corps will be announced in separate correspondence.”

The Coast Guard currently has approximately 45 flag officers.

The service also has negated the results of its fiscal 2025 promotion board for the rank of rear admiral (lower Half) while folding opportunity in next year’s selection board.

“The Secretary also disapproved the Promotion Year (PY) 2025 rear admiral (lower half) (RDML) selection board report after determining that the guidance to that board did not align with

this Administration’s policies,” the announcement said. “The Secretary’s action also supports planning to reorganize the leadership structure. Officers who were considered by the PY25 RDML selection board and who are otherwise eligible, including those previously selected, will be considered by the PY26 RDML selection board that will convene under new guidance.”

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

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

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

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

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

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

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

Kilby said the CSR rates for submarines, surface warships and

aircraft carriers today are 67%, 68%, and 70%, respectively.

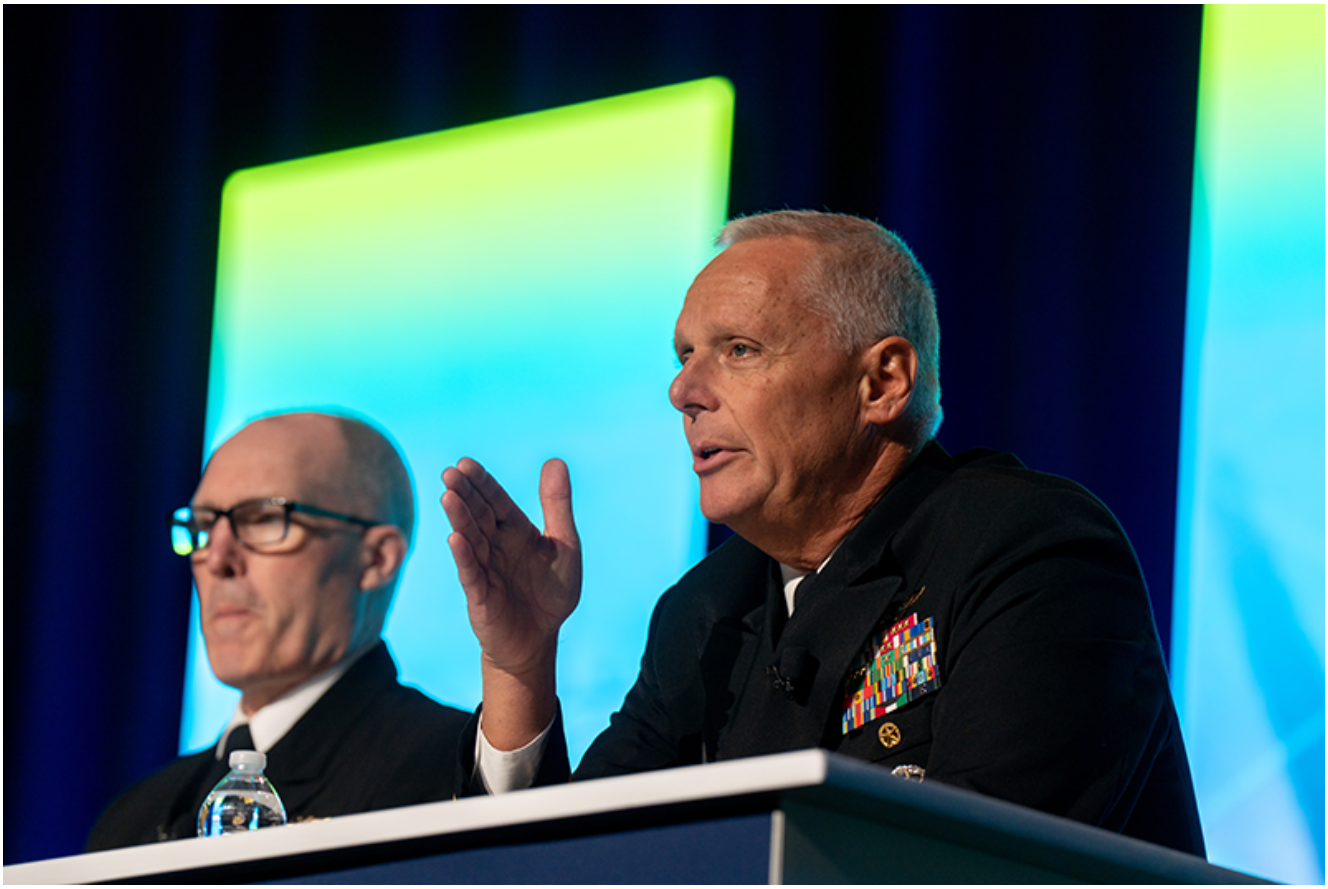
Cheever noted achieving the 80% for Super Hornet strike fighters was an “all-hands effort all the time” and involved extensive partnering with the defense industry. He defined CSR as such: “If we go to war, we have everything we need.”

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

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

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

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



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

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

Ships Ahoy

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

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

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

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

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

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

Sea-Air-Space: RTX's Barracuda Mine Destructor in Ocean Testing

Raytheon has been putting its Barracuda mine neutralization system in autonomous mission testing. *Photo credit: Raytheon*

Raytheon, an RTX company (Booth 911), has been putting its Barracuda mine neutralization system in autonomous mission testing, the company said in an interview with *Seapower*.

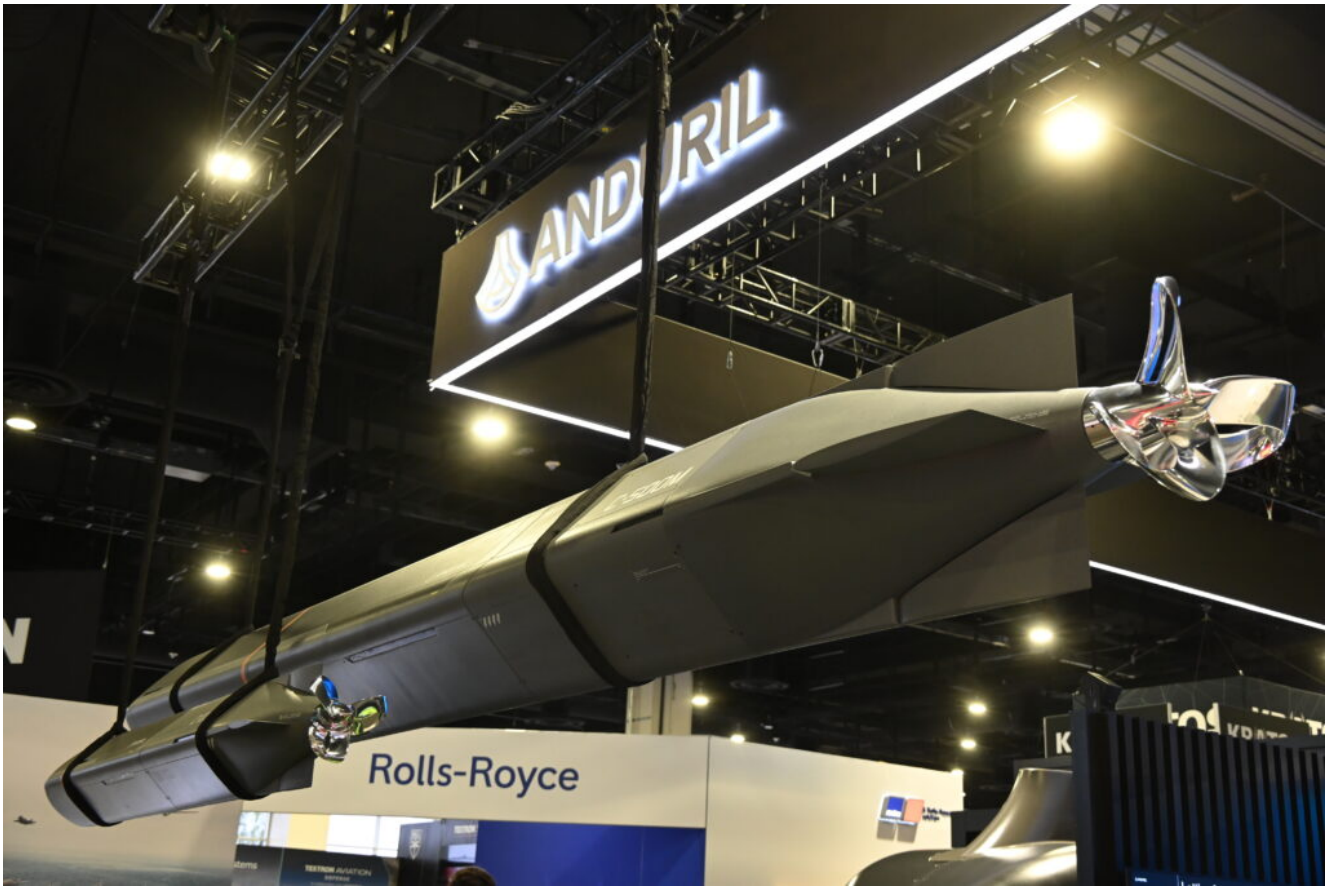
The Barracuda is a 26-pound, 48-inch-long anti-mine device housed in a tube the size of an A-size sonobuoy tube. When launched, the device is propelled by four small water jets that take the device to the datum of a suspected sea mine detected by the AQS-20C towed sonar. An acoustic communications data link buoy is released to which the device is tethered. Target updates, such as GPS coordinates, are transmitted to the device, which approaches the sea mine. A sonar and a camera mounted in the nose of the device enables a man-in-the-loop operator – for now – to confirm the mine. The device then is steered to the mine and detonated. Each Barracuda is a one-shot charge.

An engineering development model (EDM) of the of torpedo-like munition has been going through two months of contractor testing in Narragansett Bay, said Bill Guarini, Raytheon's director for Requirements, Capabilities in the company's Naval Systems and Sustainment Unit. For the tests so far, the Barracuda is tethered to its controlling craft.

The contractor testing will continue through 2025 into 2026, Guarini said, with tests against a variety of mine shapes, including bottom, tethered, and near-surface mines. Development Testing to begin in 2026 and Operational Testing to be conducted in 2027, with low-rate initial production also scheduled to begin that year. Raytheon will provide 85 EDMs of the Barracuda for the Navy's tests.

The Barracuda is designed for both surface and air launch. The weapon will be deployed on the Mine Countermeasures Unmanned Surface Vehicle deployed on some Independence-class littoral combat ships. Separately from Raytheon, the Navy is having a Barracuda launcher developed for the MCM USV. A sonobuoy air-launch cannister also is a potential launcher for the Barracuda.

Sea-Air-Space: Anduril Introduces Copperhead AUV-Launched Torpedoes



Anduril’s Copperhead AUVs on display above the company’s booth at Sea-Air-Space. *Photo credit: Brett Davis*

Anduril Industries (Booth 1623) took another step in advancing undersea warfare with the announcement of its Copperhead family of autonomous underwater vehicles (AUVs), including torpedoes, the first to be designed for launch from autonomous systems.

Anduril’s Copperhead AUV family currently includes two variants, a 12.75-inch diameter version with a dry weight payload of 100 pounds, and a 21-inch diameter with a dry weight payload of 500 pounds. These can be used for a variety of undersea missions, such as intelligence, surveillance, and reconnaissance, teaming with its Seabed Sentry sensor system, or locating objects such as a downed aircraft, said Shane Arnott, Anduril’s chief engineer, in an April 4 news conference. The Copperheads can carry a variety of sensors, such as sonar, magnetometers and chemical detectors.

Arnott said the Copperhead M version of either the 100 or 500 size is equipped with a warhead to serve as a torpedo. The

company’s Dive-XL AUV can carry dozens of Copperhead 100-Ms of multiple Copperhead-500Ms, a company release said.

He said the Copperhead M can be produced in much greater quantities and at less cost than traditional torpedoes such as the Mark 48 and Mark 54 currently used by the U.S. Navy. The Copperhead, which can travel at speeds in excess of 30 knots, also can be deployed from a Group 4 or 5 unmanned aerial vehicle.

Arnott said the Copperhead already has been tested in water.

Sea-Air-Space: First P-8A Overhauled by L3Harris to Be Delivered in 2025

A P-8A Poseidon assigned to the “Red Lancers” of Patrol Squadron 10 takes off on a search and rescue mission flight. *Photo credit: U.S. Navy | Mass Communication Specialist First Class Ashley Guire*

The first P-8A Poseidon maritime patrol aircraft to be overhauled by L3Harris (Booth 937) is scheduled to be delivered back to the U.S. Navy this year, a company official said.

L3Harris was awarded an indefinite delivery/indefinite quantity contract in September 2024 from the Naval Air Systems Command (NAVAIR) for depot-level maintenance, overhaul, and repair of the Navy’s fleet of P-8As, which will number 135 upon completion of the service’s planned procurement, said Jason Lambert, president of Intelligence, Surveillance and Reconnaissance at L3Harris. The program is scheduled to continue through September 2029.

“NAVAIR’s No. 1 priority is aircraft availability, and it’s an honor for us at L3Harris to support the Navy to ensure the P-8 aircraft is mission-ready,” Lambert said.

Lambert said the company currently has four P-8As in its workflow, with a capability to induct a minimum of nine aircraft per year, and the potential capability to induct 12 aircraft the first year. The work will be accomplished at the company's facility in Waco, Texas.

He said the contract allows processing foreign P-8 aircraft along with U.S. Navy aircraft.

"The Navy awarded the ID/IQ to both L3Harris and AAR," he said. "AAR previously had this program. The Navy decided to go with a dual source, so the Navy determines the allocation of the aircraft across our two companies.

"L3 has provided decades of modification and sustainment support on the P-3 Orion, the predecessor of the P-8 platform across multiple customers including the U.S. Navy, NOAA, and the [defense] ministries of Brazil, New Zealand, and the Republic of Korea ,and we're very honored to extend our long-lasting support to the U.S. Navy by supporting this next-generation Poseidon fleet," Lambert said.

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

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

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

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

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

doesn’t necessarily require the power and the weight necessary in a mine countermeasure system.”

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

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

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

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

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

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

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

Phillips said the Tsunami could be fielded rapidly.

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

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

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

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

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

Aircraft Carrier Suppliers Warn of Production Going Cold

The world's largest aircraft carrier, USS Gerald R. Ford (CVN 78), sails in formation with Japan Maritime Self Defense Force (JMSDF) Hatakaze-class guided missile destroyer JS Shimakaze (TV-3521) while conducting routine operations in the Atlantic Ocean, Sept. 23, 2024. (U.S. Navy photo by MC2 Jacob Mattingly)

By Richard R. Burgess, Senior Editor

ARLINGTON, Va. — The coalition of industrial base suppliers for aircraft carrier production is warning that some suppliers' production lines are going "cold" or soon will do so in there is further delay in starting procurement for the

next Gerald R. Ford-class aircraft carrier, (CVN 82).

The Aircraft Carrier Industrial Base Coalition (ACIBC) is looking for a $600 million commitment from the Congress in advance procurement toward the construction of CVN 82. Last week ACIBC leaders and members met with members of Congress to discuss carrier funding.

“We’re asking for $600 million of advance procurement funding so that we can start long-lead material and get that ball rolling [for CVN 82],” said Lisa Papini, chair of the ACIBC. “We’re looking for a commitment to start CVN 82 no later than Fiscal Year 2029.”

Papini said the situation is worse for suppliers this year than last.

“Last year when we were here, we were warning that companies in our coalition without a new ship award would start to go cold, specifically, people that are doing continuous production lines would start to have those production lines go cold in the near future,” she said. “This year we have companies that are saying they have gone cold, or they will be cold – and by cold, I mean that that production line has ceased continuous operation.”

According to an ACIBC fact sheet with the results of a survey of 219 suppliers, 73% of member critical or single-source material supply lines are cold or will go cold in 2026 without the advance funding. Those percentages would increase in 2027 and 2028 to 83% and 96%, respectively, without the advance funding. A majority of the suppliers also provide products and materials for submarine construction as well.

To deal with the business delays, suppliers are reassigning workforce to other business or exploring other business outside of shipbuilding, the fact sheet said.

Papini said that the worsening situation does not match with

the nation’s demand for aircraft carriers around the world, noting that in recent years carrier deployments have been extended numerous times and that longer deployments result in more need for supplier support and maintenance.

“The companies who support and who provide products to the new construction [carriers], so CVN 82, are the companies who provide the service and parts to sustain carriers and overhaul carriers as well, so as production lines start to go cold, the ability to support carriers in service and support overhauls decreases,” Papini said. “We’re at this inflexion point.”

She stressed that the industrial base “has such a significant role in supporting the ships when they are in service, helping them achieve their actual service life, keeping them running. It’s the companies across the country who have supplied the equipment, the parts, the services when something needs repair.”

The ACIBC would like to see Congress authorizing a two-carrier procurement, CVN 82 along with CVN 83. CVN 80 and CVN 81 were procured in such a manner.

“We know that that’s the best way to procure ships, to specifically procure aircraft carriers – so a two-carrier buy with three years of advanced procurement funding for long-lead material and four-year centers,” Papini said.

The Navy has stated that the optimum procurement profile for CVNs is two-ship procurement with at least three years of advance procurement and construction at four-year intervals.

Navy Retires Last EP-3E Electronic Reconnaissance Aircraft

EAST CHINA SEA (Sept. 24, 2020) An EP-3E Airborne Reconnaissance Integrated Electronic System (ARIES) II, assigned to the "World Watchers" of Fleet Air Reconnaissance Squadron 1 (VQ-1), transits over the East China Sea. (U.S. Navy photo by MC3 Andrew Langholf)

By Richard R. Burgess, Senior Editor

ARLINGTON, Va. — The Navy has retired its last EP-3E Aries II electronic reconnaissance aircraft after the type's 45 years of service to the fleet.

In an informal Feb. 12, 2025, ceremony, at Naval Air Station Whidbey Island, Washington, Fleet Air Reconnaissance Squadron One (VQ-1), the sole remaining operator of the EP-3E, farewelled the last EP-3E. The aircraft was flown away on Feb. 13 for the last time.

The aircraft, BuNo 159893, was the last of 26 EP-3Es that

served the fleet beginning in 1970. Ten P-3A Orion patrol aircraft were converted to EP-3Es for operation by VQ-1 and VQ-1, joining two earlier EP-3B versions in service. This batch of EP-3Es were replaced beginning the 1990s by a new generation of EP-3Es converted from P-3C Orions, with ultimately 17 aircraft converted to sustain an operational fleet of 12 aircraft.

The EP-3E fleet provided multi-intelligence support to the fleets and to theater combatant commanders with near-real-time signals intelligence and full-motion video, the Naval Air Systems Command said. The aircraft was equipped with sensitive electronic receivers and high-gain dish antennas. The large crew was able to fuse the intelligence it collected with offboard intelligence and provide threat warning and situational awareness in support of suppression of enemy air defenses, anti-air warfare, anti-submarine warfare, and anti-surface warfare.

The EP-3E has been succeeded by the MQ-4C Triton high-altitude, long-endurance unmanned aerial vehicle operated by Unmanned Patrol Squadron 19.

VQ-1 has one P-3C remaining, which it used as a utility training and transport aircraft. The aircraft, BuNO 161588, will be retired in an informal ceremony to be held at NAS Whidbey Island on Feb. 20, 2025.

VQ-1 will hold its deactivation ceremony at Whidbey Island on March 28, 2025. The official date for the deactivation is March 31.

Marine Corps Updates F-35 Procurement, Transition Plan

Marine Fighter Attack Squadron (VMFA) 314 launch and recover F-35C as they work to renew their carrier qualifications onboard the USS Abraham Lincoln (CVN 72) (U.S. Marine Corps photo by 1stLt. Charles Allen)

By Richard R. Burgess, Senior Editor

ARLINGTON, Va. — The U.S. Marine Corps has adjusted its procurement and transition plan for its F-35 Lightning II strike fighter fleet. While the overall program of record remains at 420 F-35s, the balance between the numbers of short takeoff and vertical landing F-35B and the carrier launch capable F-35C has changed, with the number of F-35Cs increasing and the number of F-35Bs decreasing.

According to the 2025 Marine Corps Aviation Plan released Feb. 3, the Corps plans to procure a total 280 F-35Bs and 140 F-35Cs, as compared with the earlier program of record of 353

F-35Bs and 67 F-35Cs. These numbers will allow the Corps to support 12 F-35B fighter-attack (VMFA) squadrons and eight F-35C VMFA squadrons.

Before, the Corps had planned to support only four F-35C squadrons, VMFAs 314, 311, 251, and 115. With the change in the procurement profile, four other F/A-18 Hornet squadrons also will make the transition to the F-35C: VMFAs 232 and 323 and reserve VMFAs 112 and 134.

Currently, all but two operational F-35 squadrons are allowed to be equipped with 10 aircraft, with the other two, both based at Marine Corps Air Station Iwakuni, Japan, being allowed 12 aircraft each. Under the new plan, all operational F-35 squadrons will be equipped with 12 aircraft each beginning in 2030.

The Marine Corps F-35C squadrons will continue to support the TACAIR Integration Plan, in which they deploy as units of Navy carrier airwings.

Lockheed Martin Offers Mk70 Launcher to Increase Lethality of LCS

An SM-6 missile is launched from a containerized launcher on board USS Savannah (LCS 28) on Oct. 24, 2023. (U.S. Navy photo)

By Richard R. Burgess, Senior Editor

ARLINGTON, Va. – Lockheed Martin has adapted its Mk41 vertical missile launcher into a scalable containerized system than can be deployed on U.S. Navy ships, including the littoral combat ships (LCS) and non-traditional platforms of opportunity to increase their lethality with mid-range precision strike and air defense capabilities. company officials said.

The system, called the Mk70 Payload Delivery System, is a 40-foot-long ISO container in which four VLS cells can be fitted. The Mk70 system, designed for and deployed with the U.S. Army in a land-based configuration, can launch any type of missile certified for the Mk41, including the Tomahawk cruise missile, the various Standard surface-to-air missiles, the antisubmarine rocket, and the Evolved SeaSparrow missile. The Mk70 container is transportable on a C-17 cargo aircraft.

Ed Dobeck, director for launching systems at Lockheed Martin, told Seapower that the Mk70 was developed two years ago in concert with the Defense Department’s Strategic Capabilities

Office to provide the Army with the ability to deploy and fire the Raytheon-built SM-6 Standard missile.

The same container can be secured on the flight deck or helicopter landing pad of a Navy ship using helicopter tie-down chains, occupying 400 square feet of a flight deck. Power from the ship's electrical system can supply 400 volts to the Mk70. No modifications are required to the ship itself. The container can be installed within hours with a pier-side crane. A command shelter with virtual Aegis and Tomahawk control systems controls the launch of the missiles.

The flight deck of the Freedom-class LCS can accommodate three Mk70 containers, while the Independence-class LCS can accommodate four containers, Dobeck said. With one or more containers installed, the ships are unable to launch or land helicopters. The missile tubes can be reloaded horizontally, an advantage over the ship-installed Mk41's need for vertical re-load by cranes.

Lockheed Martin has demonstrated containerized launch of SM-6 missiles from two Navy ships. An SM-6 missile was fired from the USS Savannah (LCS 28) in October 2023 and before that another was fired from the Overlord medium unmanned surface vessel Ranger during an exercise.

Dobeck said that the Navy has shown great interest in the Mk70 system, which already has been delivered to the Army. Two full batteries – totaling eight missile cells – have been delivered to the Army and two have been delivered to other customers. The Army has deployed the Mk70 to the Philippines