Rear Adm. Perry: First New-Production Mark 48 Torpedoes Set for 2022 Delivery

Sailors assigned to the Los Angeles-class fast-attack submarine USS Columbia (SSN 771) load a Mark 48 advanced capability torpedo for Exercise Agile Dagger 2021. *U.S. NAVY / Mass Communication Specialist 1st Class Michael B. Zingaro*

ARLINGTON, Va. – The first of a new-production batch of heavy-weight torpedoes (HWTs) is slated for delivery to the U.S. Navy fleet beginning in fiscal 2022, the Navy's submarine resource sponsor said.

Rear Adm. Doug Perry, director of Undersea Warfare Programs speaking Nov. 18 at the Naval Submarine League's annual symposium in Arlington, said the Mark 48 HWT was last delivered in 1996, but that it has been incrementally upgraded ever since to the Advanced Capability (ADCAP) standard. However, new production was needed to build up the Navy's

inventory to meet potential warfighting needs.

“The heavy-weight torpedo will remain the weapon of choice for the submarine for the foreseeable future, primarily due to its intended stealth, its destructive effectiveness in the battlespace, and [is] pretty difficult to defend against.”

Perry also noted that the HWT sustains the stealth of the launch platform, the submarine.

The Navy restarted the ADCAP production in 2016, with the program bearing fruit this year.

Perry said the Navy is focusing on capacity in parallel with improvements for the torpedoes, including in sensor capability and in defeating countermeasures.

The modernization upgrades over the last two decades primarily have been focused on software algorithms and processing, he said.

“We’re past time about introducing some game-changing capability into this mainstay weapon,” Perry said. “We’re introducing significant range increase through the re-introduction of a proven engine that can give us longer legs, much longer than the average ADCAP.

With the combination of some longer legs, some better sonar and processing and a digital backbone vice analog, it will enable us to have a one-shot, one-kill ADCAP into the next decade against those key platforms that the submarine force will be responsible to ‘service’.”

Vice Adm. Wolfe: Hypersonic Weapon Load for Zumwalt DDGs Under Study

The Zumwalt-class guided-missile destroyer USS Michael Monsoor (DDG 1001) transits under the Golden Gate Bridge during San Francisco Fleet Week 2021. *U.S. NAVY / Mass Communication Specialist 2nd Class Hector Carrera*

ARLINGTON, Va. – With the Zumwalt-class destroyer set to be the first ship to be armed with the Conventional Prompt Strike (CPS) hypersonic missiles, the Navy is studying the parameters for the weapon load-out for the ships, a senior Navy admiral said.

Vice Adm. Johnny Wolfe, director, Strategic Systems Program, speaking Nov. 18 at the Naval Submarine League's annual symposium in Arlington, said the CPS "will be the primary weapon system" on the Zumwalt DDGs.

The Zumwalt is equipped with 20 four-call Mk57 peripheral vertical launch systems which can launch Tomahawk, Standard, Evolved SeaSparrow and Vertical-Launch Anti-Submarine Rockets. The ship is expected to be fitted with separate launchers for the CPS. The two Advanced Gun Systems on the ship – which are inactive because of lack of an affordable munition – may be removed to make room for CPS launchers.

The Navy originally had planned to deploy the CPS on the Ohio-class guided-missile submarines (SSGNs), but the delay in funding for an underwater launch test facility for the missiles pushed development into the future such that, with the Navy's plan to decommission the SSGNs in the mid-2020s, Wolfe said it made more sense to skip the SSGNs as a platform. The underwater launch test facility development will be restarted in 2022.

The Block V Virginia-class attack submarine (SSN) equipped with the Virginia Payload Module will be the second platform to be armed with hypersonic missiles.

"What we're doing is trying to leverage Zumwalt – even though it is a surface platform," Wolfe said. "A lot of things that we're going to test on Zumwalt are still going to be applicable on Virginia [SSN] and we're looking at how we can get that learning to get to that platform sooner."

Wolfe said, "We've been hitting our milestones" toward fielding all-up rounds for the Army in 2023 and the Navy in its Zumwalt DDGs in 2025.

Two tests of all-up rounds for the Army will be tested in fiscal 2022 and he said the Navy will start ramping up to five Advanced Payload Modules which will go into the Zumwalts and then go into the Virginia SSN.

Wolfe said the Navy has been including CPS equipment in sounding rocket sorties from NASA's facility in Wallops Island, Virginia, along with payloads from other users to

advance technology maturation.

The hypersonics program so far has had three successful rocket motor tests and the first slug test, the latter demonstrating the ability to eject-test in a cold launch.

Boeing Delivers First P-8A Poseidon to Norway

The first of five P-8A Poseidon aircraft bound for Norway had its first flight Aug. 9. *THE BOEING CO.*

SEATTLE – The Norwegian Defence Materiel Agency (NDMA) accepted on Nov. 18 the first of five Boeing P-8A Poseidon maritime patrol aircraft that will be operated by the Royal Norwegian Air Force (RNoAF), the company said in a release.

“Norway is responsible for large maritime areas in a strategically important part of the world, and the new P-8A Poseidon will represent a tremendous improvement in our ability to both protect our sovereignty and understand developments in these areas. Today’s delivery of our first P-8A is an important milestone in the modernization of Norway’s maritime patrol aircraft capability,” said Mette Sørfonden, director general of the Norwegian Defence Materiel Agency. “I’m very pleased that the NDMA will soon be able to provide the Norwegian Armed Forces with a whole new generation of aircraft that will play an important role in preserving our national security for many years to come.”

Norway’s first P-8A aircraft, named Vingtor, was delivered to the NDMA during a ceremony at the Museum of Flight in Seattle, Washington. The milestone comes four years after the NDMA entered into an agreement with the U.S. Navy for the P-8A, and two years before the new aircraft are scheduled to begin taking over maritime patrol duties in Norway’s high north.

“We’re honored to provide this unmatched, multimission maritime patrol capability to Norway,” said Stu Voboril, vice president and program manager, P-8 Programs. “Norway joins seven other global customers that have selected or already operate the P-8 and benefit greatly from its long-range maritime surveillance and anti-submarine warfare capabilities. We look forward to enhancing our continued and enduring partnership with the U.S. Navy and the Royal Norwegian Air Force, and supporting the future fleet’s sustainment and training needs.”

Norway’s four remaining aircraft are all in advanced stages of production and will be delivered to the NDMA in 2022. The five P-8As will replace the RNoAF current fleet of six P-3 Orions and two DA-20 Jet Falcons and will be operated by 333 Squadron at Evenes Air Station.

Norwegian companies Nammo, Kongsberg Defence & Aerospace, Andoya Space and Berget currently have agreements with Boeing that are part of a tailored industrial cooperation plan related to Norway's acquisition of five P-8A aircraft. Boeing continues to work with the NDMA and Norwegian industry to expand that plan and support economic growth throughout Norway.

The delivery to Norway also marks the 142nd P-8 aircraft delivered to global customers, including the U.S. Navy, the Royal Australian Air Force, the Indian Navy and the United Kingdom's Royal Air Force. First deliveries to New Zealand, Korea and Germany will take place in 2022, 2023 and 2024 respectively.

To date, the global operating P-8 fleet has amassed more than 400,000 mishap-free flight hours. The P-8 is a long-range anti-submarine warfare, anti-surface warfare, intelligence, surveillance and reconnaissance aircraft capable of broad-area, maritime and littoral operations. In addition, the P-8 performs humanitarian and search and rescue missions around the globe.

Vice Adm. Houston: Sub Force Approaching Inflection Point of 50 SSNs

The crew of the Virginia-class submarine USS South Dakota (SSN 790) stand at parade rest during a change-of-command ceremony onboard Naval Submarine Base New London in Groton, Connecticut, Sept. 27. *U.S. NAVY / Chief Petty Officer Joshua Karsten*

ARLINGTON, Va. — The decline in the number of the Navy's attack submarines (SSNs) is leveling out sooner than was feared just a few years ago, made possible by the decision to extend the service lives of some older SSNs.

Previously, the force level of SSNs was predicted to decline to a "trough" of 41 SSNs in the mid-2020s before the number would start to increase as the building of two Virginia-class SSNs per year hit its stride.

With 50 submarines "we are at that inflection point right now," said Vice Adm. Bill Houston, commander, Naval Submarine Forces, speaking Nov. 17 at the Naval Submarine League's annual symposium in Arlington. "We are actually very stable right now [at 50] and we're starting to increase our numbers.

“How are we doing that? Through an awful lot of hard work by those people who came before me and whose shoulders we’re standing on right now; tremendous hard work from the shipbuilders and tremendous from the Navy, from the Department of Defense and from our overall government,” Houston said.

An important initiative is the service life extension of several Los Angeles-class SSNs.

“There is additional margin in the Los Angeles class,” he said. “We actually have reactor cores available which will refuel and extend a significant number of Los Angeles-class submarines.”

Houston was not specific in the number of Los Angles-class SSNs submarines that will go through life extensions. The Navy previously has mentioned consideration of extending the service lives of five to seven boats.

“We found that on most of our Los Angeles [SSNs] had significant hull margins, so we were able to extend them, and they had the fuel to go longer,” he said. “There are several Los Angeles’s that we will physically refuel and add years on them. Just due to the absolutely incredible job we did when we built the Los Angeles and the Ohio [SSBN and SSGN] that we could extend those ships as long as we can.”

Adm. Caldwell: ‘It’s a Great Time to Be a Submariner’

Adm. Frank Caldwell observes Nimitz-class aircraft carrier USS Abraham Lincoln (CVN 72) getting underway on the bridge in this 2017 photo. *U.S. NAVY / Mass Communication Specialist 1st Class Josue L. Escobosa*

ARLINGTON, Va. – The director of the U.S. Navy's Nuclear Propulsion Program told an audience of active-duty and retired submariners that the current era of great power competition is highly demanding of the submarine force but is an exciting time as the challenges are met.

"Our submarines are consistently in high demand," said Adm. Frank Caldwell, director, Navy Nuclear Propulsion Program, speaking Nov. 17 at the Naval Submarine League's annual symposium in Arlington. "We are always improving our game, our team, our platforms. … It's a great time to be a submariner."

Caldwell noted that while the United States faced a formidable adversary during the Cold War – the Soviet Union – it now faces two nuclear-capable competitors: Russia and China. He said that the U.S. Navy's attack submarines and guided missiles are deployed forward daily.

He especially praised the wisdom of the conversion of four Ohio-class ballistic-missile submarines (SSBNs) into guided-missile submarines (SSGNs), each able to deploy with up to 154 Tomahawk cruise missiles and with special operations forces.

“We can’t keep these platforms at sea enough,” he said of the Ohio-class SSGNs, calling their development in the 2000s a “monumental decision.”

The SSGNs are slated for retirement in the mid-2020s, and their missile capacity will be replaced by Block V Virginia-class submarines equipped with the Virginia Payload Module.

Caldwell noted the new strike weapons entering the submarine force’s arsenal in the next few years, including the Maritime Strike Tomahawk, the Conventional Prompt Strike hypersonic weapon, and the return of the submarine-launched Harpoon cruise missile.

Seabed warfare also is a capability being sought by the submarine force, he said, with an emphasis on unmanned vehicles.

Caldwell said the submarine force is focusing on all methods of transferring data on and off the ship to be networked with the fleet, including incorporating machine learning and artificial intelligence, to enable faster decision-making.

“Just as we pursue acoustic superiority, we are pursuing decision superiority,” he said.

He also noted that the United States currently is building submarines at the highest rate since the 1990s.

Electric drive will be returning to the submarine force with the Columbia-class SSBN. Caldwell said that every electric drive train bound for a Columbia-class SSBN will be thoroughly tested at a land-based test site in Philadelphia and then shipped to Electric Boat in Groton, Connecticut for

installation in their respective hulls.

Caldwell briefly addressed the recent AUKUS agreement between Australia, the United States and the United Kingdom, which plans to build a nuclear-powered submarine force for Australia.

The U.S. Navy stands ready to support the historic announcement, but Caldwell stressed the importance of wise stewardship, looking at various options, and the importance of trust in the endeavor. He also said the Navy must be sure not to let AUKUS slow its own efforts.

“We have an already busy enterprise,” he said, noting that it is important for the Navy to remain focused.

Moran: China Way Ahead of US on AI Data

Retired U.S. Navy Adm. William Moran, then vice chief of naval operations, visits Aircraft Intermediate Maintenance Detachment Iwakuni at Marine Corps Air Station Iwakuni, Japan, Sept. 12, 2018. *U.S. MARINE CORPS / Lance Cpl. Stephen Campbell*

ARLINGTON, Va. — The United States still has an edge in two aspects of artificial intelligence (AI), but the People's Republic of China is ahead on a third aspect and rapidly closing on the other two, a retired Navy admiral said.

Speaking on AI in a Nov. 16 webinar — hosted by the Navy League of the United States and sponsored by Deloitte — was retired Adm. William Moran, former vice chief of naval operations and currently a strategic advisor for several companies, a board member at the US Naval Institute and as the founder and president of WFM Advisors LLC.

Moran considered three legs of AI in his assessment: quality of data; AI expertise; and domain expertise.

"You add those things together and that's where the magic

happens," he said.

The admiral said that much available data has to be refined, a time-consuming task that requires a large investment in personnel to convert stove-piped data in stove-piped systems to be useful across networks.

The United States – inside the U.S. Navy and outside – is flush with AI expertise, Moran said.

"We ae the best in the world in developing algorithms and developing AI capability," he said.

But even more so, the Navy is vastly endowed with domain expertise.

"From a DoD [Department of Defense] perspective, we are so far ahead of the Chinese, in my opinion," he said. "ASW [anti-submarine warfare], ASUW [anti-surface warfare], even – to some extent – cyber, we're way ahead on domain expertise.

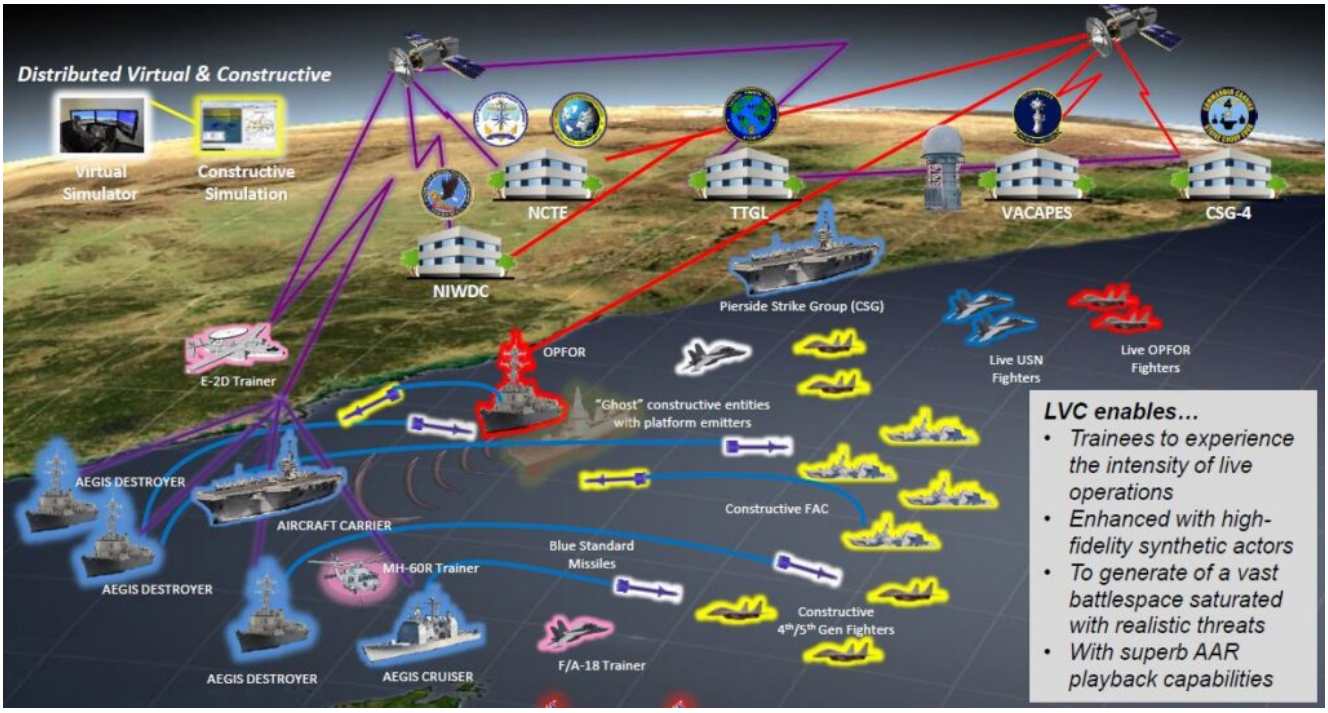
Moran said that on the aspect of data, "China is way ahead of us, because they can put raw manpower and unlimited resources towards data and they've done that for quite some time … and they don't have a lot of the roadblocks to obtaining that data, not worried about the security pieces that we rightfully have in front of mind, whether it's on the operational or tactical edge or the operational management structure."

He said that China is going to close gaps quickly in AI and domain expertise.

"They're in a race to get there sooner than we do," he said.

"You've got to get the domain folks in with the software engineers that are writing the code, with the data that's high quality, and it can happen pretty quickly. … You just have to commit and get after it."

Naval Surface Warfare Center Implements Navy Continuous Training Environment Tool for Live Virtual Constructive Training



The Navy Continuous Training Environment (NCTE) enables live virtual constructive (LVC) training with live and synthetic systems around the globe. The Navy recently utilized NCTE during the Large-Scale Exercise 2021 to execute LVC events with forces from across the United States Fleet Forces Command, U.S. Pacific Fleet and U.S. Naval Forces Europe-Africa. The above graph show how the program communicates using networks, simulations, simulation routing equipment, data translation devices and live training range systems used to create a realistic LVC training environment. *RON KETER*

To meet the goal of digital transformation that seeks to

eliminate onboard technical assists to ships by 2030 and advance the Navy's training capabilities, Naval Surface Warfare Center, Port Hueneme Division has connected to the Navy Continuous Training Environment (NCTE).

Connectivity with NCTE enables warfighters to conduct live virtual constructive (LVC) training with live and synthetic systems around the globe. NSWC Corona Division in Corona, California, develops, manages, operates and maintains the NCTE on behalf of Commander, U.S. Fleet Forces Command and Commander, Pacific Fleet.

The NCTE consists of networks, simulations, simulation routing equipment, data translation devices and live training range systems used together to create a realistic LVC training environment.

"The ability to properly train or conduct training on a simulated threat that has the actual capability of the real threat, provides us with some knowledge of what our weapons can and cannot do," said William Gieri, NSWC PHD Surface Warfare Engineering Facility (SWEF) manager. "It also provides training to fleet operations on what its people can expect in terms of how our systems would react to various threats."

NCTE enables sailors to experience an integrated and secure training environment that can generate a variety of situations that might not be available in a live exercise but should be expected at sea, including scenarios with multiple ships and aircraft, according to Gieri.

"Instead of having real-life aircraft like commercial airlines, we can put simulated aircraft up there flying commercial routes and also aircraft from hostile countries that gives operators on the ship a much more realistic threat environment they're more likely to encounter in various areas of the world they couldn't otherwise experience in a sterile fleet environment or in an ocean where they don't have

aircraft routes," Gieri said.

Gieri said he saw the tremendous potential to improve the command's capabilities by connecting to NCTE. While NCTE was developed specifically for conducting fleet training, the command is exploring options to support events such as Combat Systems Ship Qualification Trials (CSSQT) and Combat System Assessment Team (CSAT) events using the NCTE capability.

"With the CSSQT events that we conduct, we can't always provide real-world threats to the ships conducting them, so we are exploring using the NCTE and its capabilities to augment physical targets that we throw at the ships," Gieri said.

Recently, USS Fitzgerald (DDG 62) was the first ship to visit NSWC PHD that participated in the Single Ship Synthetic Training, using NCTE to develop and deliver a complex scenario of multiple anti-ship cruise missile vignettes to help DDG 62's training requirements.

And, the Navy recently used NCTE during the Large-Scale Exercise (LSE) 2021 to execute LVC events with forces from across the United States Fleet Forces Command, U.S. Pacific Fleet, and U.S. Naval Forces Europe-Africa. LSE 2021 was a globally integrated exercise that spanned multiple fleets across 17 different time zones connected using NCTE – executing new warfighting concepts and technology.

NSWC PHD's use of NCTE is in the early stages, according to Gieri, and the team is learning what its full potential is and the different ways it can be used in training the warfighter and supporting the fleet.

"If you do the crawl, walk and run phase, you can throw simple threats at somebody, and once they become proficient at simple threats, you can throw more complex scenarios at them – much like you'd expect in the real world," Gieri said. "So, it gives them the ability to learn from past experiences and become more proficient than if they were in an actual hostile

engagement.”

In addition to providing enhanced training, NCTE is a cost-effective way to conduct complex training scenarios.

Sailors can also learn, while in a LVC training environment, how to tell the difference between a threat and a non-threat, as well as see how current weapons and combat systems may react to a potential threat.

“You can also recreate past scenarios, with different combat system baselines, which NSWC PHD is working toward right now with virtual test beds in the SWEF, so you can have a crew sitting at a combat information center with a combat system it has on its ship and see what real ships are doing on the range and see how that crew would react,” Gieri said.

Kanoko Esheim, NSWC PHD LVC lead, worked alongside Gieri to connect SWEF to NCTE.

“By coupling NCTE integrating architecture with the other digital transformation initiatives that are underway, the command is determined to activate a modernized capability to enhance the toolkit and workforce development activities,” Esheim said.

Gieri added that his team is exploring different ways the Navy can use the NCTE.

“We are working toward that end right now,” Gieri said. “We haven’t gotten there yet, but that’s the next generation, which is how to bring a land-based test site and marry it with a ship at sea to look at different combat systems and evaluate older or future combat systems with the combat systems on a ship on a training range.”

While NCTE was developed primarily for fleet training purposes, NSWC PHD is also exploring options for using it to support CSATs and CSSQTs.

“We’re working on use cases [that outline the purpose and likely uses] and presenting them to Pacific Surface Fleet leadership to see if there’s any buy-in or if the leaders can support that,” Gieri said. “This first test with NCTE during a CSAT at the end of September will be a proof-of-concept to evaluate if NCTE can be used in a CSAT environment.”

AeroVironment’s New Mantis i45 N Multi-Sensor Imaging Payload Delivers Advanced ISR for Night Ops

AeroVironment’s new Mantis i45N imaging payload, intended for nighttime imaging. *AEROVIRONMENT*

ARLINGTON, Va. — AeroVironment Inc. introduced the Mantis i45 N, a multi-sensor nighttime imaging payload compatible

with Puma2 AE, Puma3 AE and Puma LE small unmanned aircraft systems (UAS), the company said Nov. 16.

Lightweight (905 grams) and compact, the new Mantis i45 N joins AeroVironment's expansive Mantis product line of micro-gimbals delivering high-quality video and imagery downlink to UAS operators.

Mantis i45 N is a dual-axis, gyro-stabilized, multi-sensor nighttime imaging payload designed for maximum visibility during low-light or nighttime intelligence, surveillance and reconnaissance (ISR) operations. The next-generation imaging system features improved long-wave IR (LWIR) thermal cameras with narrow-angle 32 mm and wide-angle 9.2 mm IR with 7.6x electronic zoom, allowing operators to capture high-resolution video at extended range. Designed for both superior night and low-light performance, the new imaging system also includes an upgraded 5-megapixel monochrome low-light camera sensor and high-powered 860 nm laser illuminator. Through its advanced suite of sensors, the Mantis i45 N payload allows Puma UAS operators to extend aircraft standoff distance for covert operations.

"Today's battlefield is dynamic and UAS operators increasingly rely on multiple payloads to successfully complete their missions," said Charles Dean, AeroVironment vice president for global business development and sales of UAS. "The new Mantis i45 N is a game changer during low-light or nighttime ISR operations, delivering increased situational awareness and advanced threat detection in any environment."

Built on the trusted and battlefield proven Mantis i45, the enhanced night variant Mantis i45 N maintains the same housing form-factor, allowing for a quick and simple change-out of payloads between day and night operations. Plug and play operational, no software updates are required for Puma UAS avionics or ground control stations for legacy system compatibility. Mantis i45 N is also natively compatible with

AeroVironment’s Crysalis next-generation ground control solution.

L3Harris Opens Canadian Facility to Address Growing Wescam MX Product Demand

L3Harris’ new 330,000 square-foot Canadian facility increases Wescam MX product production and program execution capabilities. *L3HARRIS*

MELBOURNE, Fla. — L3Harris Technologies has opened its new $110 million (USD) state-of-the-art facility in Waterdown, Ontario, Canada, to address the growing demand for its Wescam MX-Series electro-optical and infrared imaging technologies, the company said in a Nov. 16 release.

The new 330,000-square-foot facility is designed to create

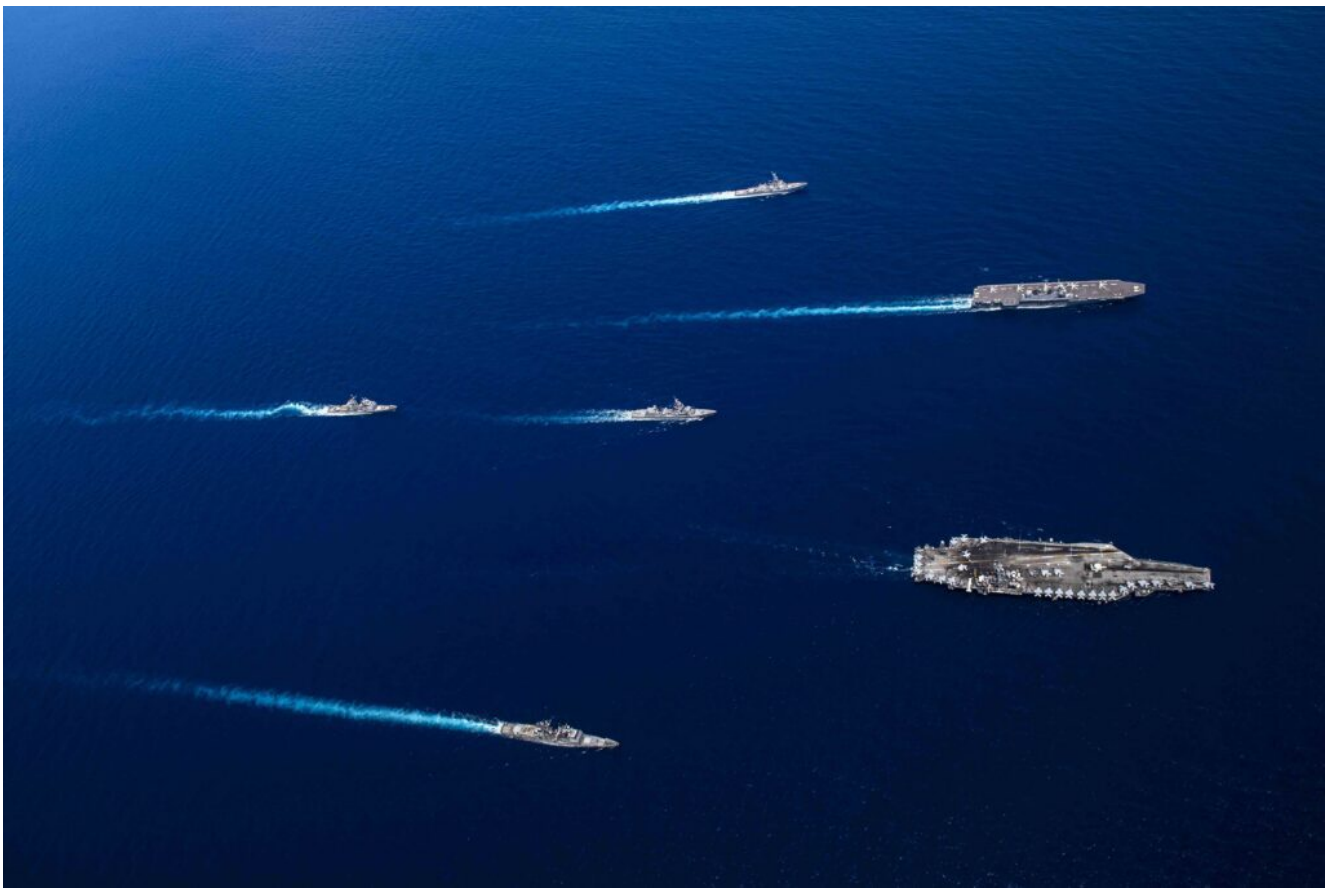
cross-functional efficiencies across research and development, engineering, assembly, service and office space. Currently 1,250 employees work either remotely or out of this new facility. By the end of 2025, L3Harris anticipates more than 1,500 employees will report into this location.

The investment in the new facility represents L3Harris' commitment to its global customers and partners, and employees throughout the region. The purpose-built facility has been designed to maximize efficiency and sustainability – increasing overall manufacturing over its previous capacity by 80%.

"This larger and leaner factory enables us to optimize production flow, enhancing L3Harris' ability to meet our customers' needs quicker, while increasing capacity for larger program execution and future growth," said Sean Stackley, president, Integrated Mission Systems, L3Harris.

L3Harris' Wescam MX systems are active in more than 80 countries. Operating across air, land and maritime domains, these intelligence, surveillance and reconnaissance and targeting systems support more than 200 different platforms.

From the Deck Plate of the Center for Maritime Strategy of the Navy League of the United States



U.S. Navy Ticonderoga-class guided-missile cruiser USS Shiloh (CG 67), U.S. Navy Ticonderoga-class guided-missile cruiser USS Lake Champlain (CG 57), U.S. Navy Nimitz-class aircraft carrier USS Carl Vinson (CVN 70), U.S. Navy Arleigh Burke-class guided-missile destroyer USS Milius (DDG 69), Japan Maritime Self-Defense Force (JMSDF) Murasame-class destroyer JS Murasame (DD 101), and JMSDF Izumo-class helicopter destroyer JS Kaga (DDH 184) transit together in the South China Sea, Oct. 30, 2021. *U.S. NAVY / Mass Communication Specialist 2nd Class Haydn N. Smith*

Last week I was pleased to christen the Navy League of the United States' new platform for naval thought and advocacy, the Center for Maritime Strategy. As first dean and plank owner, our voyage for sound maritime strategy begins with the commissioning crew and our institutional sea trials into 2022.

From the maritime logistics crisis to adversaries embracing Mahanian lessons forgotten by America, the urgency of a public embrace of sound maritime thought and is at a 30-year high. For that reason, Navy League National President David Reilly notes, "Policy development and advocacy are the main reasons

for the Navy League's existence, and we are stepping up our activity in these areas to meet the requirements of 21st century maritime power."

Dave and I are shoulder-to-shoulder in the center's role reinvigorating the league's position as Theodore Roosevelt's own flagship for bringing critical maritime issues to the forefront. I am reminded of author Robert Kaplan's assertion in his book, "Asia's Cauldron," that we are living in "a naval century." The term naval implies not merely a conventional Navy's importance, but sea power's far greater military and commercial measure the Navy enables and protects. For this reason, the Center for Maritime Strategy will serve as an advocate for the full scope of American sea power: the U.S. Navy, Marine Corps, Coast Guard, Military Sealift Command, Merchant Marine, our shipping industry at sea and ashore, our shipbuilders, and the industrial base that produces and maintains our ships across the military and commercial spectrum.

As Mahan notes, sea power is as much a measure of "the number following the sea" as those upon it plying and protecting 90% of our trade. To that end, the center will be focused on policy research and advocacy efforts across a broad spectrum of issues that impact the United States' position as a maritime nation. Although not all encompassing, the long-term goals of the Center will be to **Listen**, **Learn**, **Educate** and **Lead** by:

- Cultivating understanding of the U.S. Navy, Marine Corps, Coast Guard and Merchant Marine as contributors to American security and prosperity. This effort will be led by the Center for Maritime Strategy's new cadre of full-time maritime policy experts and part-time adjuncts dedicated to policy research.
- Educating and engaging congressional and executive branch officials on the insights and recommendations

derived from that research.

- Providing expert congressional testimony on relevant aspects of American maritime power. Actively participate in national security symposia, forums, and conversations.
- Creating and distributing general purpose summaries of research projects and other products for the education and support of Navy League members nationwide.
- Leveraging existing and emerging media channels to disseminate expertise and policy information in real-time, including expert commentary and advocacy on podcasts, television, radio, and the internet.

Our National Vice President and former CNO, Admiral John Richardson, hailed, "The Navy League's Center for Maritime Strategy will be the go-to place for maritime strategic thought, policy recommendations and informed advocacy. I'm excited about this initiative to boost the Navy League's citizen voice and help strengthen the United States as a maritime nation."

I welcome the Navy League's citizen voices to assist the center in navigating the way forward. We look forward to collaboration and partnership with other like-minded think tanks and institutions that support our national security objectives and maritime commerce. Recounting the words of John Paul Jones, I invite you:

Sign on… and sail with me. The stature of our homeland is no more than the measure of ourselves. Our job is to keep her free. Our will is to keep the torch of freedom burning for all. To this solemn purpose we call on the young, the brave, the strong, and the free. Heed my call, Come to the sea. Come Sail with me.

To those who are not yet members of the Navy League, this invitation extends as well. Members receive an insider's perspective on the Center for Maritime Strategy and up-to-the-

moment information on our next Sea-Air-Space Exposition in April 2022. Last August’s Sea-Air-Space brought over 170 speakers and a record 17,000 participants to National Harbor, Maryland, for three days of seminars and discussions with active-duty members of the sea services, retirees, and members of the industrial base.

Speakers, moderators and participants tackled the tough issues we face in the maritime domain in order to identify problems, share information and find solutions. Next year’s exposition will be even better and the Center for Maritime Strategy will be at the forefront of the discussions. I hope to see you on the stage or in the audience – and together, we can regain our sea legs for this “naval century.”