Northrop Expands Next-Generation Jammer Low-Band Team


An EA-18G Growler performs a touch-and-go on the flight deck of the aircraft carrier USS Abraham Lincoln this month. The Next-Generation Jammer Low-Band (NGJ-LB) Capability Block 1 (CB-1) will fly on the Growler. U.S. Navy/Mass Communication Specialist 2nd Class Amber Smalley

BETHPAGE, N.Y., and BALTIMORE – Northrop Grumman Corp. has expanded its Next-Generation Jammer Low-Band (NGJ-LB) Capability Block 1 (CB-1) solution team with the addition of proven structure supplier CPI Aero Inc. based in Edgewood, New York, Northrop Grumman said in a release.

The NGJ-LB will fly on the EA-18G Growler, providing advanced airborne electronic attack capabilities.

Following the proposal submittal for NGJ-LB in January, Northrop Grumman is moving forward with CB-1 execution by selecting CPI Aero to provide the NGJ-LB pod structure and assembly, advancing on the U.S. Navy's speed to fleet path.

"The addition of CPI Aero to our NGJ-LB team will help provide rapid fleet capability to the Navy," said Paul Kalafos, vice president of surveillance and electromagnetic maneuver warfare for Northrop Grumman.

"They have extensive experience in providing aircraft and pod structural components for several Department of Defense customers and we are proud to have them on our team of [electronic warfare] engineering and mission experts, helping the Navy maintain its warfighting edge through advanced airborne electronic attack (AEA) capabilities."

"Our leading structures and assembly experience is used by the

Navy’s EA-18G, E-2D, MH-60S and CH-53K systems, and we have a well-established record providing these components on-time, efficiently and with consistent high quality,” said Doug McCrosson, president and CEO of CPI Aero.

CPI Aero is also the current supplier of record for pod structure and assembly for the Navy’s ALQ-249 Next Generation Jammer Mid-Band program.

Northrop Grumman is the AEA integrator for the Navy’s current EA-18G Growler electronic warfare system. The NGJ-LB will fly on the EA-18G Growler, providing advanced AEA capabilities. Northrop Grumman has been working closely with the Navy to build and demonstrate survivable and capable carrier-based solutions for over 50 years. Starting with the AN/ALQ-86, to the current AN/ALQ-99, AN/ALQ-218 and AN/ALQ-240 for EA-18G and P-8, Northrop Grumman is helping define the future of naval electronic warfare through artificial intelligence, cognitive solutions, software defined and hardware enabled multi-function technologies and open architecture systems.

Northrop Grumman Supports Testing of MQ-8C Fire Scout’s Radar

The U.S. Navy and Northrop Grumman have started flight testing of the MQ-8C Fire Scout equipped with the Leonardo AN/ZPY-8 radar. Northrop Grumman Corp.

PATUXENT RIVER, Md. – The U.S. Navy, with support from Northrop Grumman Corp., started flight testing of the MQ-8C Fire Scout equipped with the Leonardo AN/ZPY-8 radar, the

company announced in a release.

“The AN/ZPY-8 radar significantly increases Fire Scout’s detection and tracking of targets. The ability to simultaneously employ multiple modes supports U.S. Navy intelligence, surveillance and reconnaissance requirements,” said Melissa Packwood, program manager of tactical autonomous systems for Northrop Grumman. “This increased capability enables Fire Scout to extend ranges to meet emerging requirements.”

Operating out of Webster Outlying Field near Patuxent River, the MQ-8C’s first flight with the radar occurred on Feb. 27. Testing began with several weeks of ground test prior to the first flight and continues to progress as the Navy and Northrop Grumman consider mission expansion opportunities for the platform.

To date, Northrop Grumman has delivered 32 of 38 MQ-8Cs to the Navy, all of which will be retrofit with the AN/ZPY-8 radar. The MQ-8C achieved initial operational capability last June and is set for its first deployment next year.

MCSC, ONR and CD&I Collaborating to Inform Armored Vehicle’s Path

Marines fire rounds from a Light Armored Vehicle during Exercise Northern Screen at Setermoen, Norway, in 2018. The Marines’ modern ARV in development would be the legacy LAV’s

replacement. U.S. Marine Corps/Cpl. Ashley McLaughlin
MARINE CORPS BASE QUANTICO, Va. – Marine Corps Systems Command (MCSC) is working toward the next phase of replacing the legacy Light Armored Vehicle (LAV) with a modern Advanced Reconnaissance Vehicle (ARV), the command said in a release.

Armored reconnaissance was the subject of a capability-based assessment, the results of which were summarized in a 2019 Joint Requirements Oversight Council-validated initial capabilities document produced by the Marine Corps' Combat Development and Integration (CD&I). The assessment
pitted light armored reconnaissance (LAR) battalions against a peer threat and identified shortfalls and gaps in capability.

CD&I emphasized the need for a modern, purpose-built ARV. As the core-manned, next-generation system, ARV must possess transformational capabilities to enable LAR battalions to gain contact with and collect on peer-threat forces. It must accomplish this goal without becoming decisively engaged, while also successfully waging the counter-reconnaissance fight.

After the analysis and various other supporting activities, the ARV concept emerged as a transformational required capability. The characteristics differentiating the ARV from current systems include a battle management system, enhanced vision technologies for increased situational awareness and target tracking and engagement capabilities.

The program manager for light armored vehicles (PM LAV) is pursuing this capability to support LAR battalions, provide them with additional capabilities and set the conditions to transform the way they fight.

"Any ARV path forward will continue to be informed by the ongoing [Office of Naval Research] technology demonstrator effort, the ARV Analysis of Alternatives, Phase III Force

Design outputs, additional government [requests for information], senior leadership direction and industry feedback," said John "Steve" Myers, program manager for MCSC's LAV portfolio.

A collaborative effort

In the early planning stages, the U.S. Marine Corps envisioned the ARV as a replacement combat vehicle for the LAV. Over time, officials began to view the ARV as a vehicle platform equipped with a suite of advanced reconnaissance capabilities, with an open-system architecture that can sense, shoot, move, communicate and remain transportable as part of the Naval expeditionary force. PM LAV is leading the acquisition planning effort to help realize this next-generation reconnaissance vehicle.

The portfolio is collaborating with the ONR and the Capabilities Development Directorate of Headquarters Marine Corps, CD&I.

Capitalizing on their Detroit arsenal location, PM LAV is working with Combat Capabilities Development Command Ground Vehicle Systems Center to update the ARV concept as a tool to analyze impacts of capability changes.

Recognizing commonalities exist among the ARV and the optionally manned fighting vehicle, the U.S. Army, Navy and Marine Corps are working together to ensure collaboration for those capability gaps.

ONR is conducting research on advanced technologies to inform requirements, technology readiness assessments and competitive prototyping efforts for the ARV. In 2019, ONR selected two vendors to design, fabricate and test full-scale technology demonstration platforms.

Both platforms are expected to be ready for government evaluation in the fourth quarter of fiscal 2020. Through ONR's

efforts, the Ground Combat Element Division of CDD has been refining a set of requirements for the ARV to meet the future reconnaissance mission of the Marine Corps. PM LAV will leverage this information in a performance specification to be released to industry partners to build the ARV.

The collaboration between PM LAV, ONR and CD&I is crucial to the success of the ARV.

“Effective collaboration between the materiel developer, technologist and combat developer is essential to achieving the next-generation capabilities required to transform legacy armored reconnaissance into a modern, combat credible force,” said Kurt Koch, Ground Combat Equipment Division, CDD.

Koch noted how the strong partnerships forged over the last three years set the conditions to develop the core of a next-generation, combat vehicle system —mobile on land and water —to serve as a manned hub coordinating the actions of unmanned ground and aerial robotic sensor, and weapon systems.

The path forward

PM LAV has taken several steps to ensure the success of the ARV. In 2019, PM LAV released a Request for Information to industry comprising a set of attributes for a transformational vehicle. Based on responses to the RFI, the program office met with several vendors interested in becoming a prime vendor for ARV. PM LAV originally planned to hold an industry day in May 2020 for the competitive prototyping phase. However, the ongoing COVID-19 pandemic caused the event to be rescheduled to the fourth quarter of fiscal 2020.

“We still want to hold an industry day so we can have an open discussion with industry, provide more clarification and answer any questions from our industry partners,” said Maryann Lawson, MCSC’s project lead for ARV.

In addition to industry engagements, the evaluation of science

and technology efforts as well as ongoing [capabilities design document] and performance specification refinement should yield the information necessary to move into the competitive prototyping phase.

“PM LAV will focus efforts targeted on industry RFIs and strategic small group engagements,” Myers said.

The Marine Corps plans to use the ground vehicle systems other transaction agreement with the National Advanced Mobility Consortium (NAMC) to release a draft request for prototype proposal (RPP) for the ARV base variant in the fourth quarter of fiscal 2020. The government is interested in industry feedback and collaboration to shape the requirement and statement of work for the final RPP release in spring 2021. Industry partners are encouraged to periodically check Beta.SAM.gov and engage with the NAMC for future RFIs and program updates.

HII Awarded Advance Procurement Contract for Amphibious Assault Ship

PASCAGOULA, Miss. – Huntington Ingalls Industries’ Ingalls Shipbuilding division has received a $187.46 million advance procurement contract from the U.S. Navy to provide long-lead-time material and advance procurement activities for amphibious assault ship LHA 9, the company said in a release.

“This contract allows us to maintain the health of our critical nationwide shipbuilding supplier base while continuing our serial production of large-deck amphibs,”

Ingalls Shipbuilding President Brian Cuccias said. “We will work closely with our Navy-Marine Corps partners and our suppliers across the U.S. to build another highly capable, versatile and survivable warship.”

Ingalls is the sole builder of large-deck amphibious ships for the Navy. The shipyard delivered its first amphibious assault ship, the Iwo Jima-class USS Tripoli (LPH 10), in 1966. Ingalls has since built five Tarawa-class (LHA 1) ships, eight Wasp-class (LHD 1) ships and the first in a new class of amphibious assault ships, America (LHA 6), in 2014. The second ship in that class, Tripoli (LHA 7), was delivered to the Navy earlier this year. Bougainville (LHA 8) is under construction.

Navy Taps Draper to Support Future USVs

CAMBRIDGE, Mass. – The U.S. Navy’s future unmanned surface vehicles (USVs) family of systems will set a new standard for navigating in hazardous environments, operating with minimal human control and executing missions further from port than previously imagined, a company spokesman for Draper said in a release.

Draper has supported the Navy for more than 60 years. The company was awarded a Navy contract to develop technology to support the family of USVs.

Overall, the Navy has picked 40 companies to participate in a five-year, $982 million multi-award contract (MAC) to support the research, development and delivery of USVs. In 2018, Draper won a similar award for the Navy’s unmanned underwater vehicles (UUV).

The indefinite delivery, indefinite quantity MAC identifies task orders in six functional areas. Draper will provide support in payloads, non-payload sensors and autonomy and vehicle control systems.

Key to Draper's support of the Navy's USV program is a simulation framework that enables engineers to design, develop, validate and execute real-time hardware-in-the-loop simulations and rapid assessment, integration and test of complex systems. The Draper simulation framework is available to military and scientific organizations. More than 30 entities have requested access to it and several prime contractors have used it.

"Under this award, Draper is prepared to meet the new standard for assured autonomy for autonomous surface vehicles and support the Navy's requirement for greater flexibility – in mission design, operations and resource deployment," said Joel Parry, Draper's maritime warfare and intelligence, surveillance and reconnaissance (ISR) lead.

Draper will provide capabilities for Navy platforms that include Sea Hunter, medium and large USVs and the mine countermeasures USV. The company will deliver sensor and actuator technologies, computing technologies, design methods and tools and modeling and simulation technologies, among others.

"Our capabilities in unmanned surface vehicles will continue Draper's support of the U.S. Navy and its mission to remain unsurpassed in its global flexibility, agility and reach," said Bill Borgia, director of mission systems at Draper.

Eastern Shipbuilding Group Performs Keel-Laying for Offshore Patrol Cutter

An artist’s rendering of the offshore patrol cutter. Eastern Shipbuilding Group

PANAMA CITY, Fla. – Eastern Shipbuilding Group held a keel-laying ceremony for the U.S. Coast Guard’s first-of-class offshore patrol cutter (OPC), the Argus, the company said in a release.

The April 28 ceremony, at Eastern Shipbuilding’s Nelson Street facility in Panama City, was performed and recorded without an audience to comply with U.S. Centers for Disease Control guidelines for combatting the spread of the COVID-19 virus.

The keel-laying represents the ceremonial start of a ship’s life by commemorating the assembly of the initial modular construction units. Historically, to attest that the keel was properly laid and of excellent quality, the shipbuilder would carve their initials into it. This practice is commemorated by welding the initials of the ship’s sponsor into the keel authentication plate.

The ship’s sponsor is retired Coast Guard Capt. Beverly Kelley, who was the first woman to command a U.S. military vessel. She commanded the 95-foot patrol boat, the cutter Cape Newagen, in 1979. Throughout her distinguished career, she became the first woman to command both a medium-endurance cutter and a high-endurance cutter in cutters Northland and Boutwell, respectively.

“Eastern Shipbuilding Group is humbled and proud to have been chosen to build this next-generation ship for the world’s best

Coast Guard, and we think today represents a milestone that all those involved in the program can be proud of," said Eastern's president, Joey D'Isernia.

"The steel joined here today is unlike any you or I have seen before. This steel has been ravaged by 162 mph winds, generated by the third most powerful hurricane to make landfall in this country's history. This steel has borne witness to a pandemic that has caused fear and shaken our core. But through all this, it remains sturdy, it remains resilient, and today it will join with other steel to become stronger, more defined and more resolute. Today is representative of how we build, and of unwavering resolve in the face of adversity for a Coast Guard and a nation that deserves nothing less."

Adm. Charles W. Ray, vice commandant of the Coast Guard, tours the construction of the first offshore patrol cutter, the Argus, in 2019 at the Eastern Shipbuilding Group shipyard in Panama City, Florida. U.S. Coast Guard/Petty Officer 2nd Class Loumania Stewart

D'Isernia was accompanied on the podium by Capt. Andrew Meverden, representing the Coast Guard, and Bradley Remick, the welder charged with fashioning the sponsor's initials onto the ceremonial keel authentication plate.

The OPC will provide a capability bridge between the national security cutter, which patrols the demanding open ocean, and the fast-response cutter, which serves closer to shore. The OPC design includes the capability of carrying an MH-60 or MH-65 helicopter and three operational over-the-horizon small boats. The vessel also is equipped with a highly sophisticated combat system and C4ISR suite.

Coast Guard Cutter Mohawk Returns from Counter-Drug Patrol

KEY WEST, Fla. – The U.S. Coast Guard Cutter Mohawk crew has returned to their homeport in Key West following a 65-day counter-drug patrol throughout the eastern Pacific Ocean and Caribbean, the Coast Guard said in a release.

The Mohawk crew, with a deployed Coast Guard Helicopter Interdiction Tactical Squadron crew, interdicted four suspected drug vessels, apprehended more than 25 suspected drug smugglers and seized more than 4,500 pounds of cocaine and 1,500 gallons of liquefied cocaine.

The crew worked with multiple interagency and partner-nation maritime patrol aircraft and surface assets to counter transnational criminal organizations and hinder the illicit flow of drugs, people and other dangerous cargo into the U.S.

Two of these interdictions were coordinated directly with Central and South American law-enforcement agencies from Costa Rica to strengthen partnerships, promote stability and rule of law in the region and ease pressures on the U.S. southern border and domestic law enforcement.

Between operational tasking, the cutter crew completed aviation, damage control, seamanship and navigation training to maintain operational readiness and prepare for future multimission deployments.

On April 1, U.S. Southern Command began enhanced counter-narcotics operations in the Western Hemisphere to disrupt the flow of drugs in support of Presidential National Security Objectives.

Numerous U.S. agencies from the Departments of Defense, Justice and Homeland Security cooperated in the effort to combat transnational organized crime. The Coast Guard, U.S. Navy, Customs and Border Protection, FBI, Drug Enforcement Administration, and Immigration and Customs Enforcement, along with allied and international partner agencies, play a role in counter-drug operations.

The fight against drug cartels in the eastern Pacific Ocean requires unity of effort in all phases from detection, monitoring and interdictions, to criminal prosecutions by international partners and U.S. Attorneys in districts across the nation.

The law-enforcement phase of counter-smuggling operations in the eastern Pacific is conducted under the authority of the 11th Coast Guard District, headquartered in Alameda. The interdictions, including the actual boardings, are led and conducted by members of the Coast Guard.

New CH-53K Simulator Ready for Training

Marine pilot Lt. Col. Lucas “Amber” Frank takes the CH-53K simulator, the Containerized Flight Training Device (CFTD), for a test drive. The Marine Corps took delivery of the CFTD in April. Naval Air Systems Command

PATUXENT RIVER, Md. – The H-53 heavy-lift helicopter program office has taken delivery of the first training device for the CH-53K King Stallion helicopter, according to a Naval Air Systems Command release.

Delivered April 14, the Containerized Flight Training Device (CFTD) is housed at Marine Corps Air Station (MCAS) New River in Jacksonville, North Carolina.

The CFTD, built by Lockheed Martin in partnership with Veraxx, provides realistic in-cockpit system displays (visual resolution, tactile, spatial, audio and functionality) and can simulate weather and tactical environments. The CFTD also can connect with other simulators for enhanced attitude control and other aircraft training scenarios.

“The CFTD is an amazingly capable training device,” said Col. Jack Perrin, CH-53 program manager. “It is a much less expensive practice than using operational equipment and provides near-aircraft fidelity into a state-of-the-art training simulator for the fleet.”

The CFTD is the first in a series of new training devices being developed for the CH-53K. All trainers will eventually be located at the Center for Naval Aviation Technology Training at MCAS New River, where all the aircraft’s aircrew and maintenance maintainers will be trained. Delivery of two other CH-53K training devices – the Helicopter Emulation Maintenance Trainer and the Composite Maintenance Trainer – also are expected this year.

The CH-53K is completing development tests, leading to initial operational test and evaluation in 2021. First fleet deployment will be in 2023 or 2024. The simulation software continuously updates. As the program team makes necessary modifications to the CH-53K into the future, the CFTD also will change.

U.S., British Ships Conduct Anti-Submarine Exercise Above Arctic Circle

The Arleigh Burke-class guided-missile destroyer USS Donald Cook, USNS Supply, the USS Porter and the Royal Navy's HMS Kent conduct a connected replenishment in the North Atlantic on April 28 ahead of a bilateral anti-submarine warfare exercise. U.S. Navy/Yeoman 3rd Class Anthony Nichols

NORWEGIAN SEA – The U.S. 6th Fleet conducted a bilateral anti-submarine warfare exercise with the U.K. above the Arctic Circle on May 1, U.S. Naval Forces Europe-Africa and the 6th Fleet said.

Four ships from two nations, a U.S. submarine, and a U.S. P-8A maritime patrol and reconnaissance aircraft worked together in the Norwegian Sea to conduct training in the challenging Arctic conditions.

For the exercise, Arleigh Burke-class Aegis destroyers USS Donald Cook and the USS Porter and fast combat support ship USNS Supply were joined by the Royal Navy's HMS Kent. The U.S. sub and the P-8A Poseidon from Patrol Squadron (VP) 4 supported the training. This drill reinforced the combined training that the nations received last month while participating in the U.K.'s Submarine Command Course.

"For more than 70 years, 6th Fleet has operated forces across the region in support of maritime security and stability. Our regional alliances remain strong because of our regular operations and exercises with partner navies, and we welcome this opportunity to work collaboratively at sea, while enhancing our understanding of Arctic operations," said Vice Adm. Lisa Franchetti, the 6th Fleet's commander.

The multinational anti-submarine exercise in the High North, made up of about 1,200 Sailors from the U.S. Navy and Royal Navy, is the latest in a series of U.S. ships operating above the Arctic Circle.

In 2018, elements of the USS Harry S. Truman Carrier Strike Group and the USS Iwo Jima Expeditionary Strike Group operated above the Arctic Circle to support a NATO exercise, Trident Juncture. In 2019, the forward deployed destroyer USS Donald Cook and a SAG from U.S 2nd Fleet led by the USS Normandy and the USS Farragut also operated separately above the Arctic Circle.

“We are working with our partners to enhance our combined capabilities as we conduct maritime security operations and training in the Arctic region,” Franchetti said. “Our ships must be prepared to operate across all mission sets, even in the most unforgiving environments. This is especially critical in the Arctic, where the austere weather environment demands constant vigilance and practice.”

Eastern Shipbuilding Cuts Steel for Second Offshore Patrol Cutter

PANANA CITY, Fla. – Eastern Shipbuilding Group (ESG) began to cut steel for the second offshore patrol cutter (OPC), the Chase, on April 27, ESG said in a release.

The cutting of steel starts the fabrication and assembly of the cutter’s hull, and ESG is to complete keel-laying of the Chase next year. Additionally, ESG has started the

placement of orders for long lead time materials for the third OPC, the future cutter Ingham. The OPC is to replace medium-endurance cutters in U.S. Coast Guard service now.

“Today marks a monumental event and reflects the dedication and resolve of our workforce to execute program milestones on time. ESG is dedicated to the task of building the most sophisticated, highly capable ships for the Coast Guard,” said Eastern Shipbuilding’s president, Joey D’Isernia.

“Today’s success is the start of serial production of the OPCs at ESG by our dedicated team of shipbuilders and subcontractors for our customer and partner, the United States Coast Guard. We are excited for what will be a great 2020 for Eastern Shipbuilding Group and Bay County, Florida.”

The OPC is designed to conduct multiple missions in support of the nation’s maritime security and border protection. It will provide a capability bridge between the national security cutter, which patrols the open ocean, and the fast-response cutter, which serves closer to shore.

The OPC design includes the capability of carrying an MH-60T or MH-65 helicopter and three operational over-the-horizon small boats. The vessel is to be equipped with a highly sophisticated combat system and C4ISR suite that will enhance capabilities to execute the service’s missions.

On Sept. 15, 2016, the Coast Guard exercised the option for detail design on Eastern Shipbuilding’s OPC contract. The deal includes the production of up to four vessels.