First Heliborne AOEW Pod for Navy Expected in Late 2019

WASHINGTON – Lockheed Martin expects to produce the first engineering development model (EDM) of a heliborne electronic warfare pod by late 2019, a company official said.

Orders for materials for the ALQ-218 Advanced Offboard Electronic Warfare (AOEW) pods began last month, Joe Ottaviano, director of electronic warfare programs at Lockheed Martin Rotary and Mission Systems, told reporters Nov. 28 at the Association of Old Crows convention.

The AOEW pod is designed to be taken aloft by an MH-60R or MH-60S Seahawk helicopter and serve as an offboard electronic attack system to counter anti-ship cruise missiles. The helicopter provides power and mobility for the pod, but the pod's operation is independent of the helicopter crew and linked to the SLQ-32(V)6/7 shipboard electronic warfare system.

"It's bringing capability that hasn't been brought before," Ottaviano said, who noted that testing will be a challenge because of the novelty of the capability. "It is designed to be autonomous or [alternatively] work with the fleet."

He said Lockheed Martin expects to roll out the first AOEW EDM in late 2019. The system completed its critical design review in June. The company has been awarded a contract for six EDMs. Initial operational capability is planned for the 2020. Additional pods are expected to be ordered in a low-rate initial production order in the 2021-2022 time frame.

The pod has successfully completed a fit check on the MH-60 helicopter and can be attached to either side of the helicopter.

“How to get all of this capability in a very small pod was a challenge,” Ottaviano said, noting that the pod “generates a lot of heat” and has no supplementary cooling system.

Virtual Training Means Less Danger for Carrier Flight Deck Crews

ARLINGTON, Va. – One of the most dangerous environments in the U.S. Navy is the deck of an aircraft carrier. Catapult systems that can remove limbs, furious engines, whipping propellers and high winds create a hectic environment.

The driving force behind all of these activities is helping a pilot land an aircraft on a short slab of pitching steel, in the middle of the ocean.

Although pilots are the stars of the show, they could not accomplish their missions without the support of flight deck crews, who are responsible for safely launching and recovering aircraft.

Previously, flight deck crews could only conduct training while on the job. But thanks to a collaborative effort between the Office of Naval Research Global (ONR Global) TechSolutions program and the Naval Air Warfare Center Training Systems Division (NAWCTSD), a new technology called Flight Deck Crew Refresher Training Expansion Packs (TEPs) will deliver cutting-edge training to Sailors and Marines.

The system is an expandable framework of game-based immersive 3D technologies that allows for individual, team or multi-team

training events.

“Having a simulator that allows us to tie the full flight deck team with all the key decision-makers, supervisors, catapult crew and watch stations together – and train in a virtual environment – is just fantastic,” said Cmdr. Mehdi Akacem, air boss aboard the Navy’s newest aircraft carrier, USS Gerald R. Ford.

The first three TEPs will help a carrier’s Primary Flight Control team; the Landing Signal Officer (LSO) team; and the Catapult Launch Team.

The idea for the Flight Deck Crew Refresher Training came from an LSO instructor at Naval Air Station Oceana. TechSolutions – ONR Global’s rapid-response science and technology program that develops prototype technologies to address problems voiced by Sailors and Marines, usually within 12 months – listened to the idea and found the right people to make it happen.

Courtney McNamara, a computer scientist and the Advanced Gaming Interactive Learning Environment Team Lead at NAWCTSD, helped develop the technology.

“All of the ship systems, characters, flight deck crew characters and team members can be both driven synthetically or by live players,” said McNamara.

The training stations simulate real-life with the aid of virtual environments. Even the flight patterns that occur during the simulations are based on real flight patterns conducted by pilots.

The training can simulate normal operations and emergency conditions, exposing deck crews to a wide array of real-world scenarios.

“This is really the first example I’ve seen of extending the

value of a simulation environment to such an essential, tangible thing as a carrier flight deck," said Akacem. "It's really a need we've had for years, one we've been able to get by without because of the grit and will of our Sailors and Marines."

Navy Awards Contract to VT Halter for New Oceanographic Survey Ship

ARLINGTON, Va. — The Navy has awarded a contract to shipbuilder VT Halter Marine toward advance work for the eighth Pathfinder-class oceanographic survey ship (T-AGS).

The Naval Sea Systems Command awarded to VT Halter Marine a "not-to-exceed $9 million undefinitized contract action for functional design engineering, procurement of long-lead time material, and limited advanced production to support the Oceanographic Survey Ship (T-AGS 67)," the Defense Department announced on Nov. 19.

VT Halter Marine, based in Pascagoula, Mississippi, has built seven Pathfinders, six of which were delivered between 1994 and 2001. One of these, USNS Sumner, was withdrawn from service in 2014. A seventh, USNS Maury, was delivered in 2016. It is 15 feet longer than the earlier Pathfinders and features a moon pool to facilitate operation of unmanned underwater vehicles.

The Pathfinder class is operated by the Military Sealift Command for the Naval Meteorology & Oceanography Command.

General Dynamics Tapped to Accelerate Navy Cloud Adoption

FAIRFAX, Va. – General Dynamics Information Technology (GDIT) will deliver commercial cloud services for the U.S. Navy to accelerate cloud adoption. The Navy's Program Executive Office for Enterprise Information Systems (PEO EIS) awarded CSRA LLC, a managed affiliate of GDIT, a $22.4 million blanket purchase agreement (BPA), the company said in a Nov. 19 release.

The award includes a one-year base period with four one-year options that, if exercised, would bring the estimated cumulative value to $96 million.

"GDIT will continue supporting PEO EIS as it executes the Navy's 'Cloud First' strategy of increasing data reliability and cost-effectiveness, while maintaining a robust security profile," said Leigh Palmer, senior vice president and head of GDIT's Defense Division. "Through this award, the Navy will gain access to premium commercial cloud services through GDIT's strategic relationships with Microsoft and Amazon. Our secure, scalable and containerized environment will enable the Navy to store its data securely, reap significant savings and gain impressive resources to accomplish their mission."

GDIT will deliver commercial cloud services to the Navy through the General Services Administration's Schedule 70, which includes Amazon Web Services and Microsoft Azure. Both companies are Strategic Alliance Partners with GDIT.

U.S. Navy Commissions Littoral Combat Ship Sioux City

ANNAPOLIS, Md. – The U.S. Navy commissioned USS Sioux City (LCS 11) – the nation's sixth Freedom-variant littoral combat ship – at the U.S. Naval Academy Nov. 17, Lockheed Martin said in a release.

"We are confident that LCS 11 will be what the Navy needs, when the fleet needs it," said Joe DePietro, vice president, Small Combatants and Ship Systems, Lockheed Martin. "We remain focused on delivering these ships as quickly as possible with increasing capability and lethality. These ships will have a long lifespan, and we're working with the Navy to make LCS even stronger and more resilient."

The Freedom-variant LCS integrates new technology and capability to affordably support current and future mission capability from deep water to the littorals. LCS 11 is equipped to support surface warfare.

LCS continues to increase in capability. This year, LCS 5 and 7 completed Longbow Hellfire missile testing, LCS 9 completed Rolling Airframe Missile testing and LCS 5 and 9 participated in Fleet Weeks around the United States.

The Freedom-variant LCS is designed to integrate modular weapons, as well as manned and unmanned vehicles to deliver critical warfighting capability to the fleet in mine counter measures, anti-surface warfare and anti-submarine warfare.

"LCS is our most effective fleet asset to counter asymmetric

small craft threats," said Adm. John Richardson, chief of naval operations. "This ship and the ships like her are going to complicate any adversary's operating picture. You're going to need to keep track of Sioux City when she's at sea, because if you don't, she's going to make you pay for that."

There are seven ships in various stages of production and test at Fincantieri Marinette Marine, where the Freedom-variant LCS is built. The next Freedom-variant in the class is LCS 13, the future USS Wichita, slated for commissioning in Mayport, Florida, in January. LCS 19 is scheduled for christening on Dec. 15.

"Two thousand men and women crafted this ship from flat steel to the capable and agile surface combatant being commissioned. The men and women who sail this ship have an enormous responsibility in protecting our nation and allies, and we consider it a privilege to support these missions," said Jan Allman, president and CEO of Fincantieri Marinette Marine. "I am confident that when called upon, the USS Sioux City will always prevail."

Austal Delivers Expeditionary Fast Transport Burlington to Navy

MOBILE, Ala. – Austal USA delivered the expeditionary fast transport ship USNS Burlington (EPF 10) to the U.S. Navy during a ceremony onboard the ship at the company's headquarters Nov. 15, the company said in a release. This is the fourth ship Austal has delivered to the Navy this year.

The EPF program provides the Navy with a high-speed intra-theater transport capability. The 338-foot long Burlington is an aluminum catamaran capable of transporting 600 tons, 1,200 nautical miles at an average speed of 35 knots and is designed to operate in austere ports and waterways, too shallow and narrow for the larger ships in the surface fleet, providing added flexibility to U.S. warfighters worldwide. The ship's flight deck can also support flight operations for a wide variety of manned and unmanned aircraft, including a CH-53 Super Stallion.

"Today's delivery of Burlington marks the 10th EPF we have delivered to the U.S. Navy, a milestone achieved as a result of the dedicated shipbuilding team made up of Austal employees, our Navy partners, industry suppliers and both local and state community and legislative support," said Austal USA President Craig Perciavalle. "These ships continue to deliver exceptional capability around the globe. The U.S. Navy is taking these great ships and expanding their work to support a variety of operational needs, demonstrating their significance, flexibility and value to the future 355-ship Navy."

Upon delivery of USNS Burlington, two additional Spearhead-class EPFs are under construction at Austal's Mobile shipyard. Puerto Rico (EPF 11) was launched this week and will now prepare for sea trials and Newport (EPF 12) is being erected in final assembly. Austal also recently received instruction from the Navy to order long lead-time materials for EPF 13.MIAMI – The crew of the Coast Guard Cutter James offloaded approximately 18.5 tons of cocaine Nov. 15 in Port Everglades worth more than an estimated $500 million wholesale seized in international waters in the Eastern Pacific Ocean, the 7th Coast Guard District said in a release.

The drugs were interdicted off the coasts of Mexico, Central and South America by multiple U.S. Coast Guard cutters.

The offload represents 15 separate, suspected drug-smuggling vessel interdictions by the Coast Guard:

■ James was responsible for nine cases seizing an estimated 19,288 pounds of cocaine.
■ Bear was responsible for one case, seizing an estimated 44 pounds of cocaine.
■ Stratton was responsible for one case, seizing an estimated 440 pounds of cocaine.
■ Active was responsible for two cases, seizing an estimated 3,148 pounds of cocaine.
■ Dauntless was responsible for two cases, seizing an estimated 2,050 pounds of cocaine.
■ Venturous was responsible for two cases seizing an estimated 3,100 pounds of cocaine.
■ Spencer was responsible for one case seizing an estimated 4,497 pounds of cocaine.
■ Campbell was responsible for one case seizing an estimated 5,441 pounds of cocaine.

Numerous U.S. agencies from the Departments of Defense, Justice and Homeland Security are involved in the effort to combat transnational organized crime. The Coast Guard, 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 transnational organized crime networks in the Eastern Pacific requires unity of effort in all phases from detection, monitoring and interdictions, to prosecutions by U.S. Attorneys in California, on the East Coast and in Puerto Rico.

Bear is a 270-foot medium-endurance cutter homeported in Portsmouth, Virginia. Stratton is a 418-foot Legend-class cutter homeported in Alameda, California. Active is a 210-foot Reliance-class cutter homeported in Port Angeles, Washington. Dauntless is a 210-foot Reliance-class cutter homeported in Pensacola, Florida. Venturous is a 210-foot Reliance-class

cutter homeported in St. Petersburg, Florida. James is a 418-foot Legend-class cutter homeported in North Charleston, South Carolina. Spencer is a 270-foot medium-endurance cutter homeported in Boston. Campbell is a 270-foot medium-endurance cutter homeported in Kittery, Maine.

Naval Strike Missile System Planned for Installation on LCS 27

ARLINGTON, Va. – Lockheed Martin is in the process of integrating the Over-the-Horizon (OTH) Weapon System on its Freedom-variant littoral combat ship (LCS) and has identified the ship to be built ready for the missile system.

The first Freedom LCS to be built ready to receive the Naval Strike Missile (NSM), the weapon of the OTH system, will be LCS 27, the future USS Nantucket, Joe DiPietro, vice president of Small Combatants and Ship Systems, said Nov. 15 in a teleconference with reporters from Annapolis, Maryland.

The NSM, developed by Norway's Kongsberg, is a ship- and ground-launched anti-ship cruise missile that will be integrated by Raytheon Missile Co. into the OTH system. It will give the LCS an OTH anti-ship capability as an initiative to improve the lethality of the Navy's warships.

"We're working on the design and integration of that," DiPietro said. "[The Navy] had us do space and weight on our previous hull that was awarded for the Naval Strike Missile and now we're working on the modernization package to be able to put that in to an in-service asset as well."

Rear Adm. Joseph P. Neagley, program executive officer, Unmanned and Small Combatants, told Seapower last month that the NSM will be installed on all LCSs, regardless of which mission package is installed.

DiPietro said Lockheed Martin also is working on a backfit of the NSM, but that the Navy will determine the schedule of ships to be fitted with the NSM.

DiPietro also said the company is working on the integration of the Surface Electronic Warfare Improvement Program Block II Lite into the Freedom variant.

“We actually already have put that test asset on LCS 1 Freedom and ran through the range and tested it with our COMBATSS21 configuration, being a derivative of Aegis,” he said.

Navy Orders F-35s Under Contract Modification

ARLINGTON, Va. – The Navy has awarded Lockheed Martin a $22.7 billion contract modification for 255 F-35 Lightning II joint strike fighters, the Defense Department said in a Nov. 14 release. Of the order, 42 aircraft are for the Navy and Marine Corps.

Naval Air Systems Command awarded the low-rate initial production contract modification for Lot 12 aircraft plus more added by Congress for fiscal 2018-2019.

The 255 Lightning IIs in this order include 36 F-35Bs for the U.S. Marine Corps and 16 F-35Cs for the U.S. Navy. The order includes 64 F-35As for the U.S. Air Force; 60 F-35As for

Foreign Military Sales; and 71 F-35As and 18 F-35Bs for nations partnered in the F-35 program. Work under the contract is expected to be completed by March 2023.

The F-35's production remains in low rate because it has not yet completed its operational test and evaluation.

The Marine Corps' F-35B made its first operational shipboard deployments this year and on Sept. 27 Marine Fighter Attack Squadron 211 conducted the Lightning II's first combat missions, over Afghanistan in support of Operation Freedom Sentinel. The Navy's first F-35C fleet squadron, Strike Fighter Squadron 147, has been formed and is training in its new aircraft.

Navy Super Hornet Crashes in Philippine Sea; Crew Rescued

PHILIPPINE SEA – A Carrier Air Wing 5 (CVW-5) F/A-18F experienced a mechanical issue that resulted in the crew ejecting while conducting routine operations in the Philippine Sea Nov. 12, Task Force 70 public affairs said in a release.

"The crew was immediately and safely recovered by USS Ronald Reagan search-and-rescue aircraft and brought back to the ship for evaluation by medical personnel, the release said. "Both aviators are in good condition."

The F/A-18F was flown by Strike Fighter Squadron 102, one of four Super Hornet squadrons assigned to Carrier Air Wing Five.

Two other CVW-5 aircraft have been lost in mishaps over the past year. On Nov. 22, 2018, a C-2A Greyhound assigned to

Fleet Logistics Support Squadron 30 Detachment Five crashed into the Philippine Sea while en route to Ronald Reagan, killing three Sailors. On Oct. 19, an MH-60R Seahawk assigned to Helicopter Maritime Strike Squadron 77 crashed on the flight deck of the carrier, injuring 12 persons.

CVW-5 is embarked onboard Ronald Reagan and is currently underway in the U.S. 7th Fleet area of operations in support of security and stability in the Indo-Pacific region.

Ronald Reagan has resumed normal operations and the crash is under investigation.

Navy Submarine Force Boss: All Submarines to Get 3D Printers

ARLINGTON, Va. – The Navy is moving to equip all of its submarines with additive manufacturing capability, also known as 3D printing, as part of an initiative to increase at-sea repair capability for the submarine force.

“[We’re] actively experimenting with additive manufacturing and working expediently to provide this capability to all my ships,” Vice Adm. Chas Richard, commander, Submarine Forces, said Nov. 7 at the Naval Submarine League’s symposium. “All my boats will get 3D printers in the near term.”

Richard said that the crew of the attack submarine USS Virginia “went and got their own 3D printer and, using that, built themselves apart at sea to help keep their boat on deployment. It is that type of problem-solving that happens

daily across the force.”