AN/AQS-20C Sonar System Completes Developmental Testing

PANAMA CITY, Fla. – The Navy completed developmental testing for the AN/AQS-20C mine-hunting sonar system at Naval Surface Warfare Center, Panama City Division (NSWC PCD), on Feb. 26, the Program Executive Office Unmanned and Small Combatants Public Affairs announced in a Feb. 27 release.

The AQS-20C is the next generation of the AN/AQS-20 system designed to be incorporated into the Littoral Combat Ship Mine Countermeasures Mission Package. The system consists of four sonar arrays: two side-looking arrays, a gap-filler sonar array and a forward-looking sonar array, all providing simultaneous detection, localization and classification of bottom mines, close-tethered moored mines and volume-moored mines.

The system delivers high-definition images of bottom mines, providing the operator with both range and contrast data that combine to form a three-dimensional image during post-mission analysis to aid in mine identification.

Developmental testing verifies that a system's design meets all technical specifications and that all contract requirements have been met. During testing, the Raytheon-developed towed sonar sensor conducted 12 underway missions in various operational modes and at different depths at four separate NSWC PCD test ranges. The missions were conducted aboard the test vessel M/V Patriot.

The AQS-20C will be integrated with and deployed from the Mine Countermeasures Unmanned Surface Vehicle (MCM USV), a long-endurance, semi-autonomous, diesel-powered, all-aluminum surface craft that supports the employment of various mine

countermeasure payloads.

The MCM USV can be launched and recovered by the LCS, from other vessels of opportunity or from shore sites to provide minesweeping, mine-hunting and mine neutralization capabilities. The MCM USV is undergoing developmental testing as a component of the Unmanned Influence Sweep System at the South Florida Test Facility in Fort Lauderdale, Fla.

Test results will undergo scoring and performance assessment, leading up to a final developmental testing report that is expected to be finished this spring. Findings from this report will be used for future performance improvements of the system.

Mercury Systems Receives $5.5M in Follow-on Orders from Navy for DRFM Jammers

ANDOVER, Mass. – Mercury Systems Inc. announced that it received an additional $5.5 million in follow-on orders against its previously announced $152 million five-year sole-source basic ordering agreement to deliver advanced Digital RF Memory (DRFM) jammers to the U.S. Navy.

The orders were received in the second and third quarters of the company's fiscal 2019 are expected to be delivered over the next several quarters.

"These orders reflect the U.S. Navy's continuing commitment to the advancement of our electronic warfare test and training capabilities," said Mark Bruington, vice president and general

manager of Mercury's electronic warfare and mission solutions group.

"Recent electronic attacks by known adversaries have sparked a renewed commitment to maintaining U.S. superiority in electronic warfare. Our ongoing efforts to design, develop and produce innovative DRFM jammers directly supports the growing need to effectively train U.S. warfighters and keep U.S. electronic protection technology at the leading edge."

BAE Systems Updates F-35 Electronic Warfare Systems

NASHUA, N.H. – BAE Systems reached a critical program milestone with the successful insertion of new technology into its electronic warfare (EW) systems for the global fleet of Lockheed Martin F-35 Lightning II fighter aircraft, the company announced in a Feb. 28 release. Upgrades to the AN/ASQ-239 system position it to meet future capability requirements and improve warfighters' ability to conduct critical missions in contested airspace.

The improved EW system delivers the world-class functionality of the previous system in a smaller footprint, reducing volume and power requirements – creating space for Block IV modernization upgrades. The system update also resolves issues with manufacturing obsolescence that would have otherwise required costly redesign work.

The company's capacity expansion strategy – including a $100 million investment in 80,000 square feet of state-of-the-art manufacturing space, process automation and the growth of its highly skilled electronic warfare workforce by more than 23

percent – enabled BAE Systems to become the first F-35 supplier to insert updated technology into its systems at full production speeds, delivering 11 systems monthly and ramping production to match aircraft production.

The Digital Channelized Receiver/Techniques Generator and Tuner Insertion Program (DTIP) technology was introduced into BAE's manufacturing process in 2018, with the first deliveries starting in July. The team is consistently providing 11 shipsets per month, enabling the company to continue on-time delivery to its customer.

"We've delivered almost 400 EW systems to date, and now we've updated the architecture and are manufacturing it at a high rate of production. This technology insertion gives the EW system room to grow and will help the F-35 maintain its dominance of the electromagnetic spectrum," said Deborah Norton, vice president of F-35 Solutions at BAE Systems. "The successful insertion of DTIP was the result of the outstanding focus, dedication and teamwork of our engineering and production teams working in close coordination with our customer."

The advanced F-35 EW system is a proven digital electronic warfare/countermeasures suite that provides pilots with real-time battlespace situational awareness and rapid-response capabilities. The ASQ-239 system provides fully integrated radar warning, targeting support and self-protection capabilities to engage, counter, jam or evade threats to improve survivability and mission effectiveness. The system builds on BAE Systems 60-plus years of EW experience and legacy of providing 13,500 tactical systems for more than 80 different platforms, including F-22, F-16, F-15, B-1, B-2 and classified platforms.

Coast Guard Cutter Vigilant Crew Returns Home After Caribbean Patrol

CAPE CANAVERAL, Fla. – The crew of the Coast Guard Cutter Vigilant returned home Feb. 26 to Cape Canaveral after a two-month Caribbean patrol.

Vigilant's crew returned to their homeport of Cape Canaveral, concluding a patrol in which the crew enforced U.S. federal laws by conducting numerous boardings throughout the Caribbean while working with other government agencies and international partners to increase national security.

While at sea, the crew disrupted the illegal and perilous voyages of 100 Haitian migrants and ensured their safe return to their home country. Vigilant's crew also saved the lives of three men who had been lost at sea for four days without food and water and returned the survivors to their home country after providing necessary medical attention.

"Maintaining and operating a 54-year-old ship requires great effort and a lot of dedication from everyone onboard," said Cmdr. Jerome Dubay, Vigilant's commanding officer. "This crew continuously meets the challenge, making mission success possible. I am proud of the compassion and professionalism our crewmembers displayed during every boarding and while assisting the migrants back to their country."

The Vigilant is a multimission 210-foot Medium Endurance Cutter whose missions include illegal drug and migrant interdiction as well as search and rescue. The Vigilant patrols throughout the Caribbean basin and Atlantic seaboard

to ensure safety of life at sea and enforce international and domestic laws.

Coast Guard Cutter Returns Home After Seizing $43 Million in Cocaine

VIRGINIA BEACH, Va. – The crew of Coast Guard Cutter Dependable returned home to Virginia Beach, Va., on Feb. 25 after a 59-day patrol in the eastern Pacific Ocean, the Coast Guard 5th District said in a Feb. 26 release.

While deployed, Dependable's crew aided Joint Interagency Task Force South in conducting counter-drug and alien migrant interdiction operations.

During their patrol, Dependable's boarding team intercepted a go-fast vessel off the coast of Mexico that was specially fitted to smuggle contraband. Once on scene, the boarding team confirmed that the vessel was carrying narcotics along with three suspected drug smugglers. The interdiction resulted in the seizure of about 1,235 pounds of cocaine worth an estimated street value of $18 million.

Dependable's crew also worked alongside four partner assets to patrol an operational area roughly the size of the U.S. The cutter's crew worked with the U.S. Navy and Customs and Border Protection Maritime Patrol Aircraft to conduct aerial surveillance alongside other Coast Guard cutters patrolling the region. As a result of these collaborations, Dependable's crew was able to assist Coast Guard Cutter Alert's crew with a transfer of drugs and suspected smugglers apprehended in

previous interdictions.

The Dependable crew also leveraged the cutter's embarked Helicopter Interdiction Tactical Squadron (HITRON), the members of which launched in an MH-65 Dolphin helicopter and disrupted a drug-smuggling operation. The squadron seized an estimated 1,653 pounds of cocaine worth about $25 million and intended for delivery to Mexico.

The Dependable crew sailed 12,904 miles and traveled nearly as far south as the Galapagos Islands and as far west as Acapulco, Mexico. In addition to the cutter's permanent crewmembers, teams from Tactical Law Enforcement Team South, based in Miami, and HITRON, based in Jacksonville, Fla., were aboard for the patrol. Each team provided expertise regarding maritime law enforcement and aerial use of force.

The Virginia Beach-based Cutter Dependable is a 210-foot Reliance-class medium-endurance cutter with a permanent crew of 77. They conduct homeland security missions in the offshore waters of the Western Hemisphere, from New England to the Caribbean Sea and Eastern Pacific.

Having surpassed its 50th year of service to America last November, Dependable and the other 26 medium-endurance cutters are slated for replacement by new Offshore Patrol Cutters beginning in 2021.

NNSA Completes First Low-Yield W76-2 Nuclear Warhead

for Trident Missile

WASHINGTON – The Department of Energy's National Nuclear Security Administration (DOE/NNSA) successfully completed the First Production Unit (FPU) of the W76-2 warhead on Feb. 22 at the Pantex Plant in Amarillo, Texas, according to a NNSA release on Feb. 25.

The W76-2 FPU represents NNSA's ability to achieve a significant program milestone in support of a national security initiative requested by the president in the 2018 Nuclear Posture Review.

"NNSA is fully committed to meeting the requirements of our partners at the Department of Defense," said Dr. Charles P. Verdon, NNSA's deputy administrator for defense programs. "The W76-2 will allow for tailored deterrence in the face of evolving threats."

The W76-2 program is a modification of the W76-1 warhead to provide a low-yield, sea-launched ballistic-missile warhead capability.

NNSA is on track to complete the W76-2 Initial Operational Capability warhead quantity and deliver the units to the Navy by the end of fiscal 2019.

CPI Aero Announces $8.1 Million Contract for E-2D

Wing Kits From Northrop Grumman

EDGEWOOD, N.Y. – CPI Aerostructures Inc. has received a contract with a maximum value of $8.1 million from Northrop Grumman Corp. for outer wing panel kits used in the manufacture of complete wings for the E-2D Advanced Hawkeye, CPI Aero announced in a Feb. 25 release. CPI Aero has produced outer wing panel kits since 2008 for the E-2D Advanced Hawkeye, the U.S. Navy's carrier-based airborne early warning and control aircraft.

"Exceptional program execution, superior product quality and the ability to provide value to our customers lies at the heart of our ongoing ability to secure multiyear defense contracts with leading defense technology companies," said Douglas McCrosson, president and chief executive officer of CPI Aero. "We are pleased to have the opportunity to extend our long-standing partnership with Northrop Grumman for an additional six years as a key member of 'Team Hawkeye.'"

Construction Begins on Future LCS USS Canberra

MOBILE, Ala. – Construction on the future USS Canberra (LCS 30) began Feb. 22 in Austal USA's module manufacturing facility, the company said in a release of the same date. Dave Growden, LCS program director, pushed the button to start the router that cut the first piece of aluminum, signaling start of construction for the 15th Independence-variant littoral combat ship.

LCS 30 will be the second U.S. Navy vessel to bear the name USS Canberra in honor of Australia's capital city. In 1943, the first USS Canberra joined the U.S. Navy, serving with distinction in the Pacific in World War II, the Cuban Missile Crisis blockade and the Vietnam War.

"It's a privilege to be building a U.S. Navy combat ship named for the capital of Australia, the birthplace of Austal USA's parent organization," said Austal USA President Craig Perciavalle. "The Independence-variant LCS will play a prominent role in the safety and security of the Pacific as our ships deploy forward this year and for years to come."

Austal USA has delivered nine littoral combat ships to the U.S. Navy, while six are currently under construction (LCS 20-30) and four are awaiting the start of construction following LCS 30.

LCS is a highly maneuverable, lethal and adaptable ship designed to support focused mine countermeasures, antisubmarine warfare and surface warfare missions. The ship integrates new technology and capability to affordably support current and future mission capability from deep water to the littorals.

As the role of the littoral combat ship continues to evolve as a key component to the Navy's ability to gain sea control through distributed lethality, Austal USA continues to deliver ships on time and on budget to support the needs of the fleet. The Independence-variant LCS, along with Austal USA's highly successful Expeditionary Fast Transport (EPF), are designed, constructed and well-positioned to meet the needs of the fleet today and into the future. The flexibility and capacity of the Austal USA shipyard, the Independence-variant LCS and the EPF are well suited to rapidly and efficiently support the Navy's desired fleet of 355 ships with affordable solutions.

Coast Guard, Partner Agencies Eradicate Illegal Marijuana Plants in the Bahamas

Andros Island, Bahamas – The Coast Guard, Drug Enforcement Administration (DEA) and Bahamian authorities have eradicated more than 200,000 illegal marijuana plants in the Bahamas, the Coast Guard 7th District said in a Feb. 22 release.

On Feb. 6, 2019, a Coast Guard forward-deployed MH-60 Jayhawk helicopter crew from Operation Bahamas, Turks & Caicos (OPBAT) recognized what appeared to be a strong smell of marijuana while flying over Andros Island on a joint narcotic interdiction patrol. The Coast Guard helicopter transported United States DEA agents and Royal Bahamas Police Force Officers from the Drug Enforcement Unit to the area to identify and eradicate over 200,000 marijuana plants.

“The efforts put forth by the Coast Guard, DEA, and the Bahamian Police Force is another success story highlighting the effectiveness of OPBAT’s counter-drug operation,” said Cmdr. Mike Benson, the Coast Guard OPBAT Director.

Approximately 460,000 pounds of marijuana were destroyed.

Operation Bahamas, Turks and Caicos is an international operation between the U.S., the Bahamas, and Turks and Caicos governments to identify, disrupt and dismantle illicit smugglers transiting through the Bahamas.

Navy Accepts Delivery of Future USS Paul Ignatius

PASCAGOULA, Miss. – The Navy accepted delivery of the future guided missile destroyer USS Paul Ignatius (DDG 117) from Huntington Ingalls Industries'

(HII) Ingalls shipbuilding division, Feb. 22, the Program Executive Office – Ships (PEO-Ships) said in a release of the same date.

Accepting delivery of DDG 117 represents the official transfer of the ship from the shipbuilder to the Navy. Prior to delivery, the ship conducted a series of at-sea and pier-side trials to demonstrate its material and operational readiness.

The 67th Arleigh Burke-class destroyer honors Paul Robert Ignatius, who served in the U.S. Navy during World War II; as secretary of the Navy from 1967- 1969; and as assistant secretary of Defense during the Lyndon B. Johnson administration.

"Our industry partners have delivered another highly capable platform that will provide our Sailors and Nation with warfighting lethality for the next four decades," said Capt. Casey Moton, DDG 51 class program manager, (PEO) Ships. "We are proud to accept delivery of Paul Ignatius and look forward to her Commissioning ceremony later this summer."

The DDG 51 class ships currently being constructed are Aegis Baseline 9 Integrated Air and Missile Defense destroyers with increased computing power and radar upgrades that improve detection and reaction capabilities against modern air warfare and Ballistic Missile Defense threats.

In addition to Paul Ignatius, HII's Pascagoula shipyard is also currently in production on the future destroyers Delbert

D. Black (DDG 119), Frank E. Peterson Jr. (DDG 121), Lenah H. Sutcliffe Higbee (DDG 123) and Jack H. Lucas (DDG 125), the first Flight III ship. HII is under contract for an additional six Arleigh Burke-class destroyers, awarded as part of the fiscal 2018-2022 multiyear procurement, that will be constructed in the Flight III configuration with enhanced Air and Missile Defense capabilities.