Kaney Receives Navy SBIR Award to Develop Sonobuoy Power Amplifier

ROCKFORD, Ill. – The U.S. Navy has selected Kaney Inc. for the Small Business Innovative Research (SBIR) program to apply advanced power amplifier technologies to the next block upgrade of AN-SSQ/125 sonobuoys, the company said in a Dec. 1 release.

Under this effort, Kaney teams in Rockford, Ill and Dayton, Ohio, will develop a low-distortion Class D power amplifier using high-efficiency, high-power density, wide-bandgap semiconductors. Microprocessor-based distortion reduction algorithms and specialized output filtering will be used to meet distortion requirements. Amplifier design upgrades are required to support a wide range of input voltages, high-bandwidth, high-power, low-distortion and lower volume than the legacy power amplifier. The SSQ-125 sonobuoys are used by the U.S. Navy for anti-submarine warfare operations. The SSQ-125 is air launchable from fixed or rotary-wing aircraft. It is also easily deployable from the deck of a surface vessel.

“Our team has unparalleled experience in advanced technology and manufacturing critical military and aerospace products that will be leveraged for this new product development,” said Jeffrey J. Kaney Sr., chief executive officer of Kaney Inc.

Guam’s Second Fast Response Cutter Arrives in Apra Harbor

The crew of the Coast Guard Cutter Oliver Henry (WPC 1140) arrives at the cutter’s new homeport in Santa Rita, Guam, Nov. 30, 2020. The Oliver Henry is the second of three scheduled Fast Response Cutters (FRC) to be stationed in Guam. U.S. Coast Guard / Petty Officer 3rd Class Katherine Hays

SANTA RITA, Guam – The Coast Guard Cutter Oliver Henry (WPC 1140) arrived at its new homeport in Santa Rita, Guam on Monday, following a 10,620 nautical mile journey from Florida, the Coast Guard 14th District said in a Nov. 30 release.

During the voyage to its new homeport the crew of the Oliver Henry participated in drug interdiction operations in the Eastern Pacific while also assisting in a search for an overdue fishing vessel off Saipan.

“I am extremely proud of the crew, who did an exceptional job preparing and sailing the cutter nearly 11,000 nautical miles from Key West, Florida, to Santa Rita, Guam, during the global COVID-19 pandemic,” said Lt. John Hamel, the Oliver Henry’s commanding officer. “Not only did we deliver the highly capable Fast Response Cutter to our new operational area in the Western Pacific but we also conducted operations while transiting the Eastern Pacific, seizing a cocaine shipment worth $26.7 million in support of the United States Southern Command’s Operation Martillo.”

The Oliver Henry is the second of three scheduled fast response cutters (FRCs) to be stationed in Guam. The FRCs are replacing the 30-year old 110-foot Island Class Patrol Boats and are equipped with advanced command, control, communications, computers, intelligence, surveillance, and reconnaissance systems and boast greater range and endurance.

Like the Island-class patrol boats before them the FRC's are designed as multi-mission platforms ranging from maritime law enforcement to search and rescue. The new cutters represent the Coast Guard's commitment to modernizing service assets to address the increasingly complex global Maritime Transportation System.

"Oliver Henry will significantly increase the capabilities of the Coast Guard throughout the region," said Capt. Christopher Chase, commander, Coast Guard Sector Guam. "I am excited to welcome the crew of the Oliver Henry home and look forward to them conducting operations with our partners in the near future."

The cutter is named after Oliver T. Henry Jr., an African American Coast Guardsman who enlisted in 1940 and was the first to break the color barrier of a then-segregated Service. During World War II, Henry served under Lt. Cmdr. Carlton Skinner, who later became the first civilian governor of Guam and played a critical role in developing the Organic Act in 1950. Henry blazed a trail for minorities in the U.S. military as he climbed from enlisted ranks while serving on 10 different Coast Guard cutters, finally retiring as a chief warrant officer in 1966.

Each FRC has a standard 24-person crew. This will bring over 70 new Coast Guard members to Guam, along with a projected 100 family members. In addition to the crews of the three ships additional Coast Guard support members and their families will also be in Guam.

Raytheon Intelligence & Space to Deliver and Repair Sub Communications System

Raytheon Intelligence & Space has been awarded a $70 million contract to provide test, inspection, evaluation and restoration of Submarine High-Data Rate mast components. LSIS Richard Cordell

ARLINGTON, Va. – Raytheon Intelligence & Space, a Raytheon Technologies business, was awarded a multi-year $70 million indefinite-delivery/indefinite-quantity contract by the Naval Undersea Warfare Center to provide for test, inspection, evaluation and restoration of Submarine High-Data Rate mast components, the company said in a Dec. 1 release. In addition, RI&S will fabricate spare SubHDR Mast components under the contract.

“The SubHDR system was created to support protected high-data rate communications for submarines,” said Denis Donohue, vice president, Communications and Airspace Modernization Systems for Raytheon Intelligence & Space. “SubHDR mast is a protected, secure and survivable system to support all communications needs, from day-to-day messaging to ensuring the commander-in-chief can stay connected with his commanders.”

SubHDR links submariners to the Global Broadcast Service, the Milstar satellite constellation and the Defense Satellite Communication System, via a unique mast antenna that connects them to the above-sea world. The system vastly improves a submarine’s mission capability and the quality of life for submariners by affording them high-data rate communications with the world outside of the sub.

The SubHDR System gives submarines high-data rate, multi-band

satcom capability. Operating via military satellites, SubHDR enables underwater forces to be full participants in coordinated fleet battle group and joint task force network centric operations. The mast-mounted satcom system transmits secure wideband multimedia, secure and non-secure internet access, voice and data traffic, imagery and video teleconferencing.

According to the U.S. Navy's Submarine Communication Program Office, "SubHDR makes optimal use of high efficiency, small antenna, multi-band technology and state-of-the-art packaging to provide bandwidth without sacrificing submarine stealth."

The SubHDR contract will repair and deliver sustainment spares for active fleet submarines for the next five years.

USCGC Seneca Returns to Homeport after Conducting Joint Maritime Operations

Coast Guard Cutter Seneca, shown here in a 2007 photo, has returned to its Portsmouth homeport after a 57-day counter-drug and humanitarian assistance patrol. U.S. Coast Guard
PORTSMOUTH, Va. – The Coast Guard Cutter Seneca returned to its homeport in Portsmouth, Virginia, after a 57-day patrol conducting counter-drug and humanitarian assistance operations in the Caribbean Sea and Atlantic Ocean, Nov. 20, the Coast Guard 5th District said in a Nov. 30 release.

The Seneca crew deployed with an embarked MH-65 Dolphin helicopter from Coast Guard Helicopter Interdiction Tactical

Squadron in Jacksonville, Florida. The embarked helicopter provided the cutter with aerial use of force capabilities to supplement onboard law enforcement teams.

Upon their arrival in the Pacific, Seneca crewmembers conducted joint maritime operations with the Colombian Naval vessel A.R.C. Punta Ardita. The joint operation focused on interoperability, communications, and counter-narcotics efforts.

Surface and air crews seized more than 2,750 kilograms of cocaine and 1,235 pounds of marijuana, for an estimated street value of over $124 million. Three vessels were interdicted and a fourth disrupted through joint efforts with U.S. Customs and Border Protection and the U.S. Navy. These efforts resulted in the detainment of nine suspected narcotics traffickers.

“I continue to be impressed with what the crew of Seneca can accomplish,” said Cmdr. Matthew Rooney, commanding officer of the Seneca. “Operating in a pandemic environment is a challenge and the crew rose to it. We accomplished a lot in a short time. Counter-narcotics interdictions, international cooperation, hurricane assistance, and refueling at sea. This patrol encompassed many of our core missions and improved our proficiency. The crew can return home with their head held high with pride.”

Additionally, Seneca crewmembers completed three underway replenishments with the Chilean Navy Oiler Almirante Montt. The process brings two ships in close proximity to each other while at sea to transfer fuel and supplies. The Almirante Montt crew provided logistical services in a COVID-19 free and contactless environment, extending Seneca’s time on patrol.

After transiting from the Eastern Pacific to the Caribbean, the Seneca crew was tasked to provide humanitarian assistance and disaster response in the wake of Hurricane Eta on the Mosquito Coast of Honduras. The embarked helicopter crew also

assisted in conducting multiple missions, which included medical evacuation, critical infrastructure reconnaissance, and identifying stranded populations and individuals in need.

The Seneca is a 270-foot medium-endurance cutter homeported in Portsmouth and routinely deploys in support of counter-drug, migrant interdiction, fisheries, search and rescue, and homeland security missions.

Coast Guard Completes 30-Day Test of Unmanned Surface Vehicles off Hawaii

A Coast Guard prototype unmanned surface vehicle performs a test off Oahu, Hawaii, Oct. 7, 2020. The focus of the test was to explore how current and emerging technologies might be used to enhance maritime domain awareness in remote regions. U.S. Coast Guard / Coast Guard Research and Development Center

HONOLULU — The Coast Guard completed a 30-day demonstration and evaluation of unmanned surface vehicles (USVs) off Oahu, early November, the Coast Guard 14th District said in a Nov. 25 release

The focus of the test was to explore how current and emerging technologies might be used to enhance maritime domain awareness in remote regions. The test also showed ways USVs with assorted sensor capabilities might support the Coast Guard's many missions around the globe ranging from search and rescue, to law enforcement.

"It's clear that autonomous technology is a growing industry,

and has great potential to enhance Coast Guard operations," said Cmdr. Blair Sweigart, the demonstration's director from the Coast Guard Research and Development Center. "Combined with artificial intelligence algorithms, unmanned systems could be a game changer."

During the test the Coast Guard examined USVs from Saildrone and Spatial Integrated Systems to understand their capabilities and effectiveness. The USVs participated in a variety of operational simulations to detect and alert the Coast Guard to both legitimate and nefarious behavior.

As outlined in the Coast Guard's Strategic Plan 2018-2022, one of the service's main goals is to "evaluate emerging technologies, such as unmanned platforms, artificial intelligence, machine learning, network protocols, information storage, and human-machine collaboration for possible use in mission execution."

These tests represent a commitment to those goals, allowing the Coast Guard to identify how USVs could be used to support search and rescue operations, improve Marine Environmental response, enhance Port Security, aid in the fight against illegal maritime smuggling, and identify vessels engaged in illegal, unreported, and unregulated fishing.

"The demonstration helped us understand what these technologies currently are, and are not, capable of," said Sweigart. "These vessels proved to be very effective across a variety of mission areas. The results of this study will help shape how the Coast Guard, and our partners, incorporate USVs into our future operations."

With their long endurance, USVs can provide persistent domain awareness in remote regions of the U.S. Exclusive Economic Zone. By conducting the demonstrations off Hawaii, the teams gained a firsthand understanding of how these assets could

help protect the islands, and the critical resources and habitats throughout Oceania.

Many of the Coast Guard's missions require close coordination with federal, state, local, and international partners and during the tests the Coast Guard worked closely with NOAA, DHS partners, the Navy, and agencies from several partner nations who face similar issues to protect the global maritime and fishing industries.

Lockheed Martin Awards CAE Contract for MAD-XR for U.S. Navy MH-60Rs

MH60R Seahawks on the dock landing ship USS Oak Hill (LSD 51). U.S. Navy / Mass Communication Specialist 3rd Class Taylor A. Elberg

MONTREAL – CAE has been awarded a subcontract by Lockheed Martin to supply the CAE Magnetic Anomaly Detection-Extended Role (MAD-XR) system for United States Navy MH-60R Seahawk helicopters, CAE said in a Nov. 18 release.

CAE MAD-XR is a highly sensitive magnetometer designed to sense changes in the earth's magnetic field and is used as a sensor to detect submarines. Lockheed Martin Rotary and Mission Systems is the lead systems integrator for the U.S. Navy's MH-60R "Romeo" helicopter, the Navy's primary anti-submarine and anti-surface warfare helicopter.

Under terms of a Phase 1 contract from the U.S. Navy, Lockheed Martin has responsibility to integrate the CAE MAD-XR into the

MH-60R helicopter. CAE will provide the MAD-XR system and support Lockheed Martin with non-recurring engineering and integration services. Initially, a total of six MH-60R helicopters will be integrated with the CAE MAD-XR during Phase 1.

“Over the past several years we have conducted several trials with the U.S. Navy to confirm the capabilities of the MAD-XR system on the MH-60R helicopter,” said Thomas M. Kane, director, Naval Helicopter Programs, Lockheed Martin. “Adding this to the MH-60R’s sensor suite will further advance the capabilities of the world’s most advanced anti-submarine warfare helicopter.”

The CAE MAD-XR is significantly more compact than previous MAD systems with reduced size, weight, and power requirements. This allows the CAE MAD-XR to be extended to smaller platforms such as unmanned aerial systems, helicopters and small fixed-wing aircraft.

“The integration of our MAD-XR system on the U.S. Navy’s MH-60R helicopter is testament to its powerful magnetic detection abilities,” said Daniel Gelston, group president, Defence & Security, CAE. “The MAD-XR system can provide defense forces with enhanced capabilities for operational missions such as submarine detection and search and rescue.”

L3Harris Technologies to Invest $1.5M in Rhode Island

for Navy Sonar Work

L3Harris Technologies will expand in Rhode Island as part of recent growth in its towed array sonar work for the U.S. Navy. Shown here is the company's Model 980 Active Low Frequency Towed Sonar (ALOFTS). L3Harris Technologies

ASHAWAY, R.I. – L3Harris Technologies, an aerospace and defense technology company, plans to expand in Ashaway, Rhode Island, by investing $1.5 million in its operations, the company said in a Nov. 24 release. The company will add more than 40 positions and increase its manufacturing space to 92,000 square feet.

The L3Harris facility develops and manufactures technology the U.S. Navy uses in submarines for surveillance and detection. The expansion will support the Navy's recent contract award of $31 million for L3Harris to build next-generation towed sonar systems for submarines. The facility expansion will be equipped with state-of-the-art sonar array manufacturing and environmental test equipment to enhance the product's overall performance.

"The Ashaway facility expansion represents a long-standing commitment to meeting the Navy's current and future needs and creating job opportunities in Rhode Island," said Scott Tilden, vice president and general manager, Maritime Sensors, L3Harris. "This facility has an exceptional record of designing, developing, and manufacturing undersea sensors, which is one of the exciting reasons we continue to invest and expand operations in the state."

L3Harris' Ashaway location has provided undersea sensor systems since 1991, including the TB-29C and TB-34A towed array sonars. Other support to the Navy includes providing integrated solutions for ship monitoring, ship defense sensors, submarine electronics and acoustic sensors for unmanned vehicles.

U.S. Navy Awards $197M Contract to BAE Systems for USS Wasp Modernization

An F-35B Lightning II aircraft lands aboard the amphibious assault ship USS Wasp (LHD 1) in this 2013 photo. U.S. Navy / Mass Communication Specialist Seaman Michael T. Forbes II

NORFOLK, Virginia – BAE Systems has received a $197.4 million contract from the U.S. Navy to drydock and perform maintenance and modernization work aboard the amphibious assault ship USS Wasp (LHD 1), the company said in a Nov. 24 release. This is the second time in four years the company has performed significant work onboard the Wasp to sustain its warfighting capability.

Under the new contract, BAE Systems' Norfolk shipyard will begin working aboard the 843-foot-long USS Wasp in February 2021, performing hull, tank and mechanical work. The contract includes options that, if exercised, would bring the cumulative value to $237.7 million.

During the company's last maintenance availability aboard the Wasp, from December 2016 to May 2017, BAE Systems added modifications to support Joint Strike Fighter operations onboard.

"BAE Systems is very familiar with USS Wasp, performing substantial upgrade work onboard before its forward deployment to Japan three years ago," said Mark Whitney, deputy general manager of BAE Systems Ship Repair and general manager of Norfolk Ship Repair. "Our team of skilled tradespeople and subcontractors look forward to executing another long

sustainment period on Wasp, to ensure the ship retains its sharp warfighting capability.”

The USS Wasp is the lead ship of a class of U.S. Navy amphibious assault ships. It is the 10th Navy vessel to bear the name since 1775.

To prepare for drydocking the Wasp, BAE Systems sent its largest floating drydock in Norfolk to a Baltimore, Maryland, shipyard for five months of lifecycle maintenance. The drydock, called “Titan,” returned to Norfolk earlier this month. The lifecycle maintenance work performed on Titan drydock will enable the yard to service the largest Navy ships in the port of Norfolk for another 20 to 25 years. Titan is capable of lifting up to 52,500 long tons. The USS Wasp displaces about 40,500 long tons.

USS John S. McCain conducts Freedom of Navigation Operation

Ensign James Bateman, from Huntsville, Ala., scans the horizon utilizing the ‘big eyes’ while standing watch on the on the bridge wing as the guided-missile destroyer USS John S. McCain (DDG 56) conducts routine underway operations in Peter the Great Bay in the Sea of Japan. U.S. Navy / Mass Communication Specialist 2nd Class Markus Castaneda

PETER THE GREAT BAY – On Nov. 24 (local time) USS John S. McCain (DDG 56) asserted navigational rights and freedoms in the vicinity of Peter the Great Bay in the Sea of Japan, the U.S. Seventh Fleet said in a release. This freedom of

navigation operation (“FONOP”) upheld the rights, freedoms, and lawful uses of the sea recognized in international law by challenging Russia’s excessive maritime claims.

In 1984, the U.S.S.R declared a system of straight baselines along its coasts, including a straight baseline enclosing Peter the Great Bay as claimed internal waters. This 106-nautical mile (nm) closing line is inconsistent with the rules of international law as reflected in the Law of the Sea Convention to enclose the waters of a bay. By drawing this closing line, the U.S.S.R. attempted to claim more internal waters – and territorial sea farther from shore – than it is entitled to claim under international law. Russia has continued the U.S.S.R. claim. By conducting this operation, the United States demonstrated that these waters are not Russia’s territorial sea and that the United States does not acquiesce in Russia’s claim that Peter the Great is a “historic bay” under international law.

U.S. forces operate in the Indo-Pacific region on a daily basis, as they have for more than a century. They routinely operate in close coordination with like-minded allies and partners who share our commitment to uphold a free and open international order that promotes security and prosperity. All of our operations are designed to be conducted in accordance with international law and demonstrate that the United States will fly, sail, and operate wherever international law allows – regardless of the location of excessive maritime claims and regardless of current events.

The international law of the sea as reflected in the 1982 Law of the Sea Convention provides for certain rights and freedoms and other lawful uses of the sea to all nations. The United States upholds these rights and freedoms as a matter of principle to preserve the freedom of the seas that is critical to global security, stability, and prosperity. As long as some countries continue to assert maritime claims that are inconsistent with international law as reflected in the 1982

Law of the Sea Convention and that purport to restrict unlawfully the rights and freedoms enjoyed by all States, the United States will continue to defend the rights and freedoms of the sea guaranteed to all.

The Russian Federation's statement about this mission is false. USS John S. McCain was not "expelled" from any nation's territory. McCain conducted this FONOP in accordance with international law and continued to conduct normal operations in international waters. The operation reflects our commitment to uphold freedom of navigation and lawful uses of the sea as a principle, and the United States will never bow in intimidation or be coerced into accepting illegitimate maritime claims, such as those made by the Russian Federation.

NAVAIR Accepts Delivery of 100th Production BQM-177A Aerial Target System

The BQM-117A is the newest subsonic aerial target for the U.S. Navy through the recently announced $29.2 million contract. Kratos Defense

SAN DIEGO – Kratos Defense & Security Solutions Inc. a provider of high-performance, jet-powered unmanned aerial systems, announced Nov. 19 that it has delivered the 100th production BQM-177A Subsonic Aerial Target (SSAT), nearing completion of its third and final Low-Rate Initial Production (LRIP) contract.

"I am proud to accept delivery of this 100th aircraft on behalf

of the U.S. Navy, said Capt. Molly Boron, program manager, Aerial Targets Program (PMA-208). “The government-industry team of PMA-208 and Kratos Unmanned Aerial Systems (KUAS) has worked hard to deliver this capable target on time and on budget. 2020 has been a successful year despite COVID-19 challenges. We are completing LRIP III deliveries, have awarded the $29.2M Full-Rate Production (FRP) Lot 1 contract on 29 September for 35 more BQM-177A SSATs, and are currently activating the operational site at Pacific Missile Range Facility (PMRF) in Kauai, Hawaii.

“The combined PMA-208 and KUAS team is positioned to successfully achieve Full Operational Capability this fiscal year,” Brown said. “We are delivering targets and support equipment to Atlantic Target & Marine Operations at Dam Neck, Virginia, in anticipation of their transition to the BQM-177A this winter. We will complete the transition of this capability when the PMRF Detachment Far East site in Okinawa, Japan, is activated with a ship-launch capability. The delivery of the 100th target signifies a well-performing production line but also represents an incredible amount of teamwork enabling relevant anti-ship cruise missile training and combat system testing for the Fleet.”

Steve Fendley, President of Kratos Unmanned Systems Division, said, “The delivery of this 100th aircraft represents the very hard work of many dedicated Navy and KUAS engineering, production, program, logistics, financial, and supply chain professionals. We stand shoulder to shoulder with our Navy customers as we activate additional sites and operationalize this capability around the world. The KUAS team remains committed to the mission of providing the most capable systems and realistic training possible to the warfighters.”