General Dynamics Receives $43.2M Contract for Columbia/Dreadnought-Class SSBN Fire Control Systems

An artist’s rendering of the future Columbia-class ballistic missile submarines. The 12 submarines of the Columbia class are a shipbuilding priority and will replace the Ohio-class submarines reaching maximum extended service life. U.S. Navy
PITTSFIELD, Mass. – The U.S. Navy recently awarded a contract modification to General Dynamics Mission Systems that includes a broad scope of work for the Columbia and Dreadnought ballistic-missile submarine class to support development, production, and installation requirements.

This $43.2 million award is comprised of development,

production, installation, and deployed-systems support exclusively for the Columbia/Dreadnaught (CLB/UKD) class of U.S. and U.K. submarine strategic weapons systems and subsystems and coincides with one of the largest manufacturing floor expansions at the Pittsfield, Massachusetts facility.

General Dynamics Mission Systems' Maritime and Strategic Systems line of business will deliver fire control systems for the U.S. Navy's first Columbia class submarine (US01) and the first U.S. Columbia class training facility (Kings Bay Trident Training Facility, KB-TTF) as well as installation support and pre-deployment planning for both U.S. and U.K. sites. This contract also includes CLB/UKD design completion scope and continuation of design activities for the first planned refresh of the CLB/UKD fire control system, as well as design support for CLB/UKD planning at the KB-TTF and procurement of the infrastructure material to support the new Trident Training Facility labs. The majority of the work in support of this contract will take place in Pittsfield.

"In November, we celebrated with our Navy partner, 65 years of outstanding support to our nation's strategic deterrent mission," said Laura Hooks, vice president of General Dynamics Mission Systems' Strategic Systems business. "We are entering the next era of development and production for the Navy's fire control system on the newest fleet of submarines that will extend this deterrent capability for another 65 years."

U.S. Coast Guard, Russian

Border Guard Patrolled Maritime Boundary Line

Coast Guard Cutter Polar Star crew and a Russian aircraft crew patrolled the Bering Sea maritime boundary line between Russia and the United States in mid-January. The 45-year-old heavy icebreaker is underway for a months-long patrol to support national security objectives throughout Alaskan waters and into the Arctic, including along the Maritime Boundary Line between the United States and Russia. U.S. Coast Guard / Petty Officer 1st Class Cynthia Oldham

JUNEAU, Alaska – The Coast Guard Cutter Polar Star crew and a Russian aircraft crew patrolled the Bering Sea maritime boundary line between Russia and the United States in mid-January, the Coast Guard 17th District said in a Jan. 27 release.

Following routine coordinated communications between the Russian Border Guard Directorate for the Eastern Arctic District and the Coast Guard Seventeenth District in Juneau, Alaska, the cutter Polar Star crew and a Russian Border Guard AN-26 aircraft crew patrolled a portion of the 1,700-mile maritime boundary line to support mutual agreements. The agreements consist of combined operations including search and rescue missions, contingency operations, routine communications exercises, and operations to counter illegal, unreported, and unregulated fishing.

The purpose of combined operations and communications exercises are to enforce rules and regulations and protect the sovereign rights and economies of both countries. The routine coordination maintains a strong working relationship and improves joint response capabilities for pollution, law enforcement, and search and rescue cases along our shared maritime border.

A working relationship at the operational level between the Coast Guard and Russian Border Guard remains critical to ensuring stability in the region. The partnership protects shared interests in fish stocks, safety of life at sea, coordinates environmental responses, and counters illicit activity on the high seas.

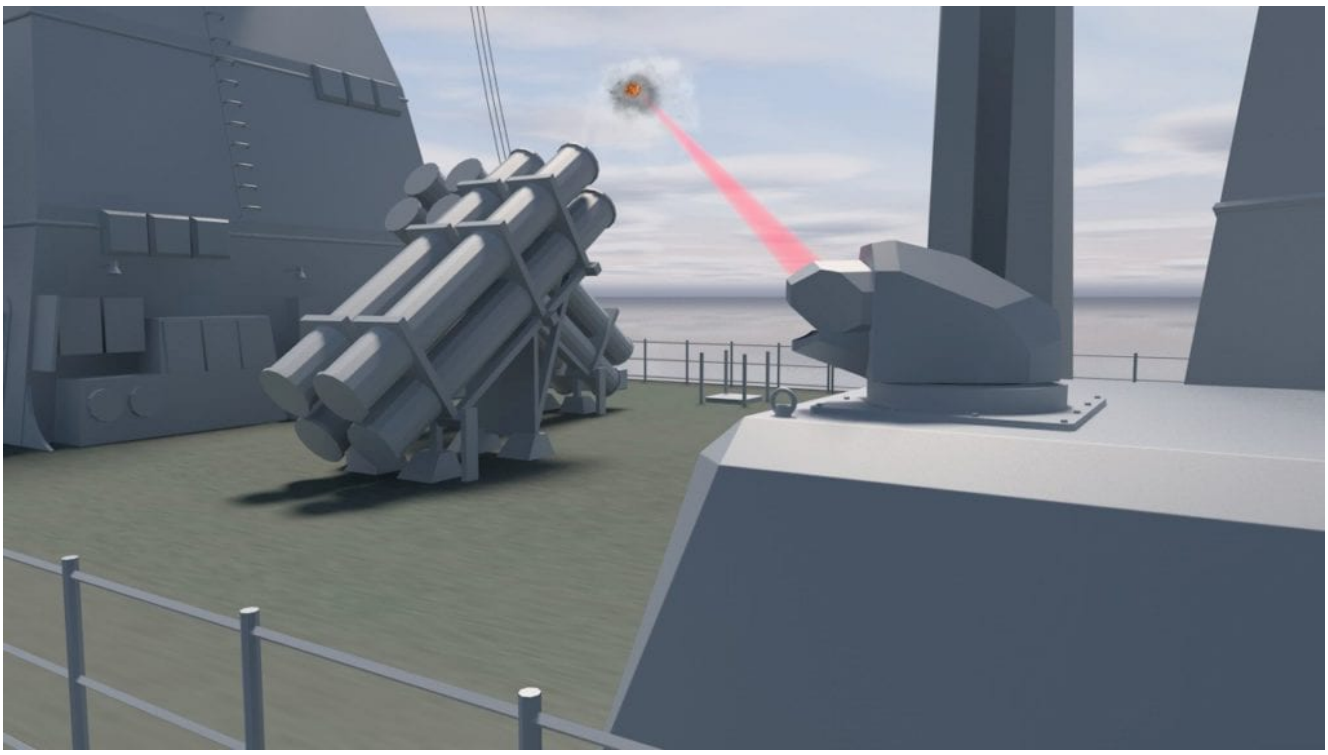
In July 2020, Coast Guard Cutter Munro conducted a similar communications exercise with the Russian Border Guard Vessel Kamchatka in the Bering Strait.

The Russian Border Guard's effective enforcement of the maritime boundary line, and direct communication with their fishing industry, significantly reduces foreign fishing vessel incursions of the U.S. exclusive economic zone.

Since 2018, the Coast Guard has detected only one Russian fishing vessel incursion along the maritime boundary line. The Russian Border Guard immediately conducted an investigation of the incident and issued fines for that incursion.

"The United States Coast Guard works diligently to maintain a unique cooperative relationship with the Russian Border Guard in an effort to enhance the protection of shared interests in and around the Arctic region. The coordinated communications exercises on the high seas these past weeks with Polar Star demonstrate a recognition of the importance of that relationship," said Capt. Jason Brennell, chief of enforcement for the Coast Guard's 17th District.

MBDA and Rheinmetall Win Contract for Naval High-Energy Laser System



An artist’s conception of a laser weapon. MBDA

SCHROBENHAUSEN/ DUSSELDORF, Germany – Germany’s Federal Office for Bundeswehr Equipment, Information Technology and In-Service Support (BAAINBw) has awarded ARGE consortium – consisting of MBDA Deutschland GmbH and Rheinmetall Waffe Munition GmbH – a contract to fabricate, integrate and support testing of a laser weapon demonstrator in the maritime environment, MBDA said in a Jan. 28 release. The order value is in the low double-digit million euro range.

Work will be shared out on a roughly equal basis. MBDA Deutschland is responsible for tracking, the operator’s console and linking the laser weapon demonstrator to the command-and-control system. Rheinmetall is in charge of the laser weapon station, the beam guiding system, cooling, and integration of the laser weapon system into the project container of the laser *source* demonstrator.

The demonstrator is to be fabricated, tested and integrated by the end of the 2021. Trials onboard the German Navy frigate F124 Sachsen are to take place in 2022.

“The contract is an important step on the path to an operational high-energy laser system, said Doris Laarmann, head of laser business development at MBDA Deutschland. “Our two companies will apply their respective strengths to make this project a success on behalf of the German navy. Once it’s installed, the demonstrator will also be used to test important aspects such as the interaction and function of the sensor suite, combat management system and effector as well as rules of engagement.”

Alexander Graf, head of Rheinmetall Waffe Munition’s laser weapons program, and Dr. Markus Jung, who leads the company’s laser weapon development effort, agreed, saying the contract marks a systematic extension of the functional prototype laser weapon successfully tested in recent years, with the experience gained now dovetailing into one of the most ambitious projects in the field of laser weapon development in Europe.

A breakthrough development in the history of defense technology, lasers engage targets at the speed of light, operating with great precision and producing very little collateral damage. A demonstrator system featuring these capabilities will soon be put to the test under highly realistic operating conditions onboard a German frigate.

Leonardo DRS Awarded Navy Contract for Technical

Insertion of Surface Fleet Combat Management Systems

The Arleigh Burke-class guided missile destroyer USS James E. Williams (DDG 95) transits the Caribbean Sea, Jan. 16, 2021. Leonardo DRS has received a Navy contract to supply system hardware and life cycle support for Aegis and Ship Self-Defense Combat Management Systems, equipped on the Arleigh Burke class destroyers and other surface combatants. U.S. Navy / AW2 Timothy Hopkins

ARLINGTON, Va. – Leonardo DRS Inc. has received a contract from the U.S. Navy to supply critical system hardware and full life-cycle support for Aegis and Ship Self-Defense System Combat Management Systems, the company announced in a Jan. 27 release.

The cost-plus-fixed-fee and firm-fixed-price, indefinite-delivery/indefinite-quantity multiple award contract was awarded in December 2020 and is worth up to $211.5 million.

Under the contract Leonardo DRS will provide sustainment of Technical Insertion (TI)-16 Combat Systems Processing, Network, Storage and Display Hardware fielded across the surface ship fleet. Included in the contract is the sustainment, manufacture, assembly, and testing of TI-16 hardware, spares; engineering services, procurement, and installation of ordinance alteration kits and related products.

Leonardo DRS is the prime contractor for the surface navy, producing consoles, displays and peripherals (CDP) and the Common Processing System (CPS) TI-16 for the Navy's surface combatants.

"We are excited about this award and proud to provide full life-cycle combat system hardware support to ensure fleet readiness remains high," said Tracy Howard, senior vice president and general manager of the Leonardo DRS Naval Electronics business. "Additionally, our extensive experience will bring increased capability to the Fleet as the Integrated Combat System is fielded over the next 5 years in support of these future U.S. Navy requirements," he said.

Work will be done at the Leonardo DRS Laurel Technologies facilities in Johnstown, Pennsylvania and Chesapeake, Virginia.

Coast Guard, Border Patrol Seize $1.9 million in

Cocaine; Apprehend 2 Smugglers

A U.S. Border Patrol K-9 rests after U.S. Ramey Sector Border Patrol agents, with the assistance of a U.S. Coast Guard HC-144 Ocean Sentry aircrew, apprehended two male Dominican Republic nationals and seized 157 pounds (71 Kilos) of cocaine with a wholesale value of $1.9 million, during a maritime drug smuggling attempt near Villa Montana in Isabela, Puerto Rico Jan. 23. U.S. Border Patrol

AGUADILLA, Puerto Rico – A Coast Guard aircrew combined efforts with U.S. Border Patrol agents during a drug smuggling event Jan. 23 that resulted in the seizure of 157 pounds (71 Kilos) of cocaine and the arrest of two suspected smugglers from the Dominican Republic near Villa Montana in Isabela, Puerto Rico, the Coast Guard 7th District said in a Jan. 27 release.

The estimated wholesale value of the seized cocaine is $1.9

million.

The joint collaboration is the result of ongoing Caribbean Border Interagency Group CBIG multiagency efforts in their common goal of securing the borders of Puerto Rico against illegal threats.

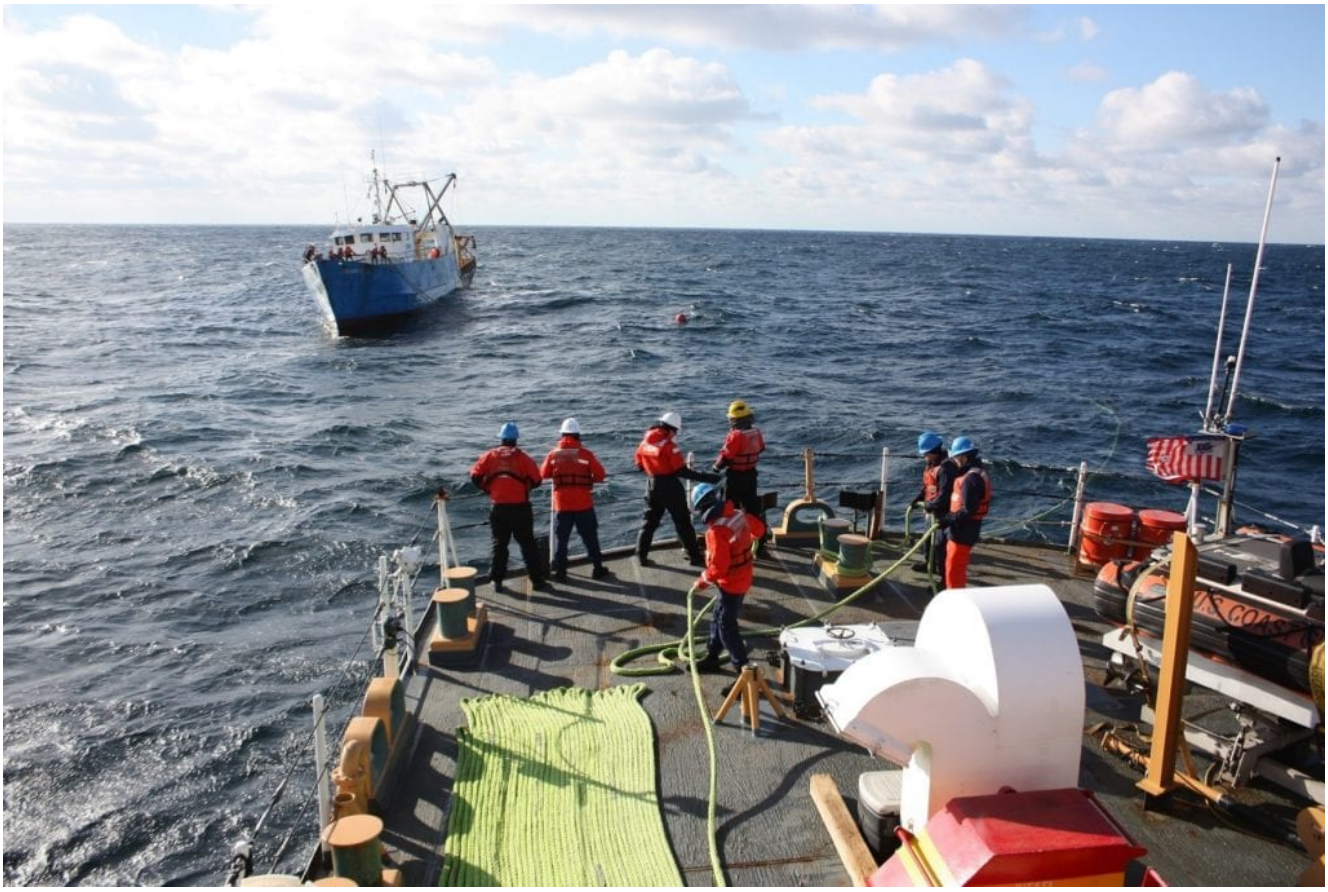
“We continue to disrupt and apprehend smugglers that attempt to smuggle people and narcotics across our borders,” said Xavier Morales, chief patrol agent for the Ramey Sector.

“Once our crew located the vessel, U.S. Border Patrol responded quickly to seize the suspects and narcotics. Our partnership is integral to protecting our shores and keeping our community safe,” said Lt. Karl Alejandre, Coast Guard Air Station Miami HC-144 Ocean Sentry aircraft commander.

While on a routine patrol Saturday night, the crew of a Coast Guard aircraft detected a suspect 21-foot go-fast vessel, approximately four nautical miles northwest of Aguadilla, Puerto Rico. Coast Guard watchstanders in Sector San Juan alerted the U.S. Border Patrol from Ramey Sector and placed the Coast Guard aircrew in direct communication with responding Border Patrol units ashore. While maintaining aerial surveillance of the vessel, the Coast Guard aircrew vectored in the Border Patrol units to the location where the suspected smugglers made landfall. Shortly thereafter, the Border Patrol agents, which included a K-9 unit, apprehended the two men and seized 58 packages of cocaine.

U.S. Immigration and Customs Enforcement – Homeland Security Investigations assumed custody the contraband and the suspected smugglers for investigation and prosecution.

Coast Guard Cutter Tahoma returns home after 58-day patrol in Northern Atlantic



Coast Guard members from U.S. Coast Guard Cutter Tahoma conduct a tow of fishing vessel Fearless 164NM east of Nantucket, Massachusetts, December 9, 2020. U.S. Coast Guard / Petty Officer 3rd Class Owen Hillberry

BOSTON – The crew of USCGC Tahoma (WMEC 908) returned to Kittery, Maine, Jan. 26 after a 58-day fisheries patrol in the Northern Atlantic, the Coast Guard 1st District said in a release.

The crew's efforts support the Coast Guard 1st District's living marine resource priorities of ensuring the safety of life at sea and protection of fisheries resources in a region home to one of the nation's largest economies.

"The value of U.S. commercial fisheries in 2018 was $5.8

billion," said Rear Adm. Tom Allan, U.S. Coast Guard 1st District commander. "Illegally caught or misreported fish entering the marketplace puts the livelihood of honest fishermen at risk. During this patrol, the Tahoma crew supported our 1st District fisheries effort to protect the sustainability of the region's fish stocks and maintain a level playing field for all Northeast fishermen. The U.S. Coast Guard is committed to combatting illegal fishing in New England."

Over the course of the eight-week patrol, Tahoma's crew conducted 28 at-sea law-enforcement boardings of commercial fishing vessels, resulting in the discovery of eight violations of safety and fishing regulations. The boarding team inspected each vessel to ensure they met fishing gear requirements, catch limitations and possessed required and serviceable safety equipment. The Tahoma crew also focused on overfishing prevention in protected and closed fishing areas.

During the patrol, Tahoma's crew responded to three search and rescue cases resulting in nine lives saved. On Dec. 6, the crew received a report from the 1st District command center of the disabled fishing vessel Fearless, located 170 nautical miles east of Nantucket, Massachusetts. The Tahoma crew arrived on scene and towed Fearless 260 nautical miles over five days until relieved by a commercial tug near Buzzards Bay, Massachusetts.

They also responded to the disabled fishing vessel Angela Michelle, located 100 miles east of Portsmouth, New Hampshire. The Tahoma crew diverted to assist the fishing vessel ahead of a severe winter storm, safely bringing it into port with assistance from Coast Guard Station Gloucester on Christmas Eve.

"The search and rescue cases we've had reminded me of why I joined the Coast Guard – to save lives," said Seaman Patrick Byrne, lead seaman of Tahoma. "The beginning of the patrol

seemed to be slow, but as we got called on each case, the reason for why we're out here became more evident. Us being out here makes a difference. We're able to make sure crews of the fishing vessels like the Angela Michelle and the Fearless return home safely to their families for holidays."

Tahoma is a 270-foot medium endurance cutter with a crew complement of 100. They conduct maritime enforcement and homeland security missions in support of Coast Guard operations throughout the Western Hemisphere.

Fairbanks Morse Awarded Contract to Service U.S. Coast Guard Cutters

A Coast Guard Station Boston crew transits between Coast Guard Cutter Escanaba and Coast Guard Cutter Spencer in Boston on Nov. 24, 2014. The Escanaba and Spencer are 270-foot Famous-class medium endurance cutters. U.S. Coast Guard / Petty

Officer 3rd Class MyeongHi Clegg
BELOIT, Wis. – Fairbanks Morse, a portfolio company of Arcline Investment Management, was awarded a six-year indefinite-delivery/indefinite-quantity (IDIQ) contract by the U.S. Coast Guard, the company said in a Jan. 26 release.

The agreement, worth approximately $53 million, enables Fairbanks Morse to maximize and improve engine lifecycle support for the Coast Guard's 270-foot Famous-class cutters.

As part of the Famous class service life-extension program (SLEP), Fairbanks Morse was awarded this contract to provide services, personnel, facilities, expertise, technological information, special tools, supplies and incidental materials necessary to ensure the longevity of the fleet's 18-cylinder FM 251F engines. The contract also includes delivery and installation of new engines, spare parts and nonrecurring engineering work.

"Fairbanks Morse has been a trusted engine and service provider to the U.S. Coast Guard for many decades, and it's an immense honor to be selected to provide engines and services for its vessels," said George Whittier, chief executive officer of Fairbanks Morse. "We are fully committed to supporting our country's national defense by delivering reliable products and quality service that facilitate mission-critical operations."

Through an IDIQ contract, pricing for support services is streamlined under a single agreement, eliminating the administrative, time and cost burdens associated with working through an intermediate party. Fairbanks Morse provides factory certified original equipment manufacturer technicians who undergo rigorous qualifications to meet the company's high standards for delivering best-in-class support. These technicians will deliver enhanced performance and improved service life while ensuring the highest level of reliability

and efficiency for Famous-class cutters.

The U.S. Coast Guard and U.S. Navy have turned to Fairbanks Morse for over 70 years to provide quality diesel engines for marine propulsion and ship service systems. Today, Fairbanks Morse engines are installed on approximately 80% of U.S. Navy ships with a medium speed power application.

Metal Shark Developing Autonomous Naval Defense System for Marine Corps

Louisiana-based shipbuilder Metal Shark is developing the Long Range Unmanned Vessel (LRUSV), a tiered, scalable weapons system, for the United States Marine Corps. Metal Shark Jeanerette, La. – Louisiana-based shipbuilder Metal Shark has been selected to develop and implement the Long-Range Unmanned

Surface Vessel (LRUSV) System for the U.S. Marine Corps, the company said in a Jan. 25 release.

The LRUSV System will usher in a new era of naval technology while increasing the lethality of U.S. forces, with a network of unmanned vessels traveling autonomously for extended ranges and transporting loitering munitions to address targets at sea and on land.

This tiered, scalable weapons system will provide the ability to accurately track and destroy targets at range throughout the battle space. While fully autonomous, the vessels may be optionally manned and they will carry multiple payloads, which they will be capable of autonomously launching and retrieving.

Metal Shark has enlisted autonomous technology developer Spatial Integrated Systems (SIS), recently acquired by Huntington Ingalls Industries, to provide the autonomy solution for the LRUSV system. SIS is a leader in the development of multi-vessel collaborative "swarming" autonomous capabilities, sensor fusion and perception.

Under an Other Transaction Authority (OTA) agreement with Marine Corps Systems Command, Metal Shark will design, build, test and implement the vessels and handle the integration of the autonomy system and an advanced command and control (C2) software suite.

In addition to the autonomous LRUSV, Metal Shark will also produce manned support vessels for the LRUSV system using its 40 Defiant military patrol craft platform, which the builder is currently producing to create the U.S. Navy's new 40 PB patrol boat fleet.

"The LRUSV program represents a significant milestone for autonomous technology, for the defense world, and for the entire shipbuilding industry," said Chris Allard, Metal Shark's CEO. "We are thrilled to be integrating advanced

autonomy and command and control capability into these highly specialized surface vessels to provide the Marine Corps with a next-generation system."

Under the OTA, Metal Shark will also provide the Marine Corps with associated program management, system engineering, configuration management, quality assurance, logistical support, and the development of technical publications and manuals in support of the LRUSV program.

The LRUSV program is the latest success for Metal Shark's Sharktech Autonomous Vessels division, a wholly owned subsidiary launched in 2018 and specifically focused on the advancement of unmanned vessel technology.

In September, it was announced that the U.S. Coast Guard had selected a 29-foot Sharktech autonomous test vessel, equipped with autonomy by Boston-based technology developer Sea Machines, for evaluation by the USCG Research and Development Center.

In 2019, Metal Shark was selected by US Navy PMS 406 (Naval Sea Systems Command's Unmanned Maritime Systems division) for the Unmanned Family of Systems Multi Award IDIQ, a blanket Navy contact covering multiple topics in the autonomous space.

As a brand-agnostic technology integrator actively engaged with multiple developers in the unmanned space, Metal Shark's Sharktech division has also produced and delivered autonomous vessels equipped with autonomy solutions from L3 Harris (previously ASV Global).

"Metal Shark has designed, built, and delivered over 400 autonomous and remotely operated vessels to date," Allard said. "As we develop and deploy the LRUSV system for the Marine Corps, we will continue to work with clients across government and commercial markets, integrating the systems of multiple technology partners into our boats, solidifying our leadership position in the autonomous vessel space, and

streamlining the path to autonomy.”

Austin Sworn In as Secretary of Defense

Washington Headquarters Services Director David Muir swears in Lloyd J. Austin III as secretary of defense, the Pentagon, Washington, D.C., Jan. 22, 2021. Holding the Bible is the Junior Military Assistant to the Secretary of Defense, Marine Corps Lt. Col. Caleb Hyatt. DoD / Lisa Ferdinando

ARLINGTON, Va.— Retired Army Gen. Lloyd J. Austin III was sworn in Jan. 22 as secretary of defense at the Pentagon by Washington Headquarters Services Director David Muir after a morning confirmation vote from the Senate.

Austin issued the following message to the Defense Department

the same day:

“I am honored to have this chance to serve again and to do so alongside you and your families. My wife, Charlene, and I know all too well the sacrifices you make to keep this country safe. That safety is job one, and I promise to work as hard as you do at it.

“The way I see it, my job as Secretary of Defense is to make you more effective at doing yours. That means ensuring you have the tools, technology, weapons, and training to deter and defeat our enemies. It means establishing sound policy and strategy and assigning you clear missions. It means putting a premium on cooperation with our allies and partners. And it means living up to our core values, the same ones our fellow citizens expect of us.

“Right now, of course, doing my job also means helping our country get control of the pandemic, which has killed more than 400,000 Americans. You have already come to the aid of our Nation’s health care professionals. You can expect that mission to continue. But we must help the Federal Government move further and faster to eradicate the devastating effects of the coronavirus. To that end, we will also do everything we can to vaccinate and care for our workforce and to look for meaningful ways to alleviate the pressure this pandemic has exerted on you and your families.

“None of us succeeds at this business alone. Defending the country requires teamwork and cooperation. It requires a certain humility, a willingness to learn, and absolute respect for one another. I know you share my devotion to these qualities.

“I am proud to be back on your team.”

Rolls-Royce Secures Navy Research Contract to Develop Innovative Debris Detection Technology

Rolls-Royce will further develop its engine FOD detection under a $1 million U.S. Navy contract. Rolls-Royce

RESTON, Va. – Rolls-Royce has been awarded $1 million of research funding from the U.S. government for digital foreign object debris (FOD) detection technology, the company said in a Jan. 20 release.

The year-long research contract from the Navy will help further develop and validate Rolls-Royce's FanSense debris monitoring system, which is currently supporting the Pegasus engine.

FanSense works by analyzing the shaft speed signal of an engine and is able to detect any disruptions that arise as a result of a small object, such as stones or screws, striking

an engine fan blade. The innovative technology will allow customers across civil and defense industries to detect much smaller debris entering the engine, enabling them to build a clearer picture of FOD damage and engine wear over time and help to identify airfields that need to improve their FOD prevention practices.

“FanSense is an innovative and revolutionary Rolls-Royce digital technology being packaged and applied to our products,” said Paul Craig, president of the company’s Defence Services. “The research funding granted by the U.S. Navy will allow us to further enhance and build upon our pioneering technologies that will enhance safety, efficiency and deliver a cultural change for our customers.”

FOD is estimated to cost the global aviation industry billions of dollars per year in damage and disruption. The vast majority of ingested debris currently goes undetected – only when very large items are ingested do operators have any indication that something has made its way into the engine. Rolls-Royce will continue to work with a long-standing industrial partner, Roke, to deliver the contract.

Jonathan Sides, FOD chief engineer at Naval Air Systems Command, said, “Inlet debris monitoring technology is a critical element of the FOD mitigation portfolio, supporting the U.S. Navy’s initiative to save hundreds of millions in FOD repair costs.”

The FanSense technology adds to Rolls-Royce’s portfolio of FOD prevention offerings, including the FOD App, the FOD cloud data analysis service and FOD officers. The vision for FOD technology is to build a digital system that is able to predict FOD events before they occur by analyzing data collected from the app and using vehicle tracking sensors and debris tracking radars. FanSense adds a key missing piece to this system, determining the exact time and location of historic FOD events, which will enable customers to predict

the conditions in which ingestion of a harmful object is likely to occur.