First Connecticut-Built Sikorsky CH-53K Helicopter in Hands of U.S. Marine Corps

Sikorsky, a Lockheed Martin company, celebrated the first Connecticut-built CH-53K helicopter in a ceremony at its Stratford facility. *SIKORSKY*

STRATFORD, Conn., Sept. 24, 2021 – Sikorsky today celebrated the first Connecticut-built CH-53K heavy-lift helicopter that will be delivered to the U.S. Marine Corps, parent company Lockheed Martin said Sept. 24. This helicopter, which moves more troops and cargo more rapidly from ship to shore, was the first all digitally designed helicopter.

The CH-53K's digital thread runs from design through production, maintenance, and sustainment, increasing mission availability while reducing pilot and crew workload.

"This Connecticut-built CH-53K aircraft is a testament to the Sikorsky legacy of building safe, reliable rotorcraft for decades. But the way we design, test and build helicopters has transformed," said Paul Lemmo, president of Sikorsky. "Our employees are using digital tools and other advanced technologies such as manufacturing simulation and 3-D laser inspection technology. This factory transformation is a model for all future helicopter programs at Sikorsky."

This King Stallion helicopter will be stationed at Marine Corps Aviation Station New River in Jacksonville, North Carolina, where Marines will conduct training flights and support the fleet with heavy-lift missions with the aircraft in preparation for the CH-53K's first deployment in 2024. This heavy-lift helicopter is part of a 200 aircraft program of record for the Marine Corps with a total of 33 aircraft currently on contract and an additional nine on contract for

long-lead parts.

“The CH-53K helicopter provides advanced capabilities allowing Marines to get anywhere in the world where the mission requires heavy-lift logistics support,” said Lt. Gen. Mark R. Wise, deputy commandant for aviation, during a ceremony at Sikorsky. “This helicopter is a much safer aircraft because it can maneuver in low visibility environments. It will forward deploy Marines quickly and effectively.”

Ramping Up Production

The factory floor at Sikorsky is active with six CH-53K aircraft in build, and there are 36 more in various stages of production, including the nine for which the company is procuring long-lead parts. Sikorsky has made significant investments in workforce training, tooling, and machinery to increase the number of aircraft built and delivered year over year.

This is the first CH-53K helicopter to roll off the Stratford production line, with the next one set to be delivered in early 2022. Since October 2020, Sikorsky has delivered three operational CH-53K King Stallion heavy-lift helicopters to the U.S. Marine Corps in MCAS New River.

The CH-53K program entered initial operational test and evaluation in July. Four aircraft are now in the hands of VMX-1 operational and test evaluation squadron. Marine pilots and maintainers are operating the CH-53K in a fleet environment as part of the rigorous test program.

Marines are learning to fly and maintain the CH-53K using a suite of training devices developed by Sikorsky. Pilots receive hands-on training by experiencing a highly immersive virtual environment in the Containerized Flight Training Device (CTFD). The CFTD replicates the functionality, flight characteristics, mission profiles, and unmatched capabilities of the CH-53K helicopter. The device can replicate the various

environmental conditions the aircraft is likely to fly in as well as a multitude of mission profiles in the operation of a true heavy-lift helicopter.

Maintenance personnel also prepare with a virtual aircraft environment through the Helicopter Emulation Maintenance Trainer. Marines train with an immersive experience to practice avionics and airframe maintenance in the schoolhouse in order to be fully prepared to perform maintenance on their fleet aircraft.

The CH-53K is the only sea-based, long range, heavy-lift helicopter in production and will immediately provide three times the lift capability of its predecessor.

The CH-53K will further support the U.S. Marine Corps in its mission to conduct expeditionary heavy-lift assault transport of armored vehicles, equipment and personnel to support distributed operations deep inland from a sea-based center of operations, critical in the Indo-Pacific region.

The new CH-53K has heavy-lift capabilities that exceed all other DoD rotary wing-platforms, and it is the only heavy-lifter that will remain in production through 2032 and beyond.

LA-based Cutter Returns Home after 32-day Deployment, Drug Offload

A crew member from the Coast Guard Forrest Rednour holds

seized contraband during a drug offload in San Diego, Sept. 24, 2021. The drugs, worth an estimated $96 million, were seized in the Eastern Pacific Ocean off the coast of Mexico. *U.S COAST GUARD / Petty Officer 1st Class Adam Stanton*

SAN PEDRO, Calif. – The Coast Guard Cutter Forrest Rednour returned home Sept. 26 following a 32-day patrol, the Coast Guard 11th District said Sept. 27.

The crew disrupted illegal narcotics smuggling, seizing more than 5,000 pounds of cocaine that was offloaded in San Diego Friday, Sept. 24. The drugs, worth an estimated $96 million, were seized in international waters of the Eastern Pacific Ocean off the coast of Mexico.

“The crew excelled during this patrol; their hard work and skill was apparent and allowed the cutter to weather a hurricane, conduct international engagements, and stop a vessel carrying approximately two metric tons of cocaine, all while in a 154-foot ship, 1,800 nautical miles and two time zones from home,” said Lt. Drew Ferraro, commanding officer of the Rednour.

During the Rednour’s deployment, the crew participated in a passing exercise with the Monte Albán, an Armada de México vessel, off the coast of Mexico.

“This deployment tested crew endurance and provided the same level of logistics challenges normally faced by much larger ships, but the Rednour crew navigated each obstacle with their usual dedication, professionalism, and teamwork,” Ferraro said. “Thank you to our outstanding logistics and finance team, and the shore-side coordinators that made this patrol successful. Lastly, thank you to the families and loved ones back home who supported us during this patrol and held down the home front during our absence.”

The Forrest Rednour is a 154-foot fast response cutter, commissioned in 2018 and homeported in San Pedro, California.

CGC Kimball, Japanese Vessel Conduct Exercise near Dutch Harbor, Alaska

The U.S. Coast Guard Cutter Kimball and the Japan Naval Training Vessel Kashima transit together during a maritime exercise near Dutch Harbor, Alaska, on Sept. 20, 2021. *U.S. COAST GUARD*

JUNEAU, Alaska – The U.S. Coast Guard Cutter Kimball crew conducted a joint exercise with members of the Japanese Maritime Self Defense Force (JMSDF) off the coast of Dutch Harbor, Alaska, Sept. 21, the Coast Guard 17th District said in Sept. 25 release.

The Kimball crew and the JMSDF crew, aboard the Naval Training Vessel Kashima, operated alongside one another in the Aleutian Island chain to exchange visual communications, followed by honors, as their respective crews lined their ship's rails for a uniform salute.

This display of maritime cooperation and mutual respect emphasizes both the United States' and Japan's continued commitment to one another and to partnership at sea.

"The Kimball crew welcomed the opportunity to meet the Kashima and conduct a professional exercise at sea," said Capt. Thomas D'Arcy, the Kimball's commanding officer. "Seeing the crews aboard the Kimball and the Kashima line the rails for the passing of honors illustrates the spirit of collaboration between the U.S. Coast Guard and Japan's maritime forces. The exercise, movements and communications between our vessels were expertly executed and the salutes

exchanged exemplify the strength of our relationship with Japan as a key partner.”

Over the past year, the U.S. and Japan have increasingly strengthened their relationship in the maritime domain through the shared mission set of the JMSDF and the U.S. Coast Guard. This includes search and rescue collaboration with the 14th Coast Guard District in Hawaii and the Japanese Coast Guard Training Ship Kajima, as well as exercises between the Japanese coast guard and the Coast Guard cutters Kimball, Munro and Bertholf near the Ogasawara Islands and in the North Pacific, respectively.

The first joint exercise between the Kashima crew and a Coast Guard crew occurred in the Bering Sea last September in the form of a personnel exchange with the Coast Guard Cutter Alex Haley.

The Kashima is one of four training ships that belong to the JMSDF and is used to train new officers. About 110 newly commissioned officers and more than 300 crewmembers are aboard the ship for its nearly two-month journey from Hiroshima to Alaska, up to the Arctic and Pearl Harbor, Hawaii, then back to Japan.

Navy Awards Ultra $23.2M for Mk54 Lightweight Torpedoes

The Arleigh-Burke-class guided-missile destroyer USS Barry (DDG 52) conducts a live-fire exercise with a torpedo launcher while underway in the Philippine Sea. *U.S. NAVY / Mass Communication Specialist Seaman Justin Stack*

BRAINTREE, Mass. – Ultra Electronics Ocean Systems (d.b.a Ultra Naval Systems & Sensors), has been awarded a $23.2 million fixed-price, cost-plus-fixed-fee and cost only modification to a previously awarded contract to exercise options for the production of Mk54 Mod 0 lightweight torpedo (LWT) array kits, associated production support material, spares and engineering and hardware support services, the company said in a Sept. 27 release.

This contract combines purchases for the U.S. government, and the governments of the Netherlands, Belgium, New Zealand, Spain, and Brazil under the Foreign Military Sales program. This is option year three of the Mk54 Mod 0 LWT array kits program to supply array nose assembly kits.

“As we continue to provide critical components of the MK54 lightweight torpedo, we understand the ongoing need to deliver reliable and effective undersea warfare capabilities to meet the anti-submarine warfare needs of U.S. and allied fleets,” said Martin Lewis, president of Naval Systems and Sensors.

Collaboration Between Small Companies Demonstrates Port Security Technology At Port Hueneme

A team from Ion, SpotterRF, and Marine Arresting Technologies employ a UAV to autonomously deploy a line that successfully slowed the Navy target boat at the entrance to the Port of Hueneme during ANTX Coastal Trident 2021. ION / Dave Gentile

The Advanced Naval Technology Exercise – Coastal Trident 2021 Open House is taking place this week at the NavalX Fathomwerx Laboratory at the Port of Hueneme to examine innovative solutions for port and maritime security. Fathomwerx is a partner-run facility with the Naval Surface Warfare Center Port Hueneme Division (NSWC PHD), the Port of Hueneme, Economic Development Collaborative and Matter Labs.

According to NSWC PHD's Brendan Applegate, the director for the exercise, Coastal Trident is an operational research program conducted to advance the state of the art in countering threats to port and maritime security and the global operations of naval forces. "ANTX-Coastal Trident is not just a Navy exercise, but rather a 'whole of government' effort to bring together involve non-DoD federal, state and local government partners, as well as academia and industry to respond to maritime security threats and incidents in port and coastal waters," he said. "Coastal Trident combines scenario-based training, technical demonstration, field experimentation, and exercise activities, and involves the participation of more than 150 public and private sector organizations."

Hybrid Event

Although teams will be conducting demonstrations throughout the week, the "kick-off" virtual event conducted via Zoom on Sept. 22 provided an overview of the Coastal Trident program and featured presentations by the operational stakeholders.

Participants representing stakeholders from Naval Surface Warfare Center, Naval Facilities Engineering and Research, Office of the Chief of Naval Operations, Department of Homeland Security and Naval Agility provided perspectives on the science and technology (S&T), research and development (R&D) and warfighter communities to communicate the "pull" from the warfighter, provide guidance and alignment for organizations, companies and academia seeking to develop and

transition their technical solutions.

The Sept. 23 sessions in-person “open house” at the Fathomwerx facility focused on engagement between operational and technical stakeholders, with presentations on some of the project demonstrations conducted at the Port of Hueneme and at Fathomwerx. Solution providers also had an opportunity to follow up on the technical needs shared during the first day, and to propose solutions and discuss collaborations for future ANTX-Coastal Trident projects.

Applegate said many of the small companies participating in Coastal Trident do not have an adequate understanding of the Navy and its operational requirements or who would best benefit from their technologies.

“We have an environment where we can get a lot of organizations together to look at the technologies from a number of different perspectives, so there are more paths to success,” he said.” We can introduce our participants to all the different parties, the companies that are developing the technology, people who are going to use it, the program offices that are going to help acquire it, and the people that are going to be part of the logistics and sustainment pipeline. So, the goal is to bring all those people together in some form or another throughout the process.”

Coastal Trident takes advantage of the facilities and capabilities of NSWC PHD and Ventura TechBridge to support high-velocity learning and accelerate development, evaluation and identification of technology implementation to support naval forces with in-service engineering, maintenance and supportability; sensor data fusion, maritime communications and decision support; multi-spectral sensing, augmented (AR) and virtual reality (VR) and digital engineering; and unmanned systems (UxS) applications and countermeasures.

This year, the exercise is examining the operational and

technical capabilities of port and maritime security organizations to counter asymmetric threats to the U.S. Marine Transportation Systems (MTS) and its associated personnel, operations, and critical infrastructure.

A number of teams have been working on their projects for many months, and may continue to leverage the knowledge and experience gained as a result of working together during ANTX.

“This event is the culmination of a lot of effort, but it’s just a part of the picture. We’ve been conducting experiments since May. We have 55 different projects, with about 850 people from 160 different organizations, that are part of the program this year,” Applegate said.

Team Entangles Target

In one scenario at the Port of Hueneme, for example, a team employed asmall unmanned vessel as a force multiplier to provide an initial response to a threat.

“The goal of our team is to detect and engage a high-speed leisure craft entering a security zone ‘on the plane’ without damage to the vessel or occupants,” said Matthew Searle, chief technology officer Marine Arresting Technologies (MAT) of Tarpon Springs, Florida. Our objective is to determine tactics, techniques and procedures for the use of unmanned platforms to deploy non-kinetic effectors, including launch and recovery procedures, the ability to maneuver and deploy payload, and to investigate if speed and stability of the platform is practical in a port environment.”

Working with MAT is SpotterRF of Provo, Utah, which is using its small radar to track targets and pass information to the command and control (C2) hub provided by Houston-based ION, which is demonstrating effective data fusion and tracking and intercepts of fast-moving targets.

In the actual demonstration at the entrance to the Port of

Hueneme, the target – a Navy High-Speed Maneuvering Surface Target (HSMST) boat – was detected by the SpotterRF radar, queuing the ION C2 system, which directed the launch of the Theiss UAV and autonomously sent it to deploy the MAT drogue line ahead of the HSMST, which entangled the boat's propulsion and slowed it, effectively allowing time for security personnel to respond, and preventing or disrupting the intrusion.

The demonstration took place during intermittent thick fog at the harbor entrance. The radar was not only able to track the boat, but also differentiate between the drone, sea birds, floating objects in the water and pedestrians on the shore, and track them all continuously.

For the demonstration, MAT fitted the UAV with a composite canister with a command-initiated life jacket air flask to inflate an airbag that discharges the arresting line in front of the vessel. The UAV can be recovered and the system reloaded for subsequent missions.

According to Ken Gardner, SpotterRF business development manager, the SpotterRF C550 perimeter surveillance radar has a range of about 1.5 kilometers, weighs 3.5 pounds and is about the size of a laptop computer (although the company has larger and smaller models), and multiple sensors can work together to cover larger areas. It can be set up or taken down in minutes, and is powered by regular 117-volt AC current or a small 24-hour battery.

Dave Gentle from ION said the input from the radar was fed into the C2 system which uses ION's Marlin platform technology to plan and execute the missions for the UAV to autonomously deploy the arresting line and return.

SpotterRF CEO Frank Cristophersen said the ANTX provided a valuable opportunity to bring together a team to collaborate and demonstrate a creative technology solution, with the Navy

providing targets, instrumentation and observers from the warfare centers and other organizations that otherwise would not be available to the individual companies.

Bollinger Shipyards Resumes Operations at All Facilities Following Hurricane Ida

Bollinger Shipyards has reopened its facilities after Hurricane Ida's landfall last month. *BOLLINGER SHIPYARDS LLC*

LOCKPORT, La. – Bollinger Shipyards LLC announced on Sept. 24 that all 11 of its facilities are now open and operational following Hurricane Ida's landfall last month near Port Fourchon, Louisiana, as a powerful Category 4 storm. Bollinger's facilities in Port Fourchon, Larose, Lockport and Houma suffered significant damage as a result of the storm, which tied with last year's Hurricane Laura and the Last Island Hurricane of 1856 as the strongest on record in Louisiana.

"Despite the devastation and loss suffered throughout South Louisiana, the community has rallied and today we're proud to welcome our workforce back to our yards across the state. This would not have been possible without the help of our employees, vendors, municipalities and our utility providers Entergy and SLECA," said Bollinger President and CEO Ben Bordelon. "Each year brings a new storm season and, with it, its own unique set of challenges – this year has been no different. But to know our workers is to understand the strength and resiliency of the Cajun people. I'm incredibly

proud of our workforce for their dedication to getting all of our facilities back up and running safely so that we can continue delivering for our customers. In spite of record storms or the ongoing COVID-19 global pandemic, America's maritime defense industrial base is unmovable."

In advance of the storm, Bollinger took steps to mitigate potential damages to its facilities and any resulting delays to its production schedules. Despite damages sustained to Bollinger's Lockport facility, the 650-man production line for the U.S. Coast Guard Fast Response Cutter program has resumed operations and Bollinger is on track to deliver the next vessel ahead of schedule.

Following the storm, the first priority for Bollinger leadership was to ensure the safety of company employees and their families, which are all safe and accounted for. A number of employees lost their homes and personal property. Many remain without access to electricity and running water. To ensure that all employees would be taken care of, Bollinger established the Bollinger Employee Relief Fund to help cover qualified essential and emergency needs of employees throughout the recovery process. The fund is administered by the Baton Rouge Area Foundation, a leader in providing disaster relief.

"In the immediate aftermath of the storm, I was overwhelmed by both the stories of devastation and loss from our community, as well as the offers of support from friends, vendors, customers and others all across the country," Bordelon said. "When my grandfather founded this company 75 years ago, he knew that taking care of employees and treating them like family was critical to ultimately delivering quality products to our customers. That's why creating the Employee Relief Fund was a no-brainer. It was the right thing to do and we'll continue to put our employees first – it's in our company's DNA."

SeeByte and Raytheon Combine AQS-20C Sonar With SeeTrack C2 Software for Real-Time Contact Analysis

The integration of SeeByte and Raytheon's platform will allow for enhanced mission analysis, according to SeeByte. *SEEBYTE*

EDINBURGH, Scotland — SeeByte and Raytheon Technologies are working together to bring Raytheon's AN/AQS-20C advanced minehunting sonar system data into SeeByte's SeeTrack v4, multi-domain command and control system, SeeByte said in a release.

The AN/AQS-20C's combination of side-scan, forward-looking and gap-filler sonars enables the sonar to detect and classify mine-like objects from the seafloor to the near surface in a single pass.

This data can now be brought into SeeByte's SeeTrack for mission analysis. The AN/AQS-20C has built in automated target recognition (ATR) and identification level contacts can now be displayed in SeeTrack in near-real time.

The AN/AQS-20C is an advanced minehunting sonar system that has been designated as the minehunting sonar for the U.S. Navy. It is the most advanced and capable mine warfare sensor system, fully integrated with and effectively operated from the Littoral Combat Ship.

SeeTrack's post-mission analysis tools provide an intuitive user interface and streamlined workflow for ease of use in

operational situations and its open architecture means it can be integrated with different sonars, sensors or behaviours for specific operational needs.

“The AN/AQS-20C provides safety and efficiency in expansive mine-sweeping operations. Combining this with SeeTrack will allow naval customers to make informed decisions from the ATR data, improving mission tempo even further” said Robert Johnson, business development manager for SeeByte.

Army, Navy SATCOM Mission Areas Shifting to U.S. Space Force

Thirteen satellites, including ultra-high frequency satellites, like the Mobile User Objective System developed for the U.S. Navy by Lockheed Martin, will transition manpower authorizations to the U.S. Space Force. *LOCKHEED MARTIN*

ARLINGTON, Va. — The chief of Space Operations announced the transfer of Army and Navy satellite communications billets, funding and mission responsibility to the U.S. Space Force, according to a Defense Department release.

Space Force Gen. John W. “Jay” Raymond made the announcement at the Air Force Association meeting in Washington, yesterday. The transfers are scheduled to be effective Oct. 1, 2021, if the DoD budget is passed and signed.

“We’re one team with our sister services, and over the last year and a half we have worked with the Army and the Navy and the Air Force to determine which capabilities come over to the

Space Force," Raymond said. "The intent was to consolidate [and] increase our operational capability, increase our readiness and do so in a more efficient manner."

The changes are "a first tranche," he said.

This is the latest step in building the new service. The idea behind the U.S. Space Force was "to create a unity of effort around our space enterprise," said Space Force Lt. Gen. B. Chance Saltzman, the service's deputy chief of space operations for operations, cyber and nuclear. Simply forming the service made the idea of looking for efficiencies possible.

"We need to create this unity of effort around our space missions, to ensure we're up to those challenges that we face, because the space domain has rapidly become far more congested, and far more contested than … when I was a lieutenant or a captain operating space capabilities," Saltzman said.

The performance of satellite communications will be enhanced by this sort of unity of effort.

On the Navy side, the Navy's narrow band satellite constellation will transfer 76 manpower authorizations to the Space Force, as well as 13 satellites – a mix of the new multi-user objective system and the ultra-high-frequency follow-on satellite constellation.

The U.S. Army will transfer roughly $78 million of operations, maintenance and manpower authorizations. This will include five wideband SATCOM operations centers and four regional SATCOM support centers. This will affect about 500 manpower authorizations.

All told, 15 global units with 319 military and 259 civilian billets from the Army and Navy combined will transfer to the Space Force.

These are crucial defense capabilities. The units can't stop just because the function is transferring to the Space Force. The capabilities are needed 24/7 and they will be, Saltzman said.

The move puts basically all of the DoD's narrowband, wideband and protected SATCOM under control of U.S. Space Force. "Now all of that – training, operations, acquisition and sustainment and follow-on activities, user allocations – all of that, will be consolidated under the Space Force to create that unity of effort, and hopefully gain the ability to be more resilient, more dynamic and ultimately more efficient with that mission set," Saltzman said.

The Soldiers, Sailors and Army and Navy civilians are not obligated to move to Space Force. There is a process and those involved must volunteer to move. For civilians, the process is relatively easy – simply moving from an Army or Navy system to becoming Department of the Air Force employees. For Soldiers and Sailors, this requires release by their respective services and acceptance by the Space Force.

Navy's Frigate Program Design, Production Reviews Set for Spring 2022

An artist rendering of the guided-missile frigate FFG(X). Fincantieri Marine Group says it will need to hire an additional 400 shipyard workers in the next two years to meet its predicted workload. *U.S. NAVY*

ARLINGTON, Va. – The U.S. Navy's future Constellation-class

guided-missile frigate (FFG) program is scheduled in spring 2022 for two program reviews that are milestones for the program to pass en route to production, the shipbuilder said.

Mark Vandroff, CEO of Fincantieri Marinette Marine at Fincantieri Marine Group, the builder of the Constellation FFG, speaking Sept. 23 in a Defense One webinar, said the program's Critical Design Review is scheduled for February 2022, followed in March by the program's production readiness review.

Vandroff, a retired Navy engineering duty officer, said his company expects to begin preparing for production of the first hull, FFG 62, in the spring of 2022 and to launch the ship in 2025. Delivery of the future USS Constellation is scheduled for 2026.

A new Frigate Erection Bay at the company's shipyard in Marinette, Wisconsin, will be able to house two FFG hulls (complete except for installation their mainmasts.) Vandroff said the bay will provide comfortable working conditions for shipbuilders during the Wisconsin winters. The FFGs will be 90% complete before they are launched.

He also said that unlike the Freedom-class littoral combat ships the company is building for the Navy, which are side-launched from the building ways, the Constellation frigates will be launched with a Synchrolift.

The Multi-Mission Combatants being built by Fincantieri also will be launched by a Synchrolift, Vandroff said.

Fincantieri also is building the last four Freedom-class littoral combat ships (LCS 25, 27, 29, 31).

Vandroff said his company has invested $250 million in capital investment and will need to hire 400 more shipyard workers over the next two years to meet the predicted workload.

Electric Boat Focusing on Current Navy Sub Programs While Australian Sub Plan Shakes Out

Shown here in September 2021, Quonset Point employee Steven Tavares, an X-ray welder, welds ship sponsor Kate Mabus' initials into the keel plate that will be installed on the Virginia-class submarine Utah. The Virginia-class is the second priority for General Dynamics, after the Columbia-class sub program. *GENERAL DYNAMICS ELECTRIC BOAT*

ARLINGTON, Va. — The General Dynamics Electric Boat shipbuilder is focusing on its own nuclear-powered submarine construction programs while standing ready to assist in any plan to build a fleet of nuclear-powered submarines for the Royal Australian Navy.

Last week, the United States, the United Kingdom and Australia announced the formation of a partnership, AUKUS, with its first project being the construction of a fleet of nuclear-powered submarines for the Australian navy, instead of procuring French-designed diesel-electric submarines.

"My message to my team is absolutely clear and that is: We stay focused at the mission at hand," said Kevin Graney, president of Electric Boat, speaking Sept. 23 in a Defense One webinar. "The mission at hand is two Virginia [-class attack] submarines a year and Columbia [-class ballistic-missile submarine or SSBN]. Those are our No. 1 and No. 2 priorities, Columbia first and Virginia second. From that perspective there's just an awful lot of work that we've got to do to get

right and make sure we are supporting the U.S. Navy."

Graney said he saw opportunities for Electric Boat going forward but that with the 18-month consultation phase for the Australian navy there currently is no task yet on the program.

"We stand ready," he said. "The Naval Reactors team and the Navy knows we stand ready to support when tasked and, in the meantime, we've got plenty of work to do."

Graney said that six of the super modules of the first Columbia SSBN are under construction. It will be 2040 before the 12th and last planned Columbia SSBN is completed, he noted, and that the program would be the defining project for many of Electric Boat's shipbuilders.

Electric Boat has added more than 18,000 workers to the company over the last decade and has invested more than $250 million in workforce development. The company's suppliers have increased from 3,000 to 5,000, located in all 50 states. The company is the largest employer in Connecticut and Rhode Island.

Graney praised the efforts of the Office of the Assistant Secretary of the Navy for Research, Development and Acquisition during the COVID-19 pandemic for its response to the pandemic by accelerating funding forward to shore up suppliers and, thus, keeping them in business producing the materials and supplies needed to build submarines.