

Coast Guard Cutter Tampa Returns Home Following 57-day Caribbean Patrol



Fireman Lukas Kuehne, a crewmember aboard the Coast Guard Cutter Tampa, helps move drugs during a contraband transfer aboard the cutter. The cutter crew conducted a 57-day counter-drug and migrant interdiction operations patrol. U.S. Coast Guard

PORTSMOUTH, Va. – The crew of the Coast Guard Cutter Tampa returned to their homeport in Portsmouth on Dec. 12, after a 57-day counter-drug and migrant interdiction operations patrol, the Coast Guard 5th District said in a release.

Patrolling known drug trafficking areas throughout the Caribbean and working with partner agencies and maritime patrol aircraft, the Tampa crew interdicted a vessel carrying approximately 170 pounds of cocaine worth \$1.95 million.

Additionally, in a joint operation with various law enforcement agency partners, the Tampa assisted the Coast Guard Cutter Richard Dixon, homeported in San Juan, Puerto Rico, with the interdiction of two fishing vessels, with 26 alleged smugglers, suspected of engaging in drug trafficking.

The Tampa's efforts to combat drug smuggling in the Caribbean was part of Operation Unified Resolve, a larger effort to increase regional stability and undermine the influence of transnational criminal organizations who routinely attempt to smuggle drugs throughout the region.

"I am exceptionally proud of everything our crew accomplished during this challenging patrol," said Capt. Michael Cilenti, commanding officer of the Tampa. "Through my entire Coast

Guard career, this has been one of the most dynamic patrols I have experienced, and I appreciate the resiliency and adaptability of our crew immensely. Additionally, Tampa's exceptional commitment to readiness and individual accountability allowed us to sail healthy, on time, and ready to execute our assigned missions. Of course, Tampa's operational success would not have been possible without the continuous support and encouragement from our friends and families. Their constant support allowed us to operate through the holiday season, focus on mission excellence and continue to serve our country. We could not be more grateful."

The Tampa crew also conducted migrant interdiction operations mission off the coast of Haiti as part of Operation Southeast Watch. The Tampa frequently patrolled Haitian waters, providing a law enforcement presence and deterrent to potential migrants and embarked an MH-65 Dolphin helicopter aircrew from Coast Guard Air Station Borinquen, Puerto Rico, which was used as an additional asset to patrol Haitian waters for potential migrant vessels.

Navy Accepts Delivery of Future USS Mobile (LCS 26)



The future USS Mobile (LCS 26). The U.S. Navy has accepted delivery of the ship, the fifth ship to bear the name. Office of U.S. Rep. Bradley Byrne

MOBILE, Ala. – The Navy accepted delivery of the future USS Mobile (LCS 26) during a ceremony at Austal USA on Dec. 9, the service said in a Dec. 11 release.

Mobile is the 23rd littoral combat ship (LCS) and the 13th of

the Independence variant to join the fleet. Delivery marks the official transfer of the ship from the shipbuilder, Austal USA, to the Navy. It is the final milestone prior to commissioning, which is planned for spring 2021.

“This is a day of celebration for both the Navy and our country with the delivery of the future USS Mobile,” said LCS program manager Capt. Mike Taylor. “This ship, and her crew, are foundational to our nation’s security.”

Four additional Independence-variant ships – Savannah (LCS 28), Canberra (LCS 30), Santa Barbara (LCS 32), and Augusta (LCS 34) – are in various stages of construction at Austal USA, and two more are awaiting the start of construction following LCS 34.

The future USS Mobile is the fifth ship named in honor of the port city on Alabama’s Gulf Coast. The first Mobile was a side-wheel steamer that operated as a Confederate government-operated blockade runner. It was captured by U.S. forces at New Orleans in April 1862, commissioned as Tennessee and later renamed Mobile. The second Mobile was a passenger liner operated by Hamburg Amerika Lines between Germany and the United States until the outbreak of World War I. It was taken over by the Allied Maritime Council and assigned to the United States after the Armistice and commissioned March 1919. The third Mobile (CL 63), a cruiser, was commissioned March 24, 1943. It participated in numerous campaigns in the Pacific Theater during World War II and received 11 battle stars for her service by the time she was decommissioned May 1947. The fourth Mobile (LKA 115) was an amphibious cargo ship that served from September 1969 until decommissioning in February 1994.

The LCS is a fast, agile, mission-focused platform designed to operate in near-shore environments, while capable of open-ocean tasking and winning against 21st-century coastal threats such as submarines, mines, and swarming small craft. The

LCS is capable of supporting forward presence, maritime security, sea control and deterrence.

The LCS class consists of the Independence variant, built by Austal USA, and the Freedom variant, being built at Fincantieri Marinette Marine Corp. in Marinette, Wisconsin.

The future USS Mobile is the fourth LCS of both variants delivered to the Navy in 2020. St. Louis (LCS 19) was delivered on Feb. 6, Kansas City (LCS 22) was delivered on Feb. 12, and Oakland (LCS 24) was delivered on June 26. Five more – Minneapolis-St. Paul (LCS 21), Cooperstown (LCS 23), Marinette (LCS 25), Savannah (LCS 28), and Canberra (LCS 30) – are planned for delivery in 2021.

HII Authenticates Keel of Virginia-Class Attack Submarine Massachusetts



The initials of Virginia-class submarine Massachusetts (SSN 798) sponsor Sheryl Sandberg were displayed at the ship's keel authentication ceremony. Sandberg (center left) delivered pre-recorded remarks during the event, which marks the ceremonial start of construction. Present was Newport News Shipbuilding President Jennifer Boykin (left); Cmdr. Erik Lundberg, commanding officer of the pre-commissioning unit (center) and welder Ronnie Payne. Huntington Ingalls Industries / Ashley Cowan

NEWPORT NEWS, Va. – Huntington Ingalls Industries' Newport News Shipbuilding division hosted a keel authentication ceremony Dec. 11 for Virginia-class attack submarine Massachusetts (SSN 798), the company said in a

release. Due to the COVID-19 pandemic, the event was held virtually, without an audience.

“This construction milestone is typically a small ceremony with shipbuilders and the submarine’s crew in attendance,” said Jennifer Boykin, president of Newport News Shipbuilding. “Given the current COVID-19 environment and the precautions it requires, today’s event is smaller than usual in scope, but not in importance.”

“Today’s event is a significant milestone in the life of the boat because it is the official construction kickoff, but it also marks the beginning of an important partnership between our shipbuilders who will build this mighty war vessel and the sailors who will bring her to life,” Boykin added.

Sheryl Sandberg, chief operating officer of Facebook, is the ship’s sponsor. In a pre-recorded video message, Sandberg etched her initials onto a metal plate, signifying the keel of SSN 798 as being “truly and fairly laid.”

Ronnie Payne, a master shipbuilder who has worked on every Virginia-class submarine built at Newport News, then traced Sandberg’s initials with a welding torch at the company’s Supplemental Module Outfitting Facility. The metal plate will remain affixed to the ship throughout its life.

“This year has been difficult for so many, and I am extra grateful for moments like this one when we can celebrate such an important milestone together,” Sandberg said. “I have a deep respect for the shipbuilders who will bring this vessel to life. I am so grateful for the opportunity to build a lifelong bond with this boat and its crew in my role as the sponsor.”

Massachusetts is the 25th Virginia-class fast attack submarine being built under the teaming agreement with General Dynamics Electric Boat. Construction began in March 2017 and is approximately 50% complete. The boat is scheduled for delivery

to the Navy in 2023.

“One of the privileges in establishing a command from the very beginning is developing a relationship with the boat’s namesake state – a relationship inherited from our forebears and one that will last the life of the ship and beyond,” said Cmdr. Erik Lundberg, commanding officer of the pre-commissioning unit. “Our mission is clear – deliver the most advanced, most capable warship to the Navy and our nation with an equally advanced and capable crew to bring her to life. The crew of Massachusetts stands ready.”

US Navy, Raytheon Conduct First Tomahawk Block V Tests



A successful flight test of the Tomahawk Block V. Raytheon Missiles & Defense

TUCSON, Ariz.— The U.S. Navy and Raytheon Missiles & Defense, a Raytheon Technologies business, successfully completed two flight tests with the franchise’s newest cruise missile variant, the Tomahawk Block V, the company said in a Dec.10 release.

During the tests, the Arleigh Burke-class guided-missile destroyer USS Chafee (DDG 90) launched two Block V missiles, impacting targets at ranges on both San Nicolas Island and Naval Air Weapons Station China Lake in California.

Tomahawk is a highly accurate, GPS-enabled missile that can fly into heavily defended airspace and conduct precise strikes on high-value targets with minimal collateral damage. The advanced Tomahawk Block V includes improved navigation and

communications.

“These tests keep the Navy on schedule to introduce Block V into the fleet next year,” said Kim Ernzen, vice president of Naval Power at Raytheon Missiles & Defense. “Our modernization and recertification efforts will also extend the missile’s service life by 15 years.”

During the tests, the missiles were redirected mid-flight to different targets using their new advanced communications architecture systems.

“The Block V capabilities reinforce Tomahawk’s unequivocal role as the Navy’s long-range strike weapon far into the future,” said Capt. John Red, the Navy’s Tomahawk Weapons System program manager. “These tests are tremendous milestones for our teams that have been working on these improvements for several years.”

Additional Block V enhancements, such as a maritime strike capability (Block Va) and a programmable warhead for an expanded land attack capability (Block Vb), are in development for future deliveries. Block Va will strike moving targets at sea, while Block Vb will defeat a more diverse range of land targets.

Marine Corps Begins Fielding Amphibious Combat Vehicle



An Amphibious Combat Vehicle. U.S. Marine Corps / Lance Cpl. Andrew Cortez
Marine Corps Base Quantico, Va.—The Marine Corps’ new

Amphibious Combat Vehicle has achieved two new major milestones, the Program Executive Office – Land Systems said in a Dec. 10 release.

On Nov. 13, the Marine Corps' Capabilities Development Directorate approved the Initial Operational Capability (IOC) of the ACV. Marines with 1st Marine Division aboard Marine Corps Base Camp Pendleton, California, were the first to receive the vehicle.

The Program Manager Advanced Amphibious Assault program office at Program Executive Officer (PEO) Land Systems manages the system.

"We're providing Marines with a modern, armored personnel carrier that offers tremendous capability with respect to survivability," said Col. Kirk Mullins, program manager for Advanced Amphibious Assault at PEO Land Systems. "The ACV gives the Marine Corps a capable platform operational across the full-range of military operations."

Then, on Dec. 8, Assistant Secretary of the Navy (Research, Development and Acquisition) James Geurts approved the vehicle for Full-Rate Production (FRP). This means the Marine Corps can build and field higher quantities of the ACV at a sustained rate over the next several years.

The ACV is a next-generation, eight-wheeled vehicle designed to move Marines from ship to shore. The vehicle will be the primary means of tactical mobility for the Marine infantry battalion at sea and ashore, replacing the Corps' aging Assault Amphibious Vehicle.

The ACV provides organic, direct fire support to dismounted infantry. The vehicle's ability to leverage waterways to carry Marines and equipment make it well-suited for various operating environments, including Expeditionary Advanced Base Operations. It is net-ready, secure, interoperable, operationally effective and built for future growth. In the

future, the Corps intends to develop, procure and field three additional variants that specialize in command and control, recovery operations and increased firepower.

“The fielding of the ACV is significant because we’re replacing the AAV, which has been effective for decades but was fielded in 1972,” Mullins said. “We’re providing Marines with a modern, more capable combat vehicle that is more adaptable to today’s battlefield.”

Col. David G. Bardorf, the director of Ground Combat Element Division at the Marine Corps’ Capabilities Development Directorate, said the ACV has progressed significantly since its initial requirements discussions in 2014. Combat Development and Integration was responsible for developing the requirements set that would be needed to replace the older platform.

“Reaching IOC is a testament to those involved in this program and the constant communication between the stakeholders: requirements, program managers, and [the vendor],” said Bardorf. “In the end, the Marine Corps is receiving an upgrade in capability ahead of schedule. We look forward to the program moving forward towards Full Operational Capability [FOC].”

Mullins said the vehicle is projected to reach FOC in fiscal year 2028.

In 2019, PEO Land Systems oversaw extensive testing involving the ACV that confirmed the vehicle’s ability to not only take on challenging surf, but also complete a long swim from ship to shore. The testing also indicated that the ACV has greater survivability and mobility than the AAV.

In 2020, Marine Corps Operational Test and Evaluation Activity performed independent operational testing involving the ACV’s achieved suitability, effectiveness and survivability. Results from the assessments, as well as feedback from Marines trained

to employ the vehicle, came back positive.

Mullins believes the ACV achieving IOC and FRP is a significant achievement for the Marine Corps, as Marines will receive an innovative vehicle that further supports their missions in various combat environments for years to come.

“As program manager, I’ve spent a lot of time speaking with Marines who have trained with this vehicle in a variety of test environments,” said Mullins. “The feedback we’ve consistently received has been overwhelmingly positive. Marines seem to really love the vehicle.”

U.S. Navy Adds Two Tech Bridges to Network



The Navy’s assistant secretary for research, development and acquisition announced two new Tech Bridges, in Panama City, Florida, and Honolulu.

WASHINGTON – James “Hondo” Geurts, assistant secretary of the Navy for Research, Development, and Acquisition, announced the stand up of two additional Tech Bridges, one in Panama City, Florida, and one in Honolulu, Hawaii, on Dec. 9, his public affairs office said in a release.

“Today’s Tech Bridge additions are a symbol of the Department of Navy’s momentum to rapidly deliver capabilities into the hands of our Sailors and Marines,” said Geurts. “There is nothing more exciting than seeing the speed and transition of technology that dramatically accelerates capability, and improved development processes – this allows our Navy and Marine Corps to provide the U.S. with the ability to adopt and

scale its asymmetric advantage. I look forward to seeing these Tech Bridges serving as a 'front door' for emerging tech to work more seamlessly with the Navy."

The newest Tech Bridges offer direct access for companies and the fleet to test and evaluate emerging technologies purposed for undersea and space-going missions. The focus areas for the Gulf Coast Tech Bridge, located in Panama City, Florida, includes coastal sciences and technology, assured maritime access and operational meteorology and oceanography. The focus areas for the Hawaii Tech Bridge, in Honolulu, entail efforts to adopt technology advances for command and control, communications, cybersecurity, intelligence, space systems and resilient infrastructure.

"The Naval Surface Warfare Center Panama City Division, the U.S. Naval Research Lab in Stennis, Mississippi, and the Naval Meteorology and Oceanography Command partnered together to establish the Gulf Coast Tech Bridge, which spans a unique, vibrant region across four states," said Holly Gardner, Director of the Gulf Coast Tech Bridge. "Our region is focused on the future, growing coastal science and unmanned vehicle development, hosting industry events and expanding strategic partnerships."

The Hawaii Tech Bridge represents a collaboration with the Naval Undersea Warfare Center Keyport Detachment Pacific, the Hawaii Technology Development Corporation, and the University of Hawaii's Office of Innovation and Commercialization. Future teaming is anticipated with the U.S. Indo-Pacific Command; Commander, United States Pacific Fleet; and Joint Base Pearl Harbor-Hickam.

"In our logo, you will see the Hawaiian canoe (wa'a)," said Neal Miyake, dual-hatted as the Business Deputy at Naval Information Warfare Center Pacific and the Director of the Hawaii Tech Bridge. "This symbolizes that everyone has to work together in unity (lokahe) to achieve success. Like our Tech

Bridge collaborators, each paddler may have a different role but they are all united by a common goal.”

Tech Bridges are part of an initiative birthed from the Navy Agility cell, called NavalX, with support from the Office of Naval Research and the Navy’s System Commands and Warfare Centers. Since September 2019, Tech Bridges stood up across the country to shorten innovation timelines, improve the U.S. Navy’s relationships with emerging tech companies, and advance the U.S. Navy’s ability to bring technology solutions to the fleet. As of today, the Tech Bridges network exists in 15 locations – stretching from London (U.K.) to Honolulu – and works with the U.S. Navy’s Warfare Centers to align requirements and bring value to Sailors and Marines.

More specifically, Tech Bridges collaborate and partner with startups, academia, corporations, small businesses, nonprofits, and private capital to match capability problems with technology solutions. Additionally, Tech Bridges serve within the growing ecosystem of the U.S. Department of Defense’s innovation groups – Defense Innovation Unit (DIU), National Security Innovation Network (NSIN), U.S. Army Futures Command, AFWERX, SOFWERX – that bolsters NavalX’s overarching ability to connect people, companies, and technology solutions.

“The new Tech Bridge locations bring in a deeper connection to the fleet, rapid prototyping mechanisms, test ranges, and access to talented students and entrepreneurs in Hawaii and the Gulf Coast Region,” said Whitney Tallarico, NavalX Tech Bridge Director. “We have seen this network mobilize during times of national crisis and are excited to watch them strengthen and serve our country during times of peace and otherwise, in the future.”

Collins Aerospace Completes Modernization of legacy E-6B Block I aircraft



An E-6B Mercury. NAVAIR

CEDAR RAPIDS, Iowa – Collins Aerospace Systems, a unit of Raytheon Technologies Corp., has successfully completed modernizing the E-6B Mercury Block I aircraft fleet, part of the Navy’s Airborne Command Post and Take Charge and Move Out (ABNCP/TACAMO) Weapon System missions, the company said in a Dec. 7 release.

The upgraded aircraft features a new command and control battlestaff, communications central control, multi-enclave voice/data/video distribution system, and an Internet Protocol Bandwidth Expansion (IPBE) digital backbone. Collins Aerospace acted as the Mission System Integrator (MSI), designing, developing, producing, installing, and qualifying the recapitalization of the mission system.

“The Block I contract is an example and testament to Collins Aerospace’s ability to deliver comprehensive, integrated and durable solutions to the Navy and E-6B community,” said Heather Robertson, vice president and general manager, Integrated Solutions, Mission Systems, Collins Aerospace. “As a result of this upgrade, crews have a modern, multi-enclave mission system that provides a full picture of their operating environment.”

As part of the ABNCP mission, the E-6B is an airborne command post and communications relay for U.S. nuclear forces. For the

TACAMO mission, the E-6B provides the survivable communications link to our submarine forces using Collins Aerospace's Very Low Frequency (VLF) terminal.

The work was completed at Will Rogers Airport where the company's co-located modification facility completed the 8-year full-rate Production (FRP) effort. With over 50 years of working within the TACAMO community, Collins Aerospace continues to deliver integrated solutions that ensure the utmost performance for the Navy's critical, no-fail, missions.

Boeing, Navy Complete First MQ-25 Test Flight with Aerial Refueling Store



Boeing and the U.S. Navy flew the MQ-25 T1 test asset with an aerial refueling store (ARS) for the first time on Dec. 9, 2020. The successful flight with the Cobham ARS – the same ARS currently used by F/A-18s for air-to-air refueling – tested the aircraft's aerodynamics with the ARS mounted under the wing. Boeing / Dave Preston

ST. LOUIS – Boeing and the U.S. Navy have for the first time flown the MQ-25 T1 test asset with an aerial refueling store (ARS), a significant milestone informing development of the unmanned aerial refueler, the company said in a Dec. 9 release.

The successful 2.5-hour flight with the Cobham ARS – the same ARS currently used by F/A-18s for air-to-air refueling – was designed to test the aircraft's aerodynamics with the ARS

mounted under the wing. The flight was conducted by Boeing test pilots operating from a ground control station at MidAmerica St. Louis Airport in Mascoutah, Illinois.

“Having a test asset flying with an ARS gets us one big step closer in our evaluation of how MQ-25 will fulfill its primary mission in the fleet – aerial refueling,” said Capt. Chad Reed, the U.S. Navy’s Unmanned Carrier Aviation program manager. “T1 will continue to yield valuable early insights as we begin flying with F/A-18s and conduct deck handling testing aboard a carrier.”

Future flights will continue to test the aerodynamics of the aircraft and the ARS at various points of the flight envelope, eventually progressing to extension and retraction of the hose and drogue used for refueling.

“To see T1 fly with the hardware and software that makes MQ-25 an aerial refueler this early in the program is a visible reminder of the capability we’re bringing to the carrier deck,” said Dave Bujold, Boeing’s MQ-25 program director. “We’re ensuring the ARS and the software operating it will be ready to help MQ-25 extend the range of the carrier air wing.”

The Boeing-owned T1 test asset is a predecessor to the engineering development model aircraft being produced under a 2018 contract award. T1 is being used for early learning and discovery, laying the foundation for moving rapidly into development and test of the MQ-25. Following its first flight last year, T1 accumulated approximately 30 hours in the air before the planned modification to install the ARS.

Earlier this year the Navy exercised an option for three additional MQ-25 air vehicles, bringing the total aircraft Boeing is initially producing to seven. The Navy intends to procure more than 70 aircraft, which will assume the tanking role currently performed by F/A-18s, allowing for better use

of the combat strike fighters.

Navy Announces Aerial Vehicle Operator Warrant Officer Specialty



Boeing conducts MQ-25 deck handling demonstration at its facility in St. Louis, Missouri, in this 2018 photo. U.S. Navy / The Boeing Co.

ARLINGTON, Va. – The Navy announced on Dec. 9 a new warrant officer specialty designator whose job will be to operate carrier-based MQ-25 Stingray unmanned aerial vehicles, which are expected to start appearing in fleet carrier air wings sometime in 2024.

The establishment of the Aerial Vehicle Operator (AVO) warrant officer specialty became a reality in October with Secretary of the Navy Kenneth J. Braithwaite's approval of the new designator, which was announced in NAVADMIN 315/20.

Over the next six to 10 years, the Navy will recruit, train and send to the fleet, a community of roughly 450 warrants in grades W-1 through W-5.

Those selected for the program will first complete Officer Candidate School in Newport, Rhode Island. Upon graduation, they will be designated as Warrant Officer One and must complete basic flight training as well as advanced training on the MQ-25 aerial vehicle. Once complete with basic flight training, these officers will earn their own distinctive Navy "wings of gold" warfare device and be assigned the 737X

designator.

“AVO’s will start out operating the MQ-25 Stingray, the Navy’s first carrier based unmanned aerial vehicle, which is expected to join the fleet with an initial operating capability in 2024,” said Capt. Christopher Wood, aviation officer community manager at the Bureau of Naval Personnel in Millington, Tennessee.

The use of warrant officers as the primary operators of unmanned aerial vehicles came about because the expected career path they’ll have as they move up the ranks will be as technical specialists who complete repetitive tours, which fits the Navy’s model on how warrant grades are utilized.

“Unlike traditional Navy Chief Warrant Officers, the majority of these officers will be accessed much younger and trained along the lines of current Naval Aviators and Naval Flight Officers in the unrestricted designators,” Wood said.

“However, Naval Aviators and Naval Flight Officers require assignments that progress in tactical and leadership scope to be competitive for promotion, while warrant officer AVO’s will be technical specialists and spend their careers as operators.”

Navy Recruiting Command will begin accepting applications for initial AVO accessions in fiscal year 2022. In addition to street-to-fleet warrants, enlisted Sailors will also be able to apply for the program, and potentially earn the 737X warrant officer designator.

“Currently, the plan is to grow the community from the ground up with Warrant Officer AVOs,” Wood said. “However, Naval Aviation will continue to evaluate the requirements of the program as it matures.”

Commanding and executive officers, as well as department heads of MQ-25 squadrons, will be filled by aviators and flight

officers administratively screened for those commands.

“During the first four to five years of the program, some MQ-25 AVOs will come from other Type/Model/Series as we build up the knowledge base, with the first 3-4 deployments having a mix of existing unrestricted line and new warrants making up the ready room.”

And though right now the community will be focused on the MQ-25, in the future, warrant officer AVOs may also operate the MQ-4C Triton while on shore duty following their initial MQ-25 sea tour. As the Navy’s footprint in unmanned aerial vehicles increases, so could the scope of the AVO community.

Lockheed Martin: AI, Data Analytics Will Transform Navy Ship, Aircraft Repairs



Aviation Ordnanceman 3rd Class Mike Schmid conducts maintenance on the weapon system of a MH-60S Seahawk helicopter on the flight deck of the amphibious assault ship USS Bataan (LHD 5). U.S. Navy / Mass Communication Specialist 3rd Class Evan Thompson

BETHESDA, Md. – Sailors will soon spend more time focused on the mission and less on aircraft and ship repairs with a new information system driven by [artificial intelligence](#) and predictive analytics, Lockheed Martin said in a Dec. 9 release.

Digitally re-engineering more than 20 standalone applications

into one integrated system, this new tool enables Sailors and Marine Corps maintainers, to anticipate and resolve potential maintenance issues or part failures on aircraft, ships and other systems.

The U.S. Navy is digitally transforming its legacy maintenance systems with a fully modernized, responsive logistics information systems solution developed by Lockheed Martin.

Lockheed Martin partnered with the Navy to rapidly develop and test the integrated logistics information systems solution, emphasizing simplified user interfaces, streamlined workflows, and time-saving features such as auto-population and smart searching.

“Lockheed Martin’s solution is both intuitive and streamlined to maximize end user efficiency,” said Capt. Allan Walters, former program manager of the Navy’s Command and Control Systems Program Office. “The ability to execute rapid and flexible changes to the software is impressive and designed to improve Navy readiness both ashore and afloat through reduced failure rates and improved repair times.”

The solution’s advanced software capabilities use the latest Department of Defense-approved [DevSecOps tools](#), so software updates can happen in days or weeks instead of months and years, enabling the Navy’s vision of “Compile to Combat in 24 Hours.”

Navy maintainers can create, view and complete maintenance work orders from a mobile device. Instead of referencing a paper or digital manual, sailors can view 3-D models of objects and see where they’re located in the context of an entire ship or aircraft.

“Our logistics solution provides a digital twin capability, integrating 3-D model visualization with material data, maintenance history and the entire operational environment,” said Reeves Valentine, vice president of Lockheed Martin

Enterprise Sustainment Solutions. "Sailors can simulate a maintenance action and see its results before doing it on the real thing. Having this capability will result in a greater ability to predict part failure, resulting in optimized maintenance actions to improve asset readiness."

Smart searching and auto-population functionality help identify proper parts and common issues when creating work orders, which eliminates work and reducing errors.

Lockheed Martin partnered with non-traditional vendors IFS – an enterprise software developer – and Beast Code, a Florida software start-up, to create the logistics information systems solution, which will be initially fielded at 10 Navy sites with about 10,000 users. The delivered solution is part of the U.S. Navy Naval Operational Business Logistics Enterprise (NOBLE) family of systems providing enhanced situational awareness, planning, execution, and management of maintenance and supply logistics and business functions for more than 200,000 sailors.