

USS Billings Returns Home After U.S. 4th Fleet Deployment



The Freedom-variant littoral combat ship USS Billings (LCS 15) transits the Caribbean Sea, July 10, 2021. *U.S. NAVY / Mass Communication Specialist 2nd Class Austin G. Collins*

MAYPORT, Fla. – The Freedom-variant littoral combat ship USS Billings (LCS 15) returned to Mayport, Florida, Oct. 30, following its successful first deployment to the U.S. 4th Fleet area of operations, said U.S. Naval Forces Southern Command/U.S. 4th Fleet Public Affairs.

Billings (Gold crew), along with the “Snowmen” of Helicopter Sea Combat Squadron (HSC) 28, Detachment 5, deployed June 30, to conduct U.S. Southern Command and Joint Interagency Task Force South’s counter-narcotics operations in the Caribbean Sea.

During their deployment, Billings, with its embarked U.S. Coast Guard Law Enforcement Detachment (LEDET), assisted in disrupting an estimated 1,597 kilograms of cocaine worth over

an estimated street value of over \$111.8 million and removed 13 suspected drug traffickers from the narcotics trade.

When a 7.2-magnitude earthquake struck Haiti Aug. 14, 2021, Billings joined in humanitarian assistance and disaster relief (HADR) efforts as part of the Joint Force Maritime Component Command. Billings provided support as an afloat refueling base for Joint Task Force-Haiti aircraft and utilized its MH-60S Sea Hawk from HSC-28 to move personnel and transport life-saving aid to remote areas in need.

“I am incredibly proud of the Sailors on Billings for everything they accomplished this deployment,” said Cmdr. Brett Seeley, commanding officer aboard Billings. “The incredible work ethic, professionalism, and resiliency of this team was crucial in conducting real world operations. Taking narcotics off the streets, easing suffering of the people of Haiti through HADR, and building partnerships in this part of the world has had tangible impacts and sets the stage for those who sail after us. I could not have asked for a better maiden deployment for our mighty warship and the Thundercat crew.”

Billings conducted three bilateral maritime exercises with Jamaica and the Dominican Republic to strengthen partnerships and build interoperability between forces.

During a port visit to Santo Domingo, Dominican Republic, the ship hosted a reception onboard, welcoming Dominican Republic President Luis Rodolfo Abinader, Vice President Raquel Peña and Chargé d’Affaires of U.S. Embassy Santo Domingo Robert W. Thomas.

Upon arriving in U.S. 4th Fleet area of operations, Billings also participated in a surface training exercise with USS Sioux City (LCS 11) and USS Wichita (LCS 13), marking the first time three Freedom-variant LCS ships have been deployed

and operating together at the same time.

Throughout the deployment, Billings partnered with other U.S. Navy warships, as well as numerous U.S. agencies from the departments of Defense, Justice and Homeland Security, in the effort to combat transnational organized crime.

Rolls-Royce Opens New \$11 Million Facility to Support U.S. Navy Programs



Rolls-Royce's flagship Naval Defense campus in Walpole, Massachusetts. *ROLLS-ROYCE*

WALPOLE, Mass. – Rolls-Royce has completed an \$11 million investment in its flagship Naval Defense campus with the opening of a new high-tech manufacturing, repair and test facility. The 25,000-square-foot facility will enhance and modernize the company's naval operations in Walpole, adding waterjet maintenance, repair and overhaul (MRO) servicing to its portfolio of world-class capabilities.

“We’re excited to add this new capability so we can better serve our U.S. Navy customers,” said Dan Rediger, Rolls-Royce head of Naval Operations. “Our Walpole team has proudly equipped the Navy for more than 50 years and this investment ensures that we can continue to meet their growing needs for decades to come.”

As the U.S. Navy Littoral Combat Ship (LCS) program continues to mature, Rolls-Royce is seeing an increased demand for spare equipment and MRO services associated with scheduled maintenance. Each Freedom-class variant of the LCS is equipped with four Rolls-Royce waterjets that were designed and manufactured on the company’s Walpole campus. The new facility gives Rolls-Royce the capacity and capability to perform the waterjet MRO work in Walpole, as well.

Rolls-Royce is a global leader in propulsion equipment and continues to provide unparalleled products and services to the U.S. Navy. The company is the sole supplier of shock-rated propeller systems, which have demonstrated extraordinary levels of reliability and robustness in service. Rolls-Royce Propulsion equipment can be found on more than 95% of the U.S. Navy’s surface warfare fleet.

“We are proud to provide the power to protect in support of our United States Department of Defense customers,” said Tom Bell, president, Rolls-Royce Defense and chairman & CEO of Rolls-Royce North America. “This investment is a clear signal that we remain committed to meeting their needs both today and well into the future with world-class, American-made products and services.”

The investment is also expected to have a positive impact on the region, bringing new business to the local economy and new high-tech, manufacturing jobs to the Rolls-Royce Walpole campus.

“I want to congratulate Rolls-Royce for expanding their

footprint in Massachusetts, which promises to increase regional access to employment opportunities in high-tech manufacturing,” said Mike Kennealy, Massachusetts housing and economic development secretary. “The Commonwealth has made great strides in building a talented workforce and fostering innovation, and this facility ensures Rolls-Royce will continue to play an important role in our ecosystem well into the future.”

Navy Hypersonic Rocket Motor Moves Closer to Flight Testing



The U.S. Navy, in collaboration with the U.S. Army, conducts a static fire test of the first stage of the newly developed 34.5” common hypersonic missile that will be fielded by both services. *U.S. NAVY / NORTHROP GRUMMAN*

WASHINGTON – The Navy Strategic Systems Programs successfully conducted a second test of the First Stage Solid Rocket Motor (SRM) Oct. 28 in Promontory, Utah, as part of the development of the Navy’s Conventional Prompt Strike (CPS) offensive hypersonic strike capability and the Army’s Long Range Hypersonic Weapon (LRHW), the Navy’s Office of the Navy Chief of Information said Oct. 29. The offensive weapon systems will enable precise and timely strike capability against deep inland targets in contested environments.

“Today’s successful test brings us one step closer to the design validation of our new hypersonic missile that will be fielded by both the Navy and the Army,” said Vice Adm. Johnny R. Wolfe Jr. director, Navy’s Strategic Systems Programs,

which is the lead designer for the common hypersonic missile. "We are on schedule for the upcoming flight test of the full common hypersonic missile. Our partners across government, industry, and academia are continuing the excellent work that is essential to providing a hypersonic capability to our warfighters as quickly as possible."

This SRM test is part of a series of tests validating the newly developed common hypersonic missile. This live fire test follows previous tests of the First and Second Stages on May 27 and August 25, 2021. This static fire test marked the first time the First Stage SRM included a thrust vector control system. The thrust vector control system is a key component of the missile booster that allows the rocket motors to be maneuverable in flight.

U.S. peer competitors are weaponizing and fielding hypersonic capabilities, creating warfighting asymmetry that must be addressed. These tests are vital in developing a Navy-designed common hypersonic missile that the Navy and Army will field. The common hypersonic missile will consist of the first stage SRM as part of a new missile booster combined with the Common Hypersonic Glide Body (CHGB).

The Navy and Army are on track to test the full common hypersonic missile that will be a catalyst for fielding the CPS and LRHW weapon systems. The services are working closely with government national laboratories and industry to continue developing and producing the common missile.

"This test continues to build momentum to deliver hypersonics capability for our warfighters in support of the National Defense Strategy," said Lt. Gen. L. Neil Thurgood, director of Hypersonics, Directed Energy, Space and Rapid Acquisition. "Fielding hypersonic weapons is one of the highest priority modernization areas the Department of Defense is pursuing to ensure our continued battlefield dominance, and the joint team did a tremendous job executing this test and

keeping us on schedule.”

Information gathered from ongoing tests will further inform the services offensive hypersonic technology development. Hypersonic weapons are capable of flying at speeds greater than five times the speed of sound (Mach 5), are highly maneuverable and operate at varying altitudes. The common hypersonic missile design for sea and land-based applications provides economies of scale for future production and relies upon a growing U.S. hypersonics industrial base.

Japan, U.S. form Surface Action Group in South China Sea



Japan Maritime Self-Defense Force Murasame-class destroyer JS Yudachi (DD 103), left, and Independence-variant littoral combat ship USS Jackson (LCS 6) sail together in the South China Sea. *JMSDF*

SOUTH CHINA SEA – Japan Maritime Self-Defense Force (JMSDF) Murasame-class destroyer JS Yudachi (DD 103) and Independence-variant littoral combat ship USS Jackson (LCS 6) operated bilaterally in the South China Sea, said Lt. Cmdr. Lauren Chatmas, U.S. Navy, Destroyer Squadron Seven Public Affairs.

Joining to form a Surface Action Group (SAG) while transiting, the ships practiced a range of surface warfare tactics to include flight operations, communications drills and coordinated tactical maneuvering, all designed to enhance interoperability and enabling the ships to practice bilateral

tactics in close proximity to one another.

“Meeting our JMSDF allies in the South China Sea allowed both of our teams to build readiness as we sail in the Indo-Pacific,” said Cmdr. Michael Root, Jackson Gold Crew commanding officer. “The complex maneuvering and operations we accomplished without meeting face-to-face reflects the strong friendship and maritime professionalism that our nations and navies share.”

Coming together with partners and allies at sea allows the U.S. Navy to operate closely with other navies and in ways shore exercises do not allow. It further provides the crews with real-life situations to practice their everyday watchstanding and communication skills with foreign vessels.

“On our way to the Gulf of Aden and Somali waters to engage counter piracy mission, we met with USS Jackson, and conducted various tactical training,” said Cmdr. Wakushima Hidetaka, JMSDF JS Yudachi commanding officer. “Despite COVID-19, Japan and U.S. naval forces are working closely in any sea area, making full use of the characteristics of the naval force.”

Attached to Destroyer Squadron (DESRON) 7, Jackson is on a rotational deployment to the U.S. 7th Fleet area of operations in support of security and stability in the region, and to work alongside allied and partner navies to provide maritime security and stability, key pillars of a free and open Indo-Pacific.

As the U.S. Navy’s forward-deployed destroyer squadron in Southeast Asia, DESRON 7 serves as the primary tactical and operational commander of littoral combat ships rotationally deployed to Singapore, functions as Expeditionary Strike Group 7’s Sea Combat Commander, and builds partnerships through training exercises and military-to-military engagements.

Under command, U.S. Pacific Fleet, 7th Fleet is the U.S. Navy's largest forward-deployed numbered fleet, and routinely interacts and operates with 35 maritime nations in preserving a free and open Indo-Pacific region.

U.S. Coast Guard, Haitian Coast Guard Interdict Suspected Drug Smugglers



A Coast Guard Cutter Joseph Doyle (WPC-1133) small boat crew and cutter crewmembers conduct a contraband transfer following an interdiction near Gonave Island, Haiti, Oct. 27, 2021. The suspected smugglers and contraband were transferred to the Haitian coast guard. *U.S. COAST GUARD*

MIAMI – Coast Guard Cutter Joseph Doyle's crew transferred 1,485 pounds of marijuana and three suspected drug smugglers to Haitian Coast Guard crewmembers on Wednesday, following an interdiction off the coast of Haiti.

The small boat crew transferred 27 bales of marijuana and the suspected smugglers aboard.

The Doyle's crew spotted a vessel with visible bales of contraband on board, during a routine patrol, Oct. 26, at 2:50 p.m, approximately 9 miles northwest of Gonave Island, Haiti. Doyle's crew coordinated a pursuit with Haitian Coast Guard crewmembers and deployed a small boat crew to interdict the vessel.

“Continued coordination and collaboration between the U.S. and

Haitian coast guard enabled this successful interdiction and prosecution,” said Lt. David Steele, Coast Guard Liaison Officer, U.S. Embassy Haiti. “The U.S. Coast Guard will continue to partner with the Haitian coast guard to build capacity, reduce the destabilizing effects of transnational organized crime and secure Haiti’s maritime borders.”

The suspected smugglers and contraband were later transferred to the Haitian coast guard. No injuries were reported.

Navy Selects BAE’s 57mm Mk110 Gun for Constellation-Class Frigates



The Mk 110 57mm Gun Weapons System (GWS) is fired as part of a regular operational exercise aboard Independence-variant littoral combat ship USS Charleston (LCS 18), July 11. *U.S. NAVY / Mass Communication Specialist 3rd Class Adam Butler*

BAE Systems has received a \$26 million contract to equip the U.S. Navy’s Constellation class frigates with the fully automatic 57mm Mk 110 naval gun, the company said in an Oct. 28 release.

The contract, awarded earlier this month, includes engineering support and calls for two Mk 110s for the USS Constellation (FFG 62) and USS Congress (FFG 63). The new Constellation class of multi-mission guided-missile frigates is designed to operate in blue water and in the littorals, for an increased forward naval presence.

The Mk110 gun system, known internationally as the Bofors 57

Mk 3, is the deck gun of choice for the Constellation class. It is a multi-mission, medium-caliber shipboard weapon, effective against air, surface, or ground threats without requiring multiple round types. The system is capable of firing up to 220 rounds per minute at an effective range of more than nine nautical miles using BAE Systems' six-mode programmable, pre-fragmented, and proximity-fused (3P) ammunition.

"The selection of the Mk 110 for the U.S. Navy's Constellation class frigates signifies confidence in the gun system and its ability to meet current and future needs in shipboard defense," said Brent Butcher, vice president of the weapon systems product line at BAE Systems "The Mk110 gun system provides this next-generation frigate with the continued performance that our surface fleet has come to expect from its intermediate caliber guns."

This contract also includes providing a Mk110 system to the U.S. Coast Guard's third Argus Class Offshore Patrol Cutter, USCGC Ingham. Deliveries are expected to begin in 2023 under the contract with Naval Sea Systems Command Integrated Warfare Systems 3C (NAVSEA IWS).

The 57mm Mk 110 is currently in service on the Navy's Littoral Combat Ship and the U.S. Coast Guard's National Security Cutter. To date, BAE Systems is providing 39 Mk110 guns to the Navy and 15 to the Coast Guard. Worldwide, 103 Mk110/57 Mk 3 naval gun systems are under contract with nine nations.

Navy Awards BAE Systems \$478

Million for SSP Systems Engineering, Integration



An unarmed Trident II D5 missile launches from the Ohio-class ballistic missile submarine USS Nebraska (SSBN 739) off the coast of California. *U.S. NAVY / Mass Communication Specialist 1st Class Ronald Gutridge*

FALLS CHURCH, Va. – BAE Systems has been awarded a five-year Systems Engineering and Integration Support Services contract to continue supporting the U.S. Navy Strategic Systems Programs (SSP) office, the company announced Oct. 27. The contract, worth up to \$478 million, was awarded in September 2021.

“We are proud to continue providing full system-level lifecycle capabilities to SSP that will help advance their digital engineering strategy to ensure the readiness of the Navy’s strategic missions,” said Lisa Hand, vice president and general manager of BAE Systems Integrated Defense Solutions. “BAE Systems brings extensive systems integration expertise to a wide range of defense initiatives that support two-legs of the nation’s nuclear triad.”

The SSP oversees the Strategic Weapons System and Attack Weapons System on-board current U.S. Ohio and U.K. Vanguard class submarines, as well as on future U.S. Columbia and U.K. Dreadnought class submarines.

Austal's Electrowatch Awarded ONR Contract for Additive Manufacturing Process

CHARLOTTESVILLE, Va. – The U.S. Navy Office of Naval Research (ONR) has awarded ElectraWatch, an Austal USA company, a highly competitive Manufacturing Science Program contract to identify new material processing pathways that use additive manufacturing for Copper-Nickel (CuNi) heat exchanger designs. ElectraWatch was one of only five organizations, and the only non-academic organization, to receive a contract award.

“I’m proud of the hard work our engineering team has done to make this contract award possible,” ElectraWatch General Manager Ryan Dunn said. “We are honored that this award puts us in a position to further champion the next generation of manufacturing capabilities and to best equip the Sailors who protect and support our country and our allies.”

Dr. Scott Kasen, ElectraWatch’s principal engineer, explained that the enormous heat loads of future naval vessels require advanced designs for seawater heat exchangers which may only be achievable by leveraging the design freedom afforded by Additive Manufacturing (AM). “Despite the tremendous advancements in AM,” Kasen said, “existing modalities are unable to easily process CuNi alloys which are chosen for their high thermal conductivity, demonstrated corrosion performance, and biofouling resistance in marine environments.”

To overcome the challenges of existing approaches, ElectraWatch partnered with Metallum3D to propose a novel AM capability which uses the unique combination of a bound pellet extrusion process and microwave sintering.

This project reinforces Austal USA's position as a global leader in advanced ship manufacturing and sustainment. Investing in these future capabilities demonstrates the commitment of Austal USA and ElectraWatch to continue expanding post-delivery support and sustainment offerings, while also supporting multiple shipbuilders, maintenance providers, and the U.S. Navy across a broad range of military ships deployed in the U.S. fleet.

Thales Expands its ALFS Repair Capabilities in the United States



The sonar dipping transducer of an MH-60R Seahawk, attached to the "Saberhawks" of Helicopter Maritime Strike Squadron (HSM) 77, assigned to the Ticonderoga-class guided-missile cruiser USS Shiloh (CG 67) is hoisted during an subsurface detection exercise. *U.S. NAVY / Mass Communication Specialist 1st Class Rawad Madanat*

CLARKSBURG, Md. – Thales Defense & Security Inc. has serviced more than 1,300 Airborne Low Frequency Sonar (ALFS) subsystems over the past eight years, a key milestone in the primary sustainment activities for ALFS, the company announced Oct. 28.

For more than 20 years, Thales Defense & Security Inc. has been the primary sustainment service provider for ALFS, demonstrating a continued commitment to onshore maintenance in the United States.

Thales, a leader in antisubmarine warfare (ASW) systems,

continues to support the U.S. Navy and various countries eligible for Foreign Military Sales program via production, maintenance, and logistics support of the ALFS.

For more than 20 years the U.S. Navy has deployed the ALFS system which is based on the FLASH (Folding Light Acoustic System for Helicopters) dipping sonar family of products.

Onboard the U.S. Navy and other navies' ASW MH-60R helicopters, the ALFS anti-submarine warfare system is capable of detecting and classifying submarines.

Thales Defense & Security Inc. is increasing its U.S. based sustainment capabilities by bringing additional repair operations onshore to further increase the throughput of repairs already performed in the U.S. These new processes bring a majority of the repairs closer to the Navy providing shorter turnaround times that enhance readiness. Additionally, this will enable the development of new skills and create more U.S. jobs.

This further supports the recent contract Thales signed with Lockheed Martin RMS for additional ALFS system deliveries and for continued sustainment support under Seahawk Performance-Based Logistics.

"We are very proud to expand our domestic U.S. support to the U.S. Navy for the ALFS systems," said Mike Sheehan, president and CEO, Thales Defense & Security, Inc. "It is a decisive advantage to be closer to our customer and reaffirm our commitments to providing U.S. based capabilities."

"Thanks to this new achievement, Thales strongly raises its ability to support the U.S. Navy from the USA whilst providing the best of breed antisubmarine warfare operational systems and technology for the benefit of the U.S. Navy," said Gwendoline Blandin-Roger, managing director, underwater systems.

Cutter Kimball Returns to Homeport after Patrol in Bering Sea and Arctic



The crew of the Coast Guard Cutter Kimball (WMSL 756) underway in the Pacific, April 4, 2021. *U.S. COAST GUARD*

JUNEAU, Alaska – The crew of Coast Guard Cutter Kimball returned to homeport in Honolulu, Hawaii Oct. 27 following a 66-day patrol in the Bering and Chukchi Seas, the Coast Guard 14th District said in a release.

The crew traveled nearly 13,000 nautical miles since departing Honolulu Aug. 21, including through the Bering Strait and into the Arctic Ocean. With Arctic sea ice melting, these distant travels are important in helping the U.S. Coast Guard conduct a range of operations in the high latitudes as fish stocks and maritime traffic moves north.

The Kimball crew conducted 18 targeted living marine resources boardings; the most a national security cutter has completed during a single patrol in the 17th District area of responsibility.

“These law enforcement boardings maximized our presence in the Bering Sea,” said Petty Officer 1st Class Samuel Cintron, Kimball lead law enforcement petty officer. “Each boarding team member was instrumental to the success of the operation and reinforced the Coast Guard’s position on protecting national security and domestic fisheries.”

More than 65 percent of fish caught in the United States is harvested from Alaskan waters, generating more than \$13.9

billion annually.

The Kimball crew conducted at-sea drills with key maritime partners including the Royal Canadian Naval Ship Harry DeWolf and Japanese Maritime Self-Defense Force training vessel Kashima. In each instance, the ships operated alongside one another and exchanged visual communications, followed by honors. This display of maritime cooperation and mutual respect emphasizes the United States', Canada's, and Japan's continued commitment to one another and to partnership at sea.

During the deployment, Kimball crew observed four ships from the People's Liberation Army Navy (PLAN) operating as close as 46 miles off the Aleutian Island coast. While the PLAN ships were within the U.S. exclusive economic zone, they followed international laws and norms and at no point entered U.S. territorial waters. All interactions between the Kimball and PLAN were in accordance with international standards set forth in the Western Pacific Naval Symposium's Code for Unplanned Encounters at Sea and Convention on the International Regulations for Preventing Collisions at Sea.

The Kimball crew conducted astern refueling at sea with Coast Guard Cutter Oliver Berry, a fast response cutter also homeported in Honolulu. This capability significantly extends the operational range of FRCs.

Commissioned in 2019, Kimball is the Coast Guard's seventh national security cutter. These assets are 418 feet long, 54 feet wide and have a displacement of 4,600 long tons. With a range of 13,000 nautical miles, the advanced technologies of this class are designed to support the national objective to maintain the security of America's maritime boundaries and provide long range search and rescue capabilities.