Littoral Combat Ship Successfully Launches Naval Strike Missile

USS Gabrielle Giffords launches a Naval Strike Missile on Oct. 1 during exercise Pacific Griffin. The NSM is a long-range, precision-strike weapon that is designed to find and destroy enemy ships. U.S. Navy/Mass Communication Specialist Kenneth Rodriguez Santiago

PEARL HARBOR, Hawaii – The Independence-variant littoral combat ship USS Gabrielle Giffords successfully demonstrated the capabilities of the Naval Strike Missile (NSM) on Oct. 1 during Pacific Griffin, U.S. Pacific Fleet public affairs announced in a release.

Pacific Griffin is a biennial exercise conducted in the waters near Guam aimed at enhancing combined proficiency at sea while strengthening relationships between the U.S. and Republic of Singapore navies.

"Today was a terrific accomplishment for USS Gabrielle Giffords crew and the Navy's LCS class," said Cmdr. Matthew Lehmann, the ship's commanding officer. "I am very proud of all the teamwork that led to the successful launch of the NSM."

The NSM is a long-range, precision-strike weapon that can find and destroy enemy ships at distances up to 100 nautical miles. The stealthy missile flies at sea-skimming altitude, has terrain-following capability and uses an advanced seeker for precise targeting in challenging conditions.

Rear Adm. Joey Tynch, commander of Logistics Group Western Pacific, who oversees security cooperation for the U.S. Navy in Southeast Asia, said Gabrielle Giffords' deployment sent a

crystal-clear message of the continued U.S. commitment to maritime security in the region.

“LCS packs a punch and gives potential adversaries another reason to stay awake at night,” Tynch said. “We are stronger when we sail together with our friends and partners, and LCS is an important addition to the lineup.”

The NSM aboard Gabrielle Giffords is fully operational and remains lethal. The weapon was first demonstrated on littoral combat ship USS Coronado in 2014. It meets the Navy’s over-the-horizon requirements for survivability against high-end threats, demonstrated lethality, easy upgrades and long-range strike capability.

The Gabrielle Giffords deployment marks the first time that an NSM has sailed into the Indo-Pacific region.

Gabrielle Giffords, which is on its maiden deployment, arrived in the 7th Fleet area of responsibility on Sept. 16 for a rotational deployment to the Indo-Pacific region. This marks the first time two LCS have deployed to the Indo-Pacific region at the same time. Gabrielle Giffords is the fifth LCS to deploy to U.S. 7th Fleet, following USS Freedom, USS Fort Worth, USS Coronado and the currently deployed USS Montgomery.

Gabrielle Giffords will conduct operations, exercises and port visits throughout the region as well as work alongside allied and partner navies to provide maritime security and stability, key pillars of a free and open Indo-Pacific.

NAVAIR Admiral: System Reliability Key to Aircraft Readiness

WASHINGTON – The admiral in charge of Naval Air Systems Command said that aircraft readiness hinges on reliability of the systems and the maintenance that keeps them mission-capable.

"Reliability is just as critical as lethality," said NAVAIR's commander, Vice Adm. Dean Peters, speaking Oct. 1 at a luncheon of the Greater Washington Council of the U.S. Naval Academy Alumni Association in Washington, noting that the Navy had to take a different view of how to achieve more reliability as it endeavors to improve aircraft readiness.

Peters said he would like to turn all 10,000 engineers in the Naval Aviation Enterprise into reliability engineers.

One challenge to achieving high readiness is the lagging provision of things like vital spare parts, technical manuals and ground support equipment. Peters cited the 2003 introduction of the Marine Corps' UH-1Y Venom helicopter to replace the UH-1N in Afghanistan and Iraq. He said the UH-1Y deployed with inadequate spare parts, manuals and ground support equipment as the Navy continued to buy the aircraft while shorting the necessary support.

"We are mesmerized by quantities," Peters said, explaining that Congress often is focused more on the aircraft – the "above-line costs" – rather than the supporting items – the "below-line" costs.

"This is just not the way to align our fleet," he said.

The admiral said the Navy is establishing a new program

executive office for common parts, such as radios and other systems used in multiple platforms, with a civilian program executive officer, to raise the procurement of such systems to a higher visibility.

He pointed out that throwing money and spare parts at the Navy is not going to solve the readiness problem, but that the sea service needed to change its way of fostering reliability and maintenance, balancing sustainment with new capability.

Peters praised fleet readiness centers for their progress in improving the readiness of Navy and Marine Corps aircraft. The Navy consulted with airlines to see what they did to sustain high aircraft availability. He said that every supporting function had to own the outcome.

“It’s really about bringing accountability to everyone involved,” the admiral said.

One factor in improvement was bringing the management, planning, logistics and maintenance all at the same site.

Peters said the Navy established a reliability control board to identify the factors that degrade aircraft readiness.

For one example, the Navy found that a component of the E-2D’s APY-9 radar was lasting only 600 hours rather than 6,000 hours.

In another example, an F/A-18 that had been inducted into a fleet readiness center had not flown a single hour since it emerged from its last induction six years prior.

Peters said the fleet readiness centers at Naval Air Station (NAS) Lemoore, California, and NAS Oceana, Virginia, delivered 36 F/A-18 strike fighters in fiscal 2019, each of which was completed in 60 days and flown within seven days after delivery.

The 80% readiness goal for the F/A-18 fleet that then-Defense

Secretary Jim Mattis set was met and exceeded by the Navy. The goal of 341 of 550 aircraft to be mission-capable was exceeded, reaching 379 aircraft on Oct. 1.

“People are starting to believe we can do it,” Peters said. “It’s not all about efficiency.”

General Atomics Wins Contract for Supporting Hypersonic Glide Body Prototype Development

SAN DIEGO, Calif. – General Atomics Electromagnetic Systems (GA-EMS) has been awarded a contract by the U.S. Army’s Rapid Capabilities and Critical Technologies Office (RCCTO) to further the development of the Common Hypersonic Glide Body (CHGB) and Flight Test Vehicle in support of the U.S. Army Long Range Hypersonic Weapon and the U.S. Navy’s Intermediate Range Conventional Prompt Strike Program, the company said in a release.

The contract award follows work performed by GA-EMS under a previous contract with the Army Space and Missile Defense Command for the Advanced Hypersonic Weapon technology demonstration program.

“As new threats continue to emerge, advancing the development and flight testing of hypersonic vehicle prototypes has become an urgent priority,” said Scott Forney, president of GA-EMS.

“Over the past 13 years, we have worked closely with the Army

and Sandia National Laboratories to design, manufacture and test hypersonic glide body components and technologies. We look forward to leveraging that expertise as this critical capability transitions out of the lab and into a production-ready asset to support the warfighter."

GA-EMS will provide manufacturing, production, engineering and technical support to integrate, test and evaluate CHGB and flight test vehicles through system and subsystem-level ground and flight test activities.

Deliverables include the manufacture of components, test and integration of vehicle flight components and assemblies, flight test planning and execution and simulation, validation and verification support.

Faller: Partnerships Vital in Countering Threats

Adm. Craig S. Faller, commander of U.S. Southern Command, speaks Sept. 30 at the Gen. Bernard W. Rogers Strategic Issues Forum, an event sponsored by the Association of the United States Army and the Navy League of the United States. Danielle Lucey

ARLINGTON, Va. — The commander of U.S. forces in Latin America and the Caribbean Sea said that the U.S. strategy in the region is designed to secure a prosperous hemisphere and to counter threats that would undermine the security of the region, including the issues brought about by the increasing great power competition.

"The best way to counter threats is partnership," said Adm.

Craig S. Faller, commander of U.S. Southern Command, speaking Sept. 30 at the Gen. Bernard W. Rogers Strategic Issues Forum, an event sponsored by the Association of the United States Army and the Navy League of the United States.

Strengthening partnerships "wins in life, wins in war," Faller said.

Strengthening partnerships is Faller's top priority as he works with the nations of the region and their militaries. He said that partnership is the best way to achieve his second priority, countering threats to the region. His third priority is to "build our team," strengthening the forces available to secure the peace in the region.

> *"The best way to counter threats is partnership."*
>
> *Adm. Craig S. Faller, U.S. Southern Command*

Faller pointed out as good news that 27 of the nations in his area of responsibility are democracies. He also noted that some nations, such as Colombia, are now not only providing their own defense but are providing security assistance to other nations in the region.

The admiral stressed the importance of promoting shared values — professionalism, respect for law, respect for human rights — as a means to address the regional problems of weak democracies and institutional corruption and of countering transnational criminal organizations engaged in activities such as drug running, human trafficking, weapons running and illegal fishing and mining. He said that combatting international terrorism, such as that sponsored by Iran, comes under the purview of U.S. Special Operations Command.

Faller said he considered Russia and China to be "malign actors" in the region that have "moved in a way that all of us should find alarming."

China is working on 60 seaport access deals across the hemisphere, 56 in the Southern Command region, he said.

Faller said that 67% of the goods that pass through the Panama Canal are U.S. goods, but he noted that China has signed 45 agreements with Panama during the last U.S. administration "and locked up port deals at either end of the canal."

"I do consider China a threat to the democracy, to the stability of this neighborhood," Faller said, noting the support of China and Russia for Venezuela's Maduro regime. He also said that Maduro's presidential guard is provided by Cuba.

He said that the Panama Canal is vulnerable to terrorist and cyber threats.

Faller praised the partnership between the United States and Brazil during World War II, when the U.S. 4th Fleet was based in Brazil, and the two countries operated together to counter the German submarine threat in the Atlantic.

"Brazil would say they should be part of NATO, and I don't disagree with them," he said. "There is a lot of opportunity there."

The admiral also stressed the importance of the U.S. naval base at Guantanamo Bay, Cuba, which is the southernmost U.S. facility in the region. The U.S. stages aircraft at Soto Cano in Honduras and has some pier space in Curacao, an island owned by The Netherlands.

The 4th Fleet has no ships permanently assigned to the Southern Command, but Faller is looking forward to one ship being assigned there. Typically, five Coast Guard cutters are in the region on drug and migrant interdiction missions.

HII Completes Dry Dock Work on George Washington

The final piece of the new main mast of the aircraft carrier USS George Washington is installed at Huntington Ingalls Industries Newport News Shipbuilding in March. With the dry dock portion of its refueling and complex overhaul complete, the ship is now in an outfitting berth, scheduled for delivery to the fleet in late 2021. Huntington Ingalls Industries/Matt Hildreth

NEWPORT NEWS, Va. – Huntington Ingalls Industries' Newport News Shipbuilding division has completed the dry dock portion of the aircraft carrier USS George Washington's refueling and complex overhaul (RCOH).

Following the recent flooding of more than 100 million gallons of water into the dry dock, George Washington was successfully moved to an outfitting berth, where it will begin final outfitting and testing. The overhaul is more than two-thirds complete and on track to be finished in late 2021.

"Getting George Washington out of the dry dock and back into the water is an important milestone in the overhaul process for shipbuilders, Sailors and our government partners," said Chris Miner, Newport News' vice president of in-service aircraft carrier programs.

"Over the next 24 months, we will focus on readying the ship for the next 25 years of its operational life. Once our work is complete, George Washington will leave Newport News Shipbuilding as the world's most technologically advanced Nimitz-class warship."

During the dry dock phase of the RCOH, George Washington underwent significant upgrades and extensive repair work both inside and outside the ship. In addition to defueling and refueling its nuclear power plant, Newport News shipbuilders have re-preserved about 600 tanks and replaced thousands of valves, pumps and piping components.

On the outside, they performed major structural updates to the island, mast and antenna tower; upgraded all aircraft launch and recovery equipment; painted the ship’s hull, including sea chests and freeboard; updated the propeller shafts; and installed refurbished propellers.

During the next phase of the complex engineering and construction project, shipbuilders will finish the overhaul and installation of the ship’s major components and test its electronics, combat and propulsion systems before the carrier is redelivered to the Navy. This period also will be dedicated to improving the ship’s living areas, including crew living spaces, galleys and mess decks.

“Taking the ship successfully out of the dry dock and over to our waterside pier marks a significant moment in the ship’s history and in our RCOH period,” said Capt. Kenneth A. Strong, the carrier’s commanding officer.

“With the ship back in the water, we can turn our attention to our next major milestones and finishing our maintenance period to return this vital national asset back to the fleet.”

USS George Washington arrived at Newport News in August 2017 and is the sixth Nimitz-class aircraft carrier to undergo its RCOH midlife refueling overhaul and maintenance availability.

Vigor Wins Modernization Contract for Two More Navy Cruisers

The guided-missile cruiser USS Cape St. George during a 2015 training exercise. U.S. Navy/Mass Communication Specialist 3rd Class Susan C. Damman

SEATTLE, Wash. – Vigor has been awarded a $255 million contract for modernization of two Ticonderoga cruisers, USS Chosin and USS Cape St. George, according to a company release.

The contract includes options, which if exercised would bring the cumulative value of the deal to $303.6 million.

Work will include a combination of maintenance, modernization and repair. The modernizations will keep these ships combat effective to support fleet operations for years to come.

Work will be performed at Vigor's Harbor Island facility in Seattle, growing the ship repair workforce at the facility to approximately 650 employees.

"Ship repair and service life extension in the defense sector has been a growth area for Vigor's Pacific Northwest shipyards," said Adam Beck, Vigor's executive vice president of ship repair.

"This contract award allows us to maintain and build upon the quality, skilled workforce so necessary to maintain the mission readiness of the U.S. Naval Fleet. We are honored to have that opportunity and we are thrilled for the job growth it represents."

Other recent work for Vigor's Navy program includes the USS Sampson, the USS Coronado and the USS Manchester. Work on the

cruisers is expected to begin in December and be completed by November 2021.

Navy Awards Contract for 9 E-2D Aircraft for Japan

An E-2D Hawkeye prepares to launch from the flight deck of the Nimitz-class aircraft carrier USS Abraham Lincoln. The Navy has ordered nine of the aircraft for Japan. U.S. Navy/Mass Communication Specialist 3rd Class Amber Smalley

ARLINGTON, Va. — The Navy has ordered nine E-2D Advanced Hawkeye from Northrop Grumman Systems Corp. for the government of Japan.

According to a Sept. 26 Defense Department contract announcement, Naval Air Systems Command awarded to Northrop Grumman Systems Corp. a $1.36 billion firm fixed-price contract modification for the production and delivery of the nine E-2Ds. The contract was awarded under Foreign Military Sales.

Earlier, in May 2019, Northrop Grumman delivered the first of four E-2Ds ordered under a 2014 contract.

The E-2Ds will equip the Japanese Air Self-Defense Force, which currently operates the older E-2C version.

The E-2D features the Lockheed Martin APY-9 radar with a two-generation leap in capability and upgraded aircraft systems that improve supportability and increase readiness. Another notable upgrade is the glass cockpit. The three 17-inch liquid crystal display panels enable either the pilot or co-pilot to become a fourth tactical operator — when not actively engaged

in flying the aircraft – to give the crew more flexibility in performing its diverse missions.

Cutter Returns to Boston After Offloading More Than 12,000 Pounds of Cocaine

The Coast Guard Cutter Seneca crew offloaded more than 12,000 pounds of cocaine on Sept. 20 at Coast Guard Sector Miami. The drugs were interdicted in international waters of the eastern Pacific Ocean off the coasts of Mexico and Central and South America. U.S. Coast Guard/Petty Officer 2nd Class Jonathan Lally

BOSTON – The U.S. Coast Guard Cutter Seneca returned home to Boston on Sept. 27 after a 93-day patrol in the eastern Pacific Ocean, the Coast Guard 1st District said in a release.

Seneca intercepted three drug smuggling vessels transporting cocaine from South America that were bound for the United States. The interdictions during this patrol resulted in the apprehension of nine suspected narcotics traffickers and more than 12,000 pounds of cocaine with a street value of nearly $174 million dollars.

“Counter-drug operations are a vital component to the Coast Guard and Department of Homeland Security’s mission and our national security,” said Cmdr. John Christensen, commanding officer of the Seneca. “I am exceptionally proud of this crew who, over the course of the last three months, rose above the challenges of conducting operations at sea, persevered through

many personal sacrifices and showed an unwavering dedication to serving our nation."

Throughout the patrol, Seneca rescued 22 Haitian Migrants, conducted joint exercises with the Honduran navy, transited the Panama Canal and spent several months combating illicit narcotics smuggling across the eastern Pacific with a deployed armed Coast Guard helicopter team from Helicopter Interdiction Tactical Squadron Jacksonville.

These interdictions were in support of Operation Martillo, a regional initiative targeting illicit trafficking that threatens security and prosperity at the national, regional and international levels.

Coast Guard Commissions Newest Fast Response Cutter in Honolulu

The crew of the Coast Guard Cutter William Hart sets the first watch during the cutter's commissioning ceremony at Base Honolulu on Sept. 26. U.S. Coast Guard/Petty Officer 3rd Class Matthew West

HONOLULU – The U.S. Coast Guard commissioned the newest Hawaii-based 154-foot fast response cutter (FRC) in Honolulu on Sept. 26, according to a Coast Guard 14th District release.

"There is no greater reflection of the commandant's strategic vision and commitment than the fact that as we commission the William Hart today, it will be the fifth Coast Guard cutter commissioned in the last two years here at Base Honolulu that

will operate in the heart of Oceania," said Rear Adm. Kevin Lunday, commander of the 14th District.

"There is no question that by our actions and not our words alone, the Coast Guard is here and committed along with the rest of the United States in the Pacific."

The Coast Guard Cutter William Hart (WPC 1134) is the third Sentinel-Class FRC to be homeported at Coast Guard Base Honolulu. While these ships' crews call Honolulu home, they will operate throughout the 14th Coast Guard District, which covers more than 14 million square miles of land and sea, with units in Hawaii, American Samoa, Saipan, Guam, Singapore and Japan.

The FRCs are some of the newest Coast Guard vessels to come online, replacing the aging Island-Class patrol boat fleet. The FRCs represent the Coast Guard's commitment to modernizing service assets to address the increasingly complex global maritime transportation system.

Margaret Hart Davis, sponsor of the William Hart, brings the cutter to life with Lt. Cmdr. Laura Foster, the cutter's commanding officer, during the Sept. 26 ceremony. Davis is the daughter of William Hart, the ship's namesake. U.S. Coast Guard/Petty Officer 3rd Class Matthew West

William Hart "is a remarkable ship with increased seakeeping, endurance, range, combat capability, telecommunications, everything about this is a game-changer for the Coast Guard," Lunday said.

FRCs feature advanced systems as well as over-the-horizon response boat deployment capability and improved habitability for the crew. The ships can accommodate a team of 24, reach speeds of 28 knots with a range of 2,500 nautical miles and patrol up to five days.

Recently, FRCs already stationed in Honolulu participated in

longer over-the-horizon voyages to the Republic of the Marshall Islands and Samoa, displaying the potential of these cutters and their importance to the Coast Guard's overall Pacific strategy and regional partnerships.

The crew took delivery of the William Hart, which was built by Bollinger Shipyards in Lockport, Louisiana, in Key West, Florida, and arrived in Honolulu on Aug. 17. Three more FRCs are scheduled to be homeported in Guam, increasing the 14th Coast Guard District's total number of the cutters to six. Servicewide, the Coast Guard is acquiring 56 FRCs to replace the 110-foot Island-class patrol boats.

William C. Hart, the cutter's namesake, was a Gold Lifesaving Medal recipient who rescued a crewmember of the tug Thomas Tracy.

In November 1926, Hart dove into the water in a 70-mph gale off Absecon, New Jersey, to save the mariner, who went overboard in the storm. Throughout the 1930s, Hart served in the U.S. Army Corps of Engineers before returning to the Coast Guard in 1939, advancing to the rank of chief petty officer and serving as a boatswain's mate.

When the United States entered World War II, he was commissioned as a lieutenant junior grade and saw action in both the Atlantic and Pacific theaters. He served as commanding officer and executive officer for several ships before retiring from the Coast Guard as a lieutenant commander in 1950.

Raytheon Demonstrates Unmanned Single-Sortie Mine Sweeping for Navy

The AQS-20C mine-hunting sonar in action at the U.S. Navy's ANTX 2019. Raytheon

ARLINGTON, Va. – Raytheon has demonstrated the ability to detect and identify a mine-like object and position an unmanned underwater vehicle to be in position to neutralize it, a company official said on Sept. 26.

The Aug. 29 "detect to engage" demonstration was one event in the Navy's ANTX (Advanced Naval Technology Exercise) 2019 held at Newport, Rhode Island.

"We view it as a tremendous success," Andy Wilde, director of strategy and business development for Raytheon Undersea, said in an interview with *Seapower*. He said it was a "great example of the great work the Navy and industry can do when we co-invest in critically important projects like this to solve very, very difficult problems."

Wilde cited the success as an example of a "high-velocity outcome" of a "best-of-breed" technology being rapidly prototyped and tested and able to be fielded very quickly, a process championed by former Chief of Naval Operations John M. Richardson.

Raytheon's AQS-20C towed sonar was pulled through the water by a surplus riverine craft acting as a surrogate for the Textron-built MCM unmanned surface vehicle (MCMUSV) that will be a component of the MCM mission package for the littoral combat ship (LCS).

Under the concept, an MCMUSV is launched from an LCS and

deploys the AQS-20C. Once a possible sea mine is detected by the AQS-20C's synthetic aperture sonar, a Barracuda expendable semi-autonomous mine neutralization unmanned undersea vehicle is – on the same pass – launched into the water from a A-size sonobuoylauncher on the MCMUSV.

The Barracuda deploys a float that serves as an RF datalink to the CUSV and an acoustic data link to the Barracuda. The tactical mission plan is downloaded from the LCS to the Barracuda via the CUSV. The Barracuda starts a search track and, once it acquires a mine, it maintains position at the mine. The operator on the LCS confirms the object is a mine and commands the Barracuda to detonate the mine with a charge. The MCMUSV would then continue its mission on its planned track.

During the demonstration, the towed AQS-20C detected a mine-like object moored in Narragansett Bay. The surface craft launched a Nemo, the prototype of the Barracuda developed with the Office of Naval Research. The Nemo located the mine-like object and hovered with it, keeping station. Having transmitted imagery of the mine-like object to the control station, the Barracuda was commanded to touch the mine-like object to simulate firing a shaped charge, Wilde said.

Wilde said the Barracuda has station-keeping technology that enables it to remain position to fire the shaped charge at the mine even in currents that cause a moored mine to sift position on its tether.

In an Aug. 15 interview, Wilde said that unmanned systems will revolutionize mine countermeasures (MCM) that currently take weeks or months to clear minefields and put minesweepers at risk. The Navy is developing an MCM mission package for the littoral combat ship that will rely largely on unmanned systems.

He also said the MCM mission concept could be expanded to

other missions, including by use of a B-size sonobuoy launcher with other payloads. The AQS-20C sonar is now in production. Raytheon is developing the engineering developmentmodels of the Barracuda and recently completed the Navy’s preliminary designreview.

Wilde said Raytheon is in discussions with the Navy about other missions to which the Barracuda could be applied.