Keel Authenticated for First Flight III Arleigh Burke-Class Destroyer

Ship's sponsors (from left) Catherine B. Reynolds and Ruby Lucas trace their initials onto a steel plate that will be welded inside the USS Jack H. Lucas, the first Flight III Arleigh Burke-class destroyer. Looking on is Mississippi Gov. Phil Bryant, who spoke at the Nov. 7 ceremony. Derek Fountain/Huntington Ingalls Industries

PASCAGOULA, Miss. – In a milestone for the DDG 51 program, the keel of the first Flight III destroyer, the future USS Jack H. Lucas (DDG 125), was ceremoniously laid and authenticated at Huntington Ingalls Shipyard on Nov. 7.

Ruby Lucas and Catherine B. Reynolds, the ship's sponsors, authenticated the keel by etching their initials into the keel plate. Although the official start of fabrication for the Lucas began in May 2018, authenticating the ship's keel symbolically recognizes the joining of modular components and represents the ceremonial beginning of the ship.

"This destroyer was named after an American hero, Medal of Honor recipient Jack Lucas, and I am humbled and honored to be here today as we authenticate the keel on his namesake ship," said Capt. Seth Miller, DDG 51 class program manager, PEO Ships. "The Flight III ships will bring increased lethality and warfighting capacity to our warfighters, and today's milestone is the first of many to come as we work to deliver this highly capable ship to the Fleet."

> *US Navy's first Flight III Arleigh Burke destroyer's keel laid by @HIIndustries @USNavy @CavasShips https://t.co/iSU1vZ2KM7*

— Naval Post (@naval_post) November 11, 2019

DDG 125 will be the first Arleigh Burke-class destroyer built in the Flight III configuration with improved capability and capacity to perform anti-air warfare and ballistic-missile defense in support of the integrated air and missile defense mission.

The Flight III design contains modifications from the earlier DDG 51 class, enabling the SPY-6 radar, in association with Aegis Baseline 10, which includes larger electronically scanned arrays and the power generation and cooling equipment required to operate the powerful new radar.

These multimission surface combatants serve as integral assets in global maritime security, engaging in air, undersea, surface, strike and ballistic missile defense as well as providing increased capabilities in anti-submarine warfare, command and control and anti-surface warfare.

HII's Pascagoula shipyard also is building the guided missile destroyers Delbert D. Black (DDG 119), Frank E. Petersen Jr. (DDG 121) and Lenah H. Sutcliffe Higbee (DDG 123), amphibious assault ships Tripoli (LHA 7) and Bougainville (LHA 8) and amphibious transport dock ships Fort Lauderdale (LPD 28) and Richard M. McCool Jr. (LPD 29).

Subs Will Get Harpoon Missiles Next Year, Navy

Undersea Warfare Director Says

ARLINGTON, Va. – The admiral in charge of undersea warfare requirements said the Harpoon anti-ship missile will be returning to the submarine force next year, restoring more lethality to the sub force.

“I am happy to report that we will have the first refurbished [Harpoon] missiles delivered to the fleet in FY21,” said Rear Adm. Thomas Ishee, director of undersea warfare in the Office of the Chief of Naval Operations, speaking Nov. 7 at the Naval Submarine League’s annual symposium in Arlington.

In a demonstration in the 2018 Rim of the Pacific exercise, a Harpoon was fired from the Los Angeles-class attack submarine USS Olympia at a target ship, the first time one was fired from a U.S. Navy submarine since the UGM-84A Harpoons were withdrawn from the force in 1997.

The UGM-84A is encapsulated to be fired from a torpedo tube and has a rocket booster to propel it above the surface of the water and into flight.

Next-Gen Attack Sub Will Be Revolutionary, Navy Undersea Warfare Director Says

ARLINGTON, Va. – The admiral in charge of undersea warfare requirements said the U.S. Navy’s next-generation attack

submarine (SSNX) will be revolutionary, not evolutionary.

“We run up against the design margin of the Virginia class, and we will need a new submarine capable of carrying [payloads] and is capable of pacing the threat,” said Rear Adm. Thomas Ishee, director of undersea warfare in the Office of the Chief of Naval Operations, speaking Nov. 7 at the Naval Submarine League’s annual symposium in Arlington.

See: Admiral in charge of procuring sub missiles praises Trident’s motor.

The NSSN “will have improved mobility – think speed and stealth, both not ‘or,’” Ishee said. “It will have improved lethality – think magazine size and payload integration. It will have some levels of artificial intelligence to increase the warfighter decision space. It will have improved survivability, able to take a punch and still carry out the mission.”

The admiral said the Navy has studies – “two starting now – to really inform our requirements process,” noting that the top-level requirements will be determined over the next year.

Ishee said the timetable for the SSNX is not clear yet.

“Since the end of the Cold War we have been making evolutionary changes to our SSNs,” he said. “The theme for SSNX is to look at revolutionary changes, so we are accelerating in the direction of a new class of fast-attack submarine.”

In an earlier briefing, Rear Adm. Scott Pappano, the Navy’s program executive officer for the new Columbia-class ballistic-missile submarine, said that the SSNX, not the Columbia, will be the class that will feature automation that will significantly affect crew size of a submarine.

Navy Strategic Systems Director Praises Trident Missile's Motor Reliability

An unarmed Trident II D5 missile launches from the Ohio-class submarine USS Nebraska off the coast of San Diego on Sept. 4. U.S. Navy

ARLINGTON, Va. – The admiral in charge of procuring and sustaining the U.S. Navy's submarine-launched ballistic missiles (SLBMs) has praised the reliability of the Trident missile's rocket motor, a critical factor in the credibility of the U.S. strategic nuclear deterrent.

See: Navy's next-gen attack submarine will be revolutionary, not evolutionary, admiral says.

Vice Adm. Johnny Wolfe, director of Strategic Systems Programs, speaking Nov. 7 at the Naval Submarine League's annual symposium in Arlington, said all of the five Trident missiles fired during tests and demonstrations in preceding 12 months "flew exactly as they were supposed to" and he noted that in one of the missiles the three rocket motors were almost 27 years old.

"From a health perspective, our system is doing very, very well," Wolfe said.

"We are the only people that use the 1.1 [highly detonable] propellant," he said. "There is no need to change that [for the next-generation Trident D5LE2 version]. We're going to continue on producing those rocket motors because, if you look from a reliability perspective, that is the base

contributor. We’re not going to change that.

“We have seen no real degradation in our motors at all,” he said. “We have understanding of the properties of these motors if we see some type of gradual degradation. But what we are focused on is never being at that point, which is why we continue to produce the motors. We take older motors out as we can and [replace them] with newer ones.”

The Trident SLBM is built by Lockheed Martin and deployed on Ohio-class ballistic-missile submarines and will be deployed on the future Columbia-class ballistic-missile sub.

Marines Narrow List of Capabilities for Large Unmanned Aerial System

The
Marine Corps has narrowed the list of requirements for its proposed large
unmanned aerial system (UAS) and is teaming with Naval Air Systems Command (NAVAIR)
on an unusual program to accelerate development of the technologies the UAS
would need.

Although
the Marines operate a variety of small and midsize UAS – primarily for short-
and medium-range intelligence, surveillance and reconnaissance (ISR) services –
the Corps has long wanted a large pilotless aircraft that

could provide a wide scope of missions at extended range and longer endurance for its expeditionary Marine Air Group Task Forces (MAGTF).

The program, called the MAGTF Unmanned Aerial System Expeditionary (MUX), initially was expected to provide extensive capabilities such as strike and armed escort for MV-22 tilt-rotor troop transports. To give it the desired speed and range and the ability to operate from amphibious ships or austere land bases, MUX was expected to be a tilt-rotor. But research and feedback from the aerospace industry indicated that all the desired attributes would require an aircraft that could be too large to operate from amphibs and would be too expensive for the Marines to buy in sufficient numbers.

As a result, the Marines have narrowed the requirements for MUX to "four critical, Tier 1 capabilities" – early warning; ISR; electronic warfare; and communications relay, Capt. Christopher Harrison, spokesman for Marine Aviation, said in an e-mail. That same information was provided by 1st Lt. Sam Stephenson, a media officer at the Marine Corps Combat Development Command, who said: "MUX will be multi-sensor and will provide early warning, electronic warfare, a C4 bridge and ISR as primary functions."

"The potential to conduct strike capability and logistics at ranges complementary

to those of MV-22 and F-35 will be explored as secondary functions. MUX

will give Naval Expeditionary Forces flexible, persistent and lethal reach," Stephenson said. "The Marine Corps owns two Kaman KMAX CQ-24 UAS – currently assigned to VMX-1 – to expand the cargo UAS envelope, refine MUX experimentation, reduce risk and capitalize on lessons learned from the AACUS program," he added, referring to an autonomous cargo aircraft project.

Harrison noted that the Marines are working with NAVAIR "as they prepare to announce the prize challenge winners as part of the first phase of the MUX development strategy.
The six prize challenges were announced on July 11 at a MUX Industry Day; four of the prize challenges are for individual mission payloads, one for payload adapter designs, and one for system architecture designs."

"The prize challenge is an innovative solution to get this capability to the Marines faster and get the best performance per dollar of investment," Capt. Eric Soderberg, the Navy's Multi-Mission Tactical UAS (PMA-266) program manager, said in a NAVAIR release. "This approach will hopefully prompt industry to use nontraditional ways to develop their concepts."

NAVAIR said it would award prize challenges in two phases. "The first phase will seek design concepts for payloads and modularity, emphasizing minimal size and weight while maximizing performance. The challenge submissions will be

scored and evaluated by a panel of judges. Vendors will receive $700,000 for first place; $200,000 for second place; and $100,000 for third place. The results of the first phase will inform a second prize challenge for airframe and power plants.

The Navy expects to award a series of up to eight prize challenge awards for MUX." A NAVAIR spokeswoman said the first phase awards were expected before the end of the calendar year. The Marines hope to field MUX in 2026, NAVAIR said.

Submarines Among Last U.S. Asymmetric Advantages, Admiral Tells Symposium

The Ohio-class ballistic missile submarine USS Alaska arrives in Scotland for a scheduled port visit on July 2. U.S. Navy
ARLINGTON, Va. — The commander of the U.S. Navy's submarine forces said the sub fleet has focused on battle readiness in view of the current era of great power competition and is taking steps to increase its effectiveness, speed of technological development and integration with the larger Navy.

"Undersea warfare, which underpins the survivable piece of strategic deterrence, is truly one of the last asymmetric advantages we have," Vice Adm. Charles A. "Chas" Richard, commander of Submarine Forces, said Nov. 6 at the Naval Submarine League's annual symposium here. "We have to earn the ability to say that. It is the thing our competitors have no answer for, although they're working awfully hard to come up

with one."

> *"Undersea warfare, which underpins the survivable piece of strategic deterrence, is truly one of the last asymmetric advantages we have."*
>
> *Vice Adm. Charles A. "Chas" Richard*

"Part of that advantage lies in the inherent stealth of our platforms, something we have to guard very jealously and can't take for granted," Richard added. "But we're going to have to be more innovative. We're going to have more initiative, [in] the submarine force, across the Navy, across academia, across the defense industry."

Noting that the ability to avoid detection in the acoustic and electronic radiation realms is a submarine's greatest asset, Richard said that "we need to add 'disturbance of the environment' as a way in which adversaries may be able to detect submarines in the future, such as wake detection.

"We are never going to periscope depth again unless we want to," he predicted.

"One of the biggest challenges we still face in this nation today is that we are not fast enough in our ability to adapt," the admiral said. "We're just too slow, whether it's rigorous development and testing of concepts or the enterprise-wide ability to feed technology at fleet-scale."

Mentioning the success of the U.S. space program in achieving the moon landing in 1969 only two and a half years after the disaster of the Apollo I fire, Richard said: "We have got to get back to a world where we can move at that kind of speed."

"A submarine force is more than a collection of boats," he said. "When we go into battle it is the entire Navy that goes, not just submarines. I need every other piece of the Navy to

be at the standards that my fleet can go to today.”

Richard said the submarine force has established an aggressor squadron to assess the threat and present realistic threat simulation. He also is fostering competition between submarine crews.

“We’re getting spectacular results,” the admiral said. “You ought to see what happens when you put two boats against each other head-to-head in an attack center. The book goes out the door in about the first five minutes. It’s a furious type of tactical development that’s going on.”

“I could not be more proud of the submarine force and what they have accomplished in a little over a year, after they got the order to pivot to warfighting readiness,” he said. “In a word, it has been breathtaking to watch how the fleet responded to this. But we’re not done.”

Navy to Christen Expeditionary Fast Transport Newport

An illustration of the future USNS Newport. U.S. Navy/Mass Communication Specialist Raymond Diaz

ARLINGTON, Va. — The U.S. Navy will christen its newest expeditionary fast transport (EPF), the future USNS Newport, during a 10 a.m. CST ceremony on Nov. 9 at the Austal USA shipyard in Mobile, Alabama, the Defense Department said.

The principal speaker will be Rear Adm. Shoshana Chatfield, president of the Naval War College in Newport, Rhode Island. Charlotte Marshall, a Newport native, will serve as the ship's sponsor. In a time-honored Navy tradition, she will christen the ship by breaking a bottle of sparkling wine across the bow.

"This ship honors the city of Newport, Rhode Island, and serves as a reminder of the contributions the community has and continues to make to our Navy," Navy Secretary Richard V. Spencer said.

"Newport is a Navy town where many officers begin their careers and then return later for strategic training. It is right that a fourth ship will bear the name Newport to continue our long relationship and provide our commanders high-speed sealift mobility and agility in the fight to defend our nation."

The first Newport (Gunboat No. 12) was commissioned on Oct. 5, 1897. During the Spanish-American War, the gunboat received credit for assisting in the capture of nine Spanish vessels. The ship was decommissioned in 1898 but recommissioned in 1900 to serve as a training ship at the U.S. Naval Academy and at the Naval Training Station at Newport until decommissioning in Boston in 1902.

The second Newport was commissioned on Sept. 8, 1944, decommissioned in September 1945 and loaned to the former Soviet Union under lend-lease and returned to U.S. custody at Yokosuka, Japan, in November 1949. Recommissioned in July 1950, Newport patrolled off Inchon, Korea, screening during the landings. Decommissioned at Yokosuka in April 1952, it was loaned to Japan in 1953 and commissioned as Kaede. She was then reclassified PF 293 and transferred to the Japanese Maritime Self-Defense Force outright in August 1962.

The third Newport was commissioned on June 7, 1969. Assigned to the Amphibious Force, U.S. Atlantic Fleet, Newport alternated amphibious training operations along the East Coast of the United States with extended deployments to the Caribbean and Mediterranean. Newport was decommissioned in October 1992 and transferred to the government of Mexico in 2001.

EPF class ships are designed to transport 600 short tons of military cargo 1,200 nautical miles at an average speed of 35 knots. The ship can operate in shallow-draft ports and waterways, interfacing with roll-on/roll-off discharge facilities and on/off-loading a combat-loaded Abrams main battle tank (M1A2).

The EPF includes a flight deck for helicopter operations and an off-load ramp that will allow vehicles to quickly drive off the ship. EPF's shallow draft (less than 15 feet) further enhances littoral operations and port access.

Coast Guard Cutter James Returns Home from 62-Day Counter-Drug Patrol

An MH-65 Dolphin helicopter lands on the flight deck of the Coast Guard cutter James while conducting hurricane relief operations in the Caribbean on Sept. 6. U.S. Coast Guard

CHARLESTON, S.C. – The Coast Guard cutter James returned to Charleston on Oct. 31 following a 62-day counter-drug patrol in support of Operation Martillo in the eastern Pacific Ocean, the Coast Guard's 7th District said in a release.

During their patrol, the James' crew, along with members from Tactical Law Enforcement Team-South, Helicopter Interdiction Tactical Squadron, and multiple partner agencies, contributed to the interdiction of seven drug-smuggling vessels and were responsible for the seizure of more than 9,000 pounds of cocaine and 4,085 pounds of marijuana bound for the United States.

The James' crew offloaded more than 28,000 pounds of seized cocaine and 11,000 pounds of seized marijuana on Oct. 28 at Port Everglades in Fort Lauderdale, Florida. The contraband was seized by multiple Coast Guard units in the eastern Pacific and Caribbean and has a wholesale value of more than $377.1 million.

"The teamwork, dedication and bias for action exhibited by this crew and other Coast Guard vessel crews represent how the Coast Guard protects this nation from threats delivered by sea, and I could not be prouder of them," said Capt. Jeffrey Randall, James' commanding officer.

The Coast Guard cutter James conducts Hurricane Dorian relief operations alongside the cutter Paul Clark in the Caribbean on Sept. 6. U.S. Coast Guard

In addition to interdicting drug-smuggling vessels, the James assumed the role of commander, Task Force Bahamas, in the wake of Hurricane Dorian, the strongest Category 5 hurricane to make landfall in the Bahamas. The James directed eight cutters and 12 helicopters in response to search-and-rescue and medevac calls by injured and stranded inhabitants and coordinated evaluations of 25 ports and their associated infrastructure.

The James is one of two 418-foot national security cutters (NSC) homeported in Charleston. With its command, control, communication, computers, intelligence, surveillance and reconnaissance equipment, the NSC is the most technologically

advanced ship in the Coast Guard's fleet. NSCs are equipped with state-of-the-art small assets to include a small unmanned aircraft system which can expand the surveillance range of a surface asset like the James.

"From mission planning to risk mitigation, the capability offered by a small shipboard based unmanned aerial system extends our visual range to enhance our ability to execute a diverse mission set," said Lt. Cmdr. Kevin Connell, operations officer for the James.

Icebreaker Returns Home After 3-Month Arctic Deployment

A crew member embraces a loved one after the U.S. Coast Guard Cutter Healy returned to homeport in Seattle on Nov. 2. The icebreaker deployed to the Arctic for three months. U.S. Coast Guard/Petty Officer 3rd Class Michael Clark

SEATTLE — The U.S. Coast Guard icebreaker Healy returned home on Nov. 2 to Seattle following a three-month deployment to the Arctic in support of Coast Guard operations and multiple scientific research missions sponsored by National Oceanic and Atmospheric Administration and the Office of Naval Research.

Healy is a high-latitude research vessel and is one of the only U.S. military surface vessels that operates in the ice-covered waters of the Arctic. Homeported in Seattle with a permanent crew of 87, Healy is the Coast Guard's largest cutter at 420 feet and a displacement of more than 16,000 tons.

“During our deployment, we successfully transited 14,000 nautical miles and spent 50 cumulative days above the Arctic Circle, reaching as far north as 81 degrees north latitude,” said Capt. MaryEllen Durley, Healy’s commanding officer. “As the Coast Guard’s sole Arctic icebreaker, we forged new relationships, trained new Arctic sailors and conducted high-latitude research that will help forecast the impact of seasonal ice formation critical to maintaining the Arctic maritime domain.”

Healy crew members and scientists pose for a photo during the icebreaker’s first ice station Sept. 18 while in the Arctic. The crew and scientists deployed numerous scientific sensors to collect data for Arctic research. U.S. Coast Guard/Ensign Trevor Layman

As the nation’s primary maritime presence in the Polar regions, the Coast Guard advances U.S. national interests through a blend of polar operational capability, regulatory authority and international leadership across the full spectrum of maritime governance.

Earlier this year the Coast Guard released the Arctic Strategic Outlook, reaffirming the service’s commitment to American leadership in the region through partnership, unity of effort and continuous innovation.

“While we focus our efforts on creating a peaceful and collaborative environment in the Arctic, we’re also responding to the impacts of increased competition in this strategically important region,” said Coast Guard Commandant Adm. Karl Schultz. “Our continued presence will enable us to reinforce positive opportunities and mitigate negative consequences today and tomorrow.”

The Coast Guard presently maintains two icebreakers – the Healy, a medium icebreaker, and the Polar Star, the only heavy U.S. icebreaker.

While the Healy deploys annually to the Arctic, the 43-year-old Polar Star is the only cutter capable of supporting Operation Deep Freeze, the annual mission to maintain U.S. presence in Antarctica.

If a catastrophic event, such as a shipboard fire or getting stuck in the ice, were to strand the Healy in the Arctic or the Polar Star near Antarctica, the Coast Guard is left without a self-rescue capability. By contrast, Russia currently operates more than 50 icebreakers – several of which are nuclear-powered.

The Coast Guard is seeking to increase its icebreaking fleet with six new polar security cutters. In April, the Coast Guard awarded VT Halter Marine Inc. of Pascagoula, Mississippi, a contract for the design and construction of the Coast Guard's lead polar security cutter, which will be homeported in Seattle. The contract also includes options for the construction of two additional PSCs.

USS Detroit Departs on Maiden Deployment

The USS Detroit departs Naval Station Mayport on Oct. 31 for a scheduled deployment. Detroit is deployed in support of Campaign Martillo, a joint operation with the U.S. Coast Guard and partner nations. U.S. Navy/Mass Communication Specialist 3rd Class Nathan T. Beard

MAYPORT, Fla. – The Freedom-class littoral combat ship USS Detroit (LCS 7) departed its homeport of Mayport, Florida, for the U.S. Southern Command area of responsibility on its maiden deployment on Oct. 31.

Detroit will conduct operations in support of Joint Interagency Task Force South's Campaign Martillo, a multinational effort launched in January 2012 targeting illicit trafficking routes in coastal waters along Central America.

Detroit's operations will involve practical exercises and exchanges with partner nations, supporting U.S. 4th Fleet interoperability and reinforce the U.S. position as the regional partner of choice.

"I expect this deployment to offer a great opportunity to work together with regional partners throughout Southern Command area of responsibility," said Capt. Cory Applebee, commander of Surface Warfare Division 21.

The deployment of Detroit is the first by an LCS in support of Martillo and the second deployment of the Freedom variant to the region. The first deployment was USS Freedom (LCS 1) in 2010.

Martillo includes 20 partner nations committed to a regional approach against targeting illicit trafficking routes. The deployment of an LCS to the region demonstrates the U.S. commitment to regional cooperation and security. Detroit's shallow draft provides unparalleled opportunities for port access, making Freedom variant an ideal vessel for these types of engagements.

"We hope Detroit will build relationships with that region and show that LCS is a capable warfighting platform that is ready to safeguard access to international waterways and demonstrate operating capabilities," Applebee said.

Detroit also will demonstrate its operational capabilities and allow the U.S. Navy to evaluate crew rotation and maintenance plans. Detroit is manned by her Gold crew of more than 90 Sailors, which will include surface warfare mission package personnel, U.S. Coast Guard law enforcement detachment and an

aviation detachment to operate an embarked MH-60S Seahawk helicopter and two MQ-8B Fire Scout Vertical Takeoff Unmanned Vehicles.

Homeported in Mayport, Detroit will have Blue and Gold crew rotations during the deployment. The two crews will rotate on the same hull every four to five months, creating a “cycle of virtue” between the crews who consistently turn the same ship over to each other, which will allow continuous presence in the region.