Pentagon, Lockheed Reach Deal to Reduce Cost of F-35A by 12.8%

Two U.S. Navy variant F-35C Lightning II aircraft from Naval Air Station Lemoore, California, fly in formation over the Sierra Nevada Mountain Range after completing a training mission. U.S. Navy/Lt. Cmdr. Darin Russell

FORT WORTH, Texas – The F-35 Joint Program Office and Lockheed Martin finalized a $34 billion agreement for the production and delivery of 478 F-35s at the lowest price in the history of the program, according to a Lockheed release. The contract includes all U.S., international partners and Foreign Military Sales (FMS) aircraft in Lots 12, 13 and 14.

In the deal, the F-35 program exceeds its cost-reduction targets for each variant of the joint strike fighter – and the price per unit of the F-35A, the U.S. Air Force version, including aircraft and engine, is below $80 million in both Lots 13 and 14.

The F-35A unit cost represents an estimated overall 12.8% reduction from Lot 11 costs for the F-35A conventional landing variant and an average of 12.7% savings across all three variants from Lot 11 to 14. The other variants are the vertical take-off and landing F-35B, the U.S. Marine Corps version, and the F-35C, equipped for U.S. Navy aircraft carrier operations.

“Driving down cost is critical to the success of this program. I am excited that the F-35 Joint Program Office and Lockheed Martin have agreed on this landmark three-lot deal,” said Air Force Lt. Gen. Eric Fick, F-35 program executive officer. “This $34 billion agreement is a truly historic milestone for the F-35 Enterprise.”

The agreement includes 291 aircraft for the U.S. armed services, 127 for F-35 international partners and 60 for FMS customers.

“With smart acquisition strategies, strong government-industry partnership and a relentless focus on quality and cost reduction, the F-35 Enterprise has successfully reduced procurement costs of the fifth-generation F-35 to equal or less than fourth-generation legacy aircraft,” said Greg Ulmer, Lockheed Martin’s F-35 program vice president and general manager.

More than 450 F-35s operate from 19 bases around the globe. More than 910 pilots and 8,350 maintainers have been trained, and the F-35 fleet has surpassed more than 220,000 cumulative flight hours. Eight nations have F-35s operating from bases on their home soil and seven services have declared initial operating capability for the aircraft.

Northrop Grumman Demonstrates Antenna Sharing, Pattern Capabilities

LINTHICUM, Md. – Northrop Grumman Corp., in partnership with the U.S. Naval Research Laboratory (NRL), successfully completed a test in the development of the Integrated Topside (InTop) Low-Level Resource Allocation Manager (LLRAM) program last month at NRL’s test facility in Chesapeake Beach, Maryland, the company said in an Oct. 28 release.

LLRAM in conjunction with the InTop Electronic Warfare/Information Operations/Communications (EW/IO/COMMS)

system demonstrated the simultaneous sharing of a single antenna, while flexing its adaptable size and antenna pattern capabilities, and performing a mission that would have required multiple dedicated antennas in the past. The significance of the test is to enable future antenna reductions on ships that are already capacity-constrained, allowing for more advanced warfighting capabilities in an ever-increasingly complex battlespace environment.

“The Northrop Grumman/NRL demonstration of LLRAM concepts was conducted in the same environment that proved crucial to the development of the SEWIP Block 3 EDM [Surface Electronic Warfare Improvement Program Block 3 Engineering Development Model],” said Mike Meaney, vice president, maritime electronic and information warfare, Northrop Grumman.

“The efficiency of signal sharing capabilities, scalability and advanced resource management capabilities developed on the Low-Level Resource Allocation Manager program will allow for a significantly reduced footprint topside.”

The demonstration showed that the EW/IO/COMMS Advanced Development Model for SEWIP Block 3 can serve as a platform for proving out advanced multi-function concepts using existing NRL test assets.

LLRAM and EW/IO/COMMS were developed under the Office of Naval Research Electromagnetic Maneuver Warfare Command and Control Integrated Topside Innovative Naval Prototype. The system leverages four active Electronically Scanned Arrays (low-band transmit/receive and high-band transmit/receive) and intended platforms include cruisers, destroyers and aircraft carriers.

Coast Guard Cutter Spencer Returns Home After $19 Million Drug Bust in Eastern Pacific

Coast Guard Cutter Spencer patrols the Atlantic Ocean with a MH-65 helicopter aboard. U.S. Coast Guard

BOSTON – The crew of Coast Guard Cutter Spencer returned to Boston on Oct. 27 after conducting an 80-day counter-drug patrol in the eastern Pacific Ocean, the Coast Guard's 1st District said in a release.

Spencer's crew seized about 700 kilograms of cocaine, valued at $19 million, after interdicting a smuggling vessel.

The crew's patrol spanned more than 14,000 nautical miles and focused on enforcing international counter-trafficking laws, supporting U.S. partnerships with Central and South American countries and helping to preserve national security.

The crew also responded to multiple search-and-rescue cases, including a distress call from an aircraft experiencing engine failure.

"Spencer's crew is happy to be home and is looking forward to spending time with family and friends in their homeport of Boston … during the holidays," said Cmdr. Thomas Rodzewicz, the cutter's commanding officer.

Spencer is a 270-foot medium-endurance cutter with a crew of 100.

USS John S. McCain Returns to Warfighting Readiness

The Arleigh Burke-class destroyer USS John S. McCain, at sea again after completing repairs and upgrades following an August 2017 collision with a tanker that killed several crew members and injured others. U.S. Navy/Mass Communication Specialist 2nd Class Sarah Villegas

YOKOSUKA, Japan – The Arleigh Burke-class guided-missile destroyer USS John S. McCain completed its necessary repairs and is underway to conduct comprehensive at-sea testing, according to a U.S. Pacific Fleet release.

The ship underwent repairs and extensive and accelerated upgrades over the last two years following an August 2017 collision with a tanker ship off the coast of Singapore that left 10 of the McCain's crew dead and another five injured.

During the at-sea testing, the ship and her crew will perform a series of demonstrations to evaluate the ship's onboard systems. Among the systems that will be tested are navigation, damage control, mechanical and electrical systems, combat systems, communications and propulsion application.

USS John S. McCain, assigned to Destroyer Squadron 15 (DS 15) and forward-deployed to Yokosuka, completed her in-port phase of training and will continue at-sea training in the upcoming months to certify in every mission area the ship is required to perform and prepare for return to normal

operations.

“The USS John S. McCain embodies the absolute fighting spirit of her namesakes and shows the resiliency of our Sailors. She has completed her maintenance period with the most up-to-date multimission offensive and defensive capabilities, preparing her to successfully execute a multitude of high-end operations,” said Capt. Steven DeMoss, commander of DS 15.

“This whole crew is eager to get back to sea, and that’s evident in the efforts they’ve made over the last two years to bring the ship back to fighting shape and the energy they’ve put into preparing themselves for the rigors of at-sea operations,” said Cmdr. Ryan T. Easterday, USS John S. McCain’s commanding officer.

Navy Commissions Newest LCS, USS Indianapolis

The crew of the Navy’s newest littoral combat ship, USS Indianapolis, brings the ship to life during its commissioning ceremony on Oct. 26. Indianapolis is the 19th littoral combat ship to enter the fleet and the ninth of the Freedom variant. U.S. Navy/Mass Communication Specialist 3rd Class Timothy Haggerty

BURNS HARBOR, Ind. – The U.S. Navy commissioned its newest littoral combat ship, USS Indianapolis, on Oct. 26 at Burns Harbor.

“To the citizens of the great state of Indiana who have joined us here today, thank you so much for enduring the weather to

show your support for the men and women of America's military and this fantastic new addition to the fleet," said Lisa W. Hershman, the Pentagon's deputy chief management officer and the ceremony's main speaker. "It is always a thrill to see a Navy ship commissioned, but it is truly a historic moment to do so on the shores of Lake Michigan."

As part of the ceremony, Dick Thelen, a survivor from that incident, handed the long glass telescope to Lt. Julian Turner, navigator of the first watch.

"Now, a combat-ready ship is necessary but not sufficient for our Navy to fight and win decisively in combat," said Adm. Christopher W. Grady, commander, U.S. Fleet Forces Command.

"To fight and win, you, the Hoosier Sailors of Indianapolis, must join as one and become a battle-minded crew. You must waste no time in preparing yourself to function as a team-of-teams, masterfully exercising your ship to the very extent of its limits. Only through the combination of this combat-ready ship and you, its battle-minded crew, both blue and gold, can Indianapolis carry on the proud legacy of your predecessors."

The Oct. 26 ceremony honored veterans of USS Indianapolis, a World War II cruiser that was torpedoed and sunk in the final days of the war after completing a secret mission to deliver components of the atomic bomb that later would be dropped on Hiroshima. Much of the crew of the Indianapolis who awaited rescue in the water after the sinking were lost due to exposure, dehydration, saltwater poisoning and shark attacks.

The ship's motto, "Legacy of War," reflects that ships named Indianapolis have served in both world wars and the Cold War. LCS 17 is the fourth ship to bear the name of the state capital and most populous city of Indiana.

“I feel honored to represent the ship’s namesake and the history that goes with that. Our crew has put in a tremendous amount of work preparing the USS Indianapolis,” Lt. j.g. Eric Wilkerson said. “There is a lot of Navy pride here today. The support from earlier crews being here is a strong reminder of the commitment needed to defend our nation and maritime freedoms.”

Jill Donnelly, the ship’s sponsor, gave the first order: “Man our ship and bring her to life!” More than 8,000 people, including Indiana residents and friends and family of the crew, attended the commissioning ceremony.

“It was all-hands effort. We work together to get the ship up and ready to go. There is a lot of teamwork and everyone really does pull their weight to accomplish the mission,” Operations Specialist 1st Class Devin Morris said. “It’s a brand-new ship so everyone has to go through all the certifications to make sure we are mission ready.”

Littoral combat ships are outfitted with mission packages that deploy manned and unmanned vehicles and sensors in support of mine countermeasures, anti-submarine warfare or surface warfare missions. The warship’s modular mission packages can be quickly and cost-effectively updated with new weapons and weapon systems without taking the ship out of service for modifications and modernizations.

USS Indianapolis will be homeported in Naval Station Mayport, Florida.

Newport News Shipbuilding Delivers Virginia-Class Sub Delaware to Navy

NEWPORT NEWS, Va. – Huntington Ingalls Industries' Newport News Shipbuilding division delivered the newest fast-attack submarine to the U.S. Navy on Oct. 25, the company said in an Oct. 28 release.

Delaware (SSN 791), which successfully completed sea trials earlier this month, is the ninth Virginia-class submarine to be delivered by Newport News and the 18th built as part of the teaming agreement with General Dynamics Electric Boat.

"Like the last two submarines we delivered to the Navy, Delaware has received some of the highest quality scores since the Virginia-class program began," said Dave Bolcar, Newport News' vice president of submarine construction. "Our team of shipbuilders continues to perform at a high level, and nothing makes us prouder than delivering one of the most mission-ready submarines to the fleet."

The submarine is the second ship to be named for the country's first state, the first being the dreadnought battleship USS Delaware (BB 28), which was delivered by Newport News in 1910.

More than 10,000 shipbuilders from Newport News and Electric Boat have participated in Delaware's construction since the work began in September 2013. The submarine was christened by Jill Biden, the ship's sponsor and wife of the former vice president, during a ceremony in last October.

The future USS Delaware (SSN 791) will be commissioned in 2020.

Cutter Returns to Oregon Following $54 Million Cocaine Seizure

Coast Guardsmen prepare bails of cocaine to be offloaded from the Coast Guard Cutter Alert in San Diego on Oct. 16. The crew offloaded about 6,800 pounds of cocaine. U.S. Coast Guard/Petty Officer 3rd Class Alex Gray

ASTORIA, Ore. – The crew of the U.S. Coast Guard Cutter Alert returned to their homeport on Oct. 25 following a 10,700-nautical-mile, 65-day, multimission patrol that resulted in the interdiction of nearly 4,000 pounds of cocaine worth about $54 million, the Coast Guard said in a release.

Alert's crew conducted counterdrug operations in international waters of the eastern Pacific Ocean, where boarding teams interdicted two go-fast vessels, seizing the cocaine and detaining six suspected drug smugglers.

Three Mexican naval officers joined Alert for the patrol to share lessons learned and to build cohesion between the sea services.

"I am extremely proud of this crew for doing their part to keep these dangerous drugs off the streets," said Cmdr. Tyson Scofield, Alert's commanding officer. "The eastern Pacific … is a challenging environment, especially on a ship that is in her 50th year of service, yet this crew persevered to disrupt the illegal flow of narcotics that fuels instability in Central and South America. The counterdrug mission is as important now as it has ever been, and these brave men and women can return home after a 65-day patrol

knowing they made a difference.”

The Coast Guard’s medium-endurance cutters represent 70% of the service’s counterdrug interdiction fleet, but many are nearing the end of their service life. Replacing the aging fleet of medium endurance cutters with the offshore patrol cutter is one of the Coast Guard’s top priorities.

As cartels become more advanced in their trafficking methods at sea, the Coast Guard is recapitalizing the fleet with modern assets equipped to detect, interdict and disrupt the growing flow of illegal drugs, weapons and people in the eastern Pacific.

Alert’s crew offloaded more than $92 million worth of cocaine Oct. 16 in San Diego before returning home. The cocaine offloaded represents a total of four suspected drug smuggling vessel interdictions by the crews of the Alert and the Coast Guard Cutters Robert Ward and Seneca, who patrolled the same international waters between late July and early October.

Alert’s crew also patrolled off the coast of California, providing an increased off-shore deterrence to illicit narcotics trafficking and human smuggling. The amount of recreational and commercial fishing traffic provided Alert’s law enforcement teams with opportunities to board vessels not normally inspected at sea.

Alert’s engineers also provided mechanical assistance to a disabled vessel, helping the distressed crew return to port prior to the arrival of gale force weather conditions.

Alert’s embarked helicopter and aircrew from Air Station Humboldt Bay also assisted two U.S. Navy ships by flying their severely injured crew members ashore to receive advanced medical treatment.

Alert began its patrol by participating in the 2019 Los Angeles Fleet Week celebration, a public event that celebrated

the U.S. armed forces and the Port of Los Angeles. During that week, Alert's crew provided shipboard tours to 880 people and worked jointly with the Coast Guard Cutter Forrest Rednour to increase the public's awareness to the Coast Guard and its missions. The crew also volunteered in a Habitat for Humanity community service event where they aided a local food bank with boxing meals for families in need.

BAE to Develop Advanced Decoy Countermeasures to Protect Aircraft

An artist's rendering of the dual band fiber-optic towed decoy. BAE Systems

NASHUA, New Hampshire – BAE Systems has been awarded a $36.7 million contract from the U.S. Navy to develop and demonstrate a next-generation, dual band fiber-optic towed decoy (FOTD) to protect aircraft and pilots from advanced threats, the company said in a release.

BAE Systems' FOTDs are radio-frequency countermeasure systems that provide robust self-protection capabilities for any aircraft, including fighters, bombers and transports. The company's dual band decoy development work is intended to expand the capabilities of its combat-proven AN/ALE-55 FOTD.

"Our towed decoys enable pilots to execute missions in highly contested airspace," said Tom McCarthy, dual band decoy program director at BAE Systems. "ALE-55 FOTD is a reliable, high-powered jamming system with years of mission success on the F/A-18E/F [Super Hornet] and

extensive flight-testing on a variety of aircraft. Under this new Dual Band Decoy contract, our focus will be building upon the ALE-55's proven performance in order to defeat the threats of tomorrow."

The primary role of the decoy is to protect the warfighter by luring threat missiles away from the aircraft. The decoy also combines techniques that disrupt adversaries' radar, preventing missile launch from occurring. Much like the ALE-55 FOTD, the dual band decoy will interface with onboard electronic warfare equipment, but it can also operate independently, enhancing its effectiveness against current and future threats.

Fincantieri Awarded $9.6 Million Contract to Support Coast Guard

WASHINGTON – Fincantieri Marine Systems North America has been awarded a $9.6 million contract to perform maintenance and repairs to the U.S. Coast Guard's fleet of inland buoy tenders, the company announced Oct. 24 in a release.

The multiyear contract was awarded by the Coast Guard's Surface Force Logistics Center in Virginia. The focus of the contract is the maintenance, repair and overhaul of the Isotta Fraschini Motori (IFM) V1312 main diesel engines onboard the 75-foot WLIC and 65-foot WLR-class cutters.

"This award with the U.S. Coast Guard builds on our proven expertise in the modification, repair and overhaul of the main

diesel engines for the inland buoy tender fleet," said Rick Dinsmore, FMSNA's general manager and vice president.

"Since our original contract to repower the buoy tenders, FMSNA has provided continuous mission critical support to the U.S. government by assuring the highest levels of fleet readiness."

USS Gerald R. Ford Returns to Sea

The aircraft carrier USS Gerald R. Ford departs Huntington Ingalls Industries' Newport News Shipbuilding on Oct. 25 to conduct sea trials. U.S. Navy

NEWPORT NEWS, Va. – The aircraft carrier USS Gerald R. Ford got underway Oct. 25 for sea trials from Huntington Ingalls Industries' Newport News Shipbuilding division following a 15-month pierside maintenance period.

"I am proud of the crew's efforts to get USS Gerald R. Ford back out to sea," Navy Secretary Richard V. Spencer said. "The Navy has diligently tackled issues associated with this first-in-class ship and will continue to do so. All are eager to demonstrate Ford's capacity to deliver combat power. There is more work to do, but this is a great milestone."

Prior to getting underway, the Ford conducted a multiday, pierside "fast cruise," where the crew worked through simulated at-sea operating scenarios. Gerald R. Ford then departed NNS and headed into the Atlantic Ocean for sea trials, putting into practice lessons learned from the fast cruise and starting a critical phase of underway

testing.

While at sea off the Virginia coast, the crew, in cooperation with NNS engineers and shipyard employees, will run through a comprehensive sequence of evolutions to test and validate systems maintained or modified during the extended maintenance period, known as a post-shakedown availability (PSA).

The PSA included combat systems installations, throttle control system improvements, propulsion train component repairs and corrections to discrepancies identified during prior testing and completion of 304 berthing spaces. The Huntington Ingalls NNS team also completed construction of four advanced weapon elevators (AWE), upgraded advanced arresting gear (AAG) water twisters and fully outfitted all galley spaces.

“After a challenging post-shakedown availability at Newport News Shipbuilding, the crew is excited to turn their hardhats in and get Warship 78 back out to sea,” said Capt. J.J. Cummings, Ford’s commanding officer.

“I am extremely proud of our Sailors and the remarkable work ethic they have demonstrated over the last 15 months. It is their energy, enthusiasm and grit that has gotten our ship to this point, and it will be their motivation and resiliency that will fuel our success during post-delivery test and trial.”

Sea trials are the culminating event prior the Ford returning to Naval Station Norfolk, Virginia. The carrier will then enter a post-delivery test and trials period to certify fuel systems, conduct aircraft compatibility testing, certify the flight deck and test the combat systems installed aboard the ship.

As a first-in-class ship, the Navy is actively incorporating lessons learned from the Ford to improve the design and construction processes of future ships in the class.