Navy Retires Last EP-3E Electronic Reconnaissance Aircraft

EAST CHINA SEA (Sept. 24, 2020) An EP-3E Airborne Reconnaissance Integrated Electronic System (ARIES) II, assigned to the “World Watchers” of Fleet Air Reconnaissance Squadron 1 (VQ-1), transits over the East China Sea. (U.S. Navy photo by MC3 Andrew Langholf)

By Richard R. Burgess, Senior Editor

ARLINGTON, Va. — The Navy has retired its last EP-3E Aries II electronic reconnaissance aircraft after the type’s 45 years of service to the fleet.

In an informal Feb. 12, 2025, ceremony, at Naval Air Station Whidbey Island, Washington, Fleet Air Reconnaissance Squadron One (VQ-1), the sole remaining operator of the EP-3E, farewelled the last EP-3E. The aircraft was flown away on Feb. 13 for the last time.

The aircraft, BuNo 159893, was the last of 26 EP-3Es that served the fleet beginning in 1970. Ten P-3A Orion patrol aircraft were converted to EP-3Es for operation by VQ-1 and VQ-1, joining two earlier EP-3B versions in service. This batch of EP-3Es were replaced beginning the 1990s by a new generation of EP-3Es converted from P-3C Orions, with ultimately 17 aircraft converted to sustain an operational fleet of 12 aircraft.

The EP-3E fleet provided multi-intelligence support to the fleets and to theater combatant commanders with near-real-time signals intelligence and full-motion video, the Naval Air Systems Command said. The aircraft was equipped with sensitive electronic receivers and high-gain dish antennas. The large crew was able to fuse the intelligence it collected with offboard intelligence and provide threat warning and situational awareness in support of suppression of enemy air defenses, anti-air warfare, anti-submarine warfare, and anti-surface warfare.

The EP-3E has been succeeded by the MQ-4C Triton high-altitude, long-endurance unmanned aerial vehicle operated by Unmanned Patrol Squadron 19.

VQ-1 has one P-3C remaining, which it used as a utility training and transport aircraft. The aircraft, BuNO 161588, will be retired in an informal ceremony to be held at NAS Whidbey Island on Feb. 20, 2025.

VQ-1 will hold its deactivation ceremony at Whidbey Island on March 28, 2025. The official date for the deactivation is March 31.

USS Tripoli to forward deploy to Japan

220917-M-MJ391-1231 Amphibious assault carrier USS Tripoli (LHA 7), right, sails next to amphibious assault carrier USS America (LHA 6) during a photo exercise in the East China Sea, Sept. 17, 2022. (U.S. Marine Corps photo by Lance Cpl. Christopher Lape)

From Ladonna Singleton, Feb. 13, 2025

The America-class amphibious assault ship USS Tripoli (LHA 7) will move to Sasebo, Japan, as part of a scheduled rotation of forces in the Pacific, the U.S. Navy announced today.

Tripoli will replace USS America (LHA 6), which will depart Sasebo and move to San Diego.

The forward presence of Tripoli supports the United States' commitment to the defense of Japan, enhances the national security of the United States and improves its ability to protect strategic interests. Tripoli will directly support the Defense Strategic Guidance to posture the most capable units forward in the Indo-Pacific Region.

The United States values Japan’s contributions to the peace, security and stability of the Indo-Pacific and its long-term commitment and hospitality in hosting U.S. forces forward deployed there. These forces, along with their counterparts in the Japan Self-Defense Forces, make up the core capabilities needed by the alliance to meet our common strategic objectives.

The security environment in the Indo-Pacific requires that the U.S. Navy station the most capable ships forward. This posture allows the most rapid response times for maritime and joint forces, and brings our most capable ships with the greatest amount of striking power and operational capability to bear in the timeliest manner.

Maintaining a forward-deployed naval force capability with the most advanced ships supports the United States’ commitment to the defense of Japan and the security and stability of the vital Indo-Pacific region.

USS Harry S. Truman Involved in Collision at Sea

The Nimitz-class aircraft carrier USS Harry S. Truman (CVN 75), transits the Strait of Gibraltar, Nov. 25. (U.S. Navy Photo by MCSN Michael Gomez)

By U.S. Sixth Fleet Public Affairs, Feb. 13, 2025

MEDITERRANEAN SEA – The Nimitz-class aircraft carrier USS Harry S. Truman (CVN 75) was involved in a collision with the merchant vessel Besiktas-M at approximately 11:46 p.m. local time, Feb. 12, while operating in the vicinity of Port Said, Egypt, in the Mediterranean Sea.

The collision did not endanger the Harry S. Truman (CVN 75) as there are no reports of flooding or injuries. The propulsion plants are unaffected and in a safe and stable condition. The incident is under investigation. More information will be released as it becomes available.

NPS Develops AI Solution to Automate Drone Defense with High Energy Lasers


Naval Postgraduate School faculty researchers Brij Agrawal, right, and Leonardo Herrera, center, observe U.S. Navy Ensign Nicholas Messina as he positions a Reaper drone model in an optical beam path that simulates how a laser weapon system engages a distant flying drone. (Javier Chagoya)
From Dan Linehan, Feb. 12, 2025

MONTEREY, Calif.— Lasers enable the U.S. Navy to fight at the speed of light. Armed with artificial intelligence (AI), ship defensive laser systems can make rapid, accurate targeting assessments necessary for today's complex and fast-paced operating environment where drones have become an increasing threat.

To counter the rapidly mounting threats posed by the proliferation of inexpensive uncrewed autonomous systems

(UAS), or drones, Naval Postgraduate School (NPS) researchers and collaborators are applying AI to automate critical parts of the tracking system used by laser weapon systems (LWS). By improving target classification, pose estimation, aimpoint selection and aimpoint maintenance, the ability of an LWS to assess and neutralize a hostile UAS greatly increases. Enhanced decision advantage is the goal.

The tracking system of an LWS follows a sequence of demanding steps to successfully engage an adversarial UAS. When conducted by a human operator, the steps can be time consuming, especially when facing numerous drones in a swarm. Add in the challenges of an adversary's missiles and rockets traveling at hypersonic speeds, efforts to mount proper defenses become even more complicated, and urgent.

Directed energy and AI are both considered [DOD Critical Technology Areas](). By automating and accelerating the sequence for targeting drones with an AI-enabled LWS, a research team from NPS, Naval Surface Warfare Center Dahlgren Division, Lockheed Martin, Boeing and the Air Force Research Laboratory (AFRL) developed an approach to have the operator on-the-loop overseeing the tracking system instead of in-the-loop manually controlling it.

"Defending against one drone isn't a problem. But if there are multiple drones, then sending million-dollar interceptor missiles becomes a very expensive tradeoff because the drones are very cheap," says Distinguished Professor Brij Agrawal, NPS Department of Mechanical and Aerospace Engineering, who leads the NPS team. "The Navy has several LWS being developed and tested. LWS are cheap to fire but expensive to build. But once it's built, then it can keep on firing, like a few dollars per shot."

To achieve this level of automation, the researchers generated two datasets that contained thousands of drone images and then applied AI training to the datasets. This produced an AI model that was validated in the laboratory and then transferred to Dahlgren for field testing with its LWS tracking system.

Funded by the Joint Directed Energy Transition Office (DE-JTO) and the Office of Naval Research (ONR), this research addresses advanced AI and directed energy technology applications cited in the CNO NAVPLAN.

During a typical engagement with a hostile drone, radar makes the initial detection and then the contact information is fed over to the LWS. The operator of the LWS uses its infrared sensor, which has a wide field of view, to start tracking the drone. Next, the high magnification and narrow field of view of its high energy laser (HEL) telescope continues the tracking as its fast-steering mirrors maintain the lock on the drone.

With a video screen showing the image of the drone in the distance, the operator compares it to a target reference to classify the type of drone and identify its unique aimpoints. Each drone type has different characteristics, and its aimpoints are the locations where that particular drone is most vulnerable to incoming laser fire.

Along with the drone type and aimpoint determinations, the operator must identify the drone’s pose, or relative orientation to the LWS, necessary for locating its aimpoints. The operator looks at the drone’s image on the screen to determine where to point the LWS and then fires the laser beam.

Long distances and atmospheric conditions between the LWS and the drone can adversely affect the image quality, making all these identifications more challenging and time consuming to conduct.

After all these preparations, the operator cannot just simply move a computerized crosshair across the screen onto an aimpoint and press the fire button as if it were a kinetic weapon system, like an anti-aircraft gun or interceptor missile.

Though lasers move at the speed of light, they don’t instantaneously destroy a drone like the way lasers are depicted in sci-fi movies. The more powerful the laser, the more energy it delivers in a given time. To heat a drone enough to cause catastrophic damage, the laser must be firing the entire time.

If the drone continuously moves, then the laser beam will wander along its surface if not continuously re-aimed. In this case, the laser’s energy will be distributed across a large area instead of concentrated at a single point. This process of continuously firing the laser beam at one spot is called aimpoint maintenance.

In 2016, construction of the High Energy Laser Beam Control Research Testbed (HBCRT) was completed by the NPS research team. The HBCRT was designed to replicate the functions of an LWS found aboard a ship, such as the 30-kilowatt, XN-1 Laser Weapon System operated on USS Ponce (LPD 15) from 2014 to 2017.

Early on, the HBCRT was utilized at NPS to study adaptive optics techniques to correct for aberrations from atmospheric conditions that degrade the quality of the laser beam fired from an LWS. Later, the addition of state-of-the-art deformable mirrors built by Northrup Grumman allowed NPS researchers to investigate further impacts of deep turbulence.

Over the years, 15 masters and 2 PhD degrees have been earned by NPS officer-students contributing their interdisciplinary research into hardware and software related to the HBCRT. Investigations by U.S. Navy Ensigns Raymond Turner, MS astronautical engineering in 2022, and Raven Heath, MS aeronautical engineering in 2023, added to this research.

Turner helped integrate AI algorithms into the HBCRT for aimpoint selection and maintenance, and Heath used deep learning to research AI target key points estimation.

Now the HBCRT is also being used to create catalogs of drone images to make real-world datasets for AI training.

Built by Boeing, the HBCRT has a 30 cm diameter, fine-tracking, HEL telescope and a course-tracking, mid-wavelength infrared (MWIR) sensor. The pair is called the beam director when coupled together on a large gimble that swivels them in unison up-and-down and side-to-side.

“The MWIR is thermal,” says Research Associate Professor Jae Jun Kim, NPS Department of Mechanical and Aerospace Engineering, who specializes in optical beam control. “It looks at the mid-wavelength infrared signal of light, which is related to the heat signature of the target. It has a wide field of view. The gimbal moves to lock onto the target. Then the target is seen through the telescope, which has very small field of view.”

A 1-kilowatt laser beam (roughly a million times more powerful than a classroom laser pointer) can fire from the telescope. If the laser beam were to be used, it’s generated by a separate external unit and then directed into the telescope, which then projects the laser beam onto the target. However, its use with the HBCRT isn’t required for the initial development of this research, which allows the work to be easily conducted inside a laboratory.

With a short-wavelength infrared (SWIR) tracking camera, the telescope can record images of a drone that is miles away. Although necessary, replicating the view of a distant drone in a small laboratory is impossible. To resolve this dilemma, researchers mounted 3D-printed, titanium miniature models of drones fabricated by AFRL into a range-in-a-box (RIAB).

Constructed on an optical bench, the RIAB accurately replicates a drone flying miles away from the telescope by using a large parabolic mirror and other optical components. This research used a miniature model of a Reaper drone. When a SWIR image is taken of the drone model by the telescope, it appears to the telescope as if it were seeing an actual full-sized Reaper drone.

The drone model is attached to a gimble with motors that can change its pose along the three rotational flight axes of roll (x), pitch (y) and yaw (z). This allows the telescope to observe real-time changes in the direction that the drone model faces.

Simply put, pose is the orientation of the drone that the telescope "sees" in its direct line of sight. Is the drone heading straight-on or flying away, diving or climbing, banking or cruising straight and level, or moving in some other way?

By measuring the angles about the x-, y- and z-axes for a drone model in a specific orientation, the pose of the drone can be precisely defined and recorded. This important measurement is called the pose label.

The NPS researchers created two large representative datasets for AI training to produce the AI model for automating target classification, pose estimation, aimpoint selection and aimpoint maintenance. The AI training used convolutional neural networks with deep learning, which is a machine learning technique based on the understanding of neuropathways in the human brain. A [recent journal article in *Machine Vision and Applications*] by NPS faculty Leonardo Herrera, Jae Jun Kim, and Brij Agrawal describes the datasets and AI training in detail.

Each piece of data in the dataset contained a 256´256-pixel image of a Reaper drone in a unique pose with its corresponding pose label. Lockheed Martin used computer generation to create the synthetic dataset, which contained 100,000 images. Created with the HBCRT and RIAB at NPS, the real-world dataset contained 77,077 images.

“If we train on only clean pictures, it won’t work. That is a limitation,” says Agrawal. “We need a lot of data with different backgrounds, intensities of the sun, turbulence and more. That’s why when using AI, it takes a lot of work to create the data. And the more data you have, the higher the fidelity.”

For the AI model, three different AI training scenarios were generated and compared to determine which scenario performed the best. The first scenario only used the synthetic dataset, the second used both the synthetic and real-world datasets, and the third only used the real-world dataset.

Because the large sizes of datasets and their individual pieces of data required enormous amounts of computational power for the AI training, the researchers used an NVIDIA DGX workstation with four Tesla V100 GPUs. NPS operates numerous NVIDIA workstations. And in December 2024, to continue advancing AI-based technologies, NPS formed a partnership with NVIDIA to become one of its AI Technology Centers.

“Once we’ve generated a model, we want to test how good it is,” says Agrawal. “Assume you have a dataset with 100,000 data. We’ll train on 80,000 data and test on 20,000 data. Once it’s good with 20,000 data, we’re finished training it.”

U.S. Navy Ensign Alex Hooker, a Shoemaker Scholar who recently earned his M.S. in astronautical engineering from NPS and is now a student naval aviator, contributed to testing the pose estimations of the AI model.

“A way to improve the reliability of the model at predicting the pose of a UAS in 3D space by taking 2D input images is detecting what’s called out of distribution data,” he says. “There are different ways to detect whether an image can be trusted or whether it is out of distribution."

By feeding the test data images from the dataset into the existing AI model and then comparing the output poses from the AI model to pose labels of the test data images, Hooker could continually train and refine the AI model itself.

Working now with Agrawal is NPS Space Systems Engineering student U.S. Navy Ensign Nicholas Messina, who graduated from the U.S. Naval Academy in aerospace engineering last year and is a Boman Scholar headed for the Nuclear Navy career track after NPS.

"My thesis is a little bit of a sidestep in the way that I am working with artificial intelligence and optics, but Dr. Agrawal and Dr. Herrera have been great," said Messina. "My research is specifically working on optical turbulence prediction and classification. I train my AI models off large image datasets and am working to improve accuracy in how the model predicts the wavefronts from a picture."

Because an LWS views the 3D drone flying far away as 2D images in the infrared spectrum, the features of the drone's shape effectively disappear into a silhouette. For example, the silhouette of a drone flying directly head-on would look the same as if it were flying away in the exact opposite direction.

The researchers solved pose ambiguity for the AI model by introducing radar cueing. Tracking data from a radar can reveal if a drone is approaching, withdrawing or moving in some other way. For the AI training, the pose labels of the drone images were used to mimic real radar sensor output. The team also developed a separate method to simulate the radar data and provide radar cuing during LWS operation if actual radar data is not available.

Overall, the AI model from the scenario using only the real-world dataset performed best by producing the least amount of error.

For the next phase of the research, the team transferred the AI model to Dahlgren for field testing on its LWS tracking system.

“Dahlgren has our model, which we trained on the dataset collected indoors on the HBCRT and complemented with synthetic data,” says Leonardo Herrara, who runs the AI laboratory at NPS and is a faculty associate in the Department of Mechanical and Aerospace Engineering. “They can collect live data using a drone and create a new dataset to train on top of ours. That’s called transfer learning.”

Creating more data under additional conditions and of other drone types will also continue at NPS. Just because the AI model is already trained on a Reaper doesn’t mean it’s reliable for other drones. But even before the AI model can be deployed, it must first be integrated into Dahlgren’s tracking system.

“We now have the model running in real-time inside of our tracking system,” says Eric Montag, an imaging scientist at Dahlgren and leader of a group that developed an LWS tracking system currently in use by High Energy Laser Expeditionary (HELEX), which is an LWS mounted on a land-based demonstrator.

“Sometime this calendar year, we’re planning a demo of the automatic aimpoint selection inside the tracking framework for a simple proof of concept,” Montag adds. “We don’t need to shoot a laser to test the automatic aimpoint capabilities. There are already projects—HELEX being one of them—that are interested in this technology. We’ve been partnering with them and shooting from their platform with our tracking system.”

When field testing occurs, HELEX will start tracking from radar cues and use pose estimation to automatically select an aimpoint. The tracking system of HELEX will be semiautonomous. So, instead of manually controlling aspects of the tracking system from in-the-loop, the operator will oversee it from on-the-loop.

Besides LWS, this research also opens other possibilities for use throughout the fleet. Tracking systems across other platforms could also see potential benefit from this type of AI-enabled automation. At a time when shipboard defenses can be threatened by massive waves of drones, missiles and rockets, a jump in the efficiency of determining friend or foe, and engaging hostile threats, could be a game-changer to speed decision-advantage.

Australian MQ-4C Triton Program on Track and Preparing Next Aircraft for Delivery

Australia’s third multi-intelligence MQ-4C Triton, also known as “AUS3,” takes to the skies for its first flight at Northrop Grumman’s Palmdale, California, facility on October 29, 2024. (Photo Credit: Northrop Grumman)

From Northrop Grumman

PALMDALE, Calif. – Feb. 6, 2025 – (PHOTO RELEASE) Northrop Grumman Corporation (NYSE: NOC) successfully completed testing of Australia’s third MQ-4C Triton at the company’s Palmdale, California, facility. The company is preparing to ferry the aircraft to Naval Air Station in Patuxent River, Maryland, where it will join Australia’s second Triton for calibration testing before delivery of both aircraft to the Royal Australian Air Force. Robust flight testing and validation of these uncrewed high-altitude, long endurance aircraft are key milestones ahead of delivery to Australia this year. Australia’s air force is collaborating with Northrop Grumman and the U.S. Navy to field the most advanced maritime intelligence, surveillance, reconnaissance and targeting capability available today.

L3Harris Technology Enhances US Torpedo Capability

From L3Harris, Feb. 4 2025

Improved Post-Launch Communications System (IPLCS) cleared sub-system testing to move closer to providing innovative tool to submarine fleets.

As great power competition increases and the U.S. Navy prioritizes strengthening undersea dominance, improved weapon reliability and lethality is more important than ever. L3Harris is answering the call with innovation to make the next generation of heavyweight torpedoes more effective for U.S. and allied naval forces.

The Improved Post-Launch Communications System (IPLCS) is a fiber-optic cable tether that connects the torpedo to its origin submarine, providing increased bandwidth for real-time data, a greater communications range along with better strength and reliability. The system is designed for the newest iteration of the MK-48 (Mod 8) torpedo, which will be the Navy’s next generation submarine-launched weapon system with upgrades beginning in 2029.

“It’s imperative we provide the U.S. Navy with technology to improve adversary targeting,” said Jahmar Ignacio, Vice President and General Manager, L3Harris Strategic Missions. “This L3Harris advanced technology is key to ensuring warfighters have the right data at the right time for increased advantages over adversaries in the undersea domain.”

IPLCS cleared Design Verification Testing and is now proving L3Harris’ ability to manufacture the technology. Upon successful testing, L3Harris will work with Naval Sea Systems Command (NAVSEA) and Program Executive Office Undersea Warfare Systems (PEO UWS) toward system production.

Countering threats in the Indo-Pacific region is a key priority for the United States. During a visit to Guam and Hawaii earlier this year, Under Secretary of the Navy Erik Raven said U.S. prosperity is built upon free and open oceans and that the U.S. will defend American, ally and partner interests in the region.

“We are steadfast in our commitment to the security, stability and prosperity of the Indo-Pacific region,” Raven said.

The U.S. Navy Science and Technology Strategy identifies Strengthening Maritime Technological Dominance as one of its three main priorities, with Undersea Systems as a focus. The L3Harris IPLCS system ties into that priority directly, giving warfighters enhanced capabilities to confront potential adversaries.

The Royal Australian Navy (RAN) is a partner on the IPLCS program and works within the Undersea Weapons Joint Program Office (PMS 404), with the tether system set to be incorporated into RAN Colins Class submarines in addition to U.S. Navy subs.

The IPLCS system replaces legacy copper wire tethers and offers dramatically better communication ranges and thousands of times more bandwidth. Warfighters on the submarine are able to guide the torpedo, working along with automated systems built into the weapon.

The fiber-optic cable is smaller than the copper wire it is replacing, but stronger, allowing for more reliable performance in contested environments. IPLCS began as a DARPA-funded program in partnership with the University of Central Florida pursuing ultra small, very strong highly integrated optical fiber cable.

USS O’Kane Returns Home after 7-Month Deployment to 5th, 7th Fleets

The Arleigh Burke-class guided-missile destroyer USS O’Kane (DDG 77), assigned to the USS Abraham Lincoln Carrier Strike Group (ABECSG), returned to their homeport, Naval Base San Diego, after a seven-month deployment to the U.S. 3rd, 7th and 5th Fleet area of operations, Feb. 7. (U.S. Navy photo by IC2 Ulrika Mendiola)

From U.S. 3rd Fleet, Feb, 10, 2025

NAVAL BASE SAN DIEGO – The Arleigh Burke-class guided-missile destroyer USS O’Kane (DDG 77), assigned to the USS Abraham Lincoln Carrier Strike Group (ABECSG), returned to their homeport, Naval Base San Diego, after a seven-month deployment to the U.S. 3rd, 7th and 5th Fleet area of operations, Feb. 7.

O’Kane departed San Diego with the ABECSG, July 17, 2024, and remained in U.S. 5th Fleet following the departure of ABECSG who returned to their homeport in December 2024.

“I am incredibly proud of the exemplary work this team has invested in themselves and their equipment over the past few months,” said Cmdr. Rich Ray, commanding officer, O’Kane. “We are proud of the work we accomplished this deployment, and we are looking forward to continuing that success into the next challenge.”

Following the departure of the USS Abraham Lincoln (CVN 72) and the Arleigh Burke-class guided-class missile destroyers USS Frank E. Petersen, Jr. (DDG 121), USS Michael Murphy (DDG 112) and USS Spruance (DDG 111) from U.S. 5th Fleet, O’Kane and the USS Stockdale (DDG 106) remained in the U.S. Central Command (USCENTCOM) area of responsibility to support global maritime security operations.

O’Kane and Stockdale successfully escorted U.S. flagged and crewed merchant vessels in the Gulf of Aden. During the escort, the destroyers worked alongside other U.S. Central Command forces in successfully repelling multiple Iranian-backed Houthi attacks during transits of the Bab el-Mandeb strait. During the transit, the destroyers were attacked by one-way attack un-crewed Aerial systems, anti-ship ballistic missiles and anti-ship cruise missiles which were successfully engaged and defeated. The vessels were not damaged, and no personnel were hurt. The ships were well prepared, supported, and the well-trained Sailors successfully defended the ship.

Throughout deployment, O’Kane successfully completed 75 flight quarters, including 84 rotary-wing landings, 26 rotary-wing refueling evolutions, and nine vertical replenishments. In addition, O’Kane conducted 24 replenishments-at-sea, and 22 mooring evolutions.

Additionally, O’Kane visited Karachi, Pakistan to promote the diplomatic relationship between the United States and Pakistan. Following the port visit, O’Kane conducted a maritime exercise to build interoperability with the Pakistan Navy.

ABECSG initially deployed to the Indo-Pacific region to support regional security and stability, and to reassure our allies and partners of the U.S. Navy’s unwavering commitment, highlighted by the first-ever U.S.-Italy multi-large deck event with the Italian Navy’s ITS Cavour Carrier Strike Group held in the Indo-Pacific on Aug. 9, 2024.

The strike group was ordered to the USCENTCOM area of responsibility to bolster U.S. military force posture in the Middle East, deter regional escalation, degrade Houthi capabilities, defend U.S. forces, and again sailed alongside our Italian allies and other partners to promote security, stability and prosperity. Assigned destroyers of the ABECSG, to include O’Kane, were essential to providing a layer of defense to U.S. forces and ensure the safe passage of commercial vessels and partner nations transiting in international waterways like the Red Sea, Bab el-Mandeb Strait and the Gulf of Aden.

As an integral part of U.S. Pacific Fleet, Commander, U.S. 3rd Fleet operates naval forces in the Indo-Pacific and provides the realistic and relevant training to ensure the readiness necessary to execute the U.S. Navy’s timeless role across the full spectrum of military operations. U.S. 3rd Fleet works together with our allies and partners to advance freedom of navigation, the rule of law, and other principles that underpin security for the Indo-Pacific region.

Portsmouth Naval Shipyard Successfully Undocks USS Cheyenne

The Los Angeles improved-class attack submarine USS Cheyenne (SSN 773) moves berths following an undocking evolution at Portsmouth Naval Shipyard in Kittery, Maine, Feb. 7, 2025. (U.S. Navy photo by Branden Bourque)

by Branden Bourque, Feb. 10, 2025

KITTERY, Maine — The Los Angeles improved-class attack submarine USS Cheyenne (SSN 773) was successfully undocked Feb. 6, marking a significant milestone in its service life extension program at Portsmouth Naval Shipyard.

“I couldn’t be more proud of the Cheyenne crew and the men and women of Portsmouth Naval Shipyard for all the work to achieve this significant milestone," said Cheyenne Commanding Officer Cmdr. Kyle Calton. "Undocking is one of the most meaningful events in our overhaul period, returning Cheyenne to the water where she belongs and putting a huge gust of wind in our sails as we prepare to return to sea."

Cheyenne has undergone major repairs, structural inspections, and replacements of mechanical and electrical systems. This extensive work, led by the project team, has enhanced the submarine's capabilities, ensuring advanced systems are delivered to warfighters at the tip of the spear. These efforts contribute to the fleet's operational readiness and support national defense priorities.

As Cheyenne's undocking is a significant achievement, it's especially noteworthy considering the ongoing construction work of the multi-mission dry dock project as part of the Navy's Shipyard Infrastructure Optimization Program. It also underscores the innovative approach of the nation's public shipyards to meet the chief of naval operations' goals of restoring critical infrastructure and increasing the number of combat-ready platforms available to the fleet.

"Reaching the undocking milestone is a big win during any maintenance availability. The efforts on Cheyenne are even more impressive as the team executed their highly complex work amid an active construction zone for our multi-mission dry dock," said shipyard commander Capt. Michael Oberdorf. "It's like cooking Thanksgiving dinner while renovating your kitchen – it requires thoughtful planning, coordination, and superb execution. Cheyenne's undocking underscores our shipyard's commitment to not only meet our current mission but ensures we can meet the future needs of America's warfighting Navy to support and defend our nation."

"I am incredibly proud of the men and women of Portsmouth

Naval Shipyard and the crew of Cheyenne for all their hard work to complete the work necessary to undock on-time," said Cheyenne project superintendent Jerry Legere. "They met every challenge head-on with tenacity and selflessness – they are all heroes. Through this incredible effort we have postured Cheyenne to be delivered as a fully mission capable submarine operated by a highly skilled crew ready to answer the nation's call."

Attack submarines are multi-mission platforms that enable five of the six core capabilities of the Navy's maritime strategy: sea control, power projection, forward presence, maritime security, and deterrence. They are designed for excellence in anti-submarine warfare, anti-ship warfare, strike warfare, special operations, intelligence, surveillance and reconnaissance, irregular warfare, and mine warfare. Attack submarines also project power ashore through special operations forces and Tomahawk cruise missiles, playing a critical role in preventing or preparing for regional crises.

As the Navy's leader in attack submarine maintenance and modernization, PNSY enhances critical warfighting capabilities by safely delivering first-time quality work, ensuring our undersea warf-ighters are battle-ready when called upon.

U.S. Navy Leaders Observe Joint Task Force Southern Guard Operations

GUANTANAMO BAY, Cuba (Feb. 5, 2025) U.S. Naval Forces Southern Command/U.S. 4th Fleet Commander Rear Adm. Carlos Sardiello meets with Sailors attached to Freedom-variant Littoral Combat Ship USS Saint Louis (LCS 19) aboard the ship during their support of Operation Southern Guard at Naval Station Guantanamo Bay, Cuba, Feb. 5, 2025. (U.S. Navy photo by Naval Station Guantanamo Bay Public Affairs)

From U.S. Naval Forces Southern Command, Feb. 7, 2025

NAVAL STATION GUANTANAMO BAY, Cuba – Rear Adm. Carlos Sardiello, Commander U.S. Naval Forces Southern Command/U.S. 4th Fleet, and Rear Adm. John Hewitt, Commander, Navy Region Southeast, visited Joint Task Force Southern Guard onboard Naval Station Guantanamo Bay (NSGB) Feb. 5 and 6, as the Joint Task Force prepares to receive illegal aliens from the United States. Sardiello and Hewitt accompanied Adm. Alvin Holsey, Commander, U.S. Southern Command, during the visit.

At the direction of the President to the Department of Homeland Security (DHS) and the Department of Defense (DOD), U.S. military service members are supporting Illegal Aliens holding operations led by DHS at NGSB. U.S. Southern Command (USSOUTHCOM) has set up Joint Task Force Southern Guard at the Naval Station to execute the directive.

“The Naval Station is fully committed to ensuring we have the infrastructure and resources in place to support this vital mission,” said Capt. Michael Stephen, Commander, Naval Station Guantanamo Bay. “From the moment we received the mission, our team has worked with urgency, executing contingency plans, and rapidly strengthening our capabilities.

“The level of teamwork—both within the base and across the joint force—has been outstanding,” said Stephen “Everyone is engaged, working together seamlessly to tackle challenges and ensure we’re ready for what’s ahead. The progress we’ve made in such a short time is a testament to their dedication and professionalism,” he said.

As the United States’ oldest overseas military installation, established in 1903, Naval Station Guantanamo Bay is in the USSOUTHCOM Area of Responsibility. U.S. Naval Forces Southern Command/U.S. Fourth Fleet serves as USSOUTHCOM’s maritime component commander and therefore has responsibilities in contingency plans involving the naval station. U.S. Navy Region Southeast manages and oversees shore installation support for the naval station as it does for a total of 18 Navy bases in the Southeast region.

“We are very proud of our Sailors, Marines and civilians who have responded to this contingency plan at Naval Station Guantanamo Bay, which is a critical forward-operating base that enables the United States to maintain a persistent presence in the Caribbean,” said Rear Adm. Sardiello. “This mission exemplifies how we integrate and deploy all-domain combat power to respond to crises, maintain regional security, and protect U.S. interests.”

Military service members and contractors have provided the manpower and organization to accommodate thousands' illegal aliens. Additional phases of expansion will follow to meet the President's directive to host up to 30,000 illegal aliens. This work includes the construction of large, secure tent facilities to house illegal aliens, the installation of high-security fencing and barriers to protect all personnel, and a huge increase in providing essential services, including food, medical care, and housing, to all DOD and DHS personnel. The Navy is also delivering comprehensive logistical support, ensuring the infrastructure and resources needed to sustain operations are in place.

Naval Station Guantanamo Bay ensures the freedom of action in the maritime domain and contributes to enhancing U.S. alliances and partnerships throughout the region. By executing this critical role in the enforcement of national immigration policies, the station continues to be an integral asset in supporting the defense and security objectives of the United States.

Navy F/A-18 Fleet Gets Enhanced Target Tracking as IR Search and Track System Achieves IOC


The U.S. Navy has declared initial operational capability for the F/A-18 E/F Infrared Search and Track Block II system. (U.S. Navy photo by Katie Archibald)
From Naval Air Systems Command, Feb 4, 2025

PATUXENT RIVER, Md. – The U.S. Navy declared initial operational capability (IOC) for the F/A-18 E/F Infrared Search and Track (IRST) Block II system in November 2024, providing the fleet with an enhanced capability to search, detect and track airborne targets at long range.

“Reaching IRST IOC is an important milestone in our overarching efforts to deliver advanced integrated warfighting capability to the fleet,” said Rear Adm. John Lemmon, Program Executive Officer for Tactical Aircraft Programs. “IRST provides data for our aircrew to improve reaction time and survivability while remaining unaffected by radio frequency jamming.”

IRST increases aircrew situational awareness by supplementing air-to-air detection and track capabilities, and autonomously or in combination with other sensors, supports the guidance of beyond visual range missiles. It acts as a complementary sensor to the aircraft’s AN/APG-79 fire control radar in a heavy electronic attack or radar-denied environment.

The system achieved IOC after completing Initial Operational Test and Evaluation with Air Test and Evaluation Squadron (VX) 9. The F/A-18 and EA-18G Program Office (PMA-265) partnered with military, civilian and contractor personnel from VX-31 and VX-23 to leverage a novel combination of operational and developmental test facilities and assets throughout the past year.

“IRST IOC reflects the hard work, dedication and resilience of a collaborative team of government and industry professionals in delivering this essential capability to the warfighters,” said Capt. Michael Burks, PMA-265 Program Manager.

The Navy brought IRST to the fleet through an evolutionary acquisition approach across two phased blocks. In 2011, Block I integrated an existing IRST system onto the F/A-18 fuel tank and in 2019, the fleet operated the system as a part of an early deployment. Block II added an improved sensor, upgraded processor and additional software with a first deployment planned in 2025.

The full rate production decision is scheduled for spring 2025 to authorize the U.S. Navy to fully outfit its carrier-based F/A-18E/F Super Hornet squadrons with IRST Block II.

PMA-265 is responsible for supporting, sustaining, and advancing the F/A-18A-D Hornet, F/A-18E/F Super Hornet and EA-18G Growler aircraft, providing naval aviators with capabilities that enable mission success.