Secretary Del Toro Tours Historic West Coast Facility, Explores Ways to Increase Shipyard Capacity in the Pacific



Release from Secretary of the Navy Public Affairs

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Office of the Secretary of the Navy

A week after calling for a new, bold maritime statecraft,

Secretary of the Navy Carlos Del Toro and key members of his team visited the Mare Island Dry Dock, located on the historic Mare Island Shipyard, in Vallejo, Calif., Oct. 2.

Established in 1854, Mare Island Naval Shipyard was the Nation's first Navy base in the Pacific. During World War II, it was one of the busiest naval shipyards in the world. In its last 25 years of operation, it was the leading submarine port for the West Coast.

Today, with strategic competition challenges in the Pacific, Secretary Del Toro, joined by U. S. Rep. John Garamendi, toured the Mare Island Dry Dock facility, met with shipyard leadership, and discussed opportunities and options to address emerging maritime challenges and increase shipyard capacity in the Pacific.

"We're making a concerted effort to improve our naval shipbuilding and repair industry — both public and commercial — with historically high investments in the industrial base," said Secretary Del Toro. "That's how we grow our nation's strategic advantage at sea."

During the visit, Secretary Del Toro expressed how impressed he was with the facilities and the amount of capacity and infrastructure that remains.

As Secretary Del Toro outlined in his recent address at Harvard, "The maritime industry is a strategic sector critical to our economic and national security. It is vital to achieving resilient global supply chains and is ripe with opportunity to partner with a greater number of shipbuilders here in the U.S. and with our closest allies overseas, including Japan and South Korea. It also requires urgent U.S. public investment and international statecraft to attract the necessary private capital."

The visit to Mare Island Dry Dock is the latest shipyard engagement by the Secretary. In July, Secretary Del Toro visited Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility (PHNSY & IMF). In August, he toured Bayonne Drydock & Repair Corp.

The visits are part of the Department of the Navy's efforts toward a new maritime statecraft that is bold and founded on a strong Navy and Marine Corps to fulfill our national security interests and address future challenges.

Additionally, the administration is working to set the necessary conditions to attract the most advanced shipbuilders in the world to open U.S.-owned subsidiaries and invest in commercial shippards here in the U.S., modernizing and expanding our shipbuilding industrial capacity and creating a healthier, more competitive shipbuilding workforce.

Systems Models Keep Submarines Mission Ready

BY TRACY GREGORIO

An important, yet often underappreciated challenge for undersea warfare is keeping submarine systems well-maintained and available. Every command has a budget for reliability, maintainability, and availability (RMA), but those resources are limited and need to be carefully allocated to keep warfighting systems mission-ready.

For decades now, maintenance planning has been performed by seasoned engineers who understand how component lifecycles and

failure rates can affect their systems. This process of expert-driven failure modes and effects analysis (FMEA) is time consuming, expensive, and can take months to complete by veterans whose expertise is sorely needed elsewhere.

Additional time is also needed to evaluate changes using the Risk Management Framework (RMF), to identify cybersecurity vulnerabilities that may degrade system availability.

Model-Based Approach.

To address this challenge, a model-based system engineering (MBSE) approach is starting to automate failure mode analysis, facilitating more efficient RMA planning. This shift provides additional time for design optimization, refinement of reliability predictions, and comprehensive analysis of casualty reporting. The result is better mission-readiness for our fleet, while consuming fewer resources.

Reliability analysis is important to ensure that a warfighting platform has no single point of failure across its many components. Between a ship's tight spaces and funding limitations, it's impossible to go to sea with spares for everything.

One organization using this new MBSE approach is the Undersea Communications & Integration Program Office, PEO C4I / Program Manager, Warfare (PMW 770). Their Program Manager, Captain David Kuhn explained, "If spares are not available, we have to plan for alternate ways of accomplishing a mission, even if it's less stealthily. To ensure we optimize our ability to change parts and/or have redundant paths for missions, we build forecasts based on how often parts are used. If a component fails early and there is no spare on board, it could be a mission kill."

The MBSE models enable program managers, like Kuhn, to create forecasts better and faster, while tying together different engineering disciplines and

stakeholder communities. "Engineers specialized in systems design, cyber, and reliably each have their own approach," said Kuhn. "They need different views and have historically used different models. Now they use the same model, each getting the views they need, and enabling analysis that just couldn't be done before."

Confidence in Outcomes

These consolidated models enable analysis and simulation on a fully validated data set that increases confidence in predicted outcomes. Kuhn illustrated the value of this analysis by describing a recent upgrade needed to improve system monitoring through the addition of passive data taps. "What normally would have needed 60 or 90 days we accomplished in a couple weeks, letting us quickly deploy the upgrades to the fleet."

The models also enable green or less experienced engineers to address critical maintenance planning elements. "MBSE helps new people coming on to look at a failure diagram and understand it faster and more accurately," notes Kuhn. This MBSE approach is being used by engineers adapting systems to field on the new classes of submarine to plan and optimize their maintenance schemes. This approach will ensure that component failures don't interfere with the platform's most important mission threads.

"The hull designs of the new sub class have an impact on how we design and maintain our antenna systems," explained Kuhn. "Through the MBSE model, we saw how a change in one subsystem increased tensions in another. While each element was meeting its defined requirements, the model showed that failure risk increased. While we might have eventually caught the issue, the model helped us see it easily and early in the design cycle."

The MBSE model also generates the reports and views needed to get system changes through the

RMF approval process. Kuhn, explaining the practical

consequences, stated, "We use the model to assess RMF compliance faster and with more accuracy, in part by eliminating the possibility of 'fat finger' data re-entry errors. Our team says they can complete RMF diagrams in a third of the normal time."

That is a huge time-saver for engineers, and a safety net against errors. The system uses the following key components:

- 1. A digital model of the warfighting platform is created to replicate all components, connections, and system functionality. This model is capable of simulating every system operation, effectively capturing the interactions between various components. It also illustrates their relationship with the officers and sailors who are responsible for the operation and maintenance of the system.
- 2. The model is populated with reliability data from COTS manufacturers and field experience, generating reliability diagrams correlated to mission threads.
- 3. Engineers use the model to simulate planned maintenance or upgrades and test operational threads for mission success, reviewing different alternatives for impacts on mission readiness.
- 4. The models export field-level instructional resources directly into interactive electronic technical manuals (ITEMs). This reduces the cost and time needed to give sailors up-to-date information for their individual hull, so they can maintain mission readiness and quickly respond to unexpected failures.

This approach is not limited to the latest-generation submarines. Maintenance planners are constantly dealing with obsolescence replacement.

"Our C4I systems make heavy use of commercial off-the-shelf

servers and hard drives that go obsolete in as little as four years," said Kuhn. "The models help us identify where one change drives a companion change in another system. For instance, we might need to make a firewall change for data to flow properly. We have to replace those elements quickly without waiting for a major availability cycle that might be five years out. We can't afford for our systems to be the reason a sub is not out at sea."

Transition Challenges

There are challenges in moving to a new approach in terms of the tools and skillsets needed by the workforce. Comparing MBSE transition challenges to those encountered during the shift to Computer-Aided Design (CAD), Kuhn said, "Just as we had to transition from engineers with drafting expertise into those who could work in CAD, now we need engineers that know how to use MBSE tools. It's not as easy as opening Microsoft Word, but it can be done. The real key will be changing entire processes to adapt to the MBSE models. Using the same old processes, but just layering on the new tools will not be effective. It requires a cultural change, just as happened when we went from pencil drafting to CAD."

This approach can improve the maintainability of any sea-going platform with integrated MBSE models that span engineering disciplines, cyber, RMF compliance, and reliability. It doesn't happen overnight, but can make an impact, one model and one command at a time.

Marine Corps deactivates

historic F/A-18 training squadron



MIRAMAR, CA, UNITED STATES

09.29.2023

3rd Marine Aircraft Wing

MARINE CORPS AIR STATION MIRAMAR, Calif. — The 3rd Marine Aircraft Wing deactivated VMFAT-101, an historic F/A-18 Hornet training squadron, here on September 29, 2023.

Since 1969, instructor pilots of the VMFAT-101 "Sharpshooters" have qualified combat aviators and sent them to operational squadrons worldwide.

The squadron commemorated the event by "flying the barn" — launching 18 aircraft in a single flight. More than 300 Marines, Sailors, veterans, family members, and community

supporters then gathered for a sundown ceremony to commemorate the squadron's history and contributions to Marine Corps readiness.

"Pilots come to VMFAT-101, cut their teeth, and are transformed into aviation warriors," said Col. William J. Mitchell, commanding officer of MAG-11.

Since October 2019, VMFAT-101 has trained Navy and Marine Corps aviators as the only remaining F/A-18 Hornet Fleet Replacement Squadron in the Department of the Navy.

"Thousands of aircrew have passed through the halls of VMFAT-101 — fighter pilots, fighter radar intercept officers, fighter weapon systems officers, and it's bigger than that," said Brig. Gen. Robert B. Brodie, Assistant Wing Commander of 3rd MAW. "This squadron has trained more maintenance Marines than any other in the Marine Corps. It's a holistic approach to ensure we are ready to fight and win."

The training mission of VMFAT-101 will transfer to the "Death Rattlers" of VMFA-323, a 3rd MAW operational squadron at MCAS Miramar. As outlined in the 2022 Marine Corps Aviation Plan, the Hornet will continue to operate and provide combat capability until its complete transition to the F-35 Lighting II in 2030.

Brodie is an F/A-18 pilot and served as commanding officer of VMFAT-101 from 2011 to 2013. He and Lt. Col. Ryan J. Franzen, the final commanding officer of VMFAT-101, were joined by ten former VMFAT-101 commanding officers and two spouses representing their late husbands.

"We're standing on the shoulders of giants," said Franzen. "You helped shape the 'Sharpshooter' legacy."

USS Augusta Commissions Amidst the Morning Fog of Maine



EASTPORT, ME, UNITED STATES

09.30.2023

Story by <u>Julie Ann Ripley</u>

Commander, Naval Surface Force, U.S. Pacific Fleet

EASTPORT, MAINE (Sept. 30, 2023) — Independence-variant littoral combat ship USS Augusta (LCS 34) commissioned at

Eastport, Maine, Sept. 30.

In the week leading up to the commissioning ceremony, the Augusta's crew spent time with their ship's sponsor, Chief Justice Leigh Saufley, and participated in community relations events in their namesake city to build a strong connection with their namesake city community.

During the ceremony guest speaker, The Honorable Jared Golden, U.S. Representative, Maine's 2nd District, wished the crew of Augusta fair winds and following seas as they brought the ship to life and began its commissioned service via recorded remarks.

Remarks were also provided by Vice Adm. John Fuller, Naval Inspector General.

"Competing and being successful in the maritime starts at home. The state of Maine's has a strong bond with the sea and our nation's military. More than 30 ships proudly represent this state, its cities, places, and people" said Fuller. "The USS AUGUSTA and her crew will play an important role in defending our nation and enabling global maritime freedom and commerce. She will be integrated into operations that provide presence and support both sea control and power projection, which are at the core of the Navy's mission."

Rear Adm. James Downey, Special Assistant to the Assistant Secretary of the Navy for Research, Development, and Acquisition; the Honorable Mark O'Brien, Mayor of Augusta, Maine; and the Honorable Chris Gardner, Director of the Eastport Port Authority and Washington County Maine Commissioner. The ship's sponsor is the Honorable Leigh Saufley, President and Dean of University of Maine School of Law and former Chief Justice of the Maine Supreme Judicial Court.

"This ship, born of American aluminum, is a testament to the versatility, resolve, and unwavering spirit that have defined our nation from its very inception. The USS Augusta stands as a living embodiment of our shared commitment to safeguarding liberty, defending democracy, and preserving peace around the world," said Cmdr. Christopher Polnaszek, USS Augusta's commanding officer. "Augusta, Maine, a place steeped in tradition and history, has given rise to brave sons and daughters who have answered the call of duty time and again. From the early days of our nation's founding, through the trials of the Civil War, to the modern challenges of the 21st century, the people of Augusta have shown an indomitable spirit, unyielding in the face of adversity. As we commission this warship, we pay homage to that spirit. May it sail the seas as a testament to the enduring strength of the American spirit. Protecting the Frontier."

Augusta is the 17th Independence-variant LCS commissioned in the United States Navy, and the second U.S. Navy ship to bear this namesake.

Augusta (SSN-710), the first Naval vessel to be name for Maine's capitol, served from 1985 — 2009, taking part in Operations Enduring Freedom and Iraqi Freedom. Its sponsor was Mrs. Diana D. Cohen, wife of Senator William S. Cohen of Maine, who later served as the Secretary of Defense (1997–2001).

USS Manchester (LCS 14), USS Gabrielle Giffords (LCS 10), USS Mobile (LCS 26), and USS Oakland (LCS 24) are deployed to Commander, 7th Fleet area of operations under Destroyer Squadron 7. USS Jackson (LCS 6) is currently deployed and is supporting Pacific Partnership, the largest annual multinational humanitarian assistance and disaster relief preparedness mission conducted in the Indo-Pacific.

Independence-variant Littoral Combat Ships are fast, optimally

manned, mission-tailored surface combatants that operate in near-shore and open-ocean environments, winning against 21st-century coastal threats. LCS integrate with joint, combined, manned and unmanned teams to support forward presence, maritime security, sea control, and deterrence missions around the globe.

Independence-variant littoral combat ships (LCS) are built by Austal USA in Mobile, Alabama.

The mission of Commander, Naval Surface Force, U.S. Pacific Fleet is to man, train, and equip the Surface Force to provide fleet commanders with credible naval power to control the sea and project power ashore.

For more news from Naval Surface Forces, visit https://www.surfpac.navy.mil/.

For more news from Commander, Littoral Combat Ship Squadron One, visit https://www.surfpac.navy.mil/comlcsron1/ or follow on Facebook at www.facebook.com/COMLCSRONONE/

Raytheon and Texas A&M Establish Texas' First Laser Weapon Test Site



First high-energy laser demonstration in Texas takes down drone targets in flight at Texas A&M-RELLIS

BRYAN-COLLEGE STATION, Texas, Sept. 29, 2023 /PRNewswire-PRWeb/ — On Sept. 21 and 22, Raytheon, an RTX company, conducted an open-air test of an operational laser weapon on the Texas A&M-RELLIS campus at the George H.W. Bush Combat Development Complex (BCDC). Raytheon's high-energy lasers (HEL) are combat-ready weapons that use silent, invisible beams of light to destroy drone threats at great distances. The open-air test was the first such shot of a laser weapon in the State of Texas, creating a new capability to advance critical defense technologies.

"We are proud to collaborate with Raytheon on the latest technologies for national security," said John Sharp, chancellor of The Texas A&M University System. "This is another example of the world-changing impact that Texas A&M-RELLIS will have for generations to come."

"We see drone attacks having an out-sized impact in combat zones and even civilian settings, and they are extremely difficult to detect and defeat," said Michael Hofle, senior director of high energy lasers at Raytheon. "That's why we're making Texas a hub for solving these challenges, side-by-side with the Bush Combat Development Complex. Our combat-ready laser weapons are a cheat code against drones. So, having the ability to test our systems in our own backyard is a game changer for getting this technology into the hands of uniformed personnel quickly and affordably."

The 15-kilowatt laser weapon is the ninth Raytheon has produced in McKinney, Texas. Previous tests and demonstrations were conducted in other states where appropriate firing ranges already exist. With the successful test on the BCDC Innovation Proving Ground (IPG), Raytheon can now design, produce and test laser weapons in Texas.

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The Raytheon test is an example of how the BCDC will help various customers accelerate innovative research and development on behalf of national security. The complex's labs offer a wide array of capabilities for collaboration among the defense industry, universities, government and the tech sector.

A team of experts transported the laser weapon to the RELLIS campus for final adjustments, and the calibrations and tests performed on the laser weapon included tracking, targeting and destroying multiple drone targets while fine-tuning system parameters. The system will be shipped to the United Kingdom in October for final integration and delivery to the U.K. Ministry of Defense.

"When we met with Army Futures Command four years ago, they identified a need for our assistance in advancing their directed energy capabilities," said BCDC director Tim Green. "Texas A&M System leadership then worked with the 2019 Texas legislature and the Board of Regents to obtain a combined \$130 million toward the development of facilities here on Texas A&M-RELLIS, designed to accelerate the development of key national security technologies, including directed energy, at what is now known as BCDC. We are proud to bring together industry and academic experts, working closely together to provide a capability Texas needs to be a leader in delivering directed energy weapons to meet urgent military needs."

When Raytheon representatives visited BCDC in February 2023, the BCDC team anticipated the primary discussion topic would be related to directed energy testing inside the Ballistic, Aero-optic and Materials (BAM) range, which is scheduled for completion in Spring 2024, and ongoing research at the Texas A&M Aerospace Laboratory for Lasers, ElectroMagnetics and Optics (ALLEMO). Following a full overview and tour, Raytheon officials saw an opportunity to test both weapon systems and potential platforms using the IPG, and they inquired about the ability to conduct open-air shots on the IPG.

Dr. James Creel, a BCDC-directed energy senior research engineer, served as lead for the project.

"When Raytheon asked about our ability to perform live-fire tests, it did catch us off guard. But when we saw how much of a game changer this could be for the State of Texas and for our troops, we quickly established a team of experts from across the Texas A&M University System, and other state agencies like the Texas Department of State Health Services, (DSHS) to quickly develop the capability where that kind of test could be conducted safely here on the Texas A&M-RELLIS campus," said Creel. "We're proud of the way this team came together to provide this new capability, and we're excited to work with Raytheon to help them develop future capabilities."

BCDC is in the process of establishing a more formal relationship with Raytheon over the coming months.

"This type of HEL testing and evaluation was previously considered impossible within Texas. I am so thankful to have partners from Raytheon, other state agencies, and many system organizations working together to solve problems and create capabilities here that will help make us more secure and protect our military personnel," Green said. "Dr. Creel did a great job pulling together our system teammates from RELLIS administration, safety, the Texas A&M Experiment Station (TEES) and the IPG. Col. (U.S. Army, Ret) Brian McHugh's excellence at range operations was critical to winning state approval for the permit. I see this as the beginning of several emerging partnerships, and I'm honored to be a part of it."

Directed energy weapons are proving to be a critical need as the U.S. and partner nations work to develop counter-drone capabilities. Industry, government and academia are working diligently to deliver the technology to protect both our forces as well as the homeland.

Coast Guard delivering upgraded multi-mission helicopters to Air Station Detroit



Air Station Detroit

Sept. 29, 2023

MT. CLEMENS, Mich. — Coast Guard Air Station Detroit received its first upgraded MH-65E Dolphin helicopter Tuesday to replace the legacy MH-65D helicopters that support Coast Guard missions throughout the Great Lakes region.

The avionics upgrade to the "E" configuration provides enhanced search and rescue capabilities including modern "glass cockpit" technology that increases pilot and aircrew situational awareness and provides commonality with the service's MH-60T Jayhawk fleet.

The Dolphin upgrades also include reliability and capability improvements for the automatic flight control system, enhanced digital weather and surface radar, and multifunctional displays with more accurate fuel calculations.

The upgrades comply with the Federal Aviation Administration's

Next Generation Airspace Transportation System requirements and extend the aircraft service life to the late 2030s. The transition of Air Station Detroit's five MH-65D helicopters to the upgraded "E" configuration is expected to take approximately two months.

During the upgrade period, the unit's 23 pilots will undergo a three-week transition course at the Coast Guard's Aviation Training Center in Mobile, Ala. Aircrew and mechanics will receive formal training specific to their roles and duties delivered by a team from the Coast Guard's Aviation Technical Training Center in Elizabeth City, N.C.

"The upgrades and advanced training will enhance the situational awareness of our aircrews and improve our mission planning capabilities" said Cmdr. Christian Polyak, commanding officer of Air Station Detroit. "The replacement and inspection of key aircraft components as a part of the upgrade also extend the aircraft's service life and enable us to continue ensuring maritime safety, security and stewardship far into the future."

Air Station Detroit Dolphin helicopter crews perform search and rescue, maritime law enforcement and marine environmental protection, and provide aids to navigation and ice patrol support throughout the Great Lakes region. Air Station Detroit helicopters and aircrews also provide support to augment the North American Aerospace Defense Command's airspace security mission in Washington, D.C., and throughout the country as required for national security.

Each MH-65D undergoes a six-month conversion to the MH-65E at the Coast Guard's Aviation Logistics Center in Elizabeth City, N.C. Detroit is the 11th of 13 MH-65 Air Stations to receive the upgraded MH-65E. The Coast Guard plans to complete conversion of all 98 of its Dolphin helicopters to the MH-65E configuration by the end of 2024.

For more information visit the MH-65 Program page at SRR — MH-65 (uscg.mil).

Britain's Largest Warship HMS Prince Of Wales Makes Virginia Temporary Homeport During East Coast Deployment



The Royal British Navy's Queen Elizabeth-class aircraft carrier HMS Prince of Wales (R09) conducts an underway replenishment with the U.S. Navy's USNS Supply (T-A0E-6), Sept. 19, 2023. Prince of Wales is participating in a Western

Atlantic deployment off the East Coast. (U.S. Navy photo by Lt. j.g. Thomas McGowan)

Release from U.S. Fleet Forces Command, Sept. 29, 2023

NORFOLK, Va. — The United Kingdom's largest aircraft carrier, HMS Prince of Wales (R09), will make Naval Station Norfolk its temporary homeport this fall beginning Sept. 30 as it pushes the boundaries of Naval Aviation with F-35 Lightning advancement and drone launches off the East Coast over the next few months.

HMS Prince of Wales left for deployment in early September with a goal to further develop how the Royal Navy utilizes Carrier Strike Groups. After a visit to Mayport, Florida, the warship will be pushing the limits of their carrier, operating drones, strike fighters, tilt-rotors and helicopters from both the U.S. Navy and the U.S. Marine Corps.

Over the next few months the warship will specifically be pushing the boundaries of carrier landings for the U.K.'s fifth-generation jets, the F-35 Lightning stealth fighter.

Allowing the jets to land on the carrier faster and while carrying heavier loads (i.e. more fuel and weapons) will allow HMS Prince of Wales to launch more strike missions, faster.

The carrier will also practice launching and landing the F-35 in heavy sea states to demonstrate their ability to operate in harsh environments.

These sea states are why the HMS Prince of Wales is operating off the East Coast, to capitalize on the heavy seas that come with hurricane season in the United States.

Part of HMS Prince of Wales' deployment will include multiple port calls to Naval Station Norfolk this fall, where they will be hosted by Carrier Strike Group-10 and the Nimitiz-class aircraft carrier USS George H.W. Bush (CVN 77).

Sailors aboard HMS Prince of Wales will be able to tour Naval Station Norfolk and visit surrounding areas in the coming months.

USS Louisiana Proves Readiness of Unmatched Strategic Weapons System



An unarmed Trident II D5LE missile launches from the Ohioclass ballistic missile submarine USS Louisiana (SSBN 743), marking a successful Demonstration and Shakedown Operation-32 (DASO-32) off the coast of San Diego, California, Wednesday. The primary objective of a DASO is to evaluate and demonstrate

the readiness of the SSBN's Strategic Weapon System (SWS) and crew before operational deployment following the submarine's engineered refueling overhaul. DASO-32 is the last DASO conducted by an Ohio-class SSBN coming out of engineering refueling overhaul (ERO), marking the completion of all post-ERO DASOs for the Ohio-class SSBNs. The Trident II D5LE strategic weapon system is the system that will provide the initial SWS capability for the Columbia-class SSBN. (U.S. Navy Photo by Mass Communication Specialist 3rd Class Kevin Tang) Release from Strategic Systems Programs Office, Sept. 28, 2023

SAN DIEGO — The U.S. Navy's Strategic Systems Programs conducted a scheduled, missile test flight of an unarmed life-extended Trident II (D5LE) missile from USS Louisiana (SSBN-743), an Ohio-class ballistic missile submarine, on the Western Test Range off the coast of San Diego, California, at approximately 2:10 p.m. Sept. 27, 2023.

This test marks 191 successful missile launches of the Trident II (D5 & D5LE) strategic weapon system (SWS) missile since it began operations in 1989. Trident II missile remains unmatched in its reliability.

"I am immensely proud of the government-industry team," said VADM Johnny Wolfe, Jr., Director of Strategic Systems Programs. "The completion of DASO-32 marks an historic milestone in the life of the Trident II D5 weapons system, and provides the SSP team with a tangible reminder of the great responsibility before us—sustain this unmatched weapons system while developing the next generation strategic weapons system to ensure our nation's sea-based strategic deterrence capability through 2084."

This was part of a Demonstration and Shakedown Operation, designated DASO-32. DASO-32 is the last DASO conducted by an Ohio-class SSBN coming out of Engineering Refuel Overhaul (ERO). The primary objective of a DASO is to evaluate and

demonstrate the readiness of the SSBN's strategic weapon system and crew before operational deployment following the submarine's midlife refueling overhaul or as part of new construction.

The Trident II (D5) SWS is a highly accurate and reliable weapon system that has been actively deployed on Ohio-class SSBNs since its introduction to operational deployment on USS Tennessee (SSBN 734) in 1990. It is the deployed system for the remaining service life of U.S Ohio-class and United Kingdom Vanguard-class SSBNs, and is the initial loadout for the U.S. Columbia-class and U.K. Dreadnought-class SSBNs.

Test launches are conducted on a recurring basis to evaluate and ensure the continued reliability and accuracy of the strategic weapon system. Each test provides valuable information about our strategic weapon systems, thus contributing to assurance in our capabilities.

The Navy's last DASO was in October 2021 off the coast of Cape Canaveral, Florida, from USS WYOMING (SSBN-742). The Navy's most recent flight test—a Follow-on Commander's Evaluation Test—was a series of two missile launches from USS West Virginia (SSBN-736) in June 2023 also off the coast of Cape Canaveral, Florida.

Flight test missiles are not armed. Safety of the public and the crew conducting the mission is paramount. Today's launch was conducted from sea, the missile flew over the sea, and landed in the sea. At no time did the missile fly over land.

The missile test was not conducted in response to any ongoing world events or as a demonstration of power. Test launches, including DASOs, are scheduled years in advance.

Strategic Systems Programs is the Navy command that provides cradle-to-grave lifecycle support for the Navy's strategic weapon systems. This includes training, systems, equipment,

facilities and personnel responsible for ensuring the safety, security, and effectiveness of the nation's Submarine

Launched Ballistic Missile (SLBM) Trident II (D5LE) strategic weapon system. In addition to maintaining the current Trident II (D5LE) strategic weapons system, Strategic Systems Programs is looking towards the future. Nuclear modernization is crucial to the continued success of the U.S.'s sea based strategic deterrent. Strategic Systems Programs is developing the next generation strategic weapon system, and modernizing shore-based infrastructure and capabilities to sustain the Ohio-class to end of life and support Columbia-class fleet introduction.

SLBMs are the sea-based leg of the nation's strategic nuclear deterrent Triad that also includes the U.S. Air Force's intercontinental ballistic missiles (ICBM) and nuclear-capable bombers. Each part of the Triad provides unique capabilities and advantages.

The sea-based leg makes up the majority — approximately 70 percent — of the U.S.'s deployed strategic nuclear deterrent Triad. The SLBM is the most survivable leg of the triad, provides a persistent presence, and allows for flexible concepts of operations.

A credible, effective nuclear deterrent is essential to our national security and the security of U.S. allies. Deterrence remains a cornerstone of national security policy in the 21st century.

U.S. Coast Guard Cutter Confidence Returns Home Following 62-day Counternarcotics Patrol in the Caribbean Sea



Bales of illegal narcotics, worth an estimated \$160 million, are offloaded onto pallets by the U.S. Coast Guard Cutter Confidence (WMEC 619) crew, Sept. 19, 2023, at Coast Guard Base Miami Beach, Florida. Coast Guard and partner agency crews interdicted the illegal narcotics during nine separate cases in the international waters of the Caribbean Sea. (U.S. Coast Guard photo by Petty Officer 3rd Class Santiago Gomez) Release from U.S. Coast Guard Atlantic Area, Sept. 28, 2023

CAPE CANAVERAL, Fla. — The crew of the U.S. Coast Guard Cutter Confidence (WMEC 619) returned to their homeport in Cape Canaveral, Sept. 20, following a 62-day deployment to the Caribbean Sea.

From their homeport in eastern Florida, Confidence's crew sailed to the central Caribbean Sea and conducted a counternarcotics patrol with an embarked helicopter and aircrew from the Helicopter Interdiction Tactical Squadron while in support of Joint Interagency Task Force — South. While underway, Confidence worked with air and sea assets from partner agencies, allied militaries, and other Coast Guard units.

Confidence's crew conducted four separate drug cases within a span of four days and prosecuted an additional case while returning to homeport. In total, these five interdictions resulted in the apprehension of 15 suspected narco-traffickers and prevented the flow of over 6,000 pounds of illicit substances, valued at over \$85 million, from reaching the United States.

In addition to enforcing U.S. law at sea and supporting the Coast Guard's counterdrug mission, the crew of the Confidence also interdicted an unlawful migrant venture in the Mona Passage that originated from the Dominican Republic. While protecting the sovereign maritime borders of the U.S., the interdiction by Confidence resulted in the successful rescue of 42 migrants aboard the makeshift vessel, which was taking on water.

"I am extremely proud of the Confidence crew for their teamwork, devotion to duty and commitment to keeping the streets of the U.S. and our partner allies safe," said Cmdr. Thomas Martin, commanding officer of Coast Guard Cutter Confidence. "Members of all ranks showcased exceptional professionalism and perseverance over the course of this patrol, enabling our success. I also appreciate the

contributions of our DoD, DHS and international partners, making this patrol a success."

The seized drugs were later transferred in Miami to partner law enforcement agencies during Confidence's transit home.

Confidence's crew steamed over 9,000 miles while conducting training, law enforcement missions, search and rescue, and helicopter operations throughout the Caribbean Sea deployment.

Confidence is a 210-foot, Reliance-class medium-endurance cutter with a crew complement of 70. The cutter's primary missions are counter-drug operations, migrant interdiction, enforcement of federal fishery laws, and search and rescue in support of U.S. Coast Guard operations throughout the Western Hemisphere.

For information on how to join the U.S. Coast Guard, visit GoCoastGuard.com to learn about active duty, reserve, officer, and enlisted opportunities. Information on how to apply to the U.S. Coast Guard Academy can be found here.

Navy Orders cockpit, improvements aircraft

modernized architecture for E-2D



An E-2D Advanced Hawkeye, attached to the "Bear Aces" of Airborne Command and Control Squadron (VAW) 124, launches from the flight deck of the world's largest aircraft carrier USS Gerald R. Ford (CVN 78) in the Eastern Mediterranean Sea, Sept. 2 2023, during its scheduled deployment in the U.S. Naval Forces Europe area of operations.

Release from Naval Air Systems Command, Sep 28, 2023

NAVAL AIR SYSTEMS COMMAND, Patuxent River, Md. — The U.S. Navy awarded an \$845.5 million contract to Northrop Grumman Systems Corporation for the E-2D Delta System Software Configuration 6 (DSSC 6) on Sept. 12.

DSSC 6 is scheduled to be introduced in fiscal year 2027 and aims to add the "most significant change to this platform since the E-2D rolled out," said Capt. Pete Arrobio, E-2/C-2 Airborne Command and Control Systems Program Office (PMA-231) program manager.

"Essentially, with the changes and upgrades with DSSC 6, this

will be an E-2D 'Block II' which will reduce pilot workload, improve situational awareness, and bring vital readiness and reliability upgrades paired with architecture and cybersecurity improvements," said Arrobio.

DSSC 6 replaces the current integrated navigation and controls and display systems and tactical mission computer and display systems on <u>E-2D Advanced Hawkeye</u> aircraft with a modern Hawkeye cockpit technology refresh and theater combat identification that allows for rapid integration of new capabilities, including non-proprietary applications from industry partners.

Fielding of DSSC 6 in the fleet is scheduled to begin in 2029.

PMA-231's mission is to develop, acquire and sustain unmatched carrier-based airborne command, control, and logistics aircraft with the E-2C Hawkeye, E-2D Advanced Hawkeye and C-2A Greyhound.