First Steel Cut for Navy's Constellation-Class Frigate

An artist's conception of the future USS Constellation. *FINCANTIERI MARINETTE MARINE*

ARLINGTON, Va. – The construction of the U.S. Navy's next class of guided-missile frigates officially began Aug. 31 with the first steel for the ship cut in a small ceremony at the Fincantieri Marinette Marine Shipyard in Marinette, Wisconsin.

The future USS Constellation (FFG 62) will be the lead ship of a class of at least 20 frigates and is slated for delivery in 2026. The hull of the frigate will be based on the Italian FREMM-class frigate and will be equipped with proven weapons and combat systems.

"There is no doubt that the future USS Constellation and the 19 follow-on ships will bring an out-sized punch to surface warfare patrols with our cruisers, destroyers and littoral combat ships as well as with our allied and partner navies," said Tommy Ross, performing the duties of the assistant

secretary of the Navy for Research, Development and Acquisition, speaking to reporters in an Aug. 29 roundtable at the Pentagon. “We need the capabilities these ships will bring now, and we will need them for decades.”

Ross said the frigate program “reflects many hard lessons learned in proven shipbuilding practices, mature designs in combat systems such as Aegis Baseline 10 to modern life-cycle improvements like land-based testing, conditions-based maintenance, and a fully cyber-resilient architecture. The supporting infrastructure also is well developed.”

The production go-ahead was given by Capt. Kevin Smith, the FFG 62 program manager, after completion of the critical design review in May and the production readiness review in July, said Rear Adm. Casey Moton, program executive officer for Unmanned and Small Combatants.

“We’re excited to begin production,” Moton said.

The admiral said the FFG program strove to reduce risk by using a proven parent design for the hull and non-developmental systems and government program-of-record combat and C4I (command, control, communications, computers and intelligence) systems.

Ross said getting the first ship “up and going” and getting the builder’s shipyard “up in cadence” is step one in building the class of 20 frigates.

“We are in a good place to meet the requirements we have in coming years,” he said.

The Navy has the option of building more than the current program of 20 frigates but is not ready to move on that option, which Moton said would depend on requirements, industrial capacity, and the budget topline.

The admiral stressed that the FFG 62 program is a team effort

of the PEO, Fincantieri Marinette Marine, and Gibbs & Cox, which produced the 3D model digital design of the ship. He said the design team met and exceeded the goal of 80% completion at construction start.

The Constellation will be a multi-mission warship that Ross said “gives commanders a lot more options.”

Three Constellation-class FFGs — Constellation (FFG 62), Congress (FFG 63), and Chesapeake (FFG 64) currently are on order. In June, the Navy exercised a contract option to order FFG 64. Marinette Marine is now under contract for those first three FFGs with options for seven more.

Although based on the FREMM frigate, the Constellation will have a longer hull and features modified to meet U.S. Navy standards on reliability, survivability, maintainability, habitability and lethality. The 496-foot-long steel ship will displace 7,300 tons and have a beam of 64.6 feet and a draft of 18 feet. It will be powered by a combination diesel electric and gas turbine propulsion system.

The FFG will feature a Mk41 Vertical Launching System, canister-launched Naval Strike Missiles, Mk110 57 mm gun, RAM Mk49 launcher, CAPTAS-4 variable-depth sonar, TB-37 Multi-Function Towed Array, SQQ-89(V)16 undersea combat system, SLQ-25E Nixie, SLQ-32(V)6 SEWIP Block 2, SPY-6(V)3 FFG Radar, Aegis Baseline 10 combat system, one MH-60R helicopter, one MQ-8C unmanned aerial vehicle, and two 7-meter rigid-hull inflatable boats. Delivery of Constellation is anticipated for 2026.

Smith said the ship was equipped to operate two MH-60Rs or two MQ-8C unmanned aerial vehicles if needed.

The CAPTAS-4 variable-depth sonar (VDS) was selected to replace the Raytheon DART VDS, which was developed for the littoral combat ship’s anti-submarine warfare mission package and which Moton said had some “technical challenges

principally in hydrodynamics and transducers."

Moton made the VDS decision in concert with the shipbuilder and noted the CAPTAS-4 was "pretty close in cost" with the DART VDS.

George H.W. Bush CSG Relieves Harry S. Truman CSG in U.S. 6th Fleet

The Nimitz-class aircraft carrier USS George H.W. Bush (CVN 77), bottom, operates with the Nimitz-class aircraft carrier USS Harry S. Truman (CVN 75), Aug. 27. *U.S. NAVY / Mass Communication Specialist Seaman Samuel Wagner*

IONIAN SEA – The George H.W. Bush Carrier Strike Group (GHWBCSG) relieved the Harry S. Truman CSG (HSTCSG) in the Ionian Sea, Aug. 27, Carrier Strike Group 10 and CSG 8 Public Affairs said Aug. 31.

The relief marked the presence of two U.S. Navy aircraft carriers operating with one another in the Mediterranean, as well as GHWBCSG's official assumption of Commander, Task Force 60 responsibilities in the U.S. 6th Fleet area of operations. HSTCSG's transit through the Strait of Gibraltar on Aug. 30 followed the dual carrier operations.

"We have the watch," said Rear Adm. Dennis Velez, commander, GHWBCSG, Carrier Strike Group 10. "The Truman and Bush Strike Groups represent a force that only a U.S. Navy carrier strike group can provide combatant commanders. The Truman Strike Group executed the mission, reassured our partners and allies, and gave our diplomats opportunities to negotiate from a position of strength. They served our nation and the region well. We are proud of our teammates and wish them well on their return to friends and family."

Velez and Rear Adm. Paul Spedero, Jr., commander, HSTCSG, CSG-8, met aboard USS George H.W. Bush (CVN 77) to discuss regional maritime security, task force operations, and building relationships with NATO allies to strengthen deterrence and defense efforts.

"This has been a meaningful deployment for our strike group," said Spedero. "We demonstrated our Navy's resounding commitment to the NATO Alliance and to our partners in the region. Our Sailors set the stage for future operations and I look forward to seeing what the Bush's strike group will accomplish during their deployment."

The GHWBCSG will work alongside the joint force, partners and allies throughout the region while in the Naval Forces Europe, Naval Forces Africa, U.S. 6th Fleet area of operations.

While operating together the CSGs conducted a face-to-face turnover between commanders and transferred ammunition. Additionally, the strike group teams worked together to create a unique opportunity for family members embarked on either carrier to spend quality time with one another aboard George H.W. Bush.

The GHWBCSG is an integrated combat weapons system that delivers superior combat capability to deter, and if necessary, defeat America's adversaries in support of national security. GHWBCSG's major command elements are USS. George H.W. Bush (CVN 77), Carrier Air Wing 7, Destroyer Squadron 26, the Ticonderoga-class guided-missile cruiser USS Leyte Gulf (CG 55), and the Information Warfare Commander.

The ships of DESRON 26 within the GHWBCSG are USS Nitze (DDG 94), USS Truxtun (DDG 103), USS Farragut (DDG 99), and USS Delbert D. Black (DDG 119).

The squadrons of CVW-7 embarked aboard George H.W. Bush are the "Jolly Rogers" of Strike Fighter Squadron (VFA) 103, the "Pukin Dogs" of VFA-143, the "Bluetails" of Carrier Airbone Early Warning Squadron (VAW) 121, the "Nightdippers" of Helicopter Sea Combat Squadron (HSC) 5, the "Sidewinders" of VFA-86, the "Nighthawks" of VFA-136, the "Patriots" of Electronic Attack Squadron (VAQ) 140, and the "Grandmasters" of Helicopter Maritime Strike Squadron (HSM) 46.

Truman serves as the flagship of the HSTCSG and is commanded by Capt. Gavin Duff. Additional units include the nine squadrons of Carrier Air Wing (CVW) 1, commanded by Capt. Patrick Hourigan, to include Strike Fighter Squadron (VFA) 11 "Red Rippers;" VFA-211 "Fighting Checkmates;" VFA-34 "Blue Blasters;" VFA-81 "Sunliners;" Electronic Attack Squadron (VAQ) 137 "Rooks;" Carrier Airborne Early Warning Squadron (VAW) 126 "Seahawks;" Helicopter Sea Combat Squadron (HSC) 11 "Dragon Slayers;" Helicopter Maritime Strike Squadron (HSM)72 "Proud Warriors;" and a detachment from Fleet Logistics

Support Squadron (VRC) 40 “Rawhides.”

The staff and guided-missile destroyers of Destroyer Squadron 28 commanded by Capt. Blair Guy have included USS Cole (DDG 67) USS Bainbridge (DDG 96), USS Gravely (DDG 107), USS Jason Dunham (DDG 109), and USS Forrest Sherman (DDG 98). The strike group also consists of the Ticonderoga class guided-missile cruiser USS San Jacinto (CG 56), commanded by Capt. Christopher Marvin.

Coast Guard Cutter Midgett Arrives in the Western Pacific

U.S. Coast Guard Capt. Willie Carmichael, commanding officer

of U.S. Coast Guard Cutter Midgett (WMSL 757), salutes members of the Philippine Coast Guard after the cutter moored in Manila, Philippines, Aug. 30. *U.S. COAST GUARD / Chief Petty Officer Matt Masaschi*

MANILA, Philippines – The U.S. Coast Guard Cutter Midgett (WMSL 757) arrived in Manila Aug. 30 for its first international port call during the crew's months-long Western Pacific deployment to the region, the Coast Guard Pacific Area said Aug. 31.

Midgett's crew will conduct professional exchanges and operate with the Philippine Coast Guard as part of an at-sea search-and-rescue exercise while in Manila, building upon the strong partnership between the two nations.

Midgett is operating in support of United States Indo-Pacific Command, which oversees military operations in the region.

Operating under the tactical control of Commander, U.S. 7th Fleet, the cutter's crew plans to engage in professional and subject matter expert exchanges with regional partners and allies and will patrol and operate as directed during their Western Pacific deployment.

The Coast Guard provides expertise within the mission sets of search and rescue; illegal, unreported and unregulated fishing; maritime environmental response; maritime security; maritime domain awareness; aviation operations; interoperability; and humanitarian assistance and disaster relief.

"Engaging with our Philippine Coast Guard partners is truly an honor," said U.S. Coast Guard Capt. Willie Carmichael, commanding officer of the Midgett. "Together we will continue to build strong relationships and learn from each other. Our deep-rooted partnership will combine the best of both our Coast Guards and the planned search-and-rescue exercise and

professional exchanges are a great opportunity for us keep the Indo-Pacific region open and free.”

Commissioned in 2019, Midgett is one of two Coast Guard legend-class national security cutters homeported in Honolulu. National security cutters are 418 feet long, 54 feet wide and have a 4,600 long-ton displacement. They have a top speed in excess of 28 knots, a range of 12,000 nautical miles, endurance of up to 90 days and can hold a crew of up to 170.

NAVAIR Orders 12 More MH-60R Helicopters for Australia

Boatswain’s Mate Seaman Maria Torres signals to an MH-60R Sea Hawk helicopter attached to Helicopter Maritime Strike Squadron (HSM) 48, during flight operations aboard the guided-missile destroyer USS Nitze (DDG 94) in the Gulf of Aden Aug. 30. *U.S. NAVY / Mass Communication Specialist 2nd Class Cryton Vandiesal*

ARLINGTON, Va. — The U.S. Navy has placed on order to Lockheed Martin to procure 12 more MH-60R Seahawk helicopters for the Australian government.

The Naval Air Systems Command has awarded Lockheed Martin Corp. a $503.7 million firm-fixed-price order for the production and delivery of the 12 MH-60Rs for the Commonwealth of Australia, an Aug. 29 Defense Department contract announcement said. Work on the order is expected to be completed by October 2026.

The sale was approved in October 2021 by the U.S. State Department. The entire sale, including the helicopters,

engines, mission systems, guns, spare parts, technical documentation, logistics support and other items was then estimated to total $985 million.

Australia previously ordered 24 MH-60Rs, the last of which was delivered to the Royal Australian Navy in July 2016. One of these was lost in a mishap in the Philippine Sea in October 2021.

The Royal Australian Navy uses its MH-60Rs to perform anti-surface, antisubmarine warfare vertical replenishment, search and rescue, and communications relay missions.

In addition to the U.S. and Australian navies, the MH-60R is operated by or on order for the Royal Danish Air Force, the Royal Saudi Navy, the Republic of Korea Navy, the Indian Navy and the Hellenic Navy.

Austal USA and Saildrone Announce Strategic Partnership to Build USVs

A Saildrone Surveyor outside the company's headquarters in Alameda, California. *SAILDRONE*

MOBILE, Ala. — Austal USA and Saildrone Inc. announced Aug. 30 a strategic partnership to build cutting-edge, autonomous uncrewed surface vehicles.

This new partnership combines Saildrone's uncrewed surface vehicle technology with Austal USA's advanced manufacturing capabilities. The partnership provides the U.S. Navy and other government customers a cutting-edge solution for maritime domain awareness, hydrographic survey, and other missions requiring persistent wide area coverage.

The partnership ensures that production of the Saildrone Surveyor will accelerate to meet the rapidly growing demand for the ground-breaking technology. The Surveyor was developed and designed by Saildrone and will be manufactured exclusively by Austal USA in Mobile, Alabama.

The Saildrone Surveyor, at 65 feet (20 meters) in length, is designed specifically for deep ocean mapping and intelligence, surveillance and reconnaissance applications, both above and below the surface. As with all Saildrone vehicles, the Surveyor is autonomous and uncrewed, offering extreme

endurance, reliability and cost-effective operations. With its industry-leading expertise in aluminum shipbuilding, Austal USA is uniquely equipped to fabricate the Surveyor’s aluminum hulls and ensure rapid delivery to the fleet.

“We are extremely pleased to enter into this agreement with Saildrone. It is a great fit as both of us are leaders in our respective markets and we both strive to provide leading edge solutions to the U.S. Navy,” said Austal USA President Rusty Murdaugh. “With our lean manufacturing techniques and serial production capabilities, Austal USA will provide large scale fabrication of these vehicles and with our partner Saildrone rapidly get the capability to the Fleet.”

Austal will begin manufacturing the first Saildrone Surveyor vehicles for the U.S. Navy in October 2022.

U.S. Navy Foils Iranian Attempt to Capture Unmanned Vessel in Arabian Gulf

Screenshot of a video showing support ship Shahid Baziar, left, from Iran's Islamic Revolutionary Guard Corps Navy unlawfully towing a Saildrone Explorer unmanned surface vessel in international waters of the Arabian Gulf, Aug. 30. *U.S. NAVY*

MANAMA, Bahrain – The U.S. Navy prevented a support ship from Iran's Islamic Revolutionary Guard Corps Navy (IRGCN) from capturing an unmanned surface vessel operated by the U.S. 5th Fleet in the Arabian Gulf, Aug. 29-30, U.S. Naval Forces Central Command Public Affairs said in a release.

While transiting international waters around 11 p.m. (local time), Aug. 29, U.S. 5th Fleet observed IRGCN support ship Shahid Baziar towing a Saildrone Explorer unmanned surface vessel in an attempt to detain it. U.S. Navy patrol coastal ship USS Thunderbolt (PC 12) was operating nearby and immediately responded. U.S. 5th Fleet also launched an MH-60S Sea Hawk from Helicopter Sea Combat Squadron 26, based in Bahrain.

The actions taken by U.S. naval forces in response resulted in

the IRGCN vessel disconnecting the towing line to the USV and departing the area approximately four hours later. The U.S. Navy resumed operations without further incident.

“IRGCN’s actions were flagrant, unwarranted and inconsistent with the behavior of a professional maritime force,” said Vice Adm. Brad Cooper, commander of U.S. Naval Forces Central Command, U.S. 5th Fleet and Combined Maritime Forces. “U.S. naval forces remain vigilant and will continue to fly, sail and operate anywhere international law allows while promoting rules-based international order throughout the region.”

The Saildrone Explorer USV the IRGCN attempted to confiscate is U.S. government property and equipped with sensors, radars and cameras for navigation and data collection. This technology is available commercially and does not store sensitive or classified information.

U.S. 5th Fleet operates a network of manned and unmanned systems in accordance with international law. The integration of unmanned systems and artificial intelligence into fleet operations enhances maritime vigilance for U.S. forces and international partners in waters across the Middle East.

Ingalls Shipbuilding Awarded DDG 1002 Combat Systems Availability Contract

HII’s Ingalls Shipbuilding division will begin combat systems availability for the Zumwalt-class destroyer Lyndon B. Johnson. *HII*

PASCAGOULA, Miss. – HII’s Ingalls Shipbuilding division has been awarded a contract from the U.S. Navy to begin the combat systems availability for the Zumwalt-class destroyer, Lyndon B. Johnson (DDG 1002), the company said Aug. 29.

During this availability, Ingalls will complete the installation, activation and testing of the combat systems to ensure a fully functional system is ready to operate in the Navy fleet, as part of the Navy’s phased delivery approach.

“HII is excited to support our Navy colleagues in bringing this new capability to the fleet,” Ingalls Shipbuilding President Kari Wilkinson said. “As a dedicated partner in the construction and system activation of Navy destroyers, Ingalls is eager to leverage our shipbuilders’ expertise and modernized facilities in supporting the Navy’s future generation systems and platforms.”

The $41.6 million cost-incentive-fee contract allows Ingalls to begin program management, labor, materials and facilities to accomplish industrial efforts and fleet industrial efforts to support the ship’s combat system.

The DDG 1002 features a state-of-the-art electric propulsion system, wave-piercing tumblehome hull, stealth design and is equipped with the most advanced warfighting technology and weaponry. This ship will be capable of performing a range of deterrence, power projection, sea control, and command and control missions while allowing Navy to evolve with new systems and missions.

DRS Delivers Advanced Electric Propulsion Equipment for Lead Columbia-Class Submarine

An artist’s rendering of the future Columbia-class ballistic missile submarines. *U.S. NAVY*

ARLINGTON, Va. – Leonardo DRS Inc. has successfully completed factory acceptance testing and shipment of the first production unit of the main propulsion motor for the U.S. Navy’s new Columbia-class submarine, the company announced Aug. 30. The motor was recently shipped to General Dynamics Electric Boat for integration into the lead ship of the class.

DRS was chosen by Electric Boat and the U.S. Navy to design and manufacture the major Columbia Electric Drive Propulsion system components including the main propulsion electric motor. All prototype components of this system successfully completed full power endurance and other testing at the Navy’s land-based test facility in 2020, where operational testing continues. In addition to the main propulsion motor, other lead ship components are being manufactured and are also preparing to ship to Electric Boat.

The Columbia class program goal is to design and build a class of 12 new ballistic missile submarines to replace the U.S. Navy's current force of Ohio class SSBNs. The Navy has identified the Columbia-class program as its top priority program. The Columbia-class submarines will be larger than the current class in terms of submerged displacement and will become the largest submarine ever built by the United States.

The DRS Naval Power Systems business was awarded contracts for the electric propulsion system components which included design, test, qualification, and production of the full-scale components for both a land-based test facility and first two ships of the class. Over the past several years, the Navy has completed successful land-based tests of DRS' electric propulsion components. With significant testing completed, the program is transitioning to production with DRS presently manufacturing the components for the first two ships of the Columbia Class.

"We are proud to play a key role in developing and providing this capability for the U.S. Navy on this critical national defense asset," said Jon Miller, senior vice president and general manager of the DRS Naval Power business. "Our long history of providing innovative technology to the U.S. Navy and continuing this work for Electric Boat ensures our Sailors will be defending this country with the most advanced submarine in the world."

AeroVironment Introduces

Mantis i23 D Imaging Payload

AeroVironment’s new Mantis i23 D multi-sensor daytime imaging payload. *AEROVIRONMENT*

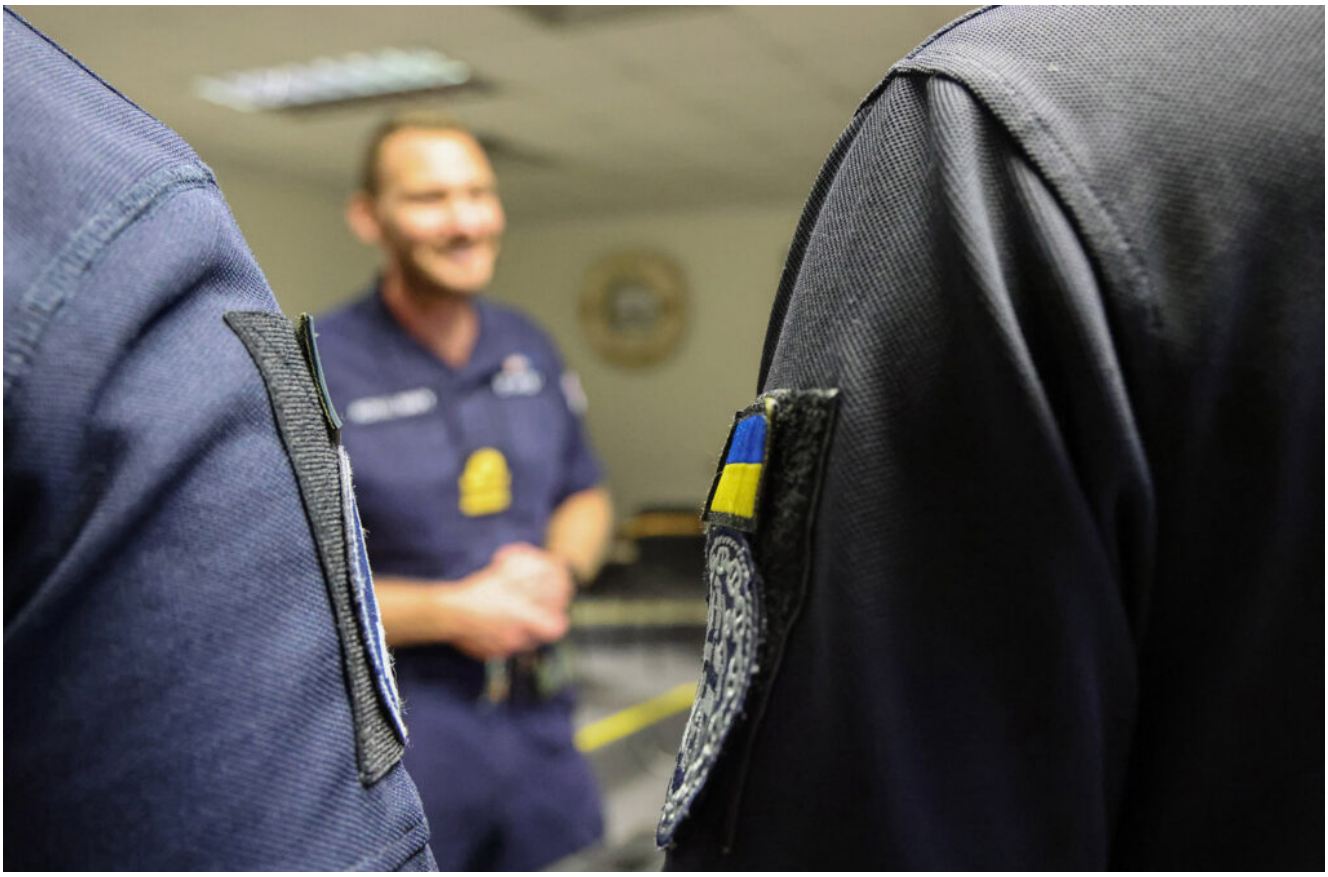
ARLINGTON, Va. — AeroVironment Inc. introduced Mantis i23 D, a multi-sensor daytime imaging payload compatible with the Raven B small unmanned aircraft systems, the company said Aug. 30.

An enhanced daylight variant of its predecessor, the Mantis i23, Mantis i23 D maintains its ruggedized design and uses the same modular interface to allow for quick and simple swapping between payloads with no software updates required to the avionics or ground control systems.

At 13.4 ounces (380 grams), the imaging system features dual 18 megapixel electro-optical sensors and 24X digital zoom, providing four times improved target detection over the current Mantis i23 payload during daytime missions. Through its advanced suite of sensors, extended zoom capability, onboard processing and digital imaging stabilization, the Mantis i23 D payload allows operators to increase aircraft standoff distance without compromising image quality.

“With the introduction of the next-generation Mantis payload, we have expanded the capabilities and adoption of the combat-proven Raven SUAS,” said Charles Dean, AeroVironment vice president of global business development, sales and marketing. “Customers can now operate their Raven systems at a greater standoff distance than before, enabling eyes-on-target from several kilometers away and reducing the risk of the target detecting or hearing the SUAS overhead.”

UK Donating Undersea Minehunter Drones to Help Ukraine Clear Coastline



Ukrainian navy divers in the classroom learning how to use an unmanned underwater vehicle. *U.K. ROYAL NAVY*

LONDON — Dozens of Ukrainian personnel will be taught to use the autonomous mine-hunting vehicles by the U.K. Royal Navy and its U.S. partners over the coming months, the U.K. Ministry of Defence said in an Aug. 26 release.

The U.K. is giving unmanned underwater vehicles to Ukraine and training Ukrainian personnel in Britain to use them to clear their coastline of mines.

Six autonomous minehunting vehicles will be sent to the country to help detect Russian mines in the waters off its coast. Three of these will be provided from U.K. stocks, with a further three to be purchased from industry.

The lightweight autonomous vehicle is designed for use in shallow coastal environments, operating effectively at depths of up to 100 meters to detect, locate and identify mines using an array of sensors so the Ukrainian navy can destroy them.

Dozens of Ukrainian navy personnel will be taught to use the drones over the coming months, with the first tranche having already begun their training.

Russia has been weaponizing food by destroying Ukrainian agriculture and blockading the country’s Black Sea ports to prevent exports, with devastating consequences for the world’s poorest people as food prices rise.

A Ukrainian sailor operates a Royal Navy-provided UUV. *U.K. ROYAL NAVY*

A small number of ships carrying grain have left Ukraine since the United Nations brokered a deal in July to allow food exports, but efforts to get food out of the country continue to be hampered by sea mines left by Russian forces along Ukraine's coast.

"Russia's cynical attempts to hold the world's food supply to ransom must not be allowed to succeed," said Defence Secretary Ben Wallace. "This vital equipment and training will help Ukraine make their waters safe, helping to smooth the flow of grain to the rest of the world and supporting the armed forces of Ukraine as they look to defend their coastline and ports."

The Royal Navy's Diving & Threat Exploitation Group will conduct the three-week training courses, alongside the U.S. Navy's 6th Fleet. Having considerable experience using the equipment already they will conduct training at sea to operate the vessels and interpret the data they send back to identify mock mines.

“Through the expert skills being taught here, our Ukrainian allies will be able to clear their own waters of mines,” said Adm. Sir Ben Key, First Sea Lord and chief of the Naval Staff. “These weapons target shipping indiscriminately, but particularly affect civilian traffic and trade and have had a devastating impact on freedom of navigation in the Black Sea. This training is another powerful demonstration of the UK’s ongoing commitment to Ukraine in their fight to defend their country and repel Russian aggression.”