Department of the Navy awards Navy Enterprise Resource Planning Technical Support Services Task Order

ARLINGTON, Va. – The Naval Information Warfare Systems Command (NAVWAR) awarded the Navy Enterprise Resource Planning (ERP) Technical Support Services (NETSS) task order Friday on behalf of the Program Executive Office for Manpower, Logistics and Business Solutions' (PEO MLB) Navy Enterprise Business Solutions (Navy EBS) program management office, the PEO MLB said in an April 24 release.

NETSS is the lead system integrator contract for Navy ERP, the Department of the Navy's (DON) financial system of record, managing nearly 56% of the Navy's total obligation authority. To date, Navy ERP has been deployed to 72,000 users across six Navy systems commands.

A SeaPort-NxG Multiple Award Contract (MAC) task order, NETSS was awarded to International Business Machines (IBM) headquartered in Armonk, New York. The task order period of performance is a 12-month base and four 12-month options, as well as a single option to extend the term of the task order for six months. The total task order value is approximately $850 million.

"The award of NETSS is a major milestone in the continued maturation of Navy ERP's capabilities," said Edward Quick, program manager for Navy EBS. "The services provided by the NETSS task order will enable the continued migration of new commands to Navy ERP, a move that will facilitate the Navy's ability to conduct a clean financial audit."

In the last year, Navy EBS has consolidated and migrated seven

DON commands and the Office of the Secretary of the Navy with a budget authority of $8 billion from their legacy financial systems to Navy ERP. This effort also included migrating and validating more than 4 billion transactions to Navy ERP, providing a more complete and audit-ready financial management system.

“The recent strides the Navy has made in migrating commands to Navy ERP and the award of NETSS is a testament to the strong partnership and collaboration between PEO MLB and the Assistant Secretary of the Navy for Financial Management and Comptroller [ASN(FM&C)],” said Les Hubbard, program executive officer for MLB. “Together, we are enabling the business of the Navy.”

The NETSS task order includes Information Technology (IT), Information Management (IM), large scale Systems Integration (SI) and Information Systems (IS) mission support activities. The NETSS vendor will provide services to upgrade and support Navy ERP’s capabilities including business intelligence, logistics, development, deployment and sustainment. NETSS services include data governance and analysis, business process re-engineering and management, software design and developing, and business system integration. Additionally, NETSS include process management, solution delivery and data services, which support current and future Department of Defense and DON requirements in the areas of enterprise information management services, solution engineering services, business process management services, analytics and decision support services and knowledge transfer.

The NETSS Fair Opportunity Proposal Request (FOPR) solicitation was released to all SeaPort-NxG MAC holders on Dec. 23, 2020 and proposals were due on Jan. 27, 2021.

Prior to the award of NETSS, Navy ERP’s system integrator support was provided by multiple companies via the Process Improvement, Reengineering, Management and Data Support

Services (PIRMDS2) Indefinite Delivery, Indefinite Quantity (IDIQ) MAC issued in 2016 to multiple contractors by Naval Supply Systems Command (NAVSUP) Fleet Logistics Center Norfolk.

Gerald R. Ford Successfully Completes Combat Systems Ship’s Qualification Trials

An evolved sea sparrow missile (ESSM) launches from one of USS Gerald R. Ford’s (CVN 78) weapons sponsons during combat

systems ship qualification trials (CSSQT), April 16, 2021. CSSQT is a Naval Sea Systems Command requirement to verify that ship personnel can operate and maintain their combat systems in a safe and effective manner. Ford is underway in the Atlantic Ocean conducting its final independent steaming event of post-delivery tests and trials. *U.S. NAVY / Mass Communication Specialist 3rd Class Zachary Melvin*
ATLANTIC OCEAN – Sailors aboard the aircraft carrier USS Gerald R. Ford (CVN 78) successfully completed Combat Systems Ship's Qualification Trials (CSSQT) April 17, representing a major milestone in validating the ship's capability to defend itself and the crew, the ship's public affairs officer said in an April 24 release.

The trials, which commenced in February, consisted of five phases. The completion of the final phase, 2C, and CSSQT overall, is the culmination of years of planning, training, ingenuity and thousands of working hours for the ship's current and previous crews.

"I could not be more proud of our Sailors and their historic accomplishment," said Capt. Paul Lanzilotta, Ford's commanding officer. "CSSQT was a live-fire, hands-on opportunity to prove the self-defense capability of this fine warship. We always intend to use our embarked air wing to influence our adversaries at great ranges from the ship, but if they're able to get a shot at us, this event has shown our crew the formidable nature of our organic weapons."

According to ship's CSSQT project officer, Larry Daugherty, phase 2C was the "prove it" phase for the ship, which had already completed multiple detect-to-engage scenarios with live aircraft. In 2C, Ford faced off against rocket propelled drones capable of speeds in excess of 600 miles per hour; towed drone units (TDUs) that simulate rockets; and remote controlled, high-speed maneuvering surface targets (HSMST).

The crew countered, relying on their skills and training to operate Ford's advanced defense systems. They used the rolling

airframe missile (RAM) launchers, firing off RIM-116 missiles; the NATO launchers to fire the evolved sea sparrow missiles (ESSM); and the Mk-15 Phalanx Close-In Weapon System (CIWS) to fire armor-piercing tungsten bullets at 4,500 rounds per minute.

“The crew crushed it, firing off four missiles [two RIM-116 and two ESSM], and all of them were conducted with precision control by combat direction center (CDC) watch teams, they executed perfectly,” said Daugherty. “All command and control decisions were made correctly, and the [systems] were engaged when they were supposed to be engaged and everything went out on time.”

The ship’s defense missiles engaged the drones and CIWS took out the TDUs and HSMSTs. All three TDUs were destroyed, and two of those TDUs were ripped to shreds, according to Daugherty. All three HSMSTs were destroyed as well.

“Those Sailors not only took out the first two HSMSTs, they punched holes in them, set them on fire, and they both sank,” said Daugherty. “On the third one, the CIWS operator was so good that he actually hit the target further out than the weapon system’s maximum effective range and put it DIW [dead in the water].”

As the first crew to fire Ford’s missiles and complete this mission, it is a huge accomplishment, according to Chief Warrant Officer 2 Todd Williamson, Ford’s fire control officer, and it began with the on-load of the missiles.

“Getting missiles transported and loaded onto a ship is a big movement that requires national coordination between multiple entities,” said Williamson. “The ship’s fire controlmen and Weapons Department were the backbone of the handling evolution, while Ford’s Aviation Intermediate Maintenance Department provided material handling equipment readiness support. Our ISEA [In-Service Engineering Agents] were also

on-hand to provide oversight.”

The first few days of the nearly week-long exercises for 2C were some of the most challenging, according to Williamson. “For Weapons Department and Combat Systems Department, it was two 18-hour back-to-back days just to get set-up and complete telemetry checks,” he said.

The telemetry checks provide the capability to record the flight performance characteristics and fusing of RAM and ESSM missiles to ensure they are capable of hitting their intended targets, according to Daugherty.

There were other system checks, system and equipment tuning, ordnance uploads, preventative maintenance checks and casualty repairs, which collectively made for an extremely complex series of exercises. According to Fire Controlman 2nd Class Douglas Huyge, who has been aboard Ford for two years, his team was up for the challenge.

“I am 100% impressed with the way the division worked together to achieve this goal,” said Huyge. “People who are in leadership positions dream of dream-teams like this, we worked hard to get here and we executed the mission.”

CSSQT is the culminating combat systems test of Ford’s 18-month post-delivery test and trials (PDT&T) phase of operations. Following PDT&T this month, Ford will commence preparations for Full Ship Shock Trials, scheduled to occur during the summer, to validate the ability of new construction ships to carry out assigned missions and evaluate operational survivability after exposure to an underwater shock.

“[CSSQT] was probably the single-handed greatest feeling I’ve felt on this ship so far,” said Huyge, describing how he felt watching the live-fire evolution in CDC, after many years of hard work. “I would say what I felt was fulfillment. It was a high level of fulfillment.”

USS Gerald R. Ford is a first-in-class aircraft carrier, and the first new aircraft carrier designed in more than 40 years. The ship is underway for Independent Steaming Event 18 (ISE 18), as part of her PDT&T phase of operations.

Coast Guard Decommissions Service's Final High-Endurance Cutter

Coast Guard Commandant Adm. Karl L. Schultz, Vice Adm. Linda Fagan, and Capt. Riley Gatewood, hold a pennant during the Coast Guard Cutter Douglas Munro (WHEC 724) decommissioning ceremony in Kodiak, Alaska, on April 24, 2021. In 1998, the cutter interdicted over 11.5 tons of cocaine on a Mexican flagged vessel, the Xolesuientle, to this day one of the

largest single drug seizures in Coast Guard history. *COAST GUARD / Petty Officer 3rd Class Janessa Warschkow*
KODIAK, Alaska – The Coast Guard Cutter Douglas Munro (WHEC 724) was decommissioned during a ceremony Saturday at Coast Guard Base Kodiak and presided over by Coast Guard Commandant Adm. Karl Schultz, the Coast Guard Pacific Area said in an April 24 release.

The Douglas Munro was the Coast Guard's last remaining 378-foot Hamilton-class high-endurance cutter. The fleet of high-endurance cutters is being replaced by 418-foot Legend-class national security cutters, which serve as the Coast Guard's primary long-range asset.

Commissioned in 1971, Douglas Munro was the tenth of 12 high-endurance cutters built for long-range, high-endurance missions, including maritime security roles, drug interdiction, illegal migrant interception and fisheries patrols.

The cutter was named after Signalman 1st Class Douglas Albert Munro, who was awarded the Medal of Honor for acts of extraordinary heroism during World War II.

Munro was the officer-in-charge of an eight-craft amphibious landing force during the Guadalcanal Campaign and used his landing craft and its .30 caliber machine gun to shield and protect several hundred Marines who were under heavy enemy fire. He was mortally wounded during this effort, but his actions allowed for the Marines to be extracted by other landing craft. For these actions Munro was posthumously bestowed the Medal of Honor, making him the only person to receive the medal for actions performed during service in the Coast Guard.

"Today we say thank you and goodbye to the end of an era – an era of nearly 50 years when high endurance cutters took our

service's racing stripe around the globe, modeling the maritime rules-based order," said Schultz during the ceremony. "Today we say thank you and goodbye to cutter Douglas Munro – the first cutter to be named after Coast Guard hero – Signalman First Class Douglas Munro."

Over the past 49-years of distinguished service, Douglas Munro's crews have served in a multitude of domestic and international theaters including the Bering Sea and Gulf of Alaska, Persian Gulf and Horn of Africa, and Southeast Asia and the Eastern Pacific. The cutters proud legacy of honorable service to the nation began in the early 1970s patrolling Ocean Stations Delta, Bravo and November, providing weather data to trans-Pacific flights, supporting oceanographic research missions and performing search-and-rescue operations.

The crew of Douglas Munro also patrolled the Pacific for decades as an enforcer of fisheries regulations. In 1998, Douglas Munro's crew discovered and seized over 11.5 tons of cocaine from a Mexican flagged vessel, the Xolesuientle, in what remains to this day one of the largest single drug seizures in Coast Guard history. The following year, Douglas Munro's crew seized the motor vessel Wing Fung Lung, which was attempting to transport 259 illegal Chinese migrants to the United States.

In early 2005, at the beginning of a six-month, 37,000 mile global circumnavigation that included support to Operations Iraqi Freedom and Enduring Freedom, the crew of Douglas Munro was diverted to render assistance to countries affected by the Indian Ocean tsunami on December 26, 2004.

The legacy of Douglas Munro was epitomized on March 23, 2008 when the cutter's crew and their embarked MH-65 Aviation Detachment worked with a forward deployed Air Station Kodiak MH-60 helicopter crew to recover 20 survivors from the

fishing vessel Alaska Ranger that sank in the Bering Sea early that morning. The 17th Coast Guard District commander at the time of the rescue, Rear Adm. Arthur Brooks, declared it “One of the greatest search and rescue efforts in modern history.”

“Serving as the final crew aboard the Coast Guard Cutter Douglas Munro, the last 378-foot cutter in the Coast Guard has been an exciting and rewarding experience for myself and my shipmates,” said Capt. Riley Gatewood, commanding officer of the Douglas Munro. “During my time aboard I have witnessed the sacrifices of the crew as they spent time away from their loved ones in service to their country. This dedication echoes the hard work put forth by our predecessors during the cutter’s 49-years of service and embodies the ships motto ‘Honoring the past by serving the present.’ While Coast Guard Cutter Douglas Munro is being decommissioned, I know that the legacy and service of Signalman 1st Class Douglas Albert Munro lives on in the Coast Guard men and women serving around the world today, and in the national security cutter Munro that continues to bear his name.”

Cutter Bear Returns Home After Interdicting $140+ Million of Illicit Drugs

Coast Guard Cutter Bear personnel offload approximately 2,300 lbs of cocaine worth more than $43.7 million at Port Everglades in Ft. Lauderdale, Florida, April 20, 2021. On April 1, 2020, U.S. Southern Command began what was then known as Enhanced Counter Narcotics (CN) Operations in the Western Hemisphere to increase the disruption of drugs. *U.S. COAST GUARD photo by Chief Petty Officer Charly Tautfest*

PORTSMOUTH, Va. – The crew of the Coast Guard Cutter Bear (WMEC 901) returned home to Portsmouth Sunday following an 86-day counter-drug patrol in the Eastern Pacific Ocean, the Coast Guard 5th District said in an April 26 release.

The Bear's crew interdicted three vessels, seized approximately 8,158 pounds of cocaine, two pounds of methamphetamines, as well as marijuana, worth a combined total of over $140 million, and detained 12 suspected drug smugglers.

The Bear's crew also coordinated operations with the U.S.

Coast Guard's Tactical Law Enforcement Team South Law Enforcement Detachment (LEDET-108), who were deployed aboard the HMCS Saskatoon, a Kingston-class coastal defense vessel from the Canadian Navy. The collaboration supported LEDET-108's seizure of an additional 2,866 pounds of cocaine and the detention of three suspected smugglers.

A flight crew and aviation detachment from the Coast Guard's Helicopter Interdiction Tactical Squadron (HITRON), deployed aboard the Bear for the patrol. HITRON crews specialize in airborne use of force, and are based out of Jacksonville, Florida. The crew of the Bear worked in preparation for the counter-narcotics mission, partaking in numerous flight operations to recertify the flight crew and enhance crew proficiency in shipboard helicopter operations and non-complaint vessel training.

The Bear's crew departed Portsmouth to conduct joint training exercises with the U.S. Navy on January 31. The Bear supported the Navy's training exercise while operating off the coast of Virginia and the Carolinas, and the crew took advantage of the unique opportunity to become more proficient at wartime steaming.

"I am extremely proud of this crew and honored to be their commanding officer," said Cmdr. Jeff Ferlauto, the Bear's commanding officer. "It's been an extremely successful deployment and the crew met each challenge head-on. Since our initial transit through the Panama Canal into the Eastern Pacific, this crew dominated! As we get ready for the home stretch, I want to personally thank all the families and friends for their continued support. I realize that our personal lives and our devotion to duty are in constant tension. We have chosen to serve our country and execute missions that take us far from home and require extended absences from our loved ones."

The Bear is a 270-foot medium-endurance cutter homeported in

Portsmouth.

Indonesian Navy Finds Broken Hull on Bottom, Declares Submarine KRI Nanggala Lost

Navy Chief Yudo Margono talks to the media on the retrieval of items from the missing KRI Nanggala sub, at Ngurah Rai Military Air Base in Bali, Indonesia, April 24, 2021. *INDONESIAN MILITARY / VOICE OF AMERICA*

The Indonesian navy has changed that status of its submarine, KRI Nanggala (402), and her crew of 53, from “sub miss” to “sub sunk.”

Indonesian authorities said the damaged submarine has been located.

“The KRI Nanggala is divided into three parts, the hull of the ship, the stern of the ship, and the main parts are all

separated, with the main part found cracked," said Indonesian navy Chief of Staff Yudo Margono.

"We received underwater pictures that are confirmed as the parts of the submarine, including its rear vertical rudder, anchors, outer pressure body, embossed dive rudder and other ship parts," said military chief Hadi Tjahjanto, speaking to the media in Bali on Sunday.

KRI Nanggala went missing during a torpedo firing exercise on Wednesday in waters between Bali and Java, Indonesia. A massive search effort was conducted by the navy, known officially as the Tentara Nasional Indonesia-Angkatan Laut (TNI-AL). Other nations, including the U.S., dispatched ships, aircraft, personnel to help in the search and rescue of the crew.

Aircraft searching the area noted an oil slick was which was suspected to have come from the submarine. "That oil spill location is the last time we had contact with the submarine," Indonesian navy spokesman First Adm. Julius Widjojono said.

In addition to the oil slick, confirming the likelihood that the submarine broke apart was the retrieval of several items that were shown to journalists. A container of grease used for periscopes, part of a torpedo launcher, part of a metal tube, prayer mats and fuel were recovered were about two miles from the where the submarine commenced its dive before it went missing. Later a life vest from the sub was found. The water at the location where the floating debris was found is 2,788 feet.

There were no reports of loud underwater noises that would point to an explosion, but Margono said the heavy pressure on the vessel probably caused the hull to lose integrity, permitting some items to escape and rise to the surface.

"With the authentic evidence we found believed to be from the submarine, we have now moved from the 'sub miss' phase to 'sub

sunk,’” Margono said at a press conference.

Margono later said sonar detected a submarine-like object at 850 meters (2,790 feet), far below the Nanggala’s safe operating depth.

“It can be stated that the KRI Nanggala has sunk and all of its crew have died,” military chief Marshal Hadi Tjahjanto told reporters.

The Indonesian submarine KRI Nanggala (402) participates in Cooperation Afloat Readiness and Training (CABAT) in 2015. *U.S. NAVY / Mass Communication Specialist 3rd Class Alonzo M. Archer*

Although initial reports stated the submarine was last reported at a location north of Bali, a later statement from the Indonesian Ministry of Defense said the sub was lost in the Bali Strait, between the islands of Java and Bali that connects to the Indian Ocean to the south and Bali Sea to the north.

The search effort was coordinated from the naval base at

Banyuwangi, on the eastern tip of Java, the most populated of Indonesia's 17,000 islands.

Earlier in the search effort, an Indonesian ship, KRI Rimau, detected a very strong magnetic signature, in an area consistent with the submarine's last known position, later confirmed by survey ship, KRI Riguel.

Before the submarine was confirmed sunk, a number of nations sent help or offered to support the search effort. Singapore, Malaysia and India dispatched submarine rescue ships and two Australian warships sailed to join the search efforts.

"HMA Ships Ballarat and Sirius, both presently at sea on separate regional deployments, are making best speed for the search area," said a Friday press release from Australia's defense department.

Rear Adm. Mark Hammond, of the Australian task force, added that his thoughts were with the submariners of KRI Nanggala, their families and the Indonesian people. "As always, we stand ready to assist our fellow mariners in the Indonesian navy," he said.

The U.S. Navy sent a P-8 Poseidon maritime patrol aircraft to support the effort.

"It's a sophisticated platform that could be helpful in leading the Indonesian government to a better idea of the location," said Pentagon spokesman John Kirby.

Secretary of Defense Lloyd J. Austin III spoke with Indonesian Defense Minister Prabowo Subianto to inform him that the aircraft was coming and provide any additional assistance that might be needed, Kirby told reporters.

In addition to the P-8, the U.S. sent three C-17 aircraft carrying boats and underwater search and rescue equipment from Dover Air Base on Friday.

Indonesian President Joko “Jokowi” Widodo directed that the search and rescue efforts for Nanggala and crew was a national priority. “To the families of the crew, I understand your feeling right now. However, the government has done and will continue to do its utmost to search and rescue all crew on board,” he said while the search was underway.

“I am deeply saddened to learn the Indonesian submarine lost at sea earlier this week is now believed sunk. Our thoughts and prayers are with the Indonesian navy, their Sailors and all those families who lost loved ones,” said Chief of Naval Operations, Adm. Mike Gilday. “As Sailors, we share a love for the sea and have a bond of fellowship with all who sail on it. We have a respect for its dangers and also understand the importance of the worlds’ oceans to our collective way of life.

“No doubt, Indonesia is a good friend and partner. Despite this tragic loss, it is my hope that we will continue to operate together in support of a free and open Indo-Pacific,” Gilday said.

The mission now changes from rescue to recovery.

Coast Guard Repatriates 18 Migrants to the Dominican Republic

A makeshift vessel, with 18 migrants aboard interdicted in Mona Passage waters by the crew of the Coast Guard Cutter Joseph Tezanos April 20, 2021. The migrants, 17 men and a woman, who claimed to be Dominican Republic nationals, were repatriated to a Dominican Republic Navy vessel just off the Dominican Republic April 22, 2021. *U.S. COAST GUARD*

SAN JUAN, Puerto Rico – The Coast Guard Joseph Tezanos crew repatriated 18 migrants to a Dominican Republic Navy vessel April 22, following the interdiction of migrant voyage in Mona Passage waters between the Dominican Republic and Puerto Rico, the Coast Guard 7th District said in an April 22 release.

The migrant group consists of 17 men and a woman, who claimed to be Dominican Republic nationals.

The interdiction is the result of ongoing efforts by Caribbean Border Interagency Group (CBIG) partner agencies to combat illegal migrant smuggling.

The aircrew of a Customs and Border Protection maritime patrol

aircraft detected the illegal voyage on April 20; a grossly overloaded 25-foot makeshift vessel in waters northwest of Aguadilla, Puerto Rico. The Coast Guard Cutter Joseph Tezanos responded and, with the assistance of the cutter's small boat, stopped the migrant vessel. The Joseph Tezanos crew embarked the migrants due to safety of life at sea concerns and destroyed the makeshift vessel as a hazard to navigation.

Prior to embarking, the Joseph Tezanos crew provided the migrants with lifejackets. Once aboard the cutter, the migrants received food, water and basic medical attention.

"These 18 migrants are among the hundreds of others who risk their lives yearly to enter Puerto Rico illegally on makeshift grossly overloaded vessels," said Lt. Anthony Orr, Coast Guard Cutter Joseph Tezanos commanding officer. "I could not be prouder of my crew for working efficiently and tirelessly to care for these migrants and ensure their safe repatriation. The success of this operation was due to the impeccable teamwork that we had with CBP, Coast Guard Air Station Borinquen, and Sector San Juan's Command Center and Enforcement Division."

Cutter Joseph Tezanos is a 154-foot fast response cutter homeported in San Juan, Puerto Rico.

Unmanned Capabilities Front and Center During Naval

Exercise

An ADARO unmanned system interacts with the Navy's newest Independence-variant littoral combat ship USS Oakland (LCS 24) during U.S. Pacific Fleet's Unmanned Integrated Battle Problem (UxS IBP) 21. UxS IBP 21 integrates manned and unmanned capabilities into challenging operational scenarios to generate warfighting advantages. *U.S. NAVY / Mass Communication Specialist 2nd Class Alex Perlman*

ARLINGTON, Va. – Chief of Naval Research Rear Adm. Lorin Selby declared "the state of our naval unmanned capabilities is truly unmatched," and vowed continued support for the nation's ongoing transition to a hybrid manned-unmanned force in the future, the Office of Naval Research (ONR) Corporate Strategic Communications said in an April 22 release.

Speaking during a visit to San Diego for the U.S. Pacific Fleet-led Unmanned Integrated Battle Problem 21 (IBP21), Selby said the exercise, which puts into operation different unmanned vehicles "Above the sea, on the sea and below the sea," demonstrates that America's growing focus on autonomous

capabilities is showing impressive results.

“We are not yet where we want to be,” said Selby, “but we are getting closer. As our potential adversaries go all-in on unmanned platforms, we must and will maintain a dominant force that can meet and defeat any challenge.”

During the exercise, a large number of multi-domain unmanned platforms – including unmanned aerial, surface and underwater vehicles (UAVs, USVs and UUVs, respectively) – are being put into real-world, “blue-water” environments, working in sync with manned platforms in actual combat drills designed to support Pacific Fleet objectives in the Indo-Pacific region.

Many of the platforms in IBP21 are supported by the Naval Research Enterprise (NRE), which Selby commands. Comprising the ONR; the Naval Research Laboratory; and the Office of Naval Research Global (ONR Global), the NRE is tasked with providing the capabilities and long-term vision ensuring U.S. naval dominance today and into the future.

While many platforms in IBP21 are classified, officials are highlighting the Medium Displacement Unmanned Surface Vehicles (MDUSV) Sea Hunter and its new sister craft, Sea Hawk, as well as a long-endurance UAVs, all of which can be used for surveillance, anti-submarine warfare and other missions.

Sea Hunter is already a proven player in the Navy’s unmanned portfolio. In 2019, the vessel completed an autonomous trip from San Diego to Pearl Harbor, a distance of over 2,000 nautical miles, and returned, demonstrating credible and relevant naval capability.

Both MDUSVs can host multiple payloads and perform multiple missions to support Sailor and Marine objectives, and both are seen as game-changers.

Indeed, the performance of many new unmanned technologies are leading the Navy and Marine Corps to rethink concepts of

operations, as noted in the widely publicized naval document "Unmanned Campaign Framework," recently released by the Department of the Navy.

The Unmanned Campaign Framework notes autonomy will complement, not replace, manned assets, and will provide warfighters far more options in combat.

Dr. Marcus Tepaske, who leads ONR Global's Experimentation and Analysis program and is coordinating many platforms in use during IBP21, confirmed naval unmanned capabilities are accelerating. He said these kinds of large-scale exercises are essential to ensure what works in theory will work in the fleet.

"The best test you can put a technology through is one where the warfighters get to work with it," Tepaske said. "Real-world applications are messier, dirtier, wetter and absolutely more beneficial than anything we can test in a lab. "Getting the warfighters' feedback on using these unmanned systems will be one real measure of success for IBP21."

Coordinating multi-domain manned and unmanned teaming efforts with so many different systems is in itself a daunting challenge. That job is being led by Pacific Fleet crews aboard USS Michael Monsoor (DDG-1001), one of three Zumwalt-class guided missile destroyers with unique advanced capabilities for command and control.

Ultimately, experts say, autonomous systems are here to stay.

Dr. Jason Stack, ONR's technical director and autonomy lead, is encouraged by the forward thinking and real-world forward movement represented by IBP21. Intelligent autonomous systems, he said, will be an essential part of the Navy and Marine Corps in the near term.

"When you read the Unmanned Campaign Framework, the serious challenge we face from well-funded, highly-motivated,

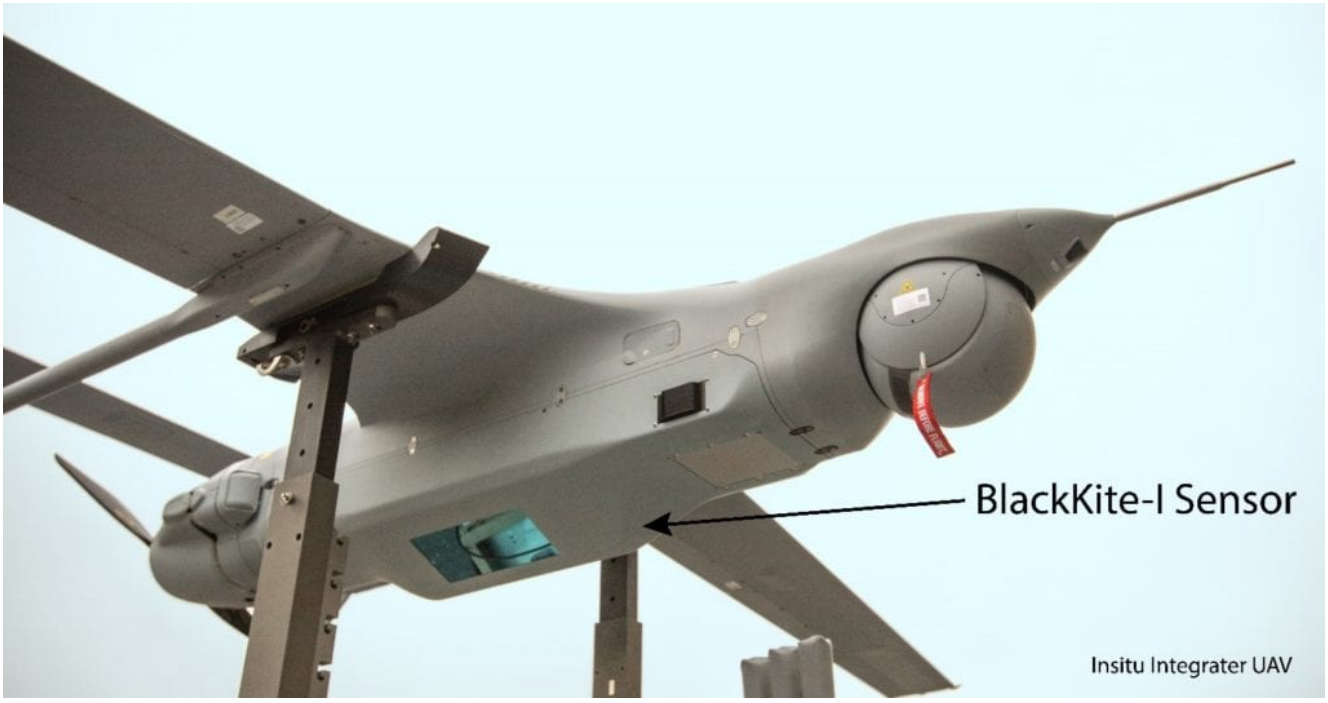
competitive naval forces around the world – all accelerating their autonomous capabilities – is clear," he said.

Stack noted that the U.S. and allied partners have a more robust commitment to the ethical use of unmanned systems and artificial intelligence when compared to some other nations.

"Our goal is to operationally integrate and continuously improve the types of intelligent and autonomous technologies that Pacific Fleet is testing right now," he said. "We will do this ethically and responsibly by always ensuring our Sailors and Marines can exercise the appropriate levels of human judgement over our machines. This will be our enduring competitive advantage."

The IBP21 exercise is the initial step in the Navy's commitment to operational experimentation with autonomous systems in the fleet. Following its completion, the Navy and Marine Corps will assess what worked, what didn't, and how to accelerate unmanned capabilities for the fleet and force.

Logos Technologies Successfully Tests WAMI Sensor on RQ-21A Blackjack



The BlackKite-I sensor on an Insitu Integrator unmanned aircraft system. *LOGOS TECHNOLOGIES*

FAIRFAX, Va. – Logos Technologies LLC successfully flew its wide-area motion imagery (WAMI) sensor aboard an RQ-21A Blackjack unmanned aircraft at a test range in Boardman, Oregon, the company said in an April 22 release.

The two-week-long test – which included preparatory groundwork in Bingen, Washington – comes on the heels of a $5.3 million contract the U.S. Naval Air Systems Command had recently awarded to Logos, to develop more WAMI sensors for Navy and Marine users.

“We are very excited by our recent test aboard the RQ-21A Blackjack,” said Doug Rombough, vice president for Business Development at Logos Technologies. “Our ongoing effort to develop an ultra-light WAMI capability for the Blackjack and other small, tactical unmanned aircraft is clearly paying off.”

Logos has created a U.S. military version of BlackKite, currently called Cardcounter, an ultra-light (26 pounds) infrared WAMI system developed by Logos. Despite its low SWaP, BlackKite can detect and track in real time every significant target moving within a city-sized area, giving

tactical operators a powerful, hereto unheard of, capability.

In addition, thanks to the WAMI system's multi-modal edge processor – which can store six or more hours of mission data – users on the ground can also access recorded imagery for on-the-fly forensic analysis.

"No military in the world has anything like the Logos WAMI sensor on their tactical unmanned aircraft," said Rombough. "This WAMI system views and records the entire area and can stream multiple real-time and recorded video 'chip-outs' down to handheld devices."

Logos was first tasked with converting their BlackKite system to meet government requirements in September 2019, with two units being produced for the U.S. Naval Air Systems Command. The follow-on $5.3 million development contract and March test flight are part of the same effort.

"In total, we will be producing four modular WAMI systems for the Navy," Rombough said, "with the hope that this will open the door for a wider U.S. military adoption of WAMI, both for the Blackjack and other Group 3 unmanned aircraft."

NSWCDD Engineers Expand to Impact Navy Vertical Launch System Capabilities

he guided-missile destroyer USS Chafee (DDG 90) launches a Block V Tomahawk, the weapon's newest variant, during a three day missile exercise. This event marked the first time a Block V Tomahawk missile was operationally tested, marking the Navy's transition to a more advanced capability for the fleet. Block V includes an upgrade that will enhance navigation performance and provide robust and reliable communications. *U.S. NAVY / Ensign Sean Ianno*

DAHLGREN. Va. — Scientists and engineers at Naval Surface Warfare Center Dahlgren Division (NSWCDD) are developing and delivering upgrades to the Navy's Vertical Launch Systems (VLS), improving the fleet's anti-air, ship self-defense, ballistic-missile defense and land-attack capabilities despite the COVID-19 pandemic, the NSWCDD said in an April 23 release.

What's more, NSWCDD hired new software and test engineers to support the continuous increase in VLS upgrades since the command's maximum telework policy took effect in March 2020.

"As the Vertical Launch System grows into other platforms, it has created more work opportunities in our branch," said Felix Lopez, NSWCDD Maritime Weapons & Launcher Systems Integration branch head. "As a result, we knew we had to grow the team."

New work opportunities within the branch include supporting capability upgrades as well as the continued authorization and

certification of the Mk41 and Mk57 VLS for shipboard test events and tactical operations.

Lisa Haas, an NSWCDD engineer and the acting certification official for MK 41 and MK 57 VLS, said she has never seen the branch and its VLS programs busier in her 31 years at NSWCDD.

“Over the last three years, we have had more changes going into our programs, more capability upgrades than we have ever had, and it’s impacting more pieces of our system than ever,” said Haas.

The Mk41 is a highly adaptable canister launching system capable of dispatching missiles for every threat in naval warfare. The system’s adaptability enables myriad upgrades, earning its place as one of the fleet’s most significant defense capabilities.

These upgrades keep NSWCDD – the sole Certification Agent and Technical Direction Agent – busy.

Some recent projects included upgrades to Mk41 to support the launch of Standard Missile, Evolved Sea Sparrow Missile and Tomahawk Missile variants. The recent upgrades in support of the Tomahawk Weapon System were so comprehensive that every ship in the U.S. Navy equipped with the Mk41 VLS is a candidate to receive the Tomahawk capability upgrades.

To keep up with these sweeping changes that affect such a large part of the fleet, Lopez said the team was due for a hiring effort when he came aboard as branch head in 2019.

“We had an issue with increasing tasking while our staffing remained about the same. This triggered hiring left and right,” said Lopez, who brought on several software and test engineers in the last year. “It’s been a challenge, but we’re doing quite well. Every time you get new personnel, you have to train them. The subject matter experts have to continue

doing their job, but they also have to allocate time to train new personnel and they've been very effective at that."

Haas, one such VLS expert on the team, said the pandemic-driven telework presented challenging but navigable obstacles in training the new recruits.

"It's been more challenging to train new folks because they can't be embedded in the middle of our large technical group with all the knowledge right there for them," said Haas. "But we can get them approved to be on base a little more often so that we can directly interface with them. It's very important to get new folks [on base] so that they can begin to feel part of the team and get that sense of loyalty that you get when you work with a team and a sense of pride in what you're doing."

This sense of pride that comes along with working in VLS is apparent in talking to Haas and Lopez. Both reference the spirited atmosphere surrounding the team and are quick to praise both the new recruits and the seasoned professionals that have been working with VLS at Dahlgren for years.

"A lot of folks in our group have been around a long time – they are very knowledgeable, capable and proactive," said Haas. "They know what the job is and they get it done."

When getting the job done means supporting a substantial percentage of our warfighters' naval defense capability, it takes a dedicated and multidisciplinary team of experts. From software engineers and computer scientists to mechanical engineers and safety professionals, the team at NSWCDD continues to support the fleet's capabilities while collaborating effectively to meet the needs of the U.S. Navy.

"VLS works together as a team very well," said Haas after rifling off more than a handful of names of teammates and partners that led to the branch's success in the last three

years. “It’s absolutely amazing the engineering that goes into the system, how it all works together and works together rather well. It’s impressive.”

Navy to Christen Guided-Missile Destroyer Lenah Sutcliffe Higbee

The Navy will christen its newest Arleigh Burke-class guided-missile destroyer, the future USS Lena Sutcliffe Higbee (DDG 123), on April 24. It is a FLight IIA destroyer, similar to the USS John Finn, the first Flight IIA Arleigh Burke class (DDG 51) ship, shown here. *HUNTINGTON INGALLS INDUSTRIES*

ARLINGTON, Va. — The U.S. Navy will christen its newest Arleigh Burke-class guided missile destroyer, the future USS

Lenah Sutcliffe Higbee (DDG 123), during a 6:30 p.m. CDT ceremony Saturday, April 24, in Pascagoula, Mississippi, the service said in an April 23 release.

The ship's namesake, Lenah Sutcliffe Higbee, served as the second superintendent of the Navy Nurse Corps in 1911, and was also the first living woman recipient of the Navy Cross. When she entered naval service in 1908, she was one of the first 20 women, known as the "Sacred Twenty," to join the newly established Navy Nurse Corps and contributed her nursing skills to the Navy during the First World War. This is the second ship named after Higbee. The first, USS Higbee (DD 806), was the first combat warship named after a female member of the U.S. Navy.

Ray Mabus, 75th secretary of the Navy, will deliver the christening ceremony's principal address. Jay Stefany, acting assistant secretary of the Navy (Research, Development and Acquisition) and Rear Adm. Cynthia Kuehner, commander, Naval Medical Forces Support Command, will also provide remarks. In a time-honored Navy tradition, the ship's sponsors, Louisa Dixon, Virginia Munford and R. Pickett Wilson, will christen the ship by breaking a bottle of sparkling wine across the bow.

"The future USS Lenah Sutcliffe Higbee will serve for decades as a reminder of Ms. Higbee's service to our nation and her unwavering support of a strong and healthy Navy and Marine Corps team," said Acting Secretary of the Navy Thomas Harker. "This ship honors not only her service but that of all of our Navy nurses who support the strength and wellbeing of our service members and their families."

The ship will be the 73rd Arleigh Burke-class destroyer and one of 20 currently under contract for the DDG 51 program. The ship is configured as a Flight IIA destroyer, which enables power projection and delivers quick reaction time, high firepower, and increased electronic countermeasures capability

for anti-air warfare. The future USS Lenah Sutcliffe Higbee will be 509.5 feet long and 59 feet wide, with a displacement of 9,496 tons. It will be homeported in San Diego.