US Navy and MDA Successfully Intercept Multiple Targets in Integrated Air and Missile Defense Test

Release from PEO Integrated Warfare Systems Public Affairs and MDA Public Affairs

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Oct. 26, 2023

By PEO Integrated Warfare Systems Public Affairs and MDA Public Affairs

U.S. Navy Arleigh Burke-class destroyer USS CARL M. LEVIN (DDG 120) successfully intercepted multiple targets in an Integrated Air and Missile Defense (IAMD) test executed by the U.S. Navy Program Executive Office Integrated Warfare Systems and the Missile Defense Agency (MDA) from the Pacific Missile Range Facility, Kauai, Hawaii.

The joint test, known as Vigilant Wyvern, demonstrated the capability of a ballistic missile defense-configured Aegis ship to detect, track, engage and execute intercepts of two short-range ballistic missile (SRBM) targets while concurrently demonstrating an Anti-Air Warfare (AAW) engagement of two subsonic anti-ship cruise missile drone targets.

This realistic, live-fire raid scenario represented one of the largest IAMD events ever conducted in the U.S. Indo-Pacific Command Area of Responsibility and demonstrated for the first time a concurrent Ballistic Missile Defense and Anti-Air Warfare raid.

The test, designated Flight Test Aegis Weapon System-48 (FTM-48) by the MDA, demonstrated the IAMD engagement of two SRBM targets with two Standard Missile 3 Block IA (SM-3 Blk IA) interceptors, and engagement of two subsonic anti-ship cruise missile drone targets with four SM-2 Blk IIIA interceptors.

“The success of Vigilant Wyvern is a huge milestone,” said

RDML Seiko Okano, Program Executive Officer Integrated Warfare Systems. “The Navy and MDA successfully demonstrated the tremendous capability of Aegis ships defending against an IAMD raid scenario. This test event is the first of its kind and an excellent example of collaboration between organizations, further progressing a unified mission to increase capability. Congratulations to the joint test team and the ship’s crew for an excellent event.”

As part of the IAMD Priority Mode, ships can integrate classic air defense with new discrimination and tracking capabilities to defend against coordinated, simultaneous missile attacks.

“The success of this joint test represents a critical step in defending against multiple targets in a realistic raid scenario,” said RDML Douglas Williams, MDA Acting Director. “The Aegis weapon system successfully defeated multiple concurrent attacks, showcasing the incredible versatility of both this system and the crew of the USS CARL M. LEVIN. My congratulations to the entire test team in achieving this milestone.”

PEO IWS and the MDA jointly executed Vigilant Wyvern/FTM-48. Targets were launched from the Pacific Missile Range Facility, located on Kauai, Hawaii.

Additional information about the Navy’s AEGIS Integrated Combat System and Guided Missile Destroyers can be found at www.navy.mil and additional information about all elements of the U.S. Missile Defense System can be found at www.mda.mil.

SM-6 Missile Fired from Deck of LCS

Release from Commander, Naval Surface Forces

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SAN DIEGO – USS Savannah (LCS 28) conducted a live-fire

demonstration Oct. 24 in the Eastern Pacific Ocean utilizing a containerized launching system that fired an SM-6 missile at a designated target, according to Cmdr. Arlo Abrahamson, spokesperson for the Naval Surface Forces. The exercise demonstrated the modularity and lethality of Littoral Combat Ships and the ability to successfully integrate a containerized weapons system to engage a surface target. The exercise will inform continued testing, evaluation, and integration of containerized weapons systems on afloat platforms.

Unmanned Surface Vessel Division Arrives in Sydney

Release from U.S. 7th Fleet Public Affairs

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Oct. 25, 2023

SYDNEY – Unmanned Surface Vessel Division One's (USVDIV-1) unmanned surface vessels (USVs) Ranger, Mariner, Seahawk and Sea Hunter arrived in Sydney, Australia, for a scheduled port visit October 24 ahead of their participation in bilateral exercises with the Royal Australian Navy (RAN).

During the exercises, USVDIV-1 will collaborate with the RAN on testing unmanned systems in concert with industry partners to advance a shared understanding of these capabilities to meet strategic requirements.

"I look forward to furthering the strong relationship our navies have worked hard to create," said U.S. Navy Commander Jeremiah Daley, commanding officer of USVDIV-1. "Our shared vision of a free and open Indo-Pacific relies upon developing these advanced capabilities that will create the asymmetric warfighting advantages to deter aggression in contested environments."

Along with the USVs, the Independence-variant littoral combat ship USS Oakland also arrived in Sydney. All five U.S. Navy vessels are currently employed in the ongoing U.S. Pacific Fleet exercise Integrated Battle Problem (IBP) 23.2 to develop concepts of operations for future unmanned programs of record and further integrated USVs into routine operations alongside manned surface combatants.

"In order to develop a program as different and disruptive as small, medium, and large USVs, integrating with allies and partners early and consistently in its development is key to our success," said Daley. "Through exercises like IBP 23.2 and Autonomous Warrior, we continue to learn from experience in an operational theater and deepen our interoperable strength."

USVDIV-1's mission is to test, evaluate and operate in support

of integrating USVs into fleet operations and provide recommendations to Navy leadership on the development of unmanned systems.

U.S. 7th Fleet is the U.S. Navy's largest forward-deployed numbered fleet, and routinely interacts and operates with allies and partners in preserving a free and open Indo-Pacific region.

USS Carney's Success Showed Value of Aegis, SM-2, VLS, Alert Crew

By Richard R. Burgess, Senior Editor

ARLINGTON, Va. — The event of the Arleigh Burke-class guided-missile destroyer (DDG) USS Carney (DDG 64) in intercepting and destroying on Oct. 19 four land-attack cruise missiles and several drones launched by Houthi forces over the Red Sea in Yemen was not routine, but it was a demonstration of naval operations and technology at its finest.

The Houthi missiles apparently were headed in the direction of Israel which had been engaged in combat with Hamas terrorists since Oct. 7. The Iran-backed Houthis have a history of using drones and missiles against Saudi petroleum infrastructure and U.S. Navy and other ships in the Arabian Sea.

The USS Carney, based in Naval Station Mayport, Florida, is one of the U.S. Navy's older destroyers, the 14th ship of its class, commissioned in 1996. It has since been equipped with ballistic-missile defense systems. At the time of the intercepts the ship was deployed to the Red Sea in support of operations of U.S. Central Command.

The Carney is equipped with the Aegis Combat System, a sophisticated digital, networked command-and-control system that links together the sensors and weapon systems of the ship. Its main sensor is the SPY-1 air search radar that enables the ship to detect, identify, track, and engage aerial targets and pass track data to other units. The Aegis system, which entered service in the 1980s, has been continuously upgraded to keep ahead of evolving threats.

The RIM-66 Standard SM-2 missile fired by the Carney entered service in 1979. It traces its developmental history from to the Terrier, Tartar, and Standard SM-1 family of surface-to-air missiles. The SM-2 already was combat proven in Operation Praying Mantis in the Persian Gulf in 1988, when an Iranian missile craft was damaged by one. More recently, in October 2016, the Arleigh Burke-class DDG USS Mason came under attack

on three occasions by Houthi anti-ship missiles off the coast of Yemen. Of the seven missiles fired at the Mason, SM-2 missiles took down at least five of the missiles. The Houthi missiles scored no hits.

The Mason's action also was the first air defense conducted by the Mk41 vertical launch system (VLS). The rapid-fire capability of a bank of Mk41 cells enables a DDG to take on multiple incoming missiles much more capably than with a single- or twin-arm launcher of previous years. The Carney's VLS system enabled similar success last week.

Equipped with well-designed, proven technology from the U.S. defense industry, the Carney was able to perform its mission successfully. Weapon systems with developmental troubles usually dominate the press coverage. Carney was a showcase of systems that worked.

Last but not least, the Carney's crew was alert and ready when the test came. Bravo Zulu to the Carney and the American bluejacket.

CORAS Wins Contract with the United States Naval Academy Leadership, Education, and Development Division

Release from CORAS

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MCLEAN, Va. – October 24, 2023: CORAS is proud to announce a

contract with the United States Naval Academy (USNA) to develop and deliver a mobile-enabled application for its Leadership, Education, and Development (LEAD) Division. The mobile application requirement was envisioned and spearheaded by Captain Kevin Mullaney, USN, Ph.D., the Course Director and Leadership, Ethics, and Law department chair for the USNA. Named the *Leaders Compass*, the application is created through research in leadership development, decision-making, and moral psychology, and delivers a competency support framework for Midshipmen leader development across the institution.

"We are honored to support the US Naval Academy and its mission to cultivate the next generation of DoD Leaders," said CORAS President and CTO Dan Naselius. "Aggregating data from all the USNA scoring areas into a mobile-enabled tracking format makes it possible for every Midshipman and Faculty to see how they are performing and growing – the familiar tracker format delivers a complete user experience and ensures buy-in at all levels. It is exciting to see how Navy and Marine Corps future leaders will be interacting with data in this way from the onset of their careers."

"One of the advantages of the Leaders Compass system is that it integrates the entire developmental experience for Midshipmen across the 47-month journey at the Naval Academy," CAPT Mullaney said. "We are fortifying the future fleet of officers by providing purposeful development in conjunction with assessments, making the data that we collect actionable and giving students access to robust developmental resources and curated experiences with the Naval Academy's faculty and leadership."

The Leaders Compass supports the assessment of Midshipmen in four (4) key areas: academic, professional/leadership development, physical, and competencies. It allows Midshipmen to track coursework and grades, chart performance in classes and training exercises, engage with coaches and faculty, and follow assigned work and goal progression. Peer review

provides 360-degree feedback on leadership behaviors and relationship management. The Leaders Compass offers complete transparency and a level of engagement that keeps Midshipmen focused on their leadership journey from day one.

USNA faculty and staff also benefit from the Leaders Compass application. They have access to Midshipmen data on the scope and effectiveness of classes, training, development, GPA, Scores, materials, and events. On a comprehensive level, it also gathers collective data to assess and gauge program performance and effectiveness.

CORAS is already at work in the Department of Defense (DoD), managing an array of disparate data sources and bringing real-time interaction, data modeling, and predictive artificial intelligence (AI) to federal civilian and military agencies. CORAS manages some of the largest business challenges through proprietary solutions that offer flexibility to work with existing programs with proven business processes and no data lock-in. CORAS' Enterprise SaaS solution manages the US Navy's digital POM and supports various S&T portfolios and contracts that use data to solve complex business challenges. CORAS' privately-owned solutions allow it to be an open data company that supports the preparation and readiness of data for AI and machine learning (ML) as well as putting teams in place that can gather the data and run models against it.

Alakai Defense Systems

Awarded $30.7 Million Naval Air Warfare Center Aircraft Division Contract

Release from Alakai Defense Systems

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Alakai to provide multiple checkpoint explosive detection systems

TAMPA BAY, Fl.–October 24, 2023– Alakai Defense Systems Inc. announced that it was awarded a $30.7 million contract with the U.S. Naval Air Warfare Center Aircraft Division to provide multiple Checkpoint Explosive Detection Systems (CPEDS) as well as required training and product support.

Alakai Defense Systems' CPEDS is an extreme standoff range explosive detection system. CPEDS is used for Entry Point Security and performs detection and identification of bulk, residue and trace quantities of explosives, homemade explosives, chemical warfare agents, toxic industrial chemicals and narcotics. CPEDS can be used for defense, security, and law enforcement applications. The system can be operated remotely, further isolating the operator from the threat chemicals or any potential blast radius.

CPEDS employs deep UV Raman spectroscopic detection methodologies to identify real-time threats. With expertise in laser-based sensing, threat sensing technology (UV, Vis, & IR), Alakai's products feature patented, proprietary eye-safety technology.

"Our military and allies increasingly face dangerous, life-threatening environments," explained Ed Dottery, President and CEO, Alakai Defense Systems. "I remain passionate in my

mission to save lives and limbs from harm and our CPEDs provide some of the most advanced explosive detection technology ever developed to safeguard our Nation's defenders."

The contract was awarded on August 17, 2023, in support of the Naval Air Systems Command's Security Cooperation Office. Work is to be completed by February 2027.

About Alakai Defense Systems Alakai Defense Systems, Inc. is a small, veteran owned high-tech company specializing in laser and electro-optical standoff threat detection sensors for defense & security applications. Founded in 2003, Alakai's ongoing work includes research and development of laser-based trace material detection technologies for U.S. government agencies. For more information, visit www.alakaidefense.com or contact Alakai at info@alakaidefense.com.

Crowley Moves to Launch First-Ever LNG Bunkering at Panama Canal's Pacific Side

Release from Crowley

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(JACKSONVILLE, Fla.; Oct. 24, 2023) – Global shipping and sustainable energy logistics leader Crowley is proceeding with plans to provide liquefied natural gas (LNG) bunkering services on the Pacific side of the Panama Canal, under the first permit issued by the Panama Maritime Authority (AMP) for the provision of such services.

Crowley's advanced energy group will operate the innovative service to manage the ship-to-ship LNG transfer services. With a potential start date in 2024, Crowley is preparing to provide bunkering and related port solutions to safely deliver lower-emission LNG to vessels for fuel and cryogenic tank cooldown services at the canal.

"LNG is widely accepted as the most practical transitional alternative fuel for maritime shipping and to stay ahead of the rapid deployment of LNG-powered ships across the global market, Crowley is strategically growing its LNG bunkering operations across North and Central America," said James Fowler, senior vice president and general manager, Crowley Shipping. "The Panama Canal will become a key location for vessels to take on LNG, and Crowley's future Panamanian bunkering service will give international ship owners confidence to continue to adopt LNG across their fleets."

A leader in U.S. LNG supply chain and engineering services, the Panama Canal location expands Crowley's LNG solutions. In 2014, Crowley received the first small-scale LNG export license from the U.S. Department of Energy for LNG transportation from the U.S. into Free Trade Agreement (FTA) and Non-Free Trade (NFTA) countries. The company then pioneered small scale LNG transportation and engineering to Puerto Rico.

Crowley's services expanded in 2022 with the opening of an LNG truck-loading terminal in Peñuelas, Puerto Rico. A 12,000 m3 (3.17 million gallons) LNG bunker barge, the largest in the U.S, is under construction with a long-term charter agreement with Shell to begin service in 2024 for ships on the U.S. East Coast.

Crowley has served Central America including Panama for more than 60 years with maritime and logistics services.

U.S. Navy Awards Bollinger Shipyards Contract to Build 4 Additional Mine Countermeasures Unmanned Surface Vessels

Release from Bolliger Shipyards

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Award builds upon Bollinger's growing autonomous portfolio

LOCKPORT, LA. – (October 23, 2023) – The U.S. Navy has awarded Bollinger Shipyards ("Bollinger"), a privately-held and leading designer and builder of military and commercial vessels, a contract to build four (4) additional Mine Countermeasures Unmanned Surface Vessels (MCM USV). This brings the total number of vessels under contract up to seven

(7), with options for up to 18 more vessels.

“Bollinger is honored to be entrusted by the U.S. Navy to continue building the Mine Countermeasures Unmanned Surface Vessel program,” said Ben Bordelon, President and CEO of Bollinger Shipyards. “Our skilled workforce is second to none. We are proud to support and protect the men and women of the U.S. Navy with state-of-the-art, multi-mission unmanned surface vessels that can operate in the most challenging conditions.”

Bollinger was first awarded the contract to build the MCM USV program in April 2022. The MCM USV is an autonomous vessel capable of supporting minesweeping, mine hunting, and mine neutralization missions. Naval mines present a significant threat to U.S. naval operations and to U.S. and allied shipping in coastal waters, continental shelf waters, port approaches, and straits. The MCM USV program is key to replacing capabilities currently being undertaken by soon to be retired MCM-1 class Mine Countermeasures Ships and MH-53E helicopters.

Bollinger will continue to build the MCM USV program at Bollinger Shipyards’ Lockport, Louisiana, facility.

DOD Report Details Chinese Efforts to Build Military Power

Release from the U.S. Department of Defense

Oct. 19, 2023 | By Jim Garamone

The People's Republic of China is continuing its efforts to overturn the international rules-based order and is building an increasingly effective military to further these aims, said a senior defense official speaking on background.

Spotlight: 2023 China Military Power Report

The official gave reporters a preview of the 2023 China Military Power Report that DOD delivered to Congress today. The annual report to Congress is based on the National Defense Strategy's premise that China is the only competitor with the intent, will and capability to reshape the international order, said the official. "The 2022 National Defense Strategy identifies the PRC as increasingly capable military as the department's top pacing challenge," he said.

The report "charts the current course of the PRC's national economic and military strategies, and offers insight into the

strategy, its current capabilities, some of its operational activities, as well as its future modernization goals," he said.

Communist leaders seek "the great rejuvenation of the Chinese nation," by 2049 – the 100th anniversary of the Chinese Communist Party's takeover of the world's largest country.

Part of this effort is China is increasing military coercion, the official said. An example of this is the increasing numbers of unsafe intercepts of U.S., allied and partner vessels and aircraft operating in international air and seaways of the Indo-Pacific region. "Between the fall of 2021 and the fall of 2023, the United States documented over 180 instances of coercive and risky air intercepts against U.S. aircraft in the region," the official said. When allies and partners are included, this jumps to more than 300 instances.

Spotlight: Focus on Indo-Pacific

The report also covers China's intensifying pressure campaign against Taiwan including Chinese ballistic missile overflights of Taiwan, increased flights into Taiwan's self-declared air defense identification zone and the large-scale simulated joint blockade and simulated joint firepower strike operations done after a visit to the island by a U.S. congressional delegation.

Additionally, China's deepening security ties with Russia are covered. In fact, as the official was detailing the content of the report, Chinese President Xi Jinping was meeting Russian President Vladimir Putin at a ceremony marking the 10th anniversary of the Belt and Road Initiative in China. The senior defense official said China sees its emergence as a great power as tied to the alliance with Russia.

The report also looks at the continued development of the Chinese military's nuclear, space and cyberspace capabilities.

“We see the PRC continuing to quite rapidly modernize and diversify and expand its nuclear forces,” he said. “They are expanding and investing in their land, sea and air-based nuclear delivery platforms, as well as the infrastructure that’s required to support this.”

The report estimates the Chinese had more than 500 operational nuclear warheads as of May 2023. “That is on track to exceed some of our previous predictions,” he said.

China is developing new intercontinental ballistic missiles. These may also be conventionally-armed missiles. “If developed and fielded, such capabilities would allow the PRC to threaten conventional strikes against targets in the continental United States, Hawaii and Alaska,” the official said.

According to the report, Chinese leaders are seeking to modernize People’s Liberation Army capabilities in all domains of warfare.

On the land, the PLA continues to modernize its equipment and focus on combined arms and joint training, the official said. The Chinese military is still a conscript force with two intakes a year. The military is working to field long-range fires and incorporate the capability into their doctrine.

At sea, China has the world’s largest navy with a battle force of more than 370 ships and submarines. The Chinese launched their third aircraft carrier in the past year and commissioned their third amphibious assault ship.

The PLA Air Force “is rapidly catching up to western air forces,” the official said. The air force continues to build up manned and unmanned aircraft and the Chinese announced the fielding of the H-6N – its first nuclear-capable, air-to-air refueled bomber.

The Chinese military has not been involved in a shooting war since 1979 and “this actually is one of the shortcomings that

the PRC highlights and a lot of their own self assessments," the official said. "They tried to address that, I think, by attempting to make their training and their exercises more realistic, to more closely approximate … actual combat type conditions.

"I think they tried to address it as well, by learning whatever lessons they can from other countries' involvement in military conflicts," he continued.

Chinese military leaders carefully studied military conflicts involving U.S. forces, Russian forces and others over the years. That is one of the key sources they draw upon to better understand how they need to prepare themselves for future combat operations. "Certainly, they're watching very closely Russia's war of aggression in Ukraine," the official said.

The Chinese military is looking for bases overseas and looking to develop the resources needed to be a globally relevant force. They have established an overall logistics command and they are working hand-in-glove with the Belt and Road Initiative to gain access.

Finally, the report also discusses the dearth of contacts between U.S. and Chinese defense officials. "The PLA's refusal to engage in military-to-military communications with the United States, combined with the PLA's increasingly coercive and risky operational behavior, raises the risk of an operational incident or miscalculation spiraling into crisis or conflict," the official said.

VCNO Visits Sailors, Defense Industry in Newport

Release from the VCNO Public Affairs

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Oct. 19, 2023

Newport, R.I. – Vice Chief of Naval Operations Adm. Lisa Franchetti traveled to Newport, R.I., to tour Navy facilities and visit with Sailors and defense industry leaders, Oct. 19.

Franchetti started her trip at General Dynamics Electric Boat, Quonset Point, where she received updates from company leadership on submarine manufacturing, modular construction, and outfitting for future Columbia and Virginia-class submarines.

The Columbia-class will replace the Ohio-class as the Navy's

contribution to the nuclear triad, which remains the most survivable leg of the U.S. strategic nuclear deterrent force.

“Ensuring that these submarines are produced on time and on budget is a national strategic imperative,” said Franchetti. “The Navy is 100% committed to partnering with Congress, industry, and the New England community to fulfill this mission.”

Franchetti then traveled to Naval Station Newport to speak with prospective command master chiefs at the Navy Leadership and Ethics Center.

“This is an exciting time to be in the Navy and to lead our teams operating around the world,” she said. “As you prepare for the next level of leadership, I expect all of you to view everything through a warfighting lens and to remember that our people are the foundation of our warfighting effectiveness.”

Her next stop was to the Navy Undersea Warfare Center (NUWC), where she met with NUWC scientists, engineers, and leadership to discuss multiple initiatives taking place in Newport, to include advanced communication techniques for submarines at depth known as the Submarine Launched Over the Horizon Buoy.

While at NUWC she was able to see the software that Sailors are currently operating on submarines and discuss the ongoing upgrades to those systems, as well as the Snakehead unmanned under water vehicle.

“The NUWC team is developing innovative concepts and cutting-edge technology that will help expand the enduring advantage we have in the undersea domain,” said Franchetti. “They are finding creative solutions to operational challenges and delivering results at the speed of relevance.”

VCNO’s last stop was at Surface Warfare Schools Command, where she engaged with prospective commanding and executive

officers, and observed Sailors training to navigate high-density maritime traffic areas in the schoolhouse simulators.

“As we see in the events of today, our Navy ships are forward and ready, providing options and decision space to our nation’s leaders. Operating them safely is job number one,” Franchetti commented. “These simulators enable our Sailors, both officer and enlisted, to undergo rigorous, realistic, and repeated training in an environment designed to accelerate their mastery of seamanship.”

Naval Station Newport is home to 50 different commands and is the Navy’s premier site for training and educating officers, officer candidates, senior enlisted personnel and midshipman candidates into future leaders, as well as testing and evaluating advanced undersea warfare and development systems.