Amphibious Combat Vehicles Mark Operational Debut in Pacific



A U.S. Marine Corps amphibious combat vehicle attached to Alpha Company, Battalion Landing Team 1/5, 15th Marine Expeditionary Unit, splashes off the amphibious dock landing ship USS Harpers Ferry (LSD 49) during Exercise Balikatan 24 in Naval Detachment Oyster Bay, Palawan, Philippines, May 4, 2024. (U.S. Marine Corps photo by Lance Cpl. Peyton Kahle) From Communication Strategy and Operations, 15th Marine Expeditionary Unit

May 6, 2024

OYSTER BAY, Philippines — The 15th Marine Expeditionary Unit's Amphibious Combat Vehicles Platoon conducted a live-fire, waterborne gunnery range exercise in Oyster Bay, Philippines, May 4, 2024, marking the first overseas employment of the ACVs during their initial deployment.

The ACV platoon launched from aboard amphibious dock landing

ship USS Harpers Ferry (LSD 49) before organizing into assault sections to close with and engage multiple shore-based targets, using their Remote Weapons Systems to control externally-mounted Mark 19 40 mm grenade machine guns.

Section leaders within the ACV Platoon, which is part of Alpha Company, Battalion Landing Team 1/5, used the opportunity to coordinate and control the simultaneous fires of all of their section's weapons while afloat to maximize the effect against the targets ashore. The ACV provides unique capabilities to the amphibious force, increasing command and control capability, mobility ashore, and a stabilized weapon system to support maneuver.

"The hard work and dedication of our Marines is what made today's training successful," said U.S. Marine Corps Col. Sean Dynan, commanding officer of the 15th MEU. "Today's training is a proof of concept across the Marine Corps for successful ACV employment in its intended environment."

The ACVs fired 40 mm training rounds that mark targets with orange chalk upon impact, instead of using high explosives in Oyster Bay.

Upon completion of the gunnery exercise, the ACV platoon and all ACVs reembarked aboard Harpers Ferry.

This waterborne gunnery range took place while the 15th MEU continues to participate in other bilateral training events during Exercise Balikatan 24, which incorporates several combined joint all-domain operation events that increase U.S.-Philippine bilateral interoperability and lethality across land, air, sea, space, and cyberspace domains. The exercise is a tangible demonstration of U.S. and Philippine cooperation to strengthen the Alliance in an increasingly complex Indo-Pacific security environment.

The ACV Platoon, along with Alpha Co. and other elements from across the 15th MEU, deployed from Southern California March

19 aboard Harpers Ferry.

During this first deployment, 15th MEU will continue to provide insights for ACV employment, embarkation, maintenance requirements, logistics trains, and integration with our allies and partners. These insights are vital for the service to ensure we continue to provide our Marines with the most operationally ready and capable platforms.

The 15th MEU is under the command and control of Combined Task Force 76/3, employed by U.S. 7th Fleet to operate with allies and partners in preserving a free and open Indo-Pacific.

KONGSBERG turret delivers firepower to U.S. Marine Corps' ACV-30



From Kongsberg Aerospace & Defense, April 30, 2024

A new Amphibious Combat Vehicle that is undergoing testing by the U.S. Marine Corps includes a PROTECTOR remote turret (RT-20) from Kongsberg Defence & Aerospace.

BAE Systems delivered the first production representative test vehicle (PRTV) of the new Amphibious Combat Vehicle 30mm Cannon (ACV-30) to the customer earlier this year. ACV-30 is the third variant in the ACV family of vehicles designed, developed, and built since BAE Systems was selected as the prime contractor for the program in 2018.

"We are proud to be working with BAE Systems and partners on a vehicle and weapon system that will increase the USMC firepower and the capacity to the Marines. The PROTECTOR RT-20 is a modern remotely operated turret with highly accurate firepower for wheeled, tracked, and robotic combat vehicles. The modularity and digitalization of the system has growth potential to incorporate new technologies to deter and defeat future threats," said Jørgen Bull, Vice President, land systems at Kongsberg Defence & Aerospace.

The vehicle mounts a stabilized, medium caliber Remote Turret System manufactured by KONGSBERG that provides the lethality and protection Marines need while leaving ample room for troop capacity and payload while keeping the crew under armor.

The remote turret eliminates the space requirement of legacy turreted cannon systems and provides more room to transport troops and associated mission essential equipment and reduces weight for better mobility.

BAE Systems' customizable ACV variants provide true open-ocean and ship-to-objective capability, land mobility, survivability, and growth potential to meet the evolving operational needs of Marines around the world.

"Delivering capability like the ACV-30 to the U.S. Marine Corps remains critical in the ever-changing battle space," said Garrett Lacaillade, vice president of the amphibious vehicles product line for BAE Systems. "The collaboration we have with Kongsberg on this PRTV enables our customer to see and test a modern and lethal firepower technology on the battlefield."

Kaman's KARGO UAV Makes First Flight



From Kaman Air Vehicles

BLOOMFIELD, Conn. – (BUSINESS WIRE)–April 30, 2024–Kaman Corporation proudly announces the significant achievement of the first flight of the full-scale KARGO UAV, a purpose-built, autonomous, expeditionary resupply vehicle. This milestone, which took place in December of 2023, signifies a major accomplishment in the ongoing flight test progression. The development of this medium-lift UAS, initiated in 2021 to address logistics needs for U. S. Marine Corps operations, is now well underway.

"It is difficult to describe the sense of satisfaction one feels when watching an aircraft take flight for the first time, and very few people get the opportunity to participate in something like this," said Romin Dasmalchi, General Manager of KARGO UAV. "This team worked hard to get here, and the intensity continues as we look to move from prototyping to production," he added. KARGO UAV is intended to support the U. S. Military, partners, allies, and commercial customers by providing affordable, reliable, and maintainable logistics support in austere and maritime environments. The design leverages existing high-TRL components so that a suitable system could be deployed as soon as 2026.

Contributions from partners significantly aided the success of the KARGO UAV flight test. Near Earth Autonomy, Kaman's partner for the autonomy system based in Pittsburgh, PA, provided autonomy features on the KARGO UAV. The two companies had previously collaborated on the K-MAX unmanned system and had showcased an earlier version of the autonomy technology to the Marines in April 2021. The Alaska Center for UAS Integration, part of the University of Alaska Fairbanks Geophysical Institute, was key in facilitating KARGO UAV flight test operations.

KARGO UAV is currently competing under the Marines' Medium Autonomous Resupply Vehicle-Expeditionary Logistics (MARV-EL) program, which is managed by NAVAIR PMA-263 and culminates in a fly-off in July of this year.

GA-ASI Delivers First MQ-9A Extended Range to USMC's VMUT-2



SAN DIEGO – 30 April 2024 – General Atomics Aeronautical Systems, Inc. (GA-ASI) and the U.S. Marine Corps (USMC) celebrated the delivery of the first MQ-9A Extended Range (ER) Unmanned Aircraft System (UAS) to Marine Unmanned Aerial Vehicle Training Squadron 2 (*VMUT-2*). The delivery of the MQ-9A ER on March 18, 2024, is part of the Marine Air-Ground Task Force (MAGTF) Unmanned Expeditionary (MUX) Program, which ordered eight MQ-9A ER UAS as part of the ARES Indefinite-Delivery/Indefinite-Quantity (ID/IQ) contract.

"It's exciting to make this first delivery to VMUT-2, which continues to build the relationship between GA-ASI, the USMC, and NAVAIR (Naval Air Systems Command)," said GA-ASI vice president of DoD Strategic Development Patrick Shortsleeve. "GA-ASI has been a contracted warfighting partner of the USMC for several years and VMUT-2's ability to produce aircrews for the USMC is a tremendous advancement in the USMC's organic capability."

VMUT-2 is a UAS training squadron for the USMC based at Marine Corps Air Station Cherry Point in Havelock, North Carolina.

The MQ-9A ER is designed with field-retrofittable capabilities such as wing-borne fuel pods and reinforced landing gear that

extend the aircraft's endurance to more than 30 hours while further increasing its operational flexibility. The aircraft provides long-endurance, persistent surveillance capabilities with Full-Motion Video and Synthetic Aperture Radar/Moving Target Indicator/Maritime Mode Radar. An extremely reliable aircraft, MQ-9A ER is equipped with a fault-tolerant flight control system and a triple-redundant avionics system architecture. It is engineered to meet and exceed manned aircraft reliability standards.

BlueHalo to Test C-UAS System on Marine Corps JLTV



By Richard R. Burgess, Senior Editor

ARLINGTON, Va. — BlueHalo will be testing its LOCUST Laser Weapon System on a U.S. Marine Corps Joint Light Tactical Vehicle (JLTV), the company's chief executive officer (CEO) said.

BlueHalo' s primary focus is on defeating Group1, 2, and 3 unmanned aerial systems (UAS), as well as counter-rocket and counter-mortar systems, said Jonathan Moneymaker, CEO of Blue Halo, in an interview with *Seapower*.

"As the foundation of P-HEL, BlueHalo's LOCUST Laser Weapon System (LWS) combines precision optical and laser hardware with advanced software, artificial intelligence (AI), and processing to enable and enhance the directed energy "kill chain," the company said in a release. "LOCUST LWS addresses the inherent need for mobility and quick deployment-tracking, identifying, and engaging of a wide variety of targets with its hard-kill high energy laser.

"We look at it from an integrated layered defense strategy," Moneymaker said. "Five years ago, we saw the evolution of drone warfare, today one of the fastest-evolving threat vectors. We wanted to engage that from a variety of modalities. We offer solutions and products that range from passive detection in our Skyview product to RF detect-anddefeat in our Titan product, our LOCUST Laser Weapon System, expanding into more global C2 [command and control], and starting to expand into our next-gen kinetic interceptor.

As of April 2024, BlueHalo had delivered two P-HEL systems to the U.S. Army, which has deployed them to unspecified locations.

"It is most certainly [deployed] in areas of conflict," Moneymaker said. "It's real, it's deployable, it's reliable, and frankly needed to bring service members home."

"We're very proud to be the first operationally deployed [HEL] system," Moneymaker said, noting that its system has surpassed operational 10,000 hours and that the customer having a system that "has finally reached a level of reliability that they've been looking for as they've been fielding these

capabilities."

He said that the next expansion would be a mobile high-energy laser weapon — on an infantry squad vehicle or a JLTV. The first mobile system was delivered in late March.

"The JLTV integration will be on the Marine Corps' JLTV, so we've been working with all of the services as it relates to deployment of LOCUST," he said. "We certainly have been having initial conversations with afloat Navy on how can we deploy these systems in the best configuration to counter some of the activity we're seeing in the Red Sea."

Moneymaker said he sees great potential in the "proven, ready [P-HEL] system" for naval use with its roll-on/roll-off capability.

The work for the Marine JLTV is through the Department of the Navy's Ground-Based Air Defense program, as well as through the Joint Capabilities Office and U.S. Army Rapid Capabilities and Critical Technologies Office (RCCTO).

Moneymaker said the LOCUST is very effective against a [drone] swarm, noting that the capability is part of the test criteria. The LOCUST uses Wizard artificial intelligence and machine learning for target identification and aimpoint recognition.

The P-HEL is powered by a generator or batteries, and the company is looking at how to tie the HEL into shipboard power.

The company's HEL is built primarily at the BlueHalo campus in Albuquerque, New Mexico, with work expanding to Huntsville, Alabama, and Rockville, Maryland. BlueHalo, headquartered in Arlington, Virginia, employs 2,400 workers and is approaching revenue of \$1 billion annually. The company has other facilities in Dayton, Ohio, and Fort Lauderdale, Florida.

Commander Marforpac Visits Palau



U.S. Marine Corps Lt. Gen. William M. Jurney, commander, U.S. Marine Corps Forces, Pacific, greets Minister of State for the Republic of Palau Gustav Aitaro, left, and U.S. Ambassador for Palau Joel Ehrendreich, center left, at the Palau International Airport, Apr. 24. Jurney traveled to Palau to meet with local and military leaders to discuss regional defense partnerships and opportunities. Palau is one of the Compact of Free Association states aligned with the United States, which provides defense, funding, and access to social services. (U.S. Navy photo by MC1 Samantha Jetzer) From Deputy AC/S, Communication Strategy & Operations

U.S. Marine Corps Forces, Pacific

April 26, 2024

CAMP H.M. SMITH, Hawaii – Lt. Gen. William M. Jurney, commander, U.S. Marine Corps Forces, Pacific, made an official visit to the Republic of Palau April 24-25, after participating in opening ceremonies for Exercise Balikatan in the Philippines.

The Republic of Palau is one of the Compact of Free Association states aligned with the United States, which provides defense, funding, and access to social services. Lt. Gen. Jurney's visit to Palau underscores the importance and depth of commitment the United States has for the U.S.-Palau partnership.

"Palau has proven to be a long-standing friend of the United States in the Pacific. We thank President Whipps, Jr. for his steadfast support for the U.S. military presence, which helps maintain a free and open Indo-Pacific," said Lt. Gen. Jurney. "We are grateful for the hospitality that Palau shows to the Marine Corps, and are proud of the contributions Marines have made to improving Palau's infrastructure and serving the people of Palau."

Previous deployments to Palau have seen U.S. Marines and Sailors provide expertise in engineering, medical, maritime law enforcement, and explosive ordnance disposal capabilities. Some of the projects Pacific Marines have recently undertaken in Palau include restoration of the Peleliu airstrip, the construction of a weapons firing range, and renovation of the Peleliu World War II Museum, significant because of the upcoming 80th anniversary commemoration of the battle for Peleliu on September 15.

"The Marines have a deep and enduring connection to the people of Palau, both through community service as well as the many Palauans who have served in the Corps," said U.S. Ambassador to Palau Joel Ehrendreich. Lt. Gen. Jurney pledged to build on the long history the Marine Corps shares with the people of Palau.

"We are committed to continuing the long and proud legacy of the Marine Corps working with the people of Palau as we secure and maintain a Free and Open Indo-Pacific."

U.S. Marine Corps Forces, Pacific is the largest operational command in the Marine Corps. It comprises two-thirds of the Marine Corps' active-duty combat forces, collectively known as the "Pacific Marines." Pacific Marines serve as an expeditionary force-in-readiness. They operate as air-ground-logistics teams, and are forward positioned and actively employed throughout the Indo-Pacific every day. Pacific Marines live and work alongside the joint force and like-minded allies and partners to prevent conflict, respond to crisis, and if the Nation calls, to fight and win.

Keel Authenticated for Future USNS Hector A. Cafferata Jr.



From Team Ships Public Affairs, 25 April 2024

SAN DIEGO – The keel for the future USNS Hector A. Cafferata Jr. (ESB 8), a Lewis B. Puller-class Expeditionary Sea Base, was laid at GD NASSCO shipyard April 25.

The ship will be named for U.S. Marine Corps Reserve Private Hector A. Cafferata Jr., who served with distinction during the Korean War. Surviving the Battle of Chosin Reservoir among those who would be called, "the Chosin Few," Cafferata received the Medal of Honor from President Harry S. Truman for his life-saving heroism during that battle.

The contemporary keel laying ceremony represents the joining together of a ship's modular components at the land level. As part of the ceremony, the keel is authenticated when the sponsors etch their initials into a ceremonial keel plate. The namesake's daughter, Heather Cafferata, and granddaughter, Jessica Cafferata, attended the keel laying ceremony as the ship sponsors. The ceremony represents the connection between a ship and its sponsors, throughout the ship's life.

"We are honored that the late Hector A. Cafferata's Jr.'s legacy will live on through this ship, and the keel laying is a first step of many milestones to come for this ship," said Tim Roberts, Strategic and Theater Sealift program manager, Program Executive Office Ships. "ESBs provide a critical capability to the fleet and provide increased flexibility to our Sailors and Marines."

Expeditionary Sea Base ships are highly flexible platforms used across a broad range of military operations, supporting multiple operational phases. Acting as a mobile sea base, they are a part of the critical access infrastructure that supports deploying forces and supplies to provide prepositioned equipment and sustainment with adaptable distribution capability.

These ships support Aviation Mine Countermeasure and Special Operations Force missions. In addition to the flight deck, the ESB features four aviation operating spots and a hangar capable of supporting MH-53E-equivalent helicopters; accommodations, workspaces, and ordnance storage for embarked forces; and enhanced command, control, communications, computers, and intelligence (C4I). These ships support embarked force mission planning and execution and have a reconfigurable mission deck area to store embarked force equipment, including mine sleds and Rigid Hull Inflatable Boats (RHIBs).

GD NASSCO is also currently constructing the future USNS Robert E. Simanek (ESB 7) and John Lewis-class Fleet Replenishment Oilers Robert F. Kennedy (T-AO 208), Lucy Stone (T-AO 209), Sojourner Truth (T-AO 210) and Thurgood Marshall (T-AO 211).

As one of the Defense Department's largest acquisition

organizations, PEO Ships is responsible for executing the development and procurement of all destroyers, amphibious ships and craft, auxiliary ships, special mission ships, sealift ships and support ships.

AV'S Switchblade 300 Selected for U.S. Marine Corps' Organic Precision Fires-Light Program



The Switchblade 300 Block 20 system is battle-proven and production-ready to support Marine Infantry. *AeroVironment*

ARLINGTON, Virginia — AeroVironment was selected by the U.S. Marine Corps for the first phase of the Organic Precision Fires-Light (OPF-L) program of record. AV's Switchblade 300 Block 20 loitering munition system (LMS) will provide the Marine Corps with organic, anti-armor/anti-personnel, precision fires capability at the tactical level. AV was awarded an initial order of \$8.9M on a contract with a maximum potential value of \$249M.

AV's Switchblade 300 Block 20 supports the OPF-L program's request for an individually operated, man-portable loitering munition with a lightweight, precision-guided capability against beyond- line-of-sight adversaries. Switchblade 300 will ensure that Marines are properly equipped and sustained with a lethal, reliable, organic capability for rapid target engagement while minimizing collateral damage and exposure to threat weapon systems.

"AV offers a battle-proven and production-ready system to support OPF-L to meet the Marine Corps' requirements," said AV's Senior Vice President of LMS, Brett Hush. "Our mature and trusted manufacturing capability combined with world-class training and support will ensure Marine Infantry is adequately prepared for the fight."

AV's Switchblade 300 has been deployed in support of urgent operational needs to combat theaters since 2012. Switchblade 300 Block 20 is the next generation of the system that capitalizes on over a decade of user assessments, combat deployments, and lessons learned from the conflict in Ukraine, including operating in contested environment operations.

The Switchblade Block 20 system significantly expands on the currently fielded Switchblade 300 capabilities, including armor penetrating capability through an Explosively Formed Penetrator (EFP) warhead, increased target attack angle, and significantly greater battery life, flight endurance, and radio link range.

"With over 6,000 Switchblade loitering missiles tested, produced, and fielded, AV is in a unique position to offer revolutionary organic precision fire capabilities to the USMC, leveraging the proven reliability, producibility and supportability of current Switchblade programs," continued Hush.

VMUT-2 begins assembly of the first 2nd MAW MQ-9A Reaper



U.S. Marines with Marine Unmanned Aerial Vehicle Training Squadron (VMUT) 2 conduct familiarization training with an MQ-9A Reaper unmanned aircraft at Marine Corps Air Station Cherry Point, North Carolina, April 11, 2024. (U.S. Marine Corps photo by Lance Cpl. Orlanys Diaz Figueroa) Story by <u>2nd Lt. John Graham, 2nd Marine Aircraft Wing</u>

April 12, 2024

MARINE CORPS AIR STATION CHERRY POINT, N.C. – Marine Unmanned Aerial Vehicle Training Squadron (VMUT) 2, 2nd Marine Aircraft Wing (MAW), began the assembly of 2nd MAW's first MQ-9A Reaper, April 10, as part of the U.S. Marine Corps' continued transition from the legacy RQ-21A Blackjack in accordance with Force Design initiatives.

"The delivery and build of VMUT-2's first MQ-9A aircraft is yet another successful milestone in the transition of VMUT-2 to become the MQ-9A Fleet Replacement Squadron, responsible for the world-class training of the Marine Corps' MQ-9A pilots and sensor operators," said Lt. Col. Michael Donlin, commanding officer of VMUT-2.

Many of the parts for the aircraft were delivered to VMUT-2, known as the "Night owls," aboard Marine Corps Air Station (MCAS) Cherry Point, North Carolina, from General Atomics in March, making 2nd MAW the third and final MAW to receive the aircraft. Marine Unmanned Aerial Vehicle Squadron (VMU) 1, 3rd MAW, procured the first MQ-9A Reaper for the Marine Corps in August 2021, and VMU-3, 1st MAW, was the first VMU to achieve initial operational capability with the MQ-9A platform in August 2023.

The MQ-9A Extended Range Marine Air-Ground Task Force (MAGTF) Unmanned Expeditionary (MUX) Medium-Altitude, High-Endurance (MALE) aircraft is a medium-altitude, long-endurance Block 5 remotely piloted aircraft, enabling future Marine Corps, naval, and joint force operating concepts by providing multisensor surveillance and reconnaissance; data gateway and relay capabilities through an aerial layer; and enabling or conducting the detection and engagement of targets during expeditionary, joint, and combined operations. The aircraft will provide intelligence, surveillance, reconnaissance and targeting as well as performing additional missions such as: maritime domain awareness, airborne network extension, airborne early warning, and electronic support. With a range of more than 1,600 miles and the ability to operate for more than 20 hours, the unmanned aircraft is designed to provide intelligence, surveillance and reconnaissance in support of 2nd MAW and wider Marine Expeditionary Force missions. This extended range is possible through the Marine Corps' addition of external fuel tanks to the aircraft that are capable of holding 1,300 pounds of fuel.

These capabilities will allow the MQ-9A Reaper to support future Marine Corps operating concepts, such as distributed maritime operations, littoral operations in a contested environment, and expeditionary advanced base operations as part of Force Design initiatives. The capabilities that the MQ-9A Reaper will provide represent an enhancement to 2nd MAW's intelligence, surveillance, and reconnaissance, and data and communications network capabilities. The arrival and assembly of this aircraft represents a milestone in 2nd MAW unmanned aircraft systems' support for future operating concepts and represents an additional milestone in VMUT-2's continued transition from the RQ-21A Blackjack platform that served as 2nd MAW's primary unmanned aircraft system until July 2023.

"Our ability to rapidly and safely build these aircraft sets the stage for flight operations in the near future and is a testament to the hard work of the 'Night owl' maintenance department and the program office over the last ten months," said Donlin. "'Night owls' don't quit."

VMM-268 Marines Prepare for

Marine Rotational Force Darwin



Marine Corps Base Hawaii

April 16, 2024

A U.S. Marine with Medium Tiltrotor Squadron (VMM) 268, Marine Aircraft Group 24, 1st Marine Aircraft Wing, guides an MV-22B Osprey in preparation for Marine Rotational Force Darwin (MRF-D) at Joint Base Pearl Harbor-Hickam, Hawaii, April 16, 2024. MRF-D is a deployment held in Australia that enhances capabilities and readiness of both the United States Marine Corps and the Australian Defense Force and continues to help strengthen the alliance between the two nations. VMM-268 will serve as the Aviation Combat Element for the upcoming iteration of MRF-D. (U.S. Marine Corps photo by Lance Cpl. Tania Guerrero)