Laser-Guided Excalibur S Munition Aces Navy Test

The new Excalibur S precision-guided munition is fired from a howitzer. Raytheon Co.

YUMA PROVING GROUND, Ariz. — Raytheon's new Excalibur S precision-guided munition scored direct hits on moving targets in a U.S. Navy test, the company said in a Feb. 5 release. Testing validated the projectile's ability to survive the shock and stress of a howitzer firing, then transition from GPS to laser guidance and hit a moving target.

Excalibur S uses the Excalibur Ib variant's GPS technology and incorporates a semi-active laser seeker to engage mobile land and maritime targets at comparable ranges. Existing Ib projectiles can be upgraded with Excalibur S capabilities.

https://www.youtube.com/watch?time_continue=18&v=rxa0ASS2wp8&feature=emb_logo

"Using artillery to engage moving targets gives soldiers more flexibility," said Sam Deneke, Raytheon Land Warfare Systems vice president. "Artillery is typically used to hit stationary objects, but Excalibur S expands the capability of artillery on the battlefield."

Excalibur is a true precision weapon, impacting at a radial miss distance of less than 2 meters from the target. Widely used by U.S. and international artillery forces, Excalibur has been fired more than 1,400 times in combat.

Coast Guard Repatriates 64 Migrants to Dominican Republic

SAN JUAN, Puerto Rico – The U.S. Coast Guard repatriated 64 migrants to the Dominican Republic between Feb. 5 and Feb. 6 following the interdiction of an illegal migrant voyage on Feb. 3 about 51 nautical miles north of Punta Cana, the according to the Coast Guard's 7th District.

The interdiction was the result of ongoing efforts in support of Operation Caribbean Guard and the Caribbean Border Interagency Group (CBIG).

The crew of a Coast Guard HC-144 Ocean Sentry aircraft sighted the illegal migrant voyage about 51 nautical miles north of Punta Cana. Coast Guard watchstanders at Sector San Juan diverted cutter Donald Horsley, which had arrived on scene and interdicted the 30-foot white migrant boat. The makeshift vessel was transporting 63 Dominican males, including a 17-year-old minor, and one Haitian man.

"In the last 10 days, the U.S. Coast Guard and our Dominican Republic navy partners have worked together to interdict 191 migrants at sea," said Lt. Michael Lopez, Coast Guard liaison officer in the Dominican Republic. "Our collective efforts help safeguard the maritime borders of both nations and the people who risk their lives when they embark grossly overloaded makeshift vessels to attempt the perilous voyage across the Mona Passage."

The crew of the cutter Donald Horsley embarked the migrants and transported them to waters Feb. 5 just off Samaná, Dominican Republic, where the 63 adult migrants were transferred to local authorities aboard a Dominican navy patrol boat. The following day, the Coast Guard Cutter

Joseph Tezanos repatriated the 17-year-old minor in Santo Domingo, Dominican Republic, where he was received by local authorities.

Once aboard a Coast Guard cutter, all migrants receive food, water, shelter and basic medical attention. Cutters Donald Horsley and Joseph Tezanos are 154-foot fast-response cutters homeported in San Juan.

Components of Northrop Grumman AQS-24B Mine-Hunting System Now Made in Australia

CANBERRA, Australia – Northrop Grumman Corp. has started to manufacture components of the AQS-24B towed mine-hunting system with Marand Precision Engineering in Australia, at the company's Moorabbin, Victoria, facility.

The AQS-24 mine-hunting system includes an operational high-speed synthetic aperture sonar (HSSAS) and an optical laser line-scan sensor. The system performs high-resolution detection, localization, classification and identification of mine-like objects from helicopter and unmanned surface vessel platforms at speeds of up to 18 knots. A total of 31 systems are deployed worldwide.

"Northrop Grumman is committed to providing our customers worldwide with a sustainable and affordable mine-hunting system," said Alan Lytle, vice president of undersea systems at Northrop Grumman. "Our partnership with Australian industry enables us to source key components from local manufacturers."

Marand designs and manufactures products for the aerospace, defense, automotive, rail and renewable-energy industries. The towed vehicle shell assemblies and sonar array housings being manufactured in Australia for the AQS-24B will benefit from Marand's experience on other successful programs such as the F-35 Lightning II strike fighter. Assemblies will be delivered this summer to satisfy existing spares contracts Northrop Grumman has to support fielded and operational AQS-24 systems.

"We are thrilled to be selected by Northrop Grumman as their partner for the AQS-24B program," said Steve Mellor, general manager of Marand Defence Partnerships. "Having received our very first order from Northrop Grumman was an important step towards a long-term relationship."

Northrop Grumman has also expanded its current partnership with Sydney-based Electrotech Australia Pty Ltd, which performs post-delivery support of Northrop Grumman navigation and radar systems operating in Australia, to include future sustainment of the AQS-24B mine-hunting sensor systems.

First RAF Poseidon Lands in U.K.

The RAF's new submarine-hunting Poseidon Maritime Patrol Aircraft (MPA) touches down for the first time in the U.K. on Feb. 4 at Kinloss Barracks. Royal Air Force

LONDON – The RAF's new submarine-hunting Poseidon maritime patrol aircraft (MPA) has touched down for the first time in the United Kingdom, the U.K. Ministry of Defence said

in a release.

The aircraft is the first of a new program, including the purchase of nine state-of-the-art Poseidon jets, which will improve the U.K.’s ability to track hostile targets below and above the waves.

Poseidon aircraft will protect the U.K.’s continuous at-sea nuclear deterrent and be central to NATO missions across the North Atlantic, co-operating closely with the U.S. and Norwegian Poseidon fleets.

The U.K.’s purchase of the Poseidon is in response to increased threats such as Russian submarine activity in the Atlantic Ocean returning to Cold War levels, while China is also investing heavily in new Arctic facilities, infrastructure and ice-capable ships.

“Our Poseidon fleet will soon join an integrated U.K. force of fighter jets, ships, submarines, helicopters and highly-trained Royal Marines, ready to operate in Arctic conditions,” Defence Minister Anne-Marie Trevelyan said. “The U.K. will not stand by if peace in the Arctic region is threatened.

“RAF Lossiemouth’s strategic northerly location makes it one of the most important air stations in the U.K., already home to half of the U.K.’s Typhoon Force, and now sitting at the heart of our anti-submarine operations,” Trevelyan said.

The Poseidon is designed to carry out extended surveillance missions at high and low altitudes. The aircraft is equipped with cutting-edge sensors which use high-resolution area mapping to find both submarines and surface vessels.

Each aircraft carries sonobuoys which are dropped from the aircraft into the sea to search for enemy submarines, surveying the battlespace under the sea and relaying data back to the aircraft.

The Poseidon will also be armed with Harpoon anti-surface ship missiles and Mk54 torpedoes capable of attacking both surface and sub-surface targets.

“The Poseidon MRA1 is a game-changing maritime patrol aircraft,” said Air Chief Marshal Mike Wigston, chief of the Air Staff. “I am delighted and proud to see the ‘Pride of Moray’ and her crews returning to maritime patrol flying from Scotland, working alongside the Royal Navy to secure our seas and protect our nation.”

“The arrival of the first Poseidon marks a significant upgrade in the U.K.’s ability to conduct anti-submarine operations,” said First Sea Lord Adm. Tony Radakin. “This will give the U.K. the ability to conduct long range patrols and integrate seamlessly with our NATO allies to provide a world-leading capability.”

All nine U.K. Poseidons will be delivered to the RAF by the end of 2021 and achieve full operational capability from RAF Lossiemouth in 2024. The aircraft will be flown initially by 120 Squadron, the leading anti-submarine warfare squadron in World War II, with 201 Squadron joining the program in due course.

Poseidon will temporarily operate from Kinloss until October 2020 while runway and taxiway resurfacing work is completed at Lossiemouth. Routine Typhoon training also will temporarily relocate from Lossiemouth to Kinloss in June and July while the intersection of the runways there is resurfaced.

“Seeing the first RAF Poseidon MRA Mk1 landing in the U.K. is an incredibly proud moment for all of the team at DE&S,” said Michelle Sanders, DE&S P-8A delivery team leader. “Close, collaborative working with colleagues in Air Capability, the U.S. Navy and industry has helped us deliver this very capable aircraft.”

Moray’s RAF Lossiemouth is one of the most important air

stations in the U.K. as it's already home to four RAF Typhoon squadrons – half of the RAF Typhoon Force – and will become the center of operations for the U.K. Poseidon fleet.

The Ministry of Defence is upgrading RAF Lossiemouth's infrastructure, including a new strategic facility for the Poseidon fleet, upgraded runways and operating surfaces, a new air traffic control tower, upgraded facilities for IX (Bomber) Squadron, which moved to Scotland in 2019, new personnel accommodation, upgraded drainage and electrical supplies.

When these developments are complete there will be 550 additional military personnel based at RAF Lossiemouth, bringing the total number of military personnel employed there to 2,532.

Marine Corps Orders Two Northrop Grumman TPS-80 Radars

The U.S. Marine Corps AN/TPS-80 Ground/Air Task-Oriented Radar (G/ATOR) system. Northrop Grumman Corp.

BALTIMORE – Northrop Grumman Corp. has received an order from the U.S. Marine Corps for two additional AN/TPS-80 Ground/Air Task-Oriented Radar (G/ATOR) systems as part of the full-rate production Lot 2 award received in December, Northrop Grumman said. This order completes the planned Lot 2 procurement for a total of eight systems for the Marines.

"We are continuing to provide an

advanced, multimission capability that meets the evolving needs of our customers," said Mike Meaney, vice president of land and maritime sensors for Northrop Grumman. "This order also enables us to keep the G/ATOR production pipeline full in anticipation for a Lot 3 award next year."

In June, the Marine Corps awarded Northrop Grumman a $958 million full-rate production contract for 30 of the G/ATOR systems.

The AN/TPS-80 G/ATOR is an advanced active electronically scanned array (AESA) multimission radar that leverages GaN to provide comprehensive real-time, full-sector, 360-degree situational awareness against a wide array of threats.

Northrop Grumman to Integrate Sonar System Onto L3Harris UUV

The Northrop Grumman μSAS (pronounced "micro-sas") mounted on an L3Harris Iver4 UUV. Northrop Grumman Corp.

ANNAPOLIS, Md. – Northrop Grumman Corp.'s μSAS (pronounced "micro-sas") will be integrated onto L3Harris Technologies' Iver4 Unmanned Undersea Vehicle (UUV) for a 12-month test period for the Defense Innovation Unit's (DIU) Next-Generation Small-Class UUV program, according to a Northrop Grumman release.

The μSAS is a Low-SWaP (size, weight and power), high-performance interferometric synthetic aperture sonar that

enables longer sorties and higher area coverage rates for UUV missions.

https://www.youtube.com/watch?v=5DcWpCJaxVA&feature=emb_logo
Integrated onto a 9-inch diameter, 99-inch long, 200-pound UUV, the installation will occur at L3Harris' Fall River, Massachusetts, facility and the system will be tested in San Diego by the U.S. Navy. The integration of synthetic aperture sonar on a small diameter UUV is a significant step in small-class vehicle capability.

"The Northrop Grumman μSAS advanced imaging sonar is a mine-hunting force multiplier designed specifically for UUVs," said Alan Lytle, vice president of undersea systems at Northrop Grumman. "This integration will help to deliver a significant increase in the platform's ability to detect objects on the seafloor and in the water column."

"The Iver4, integrated with μSAS, is a major advancement in small-class UUV capability for the warfighter," said Daryl Slocum, president and general manager of unmanned maritime systems for L3Harris.

The Iver4, internally. L3Harris Technologies

Lockheed Delivers First Block 8.1 Upgrade HC-130J to Coast Guard

A Coast Guard Hercules takes off from Air Station Barbers Point, Hawaii. U.S. Coast Guard/Petty Officer 3rd Class Matthew West

ELIZABETH CITY, N.C. – Lockheed Martin representatives joined U.S. Coast Guard leaders and crew members for a ceremony on Jan. 31 at the Coast Guard Aviation Logistics Center in Elizabeth City, North Carolina, to mark the completion of operational testing of the first Coast Guard HC-130J extended-range transport outfitted with the Block 8.1 upgrade, the company said.

This upgrade was installed on a previously delivered HC-130J at Lockheed's facility in Greenville, South Carolina. The aircraft recently completed initial operational testing and will be placed into service. Lockheed is contracted to deliver a minimum of six Block 8.1 upgrade kits to the Coast Guard.

The upgrade adds new and advanced capabilities:

- A new flight-management system that complies with CNS/ATM mandates and includes vertical navigation with coupled auto throttle
- Civil GPS
- Ground power modes
- Updated Identification Friend or Foe
- CNS/ATM Data Link
- Enhanced intercommunication system
- Enhanced approach and landing systems
- Expanded diagnostics
- Improved PA system
- Additional covert lighting
- IAMSAR compliant search pattern programming

"The U.S. Coast Guard has relied on its Hercules fleet for more than 60 years to support complicated missions that ensure our nation's safety and security," said Peter London, director of tactical airlift programs for Lockheed's air mobility and maritime missions business line.

"The advanced features and purpose-built design enhancements found in the Block 8.1 upgrade ensure that Coast Guard crews

will rely on the HC-130J for mission support for many more decades to come.”

In addition to the Block 8.1 upgrade, the Coast Guard is also integrating Minotaur mission system architecture into its fixed-wing aircraft. Missionization includes post-production modification of new C-130J aircraft to incorporate the specialized equipment necessary to carry out Coast Guard missions.

The Coast Guard’s HC-130J Super Hercules long-range surveillance aircraft provides heavy air transport and long-range maritime patrol capability. Each aircraft can serve as an on-scene command-and-control platform or as a surveillance platform with the means to detect, classify and identify objects and share that information with operational forces.

The Coast Guard is acquiring a fleet of 22 new, fully missionized HC-130J aircraft to replace its older HC-130Hs.

Boeing Delivers First F/A-18 Service-Life Modification Jet to Navy

Aviation Boatswain’s Mate (Equipment) Mason Green guides an F/A-18 Super Hornet to a catapult on the flight deck of the aircraft carrier USS Theodore Roosevelt on Feb. 1. U.S. Navy/Mass Communication Specialist Seaman Olympia O. McCoy

ARLINGTON, Va. — Boeing has given the F/A-18 a new lease on life after delivering the first Super Hornet under Service Life Modification (SLM) to the U.S. Navy, the company said

Feb. 6. The second SLM jet will deliver by the end of the month, and Boeing will deliver the third F/A-18 in April.

The initial Super Hornets delivered will extend their service lives from 6,000 to 7,500 flight hours. Future modification plans in the early 2020s will enable the jets to fly 10,000 hours and incorporate the new Block III capabilities.

“SLM is going to provide a critical resource for the Navy to recapitalize on long-serving aircraft to return them to the fleet in a near new condition,” said Capt. Stephen May, PMA-265 co-lead for E/F/G Air Vehicles. “It will reduce burden on our maintainers, our supply system and our depot-level assets within the enterprise.”

A total of 15 Super Hornets are in SLM on production lines in St. Louis and San Antonio. It takes 18 months to complete modifications on an F/A-18, although that time will be driven down to one year as the modifications progress. Boeing will deliver five more Super Hornets this year.

The Block III conversion will include enhanced network capability, conformal fuel tanks, an advanced cockpit system, signature improvements and an enhanced communications system. The updates are expected to keep the F/A-18 in active service for decades.

Senator Introduces Legislation to Boost

Shipbuilding Toward 355-Vessel Fleet

A crane moves the lower stern into place on the nuclear-powered aircraft carrier USS John F. Kennedy under construction at Newport News Shipbuilding in Virginia in 2017. U.S. Navy/John Whalen

WASHINGTON – Roger Wicker, a senior member of the Senate Armed Services Committee, on Feb. 6 introduced the Securing the Homeland by Increasing our Power on the Seas (SHIPS) Implementation Act, according to his office.

The legislation follows the Mississippi Republican's 2017 SHIPS Act, which was signed by President Trump, making it U.S. policy to reach a 355-ship Navy. The new act would authorize the use of multiple cost-saving measures and direct the Navy to procure 39 new ships over the next four fiscal years.

"Our nation's Navy is still the envy of the world, but our adversaries are quickly catching up," Wicker said. "It is time for Congress to get serious about investing in our fleet and give our Sailors and Marines the tools they need to stay ahead of those who wish us harm."

"In the near term, [the act] would empower our Navy to reach its 355-ship goal by authorizing the procurement of specific vessels and cutting costs. Over time, my proposal would help to decrease risk for the Navy and provide greater certainty for the industrial base."

The Navy's 355-ship goal is the direct result of a Navy-wide "force structure assessment" from 2016 that solicited inputs from all regional commands about their current and projected needs. These projections included a recognition that the U.S. would need to significantly increase the size and capability

of the Navy to counter growing threats from China and Russia.

In response to this assessment, Wicker introduced the 2017 SHIPS act. Even with a reinvigorated shipbuilding effort over the last three years, the Navy's shipbuilding budget still falls between $4 billion and $5 billion short of the level required to reach a 355-ship Navy.

Wicker's SHIPS Implementation Act would expand his 2017 legislation by providing a strategic framework and additional support to help the Navy reach its fleet goal.

Among other provisions, the act would:

- Direct the Navy to start construction on at least 12 Arleigh Burke-class destroyers, 10 Virginia-class submarines, two Columbia-class submarines, three San Antonio-class amphibious ships, one LHA-class amphibious ship, six John Lewis-class fleet oilers and five guided missile frigates across fiscal 2021-2025.

- Authorize the award of shipbuilding contracts for three San Antonio-class amphibious ships, one America-class amphibious ship, two Columbia-class submarines and six John Lewis-class fleet oilers in fiscal 2021.

- Recognize the strategic value of the Columbia-class submarine program by authorizing the use of the National Sea-Based Deterrence Fund to support the program with funds over and above the Navy's shipbuilding budget.

- Introduce stability to the Navy's acquisition process by requiring steady shipbuilding rates to be maintained for each vessel class.

- Authorize the use of several cost-saving measures, including multiyear or block buy contract authorities when appropriate.

- Minimize risk for the Navy by requiring shipbuilding prototyping to occur at the subsystem-level in advance of ship design, to the maximum extent practicable.

L3Harris to Design New Marine MUX UAS Electronic Warfare Payload

MELBOURNE, Fla. – L3Harris Technologies finished first in a contest to design an electronic warfare (EW) solution for the U.S. Marine Corps' future large unmanned aerial system, a network of early warning and intelligence, surveillance and reconnaissance drones to protect maritime forces, the company announced.

As part of the Marine Air-Ground Task Force Unmanned Aerial System Experimental (MUX) design challenge, L3Harris proposed an EW payload solution for the drone that includes the company's combat-proven technologies in software-defined, multifunction EW featuring advanced antenna arrays.

Once fielded, the MUX drone will be able to launch from a ship, perform reconnaissance and relay communication to deployed ground forces. The EW payload will provide the drone and its operators with situational awareness and protection from sophisticated electronic threats.

"L3Harris proposed the winning EW payload design based on proven technologies from across the newly merged companies, which can be integrated today in order to help the Marines realize their vision of initial operation capability for the new drone as early as 2025," said Ed Zoiss, president of space

and airborne systems at L3Harris.