Raytheon’s SM-3 IIA Intercepts ICBM Target, Creating New Option for Missile Defense

An SM-3 Block IIA missile is on its way to intercept a target missile in this 2018 photo. In a new test, the missile intercepted an ICBM target outside Earth’s atmosphere. Missile Defense Agency

TUCSON, Ariz. – As part of a historic Missile Defense Agency demonstration and for the first time ever, an intercontinental ballistic missile target was intercepted and destroyed outside Earth’s atmosphere by an advanced SM-3 Block IIA ballistic missile defense interceptor made by Raytheon Missiles & Defense, a Raytheon Technologies business, the company said in a Nov. 17 release. The interceptor was co-developed with Japan’s Mitsubishi Heavy Industries.

“This first-of-its-kind test shows that our nation has a viable option for a new layer of defense against long-range threats,” said Bryan Rosselli, vice president of Strategic Missile Defense at Raytheon Missiles & Defense.

The SM-3 family of ballistic missile defense interceptors has executed more exo-atmospheric intercepts than all other missiles combined and is the only weapon of its kind employed from both ships and land.

Raytheon Intelligence & Space sensors were also part of the historic test from low-earth orbit. The sensors detected and tracked the target and relayed the data to decision makers in a demonstration of space-based early warning.

All five NATO RQ-4D Phoenix drones are on station at Sigonella, Sicily

One of five NATO RQ-4D aircraft called “Phoenix” presented in the hangar on Sigonella airbase in Italy. The remotely piloted aircrafts are part of the Alliance Ground Surveillance System that 15 NATO Allies have acquired together. NATO / OR7 Pia Dunkel, German army

NATO now has all five NATO RQ-4D Phoenix unmanned Alliance Ground Surveillance (AGS) aircraft at the Main Operating Base at Sigonella, Sicily.

AGS is based on the Northrop Grumman RQ-4 Global Hawk wide-area surveillance drone and the MQ-4C Triton maritime surveillance platform. Northrop Grumman is the prime contractor for AGS and leads an industry team comprised of Leonardo, Airbus, and Kongsberg and other defense companies from all of the procuring nations participating in the AGS program.

The first AGS arrived a year ago. The first test and training flight of the unmanned aircraft by NATO AGS Force pilots was conducted on 4 June 2020. The final AGS landed at Sigonella yesterday (Nov. 12, 2020).

Northrop Grumman ferried the aircraft to Sigonella via a non-stop transatlantic flight. The aircraft departed on Wednesday, Nov. 11 from Palmdale, California and landed nearly 20 hours later on Nov. 12 at Sigonella, near the Italian city of Catania on the island of Sicily.

According to a NATO statement, “The five drones will support NATO operations by monitoring the ground and providing situational awareness, also known as Joint Intelligence, Surveillance and Reconnaissance, or JISR. This gives decision makers an increased tactical awareness of what’s happening on the ground, in the air and at sea, allowing accurate decision making based on real time-shared information.”

The AGS RQ-4D Phoenix is a remotely piloted surveillance aircraft developed with contributions from 15 NATO Allies: Bulgaria, the Czech Republic, Denmark, Estonia, Germany, Italy, Latvia, Lithuania, Luxembourg, Norway, Poland, Romania, Slovakia, Slovenia and the United States. Intelligence data gathered by the AGS system – which also includes associated command and control ground stations – will be available to all NATO Allies.

The 30 NATO nations have ships, battalions and aircraft, funded and maintained by the nations themselves. But there are some capabilities that are owned by NATO, itself. It amounts to less than 1% in investment money, and includes programs like the NATO AWACs (Airborne Warning and Control System) and AGS, which are owned by NATO itself.

According to a statement from Northrop Grumman, NATO AGS is a system of systems comprised of aircraft, ground and support segments. Work remains to complete handover of the AGS System to the NATO AGS Force (NAGSF), the statement said.

“Once the NATO AGS system achieves handover, NATO commanders will have greater flexibility and redundancy to support the mission of protecting ground troops, civilian populations and international borders in peacetime and times of conflict as well as humanitarian missions during natural disasters,” said Jane Bishop, vice president and general manager, autonomous systems, Northrop Grumman.

Martin UAV Partners with SOUTHCOM on Counter Narcotics Operations

Martin UAV's vertical takeoff and landing unmanned aircraft, the V-Bat. Martin UAV

PLANO, Texas – Martin UAV successfully demonstrated the shipboard integration of its V-BAT as well as its impressive maritime capabilities in support of U.S. Southern Command's (USSOUTHCOM) counter-narcotics operations in the Eastern Pacific from Oct. 6, 2019, to July 31, 2020, the company said in a Nov. 10 release.

Support for the mission included the highly visible Enhanced Counter Narcotics Operations that began April 1 and was kicked off by the President of the United States.

The 10-month mission started with a demonstration of the V-BAT's small footprint, quick set-up, rapid deployment and true vertical takeoff and landing capabilities. Upon successful completion, a technology assessment to support the USSOUTHCOM Exercises and Coalition Affairs Directorate, Long Duration, Long Dwell (LD2) started upon successful completion of the shakedown.

By leveraging commercial off-the-shelf technologies, LD2's goal is to enhance the execution of the Department of Defense's strategic objectives. Over the course of the demonstration, the V-BAT flew an unprecedented 273 sorties for a total of 1340.7 flight hours.

"This mission helped catapult Martin UAV's V-BAT into the

maritime environment, showcasing its ability to withstand and perform in tropical conditions, including: strong crosswinds and unexpected storms with rain exceeding 10mm per hour," said Heath Niemi, vice president of Global Sales & Development.

State Dept. Approves Possible SM-2 Block IIC Missile Sale to Canada

The Arleigh-Burke class guided-missile destroyer USS Stout (DDG 55) launched a Standard Missile (SM) 2 during a missile exercise (MSLEX) in 2019. U.S. Navy / Lt. Laura Radspinner

WASHINGTON – The State Department has approved a possible Foreign Military Sale to the Government of Canada of Standard Missile 2 (SM-2) Block IIIC missiles and related equipment for an estimated cost of $500 million, the Defense Security Cooperation Agency (DSCA) said in a release.

The Government of Canada has requested to buy 100 Standard Missile 2 (SM-2) Block IIIC missiles and 100 Mk13 Vertical Launch System canisters modified to employ the SM-2 Block IIIC missile.

The proposed also would include "obsolescence engineering; integration and test activity associated with production of subject missiles; canister handling and loading/unloading equipment and associated spares; training and training equipment/aids; technical publications and data; U.S. Government and contractor engineering, technical, and logistics support; and other related elements of logistical and program support, the release said.

This proposed sale will provide Canada with SM-2 Block IIIC missiles for installation on its planned 15 Canadian Surface Combatant ships, ensuring its ability to operate alongside U.S. and Allied naval forces against the full spectrum of naval threats.

The principal U.S. contractor will be Raytheon Missiles and Defense, Tucson, Arizona.

General Dynamics Tapped by Canadian Navy for In-Service Support Work

OTTAWA – General Dynamics Mission Systems–Canada announced today it has been awarded the Halifax-class Combat Systems (HCCS) in-service support contract, valued at $182 million over six years.

General Dynamics will support the Royal Canadian Navy's operational readiness and sustainment objectives, providing support to six Combat Systems on 12 Halifax-class ships, RCN Fleet Schools, Fleet Maintenance Facilities and the Naval Electronic Systems Test Range Atlantic and Pacific.

"General Dynamics has a long and proud history of working closely with the Canadian Armed Forces and the Royal Canadian Navy – building on 30 years of support to the Halifax-class ships," said David Ibbetson, vice president and general manager of General Dynamics Mission Systems–International. "With this contract, we are proud to maintain technology-driven careers from Halifax to Ottawa and Victoria for years to come."

This ISS contract will help ensure the RCN's HCCS Equipment Group, which largely includes radar systems, are ready for any mission. General Dynamics is also upgrading and maintaining underwater sensors on the Halifax-class ships via the Underwater Warfare Suite Upgrade contract, further contributing to technologies that generate economic impact for Canada.

First Triton UAV for Australia Under Construction

Northrop Grumman initiates build of Australia's first MQ-4C Triton aircraft. Northrop Grumman

MOSS POINT, Miss. – Northrop Grumman has initiated the build process for Australia's first MQ-4C Triton unmanned maritime intelligence, surveillance and reconnaissance (ISR) aircraft, the company said in an Oct. 27 release. In a ceremony broadcast to a virtual audience, speakers from the Australian Government, Royal Australian Air Force (RAAF), U.S. Congress, U.S. Navy and Northrop Grumman emphasized the significance of this event.

"The MQ-4C Triton will be a very important ISR capability for Australia," said Air Commodore Terry van Haren, the RAAF's air attaché to the Australian embassy. "It is ideally suited for Australian operating conditions, given its high altitude, long endurance, and impressive sensor suite. The Royal Australian Air Force looks forward to operating the MQ-4C alongside its other ISR and response aircraft such as the P-8A Poseidon."

Capt. Dan Mackin, the U.S. Navy's Triton program director, applauded the continued progress of the program, stating,

“With much of our team working remotely, geographically dispersed, and across many time zones, I am so impressed with the continued productivity I have seen and the great work being done. Our partnership near and far remains strong as we prepare to deliver the first Triton aircraft to Australia in 2023.”

“As a strategic partner in the cooperative development program, Australia is a critical part of Triton’s development and production,” said Doug Shaffer, vice president, Triton programs, Northrop Grumman. “This game-changing system will boost Australia’s ISR capability and enable them to meet their surveillance needs to manage the world’s third largest exclusive economic zone.”

The MQ-4C is a cooperative development program between the Royal Australian Air Force and the U.S. Navy, and provides a round-the-clock maritime wide-area ISR. Operating at altitudes exceeding 50,000 feet, Triton can cover more than one million square miles, or two and a half million square kilometers, of ocean and littorals in a single flight, bringing unprecedented awareness to commanders’ common operating pictures.

Navy Awards Silver Ships $6.12M Contract for FMS Patrol Boats

Sailors with Riverine Squadron 3, Detachment 2, Regimental Combat Team 5, tour Marines of Civil Affairs Group, 2nd Battalion, 11th Marine Regiment, RCT 5, around Lake Quadsiyah, near Haditha, Iraq, in Riverine Patrol Boats, in this 2008

photo. U.S. Navy / Cpl. Seth Maggard
MOBILE, Ala. – Silver Ships Inc. has received a contract award worth $6.12 million from the Naval Sea Systems Command for six Riverine Patrol Boats (RPBs), the company said in an Oct. 27 release.

The Riverine Patrol Boat is a U. S. Navy Foreign Military Sale (FMS) that will benefit a Pacific region ally. The 40-foot vessels are an extremely rugged, center console design and are powered by twin Yanmar 440 HP engines and waterjets. They are armed, armored and have been designed to carry 20 personnel, or a typical crew of six with 14 additional troops and cargo.

RPBs are designed to support military operations in inland waters and rivers as well as coastal areas. Typically, they are used to counter terrorism and lawlessness but can also be used for humanitarian assistance, medical evacuation, command and control, counter-drug, search and rescue, and many other missions.

Several partners were involved in supporting the project, including Laborde Products Inc., JDCI/Boatmaster and SKYDEX, among others.

“We are excited to be able to provide additional RPBs to the Navy’s Foreign Military Sales program,” said Shawn Lobree, federal contracts manager at Silver Ships. “Silver Ships has maintained a consistent commitment to excellence by providing top quality and highly durable aluminum workboats to the U.S. and foreign militaries for more than two decades.”

“Silver Ships has been manufacturing military patrol boats for the United States military for nearly 30 years and is proud to grow this continued partnership through the Navy FMS program,” said Steven Clarke, co-owner of Silver Ships. “As our 35th anniversary comes to a close at the end of 2020 our sales backlog continues to grow, and our team looks forward to

designing and building vessels that meet the highest quality, performance and durability standards.”

State Dept. Approves Possible Sale of SLAM-ER Cruise Missiles to Taiwan

A Boeing-built SLAM-ER missile. Shown here is the AGM-84K variant. Navair

WASHINGTON – The State Department has made a determination approving a possible Foreign Military Sale to the Taipei Economic and Cultural Representative Office in the United States (TECRO) of 135 AGM-84H Standoff Land Attack Missile Expanded Response (SLAM-ER) Missiles and related equipment for an estimated cost of $1.008 billion, the Defense Security Cooperation Agency said in an Oct. 21 release.

In addition, TECRO has requested to buy four ATM-84H SLAM-ER Telemetry Missiles and 12 CATM-84H Captive Air Training Missiles (CATM). Also included are 151 containers, spare and repair parts, support and test equipment, publications and technical documentation, personnel training and training equipment, U.S. Government and contractor representatives’ technical assistance, engineering and logistics support services, and other related elements of logistics support. The total estimated program cost is $1.008 billion.

This proposed sale will improve the recipient’s capability to meet current and future threats as it provides all-weather, day and night, precision attack capabilities against both moving and stationary targets. The recipient will be able to

employ a highly reliable and effective system to increase their warfighting effectiveness as needed, which can counter or deter aggressions by demonstrated precision against surface targets. This capability will easily integrate into existing force infrastructure as it will only improve defense against opposing threats. The recipient will have no difficulty absorbing these systems into its armed forces.

The principal contractor will be the Boeing Company, St. Louis, Missouri.

Implementation of this proposed sale will require the assignment of two U.S. contractor representatives to the recipient for a duration of eight years to support technical reviews, support, and oversight.

First Harvest Navigation Selects Sea Machines to Launch Hybrid Cargo Vessel

First Harvest Navigation's Captain Ben Moore, powered by Sea Machines' SM300 autonomous command and remote-helm control system. First Harvest Navigation

NORWALK, Conn. – Norwalk-based First Harvest Navigation, a marine transportation company that connects family farms to urban and suburban neighborhoods, has selected Boston-based Sea Machines' technology to launch the first autonomous hybrid cargo vessel in the U.S. Powered by Sea Machines' SM300 autonomous command and remote-helm control system, the U.S.-built, electric-powered *Captain Ben Moore* will also be the first hybrid cargo vessel to feature remote crew-assist

technology and to generate zero emissions.

Installation of Sea Machines' SM300 aboard the *Captain Ben Moore,* a 63-foot x 21.3-foot aluminum catamaran, will take place in November 2020. Once complete, vessel's intelligent capabilities will offer First Harvest Navigation redundancy and flexibility for crew shifts, with the capability to autonomously command *Captain Ben Moore* from the company's land-based control station. In addition to autonomous control and remote vessel monitoring tools, the SM300 system also features obstacle detection and collision avoidance technology for added operational safety.

Captain Ben Moore will enter service between Norwalk and Huntington, New York, to deliver food and other cargo faster, more reliably and more affordably than truck transportation to East Norwalk's Harbor Harvest food market, while also reducing regional highway congestion. Comparable trucking services require a near nine-hour round trip to deliver within this location. First Harvest Navigation completes the terminal-to-terminal voyage in approximately 35 to 45 minutes.

"Part of our transportation goals are to develop autonomous, hybrid catamarans to move farm products across Long Island Sound. The Sea Machines SM300 autonomous navigation system will help us achieve many of our goals because it enables shipping movements to be completed very reliably and efficiently in a seamless and sustainable delivery system," said Bob Kunkel, president, First Harvest Navigation. "Shifting cargo from streets and highways also alleviates the growing congestion, lower emissions and reestablishes our waterways as a viable and cost-efficient alternative to land-based transport."

"Sea Machines and First Harvest Navigation are aligned in our commitments to innovation to bolster the U.S. marine highway system and in our support of family farms," said Michael G.

Jonson, founder and CEO of Sea Machines. “The SM300 ensures predictable and performance-based vessel operations while providing a 24/7 crew support system that is always on watch. It often takes determined entrepreneurial leaders like First Harvest Navigation to move an industry into new waters and Sea Machines is pleased to support the achievement of their goals.”

The hybrid vessel can carry approximately 28 pallets, 10 of which are positioned in a fully refrigerated and protected walk-in space. The remaining cargo spaces are open and covered according to customer requirements. It is powered by a pair of Cummins QSB 6.7 diesels, generating 104 kW each at 2,400 kW, and lithium batteries connected to a pair of BAE Systems HybriDrive electric motors.

DOT Announces First Marine Highway Project Designation for North Carolina

An NCDOT ferry heading to Hatteras island. Outer Banks.com
WASHINGTON – U.S. Secretary of Transportation Elaine L. Chao announced in an Oct. 22 release the designation of the North Carolina Ferry System (NCFS) as a Marine Highway Project, a first for the state of North Carolina. Marine highways are navigable waterways that can be used as alternate options to traditional transportation methods.

“This historic designation will enhance the ability of the North Carolina Ferry System to connect communities and promote economic growth with an efficient, effective, and sustainable water-based transportation option,” Chao said.

Issued as part of MARAD’s America’s Marine Highway Program, the designation will enable the NCFS to apply for federal funding that can be used to modernize its vessels and improve infrastructure at terminals, further allowing for the streamlining of maintenance to meet the region’s needs of efficient transportation of freight and vehicles.

America’s Marine Highway Program bolsters local economies by creating and preserving jobs on U.S. waterways. By expanding the use of navigable, cost-effective waterways, communities are able to save in vehicle costs and travel time, ultimately improving economic efficiency, public safety, and security.

Located on the M-95 Marine Highway route, the NCFS is an underutilized, expansive network of navigable waterways that connects eastern North Carolina to rural communities of the Outer Banks’ barrier islands. The ferry system serves as a lifeline, carrying supplies, equipment, and other consumable goods to these islands.

This century-old, state-run ferry system is the second largest in the nation, currently transporting approximately 800,000 vehicles along seven regular routes annually. Running 22 ferries that transport 9,000 trailer trucks yearly, the NCFS has reduced almost 200,000 miles of landside traffic. The service is also an economic boon to the region, generating $18.1 million in vehicle cost savings, $13.9 million in travel time savings, and $8.3 million in safety benefits.