

Coast Guard Foreign Military Sales Boosting Standing With Partner Nations

NATIONAL HARBOR, Md. – The Coast Guard’s foreign military sales program is fostering good relations with partner nations, increasing maritime governance and saving money, according to the program’s director, Tod Reinert.

Speaking before a show floor audience on May 6 during Sea-Air-Space 2019 at National Harbor, Maryland, Reinert also described how foreign sales of aging Coast Guard vessels is keeping U.S. vendors busy with replenishment and refurbishment contracts – all necessary to ensure that the new owners have hale platforms with which to pursue their missions.

The foreign military sales program is “extending production lines, sharing overhead costs and [sustaining] a robust vendor base,” Reinert said.

The Coast Guard has delivered more than 540 “assets,” worth more than \$1 billion, to 75 partner nations during the past 20 years. The list of benefactors is long. Bangladesh, Vietnam, Yemen and Saudi Arabia got response boats. The Philippines received riverine boats, and Tunisia got near-shore patrol boats. U.S. Central Command stands to take possession of retired medium-response boats as well.

Recipient nations stand to take ownership of decommissioned high-endurance cutters, Island-class

patrol boats, medium-endurance cutters and patrol boats – in a time frame generally beginning sometime next year and spanning into 2024, Reinert said.

These countries must rely upon their acquisitions to conduct search-and-rescue, maritime safety, law enforcement and national defense missions akin to those the Coast Guard performs every day – the cornerstones of its mission to protect the nation’s 95,000 nautical miles of coastline, Reinert said.

Milestone C Decision Expected in Late May for Presidential Helicopter



Marine Helicopter Squadron One (HMX-1) runs test flights of the new VH-92A over the south lawn of the White House on Sept. 22, 2018, Washington D.C. The Navy is projected to reach Milestone C for the VH-92A in May. U.S. Marine Corps / Sgt. Hunter Helis

NATIONAL

HARBOR, Md. – The Navy expects to reach a Milestone C decision in late May for the VH-92A presidential transport helicopter. Such a decision would mark approval for the helicopter to enter low-rate initial production.

Speaking to an audience at the Navy League's Sea-Air-Space Expo in National Harbor, Maryland, Marine Maj. Gen Greg Masiello, the Navy's program executive officer for Air, ASW, Assault and Special Mission PEO (A), said the program team has three VH-92As, two of which it is running through Developmental Test, with the two alternating flights every other day.

Program officials have a meeting scheduled May 30 with James F. Geurts, assistant secretary of the Navy for Research, Development and Acquisition, who has the milestone decisional authority.

The Navy is developing the Lockheed Martin/Sikorsky VH-92A as a replacement for the VH-3D and VH-60N helicopters flown in support of the president and other high-level government officials by Marine Helicopter Squadron One.

Modularity the Key to Keeping Ship Systems in Shape, Says Mercury Systems

NATIONAL HARBOR, Md. – Like every other entity that relies upon technology to do its job, the Navy has to constantly contend with systems that fail or become outdated. When such

systems are situated on ships that could be situated anywhere in the world, the challenge potentially becomes even more acute.

Andover, Massachusetts-based Mercury Systems thinks they have the answer to the conundrum. Building on the company's years of experience working with numerous Navy programs, most notably the Aegis Combat System, they believe that a modular approach offers the best method of ensuring seamless functionality. With that, Mercury Systems introduced its second-generation Intel Xeon scalable processors at Sea-Air-Space 2019.

"Commercial products go obsolete, and technology changes too fast," said Rick Studley, chief of technologies for Mercury Systems Trusted Missions Solutions in Chantilly, Virginia, during a Monday interview.

Mercury Systems provides hardware on nearly every surface combatant big-deck ship and submarine in the Navy. With its modular approach, the company's products allow for switching out old or broken components for new ones in complex systems without changing shock isolation, power or cooling already in place.

"We can abstract applications from underlining hardware, making the technology insertion much easier," Studley said.

Moreover, with the presence of multiple virtual machines, systems can run on smaller sets of hardware – saving valuable shipboard space. This is done by

running “virtual twin” systems in parallel with existing ones, for example, on a system like Aegis. The “twin” systems can take passive taps from the actual system – data from sensors, with the weapon system’s actual code. In simplistic terms, the “twin” can integrate with the actual server. Over time, tactical servers, which are bare-metal and redundant, would evolve into fully virtualized systems, Studley said.

“The goal is to move away from redundancy and toward resiliency, so that no single element in the system is so important that you can’t afford to lose it [and still function],” he said.

[and still function]

“It’s totally modularized and virtualized. You accept that failures are going to happen, but your machine keeps working,” Studley said. “The system heals itself around these failures.”

The process allows for greater sharing of technology across platforms, applications and systems, Studley said. The Navy would save money by having an infrastructure that is easily upgraded, managed and deployed, he added.

Last HH-60H Helicopters to Be Retired This Year



U.S. Air Force 320th Special Tactics Squadron combat controllers and U.S. Marine Corps 3rd Reconnaissance Battalion operators exit two U.S. Navy HH-60H Sea Hawk helicopters assigned to Helicopter Sea Combat Squadron-85 (HSC-85), shown here following their extraction July 13, 2017, from Shoalwater Bay Training Area in Queensland Australia. U.S. Air Force / Capt. Jessica Tait

NATIONAL

HARBOR, Md. – The Navy will retire its last HH-60H Seahawk special operations support helicopters this year, an official said.

Speaking to

an audience at the Navy League's Sea-Air-Space expo in National Harbor,

Maryland, Marine Maj. Gen Greg Masiello, the Navy's program executive officer

for Air, ASW, Assault and Special Mission PEO (A), said the last seven of the

HH-60Hs in the inventory would be retired and replaced by the next-generation

Seahawk, the MH-60S.

The HH-60H is

flown by reserve Helicopter Sea Combat Squadron 85 and deploys in support of

Navy special warfare forces and other forces.

MH-60S

helicopters for the squadron will be modified with the 7.62 mm GAU-17 six-barrel

rotary machine gun used for fire suppression.

The HH-60H is the last of three Seahawk versions from the H-60's initial naval service: the SH-60B, SH-60F, and HH-60H. The MH-60R and MH-60S are the latest versions in the Navy.

Service Chiefs Tout Agility, but MARAD in Need of Funding to Flex Muscle



The sea services chiefs (from left) – U.S. Navy CNO Adm. John M. Richardson, Marine Corps Commandant Gen. Robert B. Neller, Coast Guard Commandant Adm. Karl Schultz and Rear Adm. Mark Buzby of the U.S. Maritime Administration – during their panel discussion May 6 at Sea-Air-Space 2019. Lisa Nipp

NATIONAL HARBOR, Md. – The sudden order to send the Abraham Lincoln carrier strike group to the U.S. Central Command theater in response to threats from Iran is a great example of the value of the Navy's dynamic deployment concept, Chief of Naval Operations Adm. John M. Richardson said at the Navy League's Sea-Air-Space 2019 exposition.

Although the Lincoln's deployment into the Mediterranean had been planned, "this is a great demonstration of what we've been working on, dynamic deployment," Richardson said May 6. Naval maneuver forces are "dynamic by design," but Richardson said he found it encouraging that if the national command authority

needed the Lincoln strike group to go to the Middle East it can do so immediately.

At the opening session of the Navy League's annual Sea-Air-Space exposition, Richardson responded to a question about National Security Advisor John Bolton's announcement that the administration had ordered the Lincoln and its escorts to cut short its planned Mediterranean exercise and sail to the Persian Gulf region after warnings that Iran may be planning attacks on U.S. forces. Bolton said an Air Force bomber unit also was being sent to the region.



The sea services chiefs at their panel discussion at SAS. Lisa Nipp Asked how the Navy would respond to President Donald Trump's decision to reverse the 2020 budget proposal to skip the mid-life refueling of the aircraft carrier Harry S. Truman, Richardson noted that he had told Congress, which has opposed the decision, that the Truman's early retirement was reversible. "Now we will have to find the resources going forward," to invest in the new technologies, such as unmanned systems, that were to be funded with money saved from retiring Truman.

Appearing on the same panel, Marine Corps Commandant Gen. Robert B. Neller

agreed with Richardson that the challenge of effective leaders was to anticipate the need to change their organizations and policies, rather than waiting to respond to a disaster. Neller cited the changes the Marines are making to respond to the growing threats of cyber and electronic warfare attacks from peer competitors as an example. The first shot of a major conflict would be against the networks and the U.S. forces must prepare to operate without the assured communications they have become accustomed to, Neller said.

"This is a great demonstration of what we've been working on, dynamic deployment."

Chief of Naval Operations Adm. John M. Richardson

Also on the panel, Coast Guard Commandant Adm. Karl Schultz said his service was engaging in more national security operations, such as the recent freedom of navigation transit of the Taiwan Straits, in addition to its heavy load of maritime security and safety missions. Schultz said the Coast Guard was looking forward to getting its first new Arctic icebreaker and hoped to get initial funding for a second one in the fiscal 2021 budget.

Retired Rear Adm.

Mark Busby, administrator of the Maritime Administration, said the materiel readiness of his 46 sealift vessels, which have an average age

of 44 years, had gotten a bit worse since his warnings last year. Busby was hopeful Congress would fund the three-part program MARAD and the Navy have urged to modernize his fleet by updating some ships, buying some newer commercial ships and building a small number of vessels. Asked about the threat to global shipbuilding industry from China's rapidly growing ship production capabilities, Busby said U.S. shipbuilding survived only due to Navy production and commercial ships for the Jones Act, which required U.S. built ships for commerce between U.S. ports.

Analysis Underway for E-6B Mercury Aircraft Replacement



A U.S. Navy E-6B Mercury airborne command post flies over Solomons Island, Maryland. An analysis is underway for a replacement for the E-6B. U.S. Navy photo.

NATIONAL HARBOR, Md. – An analysis of alternatives (AOA) is underway in the Office of the Secretary of Defense for a replacement for the Navy's E-6B Mercury strategic communications aircraft.

Speaking to an audience at the Navy League's Sea-Air-Space conference here, Marine Maj. Gen

Greg Masiello, the Navy's program executive officer for Air, ASW, Assault and Special Mission PEO (A), said that his office is supporting the AOA. PEO(A)'s portfolio includes the E-6B aircraft.

The E-6B is the legacy platform that relays strategic communications to and from the Navy's ballistic-missile submarines and national command authority, a program called TACAMO (Take Charge and Move Out). The E-6B also serves in the airborne command post (ABNCP) role for U.S. Strategic Command, flying with a battle staff onboard.

The AOA is for the NEAT program, which is a simplification of the terms NAOC (National Airborne Operations Center)/EA (ABNCP/TACAMO). The AOC mission is performed by the Air Force E-4B aircraft.

BAE Systems Sensor Technology Guides Next-Generation Missile to Readiness



Artist's rendering of the LRASM. BAE Systems NASHUA, New Hampshire – BAE Systems worked closely with Lockheed Martin to deliver Long-Range Anti-Ship

Missiles (LRASM)

to the U.S. Air Force, achieving Early Operational Capability (EOC) for the B-1B bomber ahead of schedule, BAE said in a May 6 release. The Air Force accepted delivery of production LRASM units following successful simulation, integration, and flight tests that demonstrated the missile's mission readiness.

"We're quickly delivering critical capabilities to warfighters to meet their urgent operational needs," said Bruce Konigsberg, Radio Frequency (RF) Sensors product area director at BAE Systems. "Our sensor systems provide U.S. warfighters with a strike capability that lets them engage protected, high-value maritime targets from safe distances. The missile provides a critical advantage to U.S. warfighters."

BAE Systems' long-range sensor and targeting technology enables LRASM to detect and engage protected ships in all weather conditions, day or night, without relying on external intelligence and navigation data.

BAE Systems and Lockheed Martin are working closely together to further mature the LRASM technology. The companies recently signed a contract for the production of more than 50 additional sensors and are working to achieve EOC on the U.S. Navy's F/A-18E/F Super Hornet in 2019.

The advanced LRASM sensor technology builds on BAE Systems' knowledge in electronic warfare (EW), signal processing and

targeting technologies, and demonstrates the company's ability to apply its world-class EW technology to small platforms. The successful LRASM sensor program demonstrates the company's ability to quickly deliver advanced EW technology to warfighters.

As part of the company's electronic warfare capacity expansion initiatives, it locates key programs where they will be optimally staffed to quickly transition from design to production, accelerate deliveries, and improve product affordability. The company's work on the LRASM program is conducted at state-of-the-art facilities in Wayne, New Jersey and Nashua, New Hampshire.

Pentagon Report Cites Rapidly Modernizing Chinese Navy



A Chinese Type 052C destroyer, the Changchun, in Malaysia in 2017.

ARLINGTON, Virginia

– China's first home-built aircraft carrier is likely to join the People's

Liberation Army Navy (PLAN) fleet this year, a highlight of China's effort to

modernize its fleet with modern, farther-ranging platforms and weapons.

Construction

began on a second aircraft carrier in 2018, said a new report to Congress from

the Defense Department, "Military and Security Developments Involving the

People's Republic of China 2019." This carrier, which should reach the PLAN fleet in 2022, is likely to be fitted with a catapult aircraft launch system, according to the report.

A coastal defense navy during the Cold War, the PLAN is continuing a two-decade build-up with numerous blue-water platforms

"The PLAN is rapidly replacing obsolescent, generally single-purpose platforms in favor of larger, multirole combatants featuring advanced anti-ship, anti-air and anti-submarine weapons and sensors," the report said. "This modernization aligns with China's growing emphasis on the maritime domain and increasing demands on the PLAN to conduct operational tasks at expanding distances from the Chinese mainland using multimission, long-range, sustainable naval platforms possessing robust self-defense capabilities."

"Modernization of China's submarine force remains a high priority for the PLAN," the report said. "The PLAN currently operates four nuclear-powered ballistic missile submarines (SSBN), six nuclear-powered attack submarines (SSN) and 50 conventionally powered attack submarines (SS). The speed of growth of the submarine force has slowed and will likely grow to between 65 and 70 submarines by 2020."

The PLAN also continues to modernize its surface warship fleet.

“The PLAN is rapidly replacing obsolescent, generally single-purpose platforms in favor of larger, multirole combatants featuring advanced anti-ship, anti-air and anti-submarine weapons and sensors.”

A new Pentagon report to Congress on China’s naval modernization

China has built new guided-missile cruisers (CGs), guided-missile destroyers (DDGs) and guided-missile frigates (FFGs) that “will significantly upgrade the PLAN’s air defense, anti-ship, and anti-submarine capabilities. These assets will be critical as the PLAN expands operations into distant seas beyond the range of shore-based air defense systems” the report said.

China has built four Renhai-class CGs over the last two years and has several more under construction. The lead CG is scheduled to join the fleet in 2019. At least three Luyang-class DDGs joined the PLAN fleet in 2018, bringing the total to nine with at least four more under construction. A larger variant forthcoming, Luyang III, will be equipped with a vertical launcher system.

China also emphasizes small surface combatants, with 27 or more Jiangkai II FFGs and more than 40 Jiangdao-class corvettes, with more of both types under construction.

All new attack submarines and surface combatants are being armed with modern anti-ship missiles.

“The PLAN recognizes that long-range ASCMs require a robust, over-the-horizon targeting capability to realize their full potential,” the new Pentagon report said. “China is investing in reconnaissance, surveillance, command, control and communications systems at the strategic, operational and tactical levels to provide high-fidelity targeting information to surface and subsurface launch platforms.”

China also is building a fleet of amphibious warfare ships, adding three to the current five Yuzhao-class amphibious transport dock ships.

China also is expanding the PLAN marine corps from two brigades and 10,000 marines to seven brigades and 30,000 marines by 2020. The Chinese marine corps also now has its own commander and a new central headquarters.

Sealift Command to Welcome

New Navajo Class of Tugboats to Fleet



An artist rendering of the future USNS Navajo (T-TATS 6). U.S. Navy photo illustration.

NORFOLK, Virginia

– A new class of towing and salvage vessels will join the U.S. Navy's Military

Sealift Command (MSC) in fiscal year 2021.

“The new

Navajo class replaces the Powhatan class T-ATF fleet tugs, which provide

towing, diving and standby submarine rescue services for the U.S. Navy, and the

Safeguard class T-ARS rescue and salvage vessels, whose mission includes,

salvage, diving, towing and heavy-lift operations,” said Tim Schauwecker, MSC towing and salvage project officer.

“MSC and

the fleet commanders will benefit by having new, state-of-the-art and highly

capable platforms that can perform a wide range of missions ranging from towing

and salvage, diving operations and submarine rescue,” he said.

The

primary mission of the fleet tug is towing and submarine rescue with the

secondary mission of salvage. Rescue and salvage ships conduct salvage with a

secondary mission of towing. The Navajo class will combine the capabilities of

both classes into a single class for greater efficiency, Schauwecker said.

“This new ship class will ... eventually restore the towing and salvage fleet to an end strength of eight hulls.”

Tim Schauwecker, Sealift command’s towing and salvage project officer

“The major improvements include a significant bollard pull increase that will enable the ship to tow virtually any ship currently in the [Navy] inventory. The new ships include additional deck space to account for the requirements of the submarine rescue diving and recompression system, including transfer under pressure, a 40-ton heave compensating crane to assist with underwater salvage operations such as lifting aircraft wreckage out of the water, dynamic positioning, which provides the ability to automatically maintain position and heading in the water by using its propellers and thrusters despite the environmental conditions, and berthing for an additional 42 personnel [other than crew] in two- to six-person staterooms. The ship will also have modern automation and engineering systems that include environmentally friendly main propulsion diesel engines,” he said.

MSC search-and-rescue vessels have contributed to a variety of missions around the world, including

recovery efforts for John F. Kennedy Jr.'s plane crash, the USS Guardian grounding, TWA flight 800, Hurricane Katrina and the SS El Faro sinking.

MSC took delivery of the Powhatan class of fleet ocean tugs between 1978 and 1981. These ships were designed and built based on commercial offshore towing vessels and were manned by civilian mariners. Salvor and Grasp were commissioned in 1985 and 1986 and were sailed as USS ships by U.S. Navy Sailors. The Navy decommissioned the Safeguard class of salvage ships in 2006 and 2007 and transferred them to MSC, where they were redesignated as T-ARS and manned by civilian mariners.

According to the Congressional Budget Office's 2019 shipbuilding analysis, the procurement of the new Navajo class aligns with the Navy's plan to expand the fleet to 355 ships.

"This new ship class will bring a significant capability increase to the U.S. Navy and Military Sealift Command and eventually restore the towing and salvage fleet to an end strength of eight hulls," Schauwecker said.

Secretary of the Navy Richard V. Spencer announced in March the new class of ships will be named Navajo, in honor of the major contributions the Navajo people have

made to the armed forces.

The lead ship will start construction in May, with delivery of the first five ships in fiscal 2021 and 2022, followed by one ship per year through 2025.

Navy's Heliborne EW Pods Set for Delivery at Year's End

ARLINGTON, Va. – Lockheed Martin is set to deliver to the Navy the first Advanced Off-Board Electronic Warfare AOEW pods at the end of 2019, the company's program manager said.

The first set of pods is on track for delivery in December 2019 or January 2020, said Joe Ottovanio, director of electronic warfare solutions for Lockheed Martin, speaking to reporters May 1 in Arlington.

Ottoviano also said the program expects a Milestone C decision for Low-Rate Initial Production of the AOEW pod in December.

The AOEW is a pod designed to be carried aloft by and MH-60R or MH-60S helicopter and function as an extension of a warship's SLQ-32(V)6 electronic warfare system.