Navy Strategic Systems Official: Hypersonics 'Coming to a Theater Near You'

WASHINGTON – The Navy's Strategic Systems Program (SSP) office is planning two more test flights to demonstrate conventional prompt strike (CPS) capability, a program official said, to capitalize on the first test conducted a year ago.

"Hypersonics is coming to a theater near you," Capt. Doug Williams, the SSP's technical director, said at the third annual Triad conference.

"As part of a program of record within the Office of the Secretary of Defense, we [SSP] have been working a hypersonic glide technology demonstration," Williams said. "We called it Flight Experiment No. 1. FE-1 flew about a year ago, Oct. 31. We took an old A3 [Polaris] rocket motor built in the late '80s, made it a stack, and launched it off of Hawaii, flew it a couple thousand miles. It landed at Kwaj [Kwajalein Atoll].

"It was brilliant. The whole time we had telemetry pumping down. We saw everything in a virtual model, real time, and it was one of those things that makes your hair on the back of your neck stand up. And you stand up as you see the body do what the body did and the body land exactly where it was supposed to land. It was awesome," he said.

Williams said that hypersonics is the No. 1 priority of Michael D. Griffin, undersecretary of defense for research and engineering.

"We're leaning forward," Williams said. "We have two more experiments to fly. We are working with the Office of the Secretary of Defense and with ASNRD&A [assistant secretary of the Navy for research, development and acquisition] staff to

understand conventional prompt strike. For the Navy it is going to be indeed a program."

Williams noted that even with the potential of conventional prompt strike, the primary mission of SSP is to provide a nuclear deterrence capability with the Strategic Weapon System. He cautioned that "if we don't do that right, no one is going to care about CPS. We are on a path to ensure that we firewall this conventional capability. That, no doubt, will be a heavy lift. We cannot have CPS drain Trident [the Navy's submarine-launched ballistic missile program]."

SPY-6 Radar Tracks Ballistic Missile Through Intercept and Multiple, Simultaneous Targets

TEWKSBURY, Mass. – Raytheon Co.'s AN/SPY-6(V) radar continues to demonstrate its integrated air and missile defense capability through exceptional performance against multiple targets, the company said in an Oct. 10 release.

The radar detected, acquired and tracked multiple targets from the U.S. Navy's Pacific Missile Range Facility, Kauai, Hawaii. Capitalizing on two unrelated exercises conducted nearby in mid-September, SPY-6(V) not only tracked multiple threats simultaneously, but also a ballistic missile through intercept, for the first time.

Raytheon's SPY-6 continues successful testing at the U.S. Navy's Pacific Missile Range Facility.

“AN/SPY-6(V) continues to impress through consistent performance against complex, surrogate threats,” said U.S. Navy Captain Seiko Okano, major program manager for Above Water Sensors, Program Executive Office, Integrated Warfare Systems. “With production now underway, we’re progressing – with confidence – toward delivery of this exceptional, game-changing radar, which will transform our naval capabilities for decades to come.”

The SPY-6(V) program has met all milestones, ahead of or on schedule, since its inception in January 2014. The radar has amassed a track record of performance, demonstrating its multimission capabilities against an array of single and multiple simultaneous targets throughout the Navy’s extensive testing program and against various targets of opportunity. Now in production at Raytheon’s advanced Radar Development Facility, AN/SPY-6(V) remains on schedule for delivery to the first DDG 51 Flight III, the future USS Jack H. Lucas, in 2019.

AN/SPY-6(V) provides greater range, increased accuracy, greater resistance to environmental and man-made electronic clutter, higher reliability and sustainability than currently deployed radars. The radar’s demonstrated sensitivity provides greater coverage for early and accurate detection which optimizes the effectiveness of the Navy’s most advanced weapons, including all variants of Standard Missile-3 and Standard Missile-6.

Coast Guard Conducting Search

and Rescue After Hurricane Michael

MOBILE, Ala. – The Coast Guard is conducting search-and-rescue operations throughout areas affected by Hurricane Michael, the U.S. Coast Guard Hurricane Michael Response Center in Mobile, Alabama, said in an Oct. 11 release.

As of 9 a.m. on Oct. 11, Coast Guard crews have rescued approximately 17 people and assisted six. Currently, the Coast Guard has nine aircraft and three shallow-water response teams conducting rescues.

Nine people were rescued by Coast Guard aircrews after they became trapped in a bathroom when a roof collapsed in Panama City, Florida, on the afternoon of Oct. 10.

“We have multiple aviation and ground assets focused on saving lives,” said Cmdr. Jason Franz, Sector Mobile incident commander for Hurricane Michael. “We’re working closely with Customs and Border Protection aircrews to help with our search and rescue operations.

“Our pollution and damage assessment teams have begun evaluating major areas of pollution and damage to our waterways, and we’ve partnered with the Army Corps of Engineers and other port partners to begin the process of re-establishing our ports to ensure we have commerce flowing as soon as possible,” he said.

NAVSEA Approves First Additive Manufactured Metal Component for Shipboard Use

WASHINGTON – Naval Sea Systems Command (NAVSEA) has approved the first metal part created by additive manufacturing (AM) for shipboard installation, the command said in an Oct. 11 release.

A prototype drain strainer orifice (DSO) assembly will be installed on USS Harry S. Truman (CVN 75) in fiscal 2019 for a one-year test and evaluation trial. The DSO assembly is a steam system component that permits drainage/removal of water from a steam line while in use.

Huntington Ingalls Industries Newport News Shipbuilding builds Navy aircraft carriers and proposed installing the prototype on an aircraft carrier for test and evaluation.

"This install marks a significant advancement in the Navy's ability to make parts on demand and combine NAVSEA's strategic goal of on-time delivery of ships and submarines while maintaining a culture of affordability," said Rear Adm. Lorin Selby, NAVSEA chief engineer and deputy commander for Ship Design, Integration, and Naval Engineering. "By targeting CVN 75, this allows us to get test results faster, so – if successful – we can identify additional uses of additive manufacturing for the fleet."

The test articles passed functional and environmental testing, which included material, welding, shock, vibration, hydrostatic, and operational steam, and will continue to be evaluated while installed within a low temperature and low-pressure saturated steam system. After the test and evaluation period, the prototype assembly will be removed for analysis and inspection.

While the Navy has been using additive manufacturing technology for several years, the use of it for metal parts for naval systems is a newer concept and this prototype assembly design, production, and first article testing used traditional mechanical testing to identify requirements and acceptance criteria. Final requirements are still under review.

“Specifications will establish a path for NAVSEA and industry to follow when designing, manufacturing and installing AM components shipboard and will streamline the approval process,” said Dr. Justin Rettaliata, technical warrant holder for Additive Manufacturing. “NAVSEA has several efforts underway to develop specifications and standards for more commonly used additive manufacturing processes.”

Coast Guard Releases ‘Maritime Commerce Strategic Outlook’

ARLINGTON, Va. — The Coast Guard has released a 10-year vision for enabling maritime commerce, which “emphasizes the critical need for a ready, relevant, responsive Coast Guard,” the service said in an Oct. 11 message.

The Coast Guard “Maritime Commerce Strategic Outlook” will guide the service’s efforts in securing the strategically critical maritime environment while enabling its impact on the nation’s economic prosperity.

A message to the service signed by Vice Adm. Daniel B. Abel, deputy commandant for Operations, noted that “America is a

maritime nation. It is a nation shaped by seafarers who recognized the tremendous economic potential derived from unrestricted access to the oceans, internal waterways, deep-water ports, and protected straits and bays. Our American prosperity remains inextricably linked to the fate of the maritime environment.

“Our waterways, a wealth of natural resources and marine transportation networks, remain critical to our prosperity, our security and our identity as a nation. Americans have come to expect goods to be shipped safely and efficiently, and the Coast Guard has a vision for how our nation’s waterways can meet the increased demand.”

In the “Maritime Commerce Strategic Outlook”, the Coast Guard outlined three lines of effort (LOEs) that are critical to the success of the strategy.

■ LOE 1, “Facilitating Lawful Trade and Travel on Secure Waterways. The ease of moving people and cargo on America’s waterways is a competitive advantage and wellspring for economic prosperity and national security. The Coast Guard will manage risks to critical infrastructure, ensure efficient delivery of Coast Guard services, support vessel and facility standards, and promote resiliency and unity of effort among Marine Transportation System stakeholders.”

■ LOE 2, “Modernizing Aids to Navigation and Mariner Information Systems. Through technological advancements such as artificial intelligence, mobile and cloud-based computing, and data analytics, the Coast Guard will keep the service in step with emerging trends in the maritime industry. The Coast Guard must modernize information technology networks and applications that enable the Coast Guard to assess, monitor, and manage risk. The service will optimize maritime planning in order to address competing uses and growing demands for commerce, energy, food, resources, and recreation in U.S. waters. The service must also balance traditional navigation

systems while building next generation waterway management systems, modernizing inland and coastal aids-to-navigation cutters, and applying emerging technologies. Regulatory frameworks, applications, and standards will be adapted to accurately incorporate the implementation of emerging technologies that will transform maritime operations, such as autonomous systems."

■ LOE 3, "Transforming Workforce Capacity and Partnerships. The Coast Guard needs to develop an adaptive force that is proficient operating in a highly complex environment amid rapid acceleration of technology. The service needs to strengthen the workforce with the digital competencies to respond to changes in commercial markets and the maritime industry. The Coast Guard will leverage robust auditing capabilities of third-party organizations to improve vessel plans, surveys, and certain required certificates to ensure the highest standards of compliance oversight. It is imperative to transform the workforce and roles of other enabling organizations to have the capability, experience, and expertise to address the broad spectrum of threats to our national interests."

MARAD Issues RFP for Vessel Construction Manager to Deliver New Training Vessel

WASHINGTON – The Maritime Administration (MARAD) released a request for proposal (RFP) to solicit for a Vessel Construction Manager (VCM) to deliver a new class of training ship, referred to as the National Security Multi-Mission

Vessel (NSMV), MARAD said in an Oct. 11 release.

The VCM selected by MARAD will contract with a qualified shipyard to ensure that commercial best practices are utilized in delivering the NSMV on time and on budget.

“A new multi-mission vessel built by an American shipyard will not only create new jobs but help train the next generation of American mariners and contribute to disaster relief,” said U.S. Secretary of Transportation Elaine L. Chao.

The 2017 National Defense Authorization Act directed MARAD to “provide for an entity other than the Maritime Administration to contract for the construction of the NSMV.” This procurement process leverages existing marketplace expertise, targeting companies experienced in the production of innovative U.S.-built ships.

“The U.S. shipbuilding and repair industry is vital to the economic strength and security of our nation,” said Maritime Administrator Mark H. Buzby, “and this project will demonstrate that American shipbuilding remains the global standard of excellence.”

The NSMV will help to sustain world-class, U.S. maritime training operations at the state maritime academies by equipping young American mariners with a modern and adaptable training platform. The NSMV will feature numerous instructional spaces, eight classrooms, a full training bridge, labs, and an auditorium. It will have space for up to 600 cadets to train in a first-rate maritime academic environment at sea.

In addition to serving as an educational platform, the NSMV will also be available to support federal government efforts in response to national and international disasters, such as hurricanes and earthquakes. In this role, the NSMV will be equipped to support major federal relief and response efforts, providing hospital facilities, a helicopter landing pad, and

berthing for up to 1,000 first responders and recovery workers. The NSMV's roll-on/roll-off ramp and a crane to facilitate container storage capabilities will also enable it to provide critical supplies to damaged port facilities.

The economic benefit of this coastwise-endorsed training vessel extends beyond academics – and the replacement of the nation's aging "training ship" fleet – to the thousands of men and women in the shipbuilding and repair industry. These skilled workers at U.S. shipyards and repair facilities add billions to the economy annually, reflecting the best of American maritime engineering and ingenuity. The first NSMV is expected to be delivered to MARAD in 2022.

Navy Elevates TACAMO Weapons Tactics Detachment to Full Command

ARLINGTON, Va.– The Navy has upgraded the TACAMO strategic communications community's weapons tactics detachment to a full command.

According to an internal Navy directive, the Detachment Weapons Tactics Unit of commander, Strategic Communications Wing One, at Tinker Air Force Base, Oklahoma, was disestablished on Oct. 1. In its place, on the same day, TACAMO Weapons School was established with a commanding officer instead of an officer in charge.

TACAMO, an acronym for "Take Charge and Move Out," is a system of survivable communications designed to maintain communications between the national command authority with the

elements of the U.S. strategic deterrent triad: Air Force bombers and intercontinental ballistic missile bases and Navy ballistic-missile submarines.

The Navy's two operational TACAMO squadrons, Fleet Air Reconnaissance Squadrons Three and Four, also based at Tinker, fly 15 Boeing E-6B Mercury aircraft in support of U.S. Strategic Command.

Navy Secretary Names Two Littoral Combat Ships

WASHINGTON – Navy Secretary Richard V. Spencer has announced the names of two future littoral combat ships (LCSs), the secretary's public affairs office announced in two Oct. 9 releases. The Freedom-variant LCS 29 will be named USS Beloit and the Independence variant LCS 32 will be named USS Santa Barbara.

The future USS Beloit (LCS 29) is named in honor of Beloit, Wisconsin, and is the first ship to bear the name.

"The city and citizens of Beloit have been a steadfast supporter of the Navy and Marine Corps," Spencer said. "From building engines for Freedom-variant LCSs to manufacturing components for the Ford-class aircraft carriers, the contributions of Beloit citizens make our Navy stronger, more capable and more lethal. I am proud to name the next ship in honor of the city and citizens of Beloit."

USS Beloit will be constructed by Lockheed Martin with Marinette Marine in Marinette, Wisconsin. This ship will be 387 feet long, have a beam length of 57.4 feet and travel at

speeds in excess of 40 knots.

The future USS Santa Barbara (LCS 32) is named in honor of Santa Barbara, California, and is the third ship to bear the name.

“I am pleased to name the next Independence variant LCS after the city of Santa Barbara,” Spencer said. “This city’s innovative workforce and longstanding support of our Navy and Marine Corps team, whether active duty, reserve force, civilian or Veterans, the support from this community strengthens our Navy and nation.”

The future USS Santa Barbara will be built by Austal USA in Mobile, Alabama. This ship will be 421 feet long with a beam length of 103.7 feet and be capable of operating at speeds in excess of 40 knots.

The Navy has accepted delivery of 16 LCSs. Including the recent contract modifications, a total of 32 LCSs have been procured with 10 ships under construction (LCS 15, 17, 19-26).

Marine Commandant: 2018 Recruiting Goal Met, but Dearth of Qualified Youth ‘Should Scare You’

WASHINGTON — The Marine Corps met its recruiting goal in fiscal 2018, said the service’s commandant, Gen. Robert B. Neller, despite a more challenging recruiting environment.

“We’ve made our recruiting goal every year,” Neller told

reporters Oc. 10 at a Defense Writers Group breakfast.

The Marine Corps met 100 percent of its goal in 2018, while the Army failed to meet its goal for the first time since 2005.

The improving U.S. economy, with the lowest unemployment rate since 1969, is adding to the stress of military recruiters.

Neller said the Corps achieved its goal without lowering standards.

“If anything, we’ve raised our standards,” he said.

Neller pointed out that today less than 30 percent of the nation’s youth are qualified – physically and otherwise – for military service.

“That should scare you,” he said.

He said that in the Marine Corps, 62 percent of the force – about 120,000 of 186,000 Marines – is 25 years old or less. The average age of Marines is the youngest of the U.S. armed forces.

“We’re getting good folks,” he said.

As a manpower-intensive service, the Marine Corps spends 65 percent of its budget on personnel costs.

Coast Guard Rescues 10 from Disabled Cargo Ship

PORTSMOUTH, Va. – The Coast Guard Cutter Confidence rescued 10 crew members, who had been stranded on a disabled cargo ship

for almost 20 days, Oct. 8 approximately 1,380 miles southeast of Bermuda, the 5th Coast Guard District said in an Oct. 5 release.

“We were conducting a law enforcement patrol near Puerto Rico when we were assigned to assist the crew of the motor vessel Alta,” said Cmdr. Travis Emge, the commanding officer of the Confidence. “We traveled over 1,300 nautical miles to get to the disabled ship ahead of Hurricane Leslie’s forecasted track and brought the 10 crew members aboard. We are all proud of our part in this coordinated Coast Guard response to rescue this crew.”

The Coast Guard was notified Sept. 30 that the 250-foot Tanzanian-flagged cargo ship, Alta, became disabled Sept. 19, while transiting from Greece to Haiti, and was unable to make repairs. The crew reported that they had enough food for two days and water for 15 days, and that there were no injuries or immediate medical concerns.

An aircrew on an HC-130 Hercules airplane from Coast Guard Air Station Elizabeth City, North Carolina, dropped about a week’s worth of food to the crew Oct. 2, helping sustain the men until help could arrive.

The Confidence is taking the 10 men to Puerto Rico and is scheduled to arrive there Oct. 12.
The Coast Guard’s Fifth District command center has been working to coordinate with the ship owner for a commercial tug to tow the vessel to shore.