# MDA Test Intercepts Target with SM-6 Missiles

The U.S. Missile Defense Agency, in cooperation with the U.S. Navy, conducted Flight Test Aegis Weapon System 33 in the broad ocean area northwest of Hawaii, July 24. *U.S. NAVY*

WASHINGTON – The U.S. Missile Defense Agency, in cooperation with the U.S. Navy, conducted Flight Test Aegis Weapon System 33 in the broad ocean area northwest of Hawaii, July 24, the agency said in a release.

The objective of FTM-33 was to intercept a raid of two Short-Range Ballistic Missile targets with four Standard Missile-6 Dual II missiles.

Based on initial observations, one target was successfully intercepted. At this time, destruction of the second target cannot be confirmed.

FTM-33 was the most complex mission executed by MDA (a raid of two test targets and two SM-6 Dual II salvos consisting of

four missiles). It was the third flight test of an Aegis BMD-equipped vessel using the SM-6 Dual II missile.

FTM-33, originally scheduled for December 2020, was delayed due to restrictions in personnel and equipment movement intended to reduce the spread of COVID-19.

Program officials will continue to evaluate system performance based upon data obtained during the test.

The firing ship for the test was the USS Ralph Johnson (DDG 114).

The SM-6 Dual II missile is designed for use in the terminal phase of a short-to- medium-range ballistic missile trajectory.

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# USS Mustin Returns to San Diego after 15 Years of Service in Japan


Arleigh Burke-class guided-missile destroyer USS Mustin (DDG 89) returned to San Diego, July 22, after 15 years serving in the Forward Deployed Naval Forces in Japan. *U.S. NAVY*

SAN DIEGO – Arleigh Burke-class guided-missile destroyer USS Mustin (DDG 89) returned to San Diego, July 22, after 15 years serving in the Forward Deployed Naval Forces (FDNF) in Japan, commander, Naval Surface Forces, U.S. Pacific Fleet, said in a July 23 release.

Mustin executed a change of station to the United States to conduct a planned depot modernization period and will be replaced by Arleigh Burke-class guided-missile destroyer USS Ralph Johnson (DDG 114), which will depart its homeport of Everett, Washington.

"Planned maintenance availabilities like these are critical to ensuring ships are maintained and equipped to perform combat-ready tasking when called upon and achieve their expected service life," said Cmdr. Robert Briggs, commanding officer of

USS Mustin.

Mustin arrived in Yokosuka, Japan in July 2006 and has participated in multiple humanitarian efforts in the Indo-Pacific region while assigned as a FDNF ship. In 2008, as part of USS Essex Amphibious Ready Group, Mustin provided aid to Myanmar in response to Cyclone Nargis. The ship earned the Humanitarian Service Medal for response to the 2011 Tohoku earthquake and tsunami as well as Typhoon Haiyan. Also in 2011, at the request of the government of Thailand, Mustin provided aerial surveillance support following flooding.

While taking precautions against COVID-19 at the onset of the global pandemic, Mustin successfully participated in a number of training exercises and operations including Integrated Ship and Air Team Training, Surface Warfare Advanced Tactical Training, Freedom of Navigation Operations, and carrier strike force operations with USS Ronald Reagan (CVN 76) and USS Nimitz (CVN 68).

“I couldn’t be more proud of Mustin’s accomplishments,” said Briggs. “As we transition into the maintenance phase over the following months, the crew is focused on upgrading the combat systems and engineering plant, and eventually returning this warship back to sea.”

Commissioned in San Diego nearly 18 years ago on July 26, 2003, Mustin spent three years assigned to Destroyer Squadron 23 as part of U.S. 3rd Fleet before joining the FDNF as part of Destroyer Squadron 15 based out of Yokosuka, Japan, with U.S. 7th Fleet.

Forward deployed naval forces improve the ability for the U.S. to protect interests while reassuring their friends and allies in the region of their commitment to peace, stability, and prosperity with unfettered access to the sea lanes for all nations in the Pacific.

# SECDEF Announced Flag JAG Flag Nomination

ARLINGTON, Va. – Secretary of Defense Lloyd J. Austin III announced July 23 that the president has made the following nomination:

Navy Capt. David G. Wilson for appointment to the rank of rear admiral (lower half). Wilson is currently serving as assistant judge advocate general (Operations and Management), Washington, D.C.

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# Sea-Air-Space 2021 Prequel: Post-Columbia Sub Construction Capacity Will Help Relieve SSN Shortage

An artist’s rendering of the future Columbia-class ballistic missile submarines. *U.S. NAVY*

ARLINGTON, Va. — The nation’s submarine construction capacity built up for the Columbia-class ballistic-missile submarine (SSBN) program eventually will help the U.S. Navy to increase production of attack submarines (SSNs) to alleviate a shortage of attack boats, according to Navy and shipbuilding officials.

Under current planning, the Navy’s force structure studies have shown a need 70 SSN. The service currently fields about 50 SSNs, which are heavily used by regional combatant commanders, being only able to meet about 50% of their deployment requirements.

The Navy is building two Virginia-class attack submarines per year, and soon both, in the Block V version, will be equipped with the Virginia Payload Module, which will add cruise missile capacity and hypersonic missile capability to the force, among other payloads.

The Navy would like to procure three SSNs per year but currently is constrained by budget capacity to two per year while the Columbia-class SSBN is under construction. The Columbia program is a once-in-a-generation recapitalization program for the nation's strategic deterrent force.

"We're working very closely with industry to make sure we're making the right long-term decisions, said Rear Adm. Bill Houston, director, Undersea Warfare, Division, Office of the Chief of Naval Operations, who has been selected to be the Navy's next commander, Submarine Forces, speaking in a pre-recorded webinar of the Navy League's Sea-Air-Space Prequel.

"We also have to look at it from a budget aspect [and] maintenance capability," Houston said. "What our concern is that if you go to three [SSNs] per year in trying to peak out [the submarine force] with Virginia – with a 33-year life of ship – when you start building three per year, you're ending up with a force structure of 99. So, as we're reconstituting Columbia, and building two Virginias per year, when [construction of] the last Columbia hull commences in '35, we're going to have significant capacity then. So, we have the capability to go to three per year right now. The issue is that we've got Columbia under construction, so we're just doing that balancing right now. Working with industry right now to make sure that stability that's out there for [submarine builders], we're trying to avoid those peak/troughs.

"As part of our private [shipyard submarine maintenance] plan, that workforce is highly skilled and we can't go from periods when we have the private industry doing maintenance and then it's not doing maintenance, because that is a fragile skillset," he said.

Houston pointed out that stability in work orders is key to shipyard health and performance.

“We’re capable of going to three Virginias [per year] right now, [but] it would impact Columbia, so we’re concentrating on doing the Columbia and two Virginias per year,” he said. “We’re looking [at] how we can get up to three, but we’re sure that when that last Columbia hull is under construction, we’re going to have significant capacity.”

Houston noted that a Block V Virginia SSN displaces 10,000 tons submerged, equating to about half that of the Columbia SSBN, so every Columbia equates to two Virginia SSNs in displacement. Accordingly, with one Columbia and two Block V Virginias under construction, “we’re essentially building the equivalent of four Virginias,” he said.

“So, the capacity is there,” he said. “It’s more about the stability and avoiding the peaks and troughs.”

“I think our industrial base is somewhat fragile as we’ve gone from low-rate production in the 90s to now a two-per-year Virginia, a two-plus-one Virginia and Columbia,” said Kevin Graney, president of General Dynamics Electric Boat, whose company, teamed with Huntington Ingalls Newport News Shipbuilding, is building the Columbia-class SSBN. “That’s requiring us to bring in an awful lot of new suppliers across the industrial base in order to support that.”

Graney also said Electric Boat has been investing in additional facilities including construction halls and laid-out space in Groton, Connecticut, and Quonset Point, Rhode Island; upgrading a floating drydock from which the Columbia will be launched; and purchasing a new transport barge. The company has invested “about $250 million in training programs over the last five years and we’re developing active learning shipyards within the shipyards that have proven effective in improving our proficiency.”

# HII Authenticates Keel of National Security Cutter Calhoun


Ship sponsor Christina Calhoun Zubowicz writes her initials onto a steel plate that will be welded inside Calhoun (WMSL 759), the national security cutter named in honor of her grandfather, Charles L. Calhoun. Pictured with Zubowicz are (left to right) George Nungesser, Ingalls Shipbuilding vice president of program management; Christopher Tanner, a structural welder at Ingalls; and Capt. Peter Morisseau, commanding officer, U.S. Coast Guard Project Resident Office Gulf Coast. *HUNTINGTON INGALLS INDUSTRIES / Lance Davis*

PASCAGOULA, Miss. – Huntington Ingalls Industries' Ingalls Shipbuilding division ceremonially authenticated the keel of Legend-class national security cutter Calhoun (WMSL 759) July 23, the company said in a release.

The keel authentication, initially planned for 2020, was postponed due to the COVID-19 pandemic.

"This is a very special keel authentication ceremony for a multitude of reasons," said George Nungesser, Ingalls' vice president of program management. "While we were able to work steadily and safely though the pandemic, visitation to the shipyard made commemorating major shipbuilding milestones a challenge. We are proud to be able to celebrate our talented shipbuilders and their successes today during this ceremonial keel laying."

Calhoun recently reached the halfway point of its construction. Ingalls is the builder-of-record for the Legend-class NSC program and has delivered nine national security cutters with two more under construction.

NSC 10 is named for Charles L. Calhoun, the first master chief petty officer of the Coast Guard. He served in the U.S. Navy for three years during World War II and was honorably discharged as a torpedoman second class in February 1946. Seven months later, he enlisted in the Coast Guard and held various leadership positions over the course of 14 years. He served as master chief petty officer of the Coast Guard from Aug. 27, 1969, until Aug. 1, 1973.

The sponsor of NSC 10 is Christina Calhoun Zubowicz, the granddaughter of Charles L. Calhoun.

"I want to thank the entire United States Coast Guard for this opportunity and recognize their fervent efforts in protecting America's economic, national and border security," Zubowicz said. "May abundant divine protection, luck and blessings surround the ship: and the men and women –

the shipbuilders, in crafting the new innovative national security cutter, Calhoun.”

The Legend-class NSC is the most technologically advanced ship in the Coast Guard’s fleet, which enables it to meet the high demands required for maritime and homeland security, law enforcement, marine safety, environmental protection and national defense missions. NSCs are 418 feet long with a top speed of 28 knots, a range of 12,000 miles, an endurance of 60 days and a crew of 120.

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# Navy Orders Quickstrike-Extended Range Glide Kits for Sea Mines


A Quick Strike extended range mine hangs from a B-52 on Andersen Air Force Base, Guam, as part of Valiant Shield 18, Sept. 16, 2018. *U.S. AIR FORCE / Senior Airman Zachary Bumpus*

ARLINGTON, Va. – The U.S. Navy has awarded Boeing a contract for the design and production of wing glide kits for Quickstrike-Extended Range (QS-ER) aerial-delivered sea mines.

The Naval Sea Systems Command awarded the $58.3 million contract to Boeing for the design and production of non-functional wing glide kits, glide kit prototypes articles and glide kit shipping containers, according to a 20 July Defense Department announcement.

The banded-on kits will be designed to convert Quickstrike aerial-delivered sea mines into Quickstrike-Extended Range variants. Upon launch, the wings of kits extend and provide a glide capability to the mines that extend their drop range and provide a protective standoff range from enemy defenses to the launching aircraft. The mines will be able to glide approximately 40 nautical

miles from the launching aircraft when dropped from 35,000 feet.

In addition to the wing kits, the QS-ER will be equipped with the precision-guidance kit used by the Joint Direct-Attack Munition. The QS-ER also is equipped with sensors – including acoustic, magnetic and seismic – to detect passing ships and submarines.

Both the Navy and Air Force have aircraft that can deliver mines, including the F/A-18E/F Super Hornet strike fighter and B-52 Stratofortress heavy bomber. The mine-delivery capability is expected to extend to the Navy's P-8A Poseidon maritime patrol aircraft, which has replaced the mining-capable P-3 Orion.

U.S. interest in offensive mining has increased in recent years in the era of great power competition and the increasing naval capabilities of China and Russia.

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# Navy's APL 67 Sails Away from Pascagoula, Bound for Japan Base

The Navy’s newest berthing barge, Auxiliary Personnel Lighter (APL) 67 sailed away from VT Halter Marine’s shipyard this week en route to Naval Base San Diego. APL 67 will eventually be delivered to Yokosuka, Japan. *NAVAL SEA SYSTEMS COMMAND*

PASCAGOULA, Miss. – The Navy’s newest berthing barge, Auxiliary Personnel Lighter (APL) 67 sailed away from VT Halter Marine’s shipyard this week en route to Naval Base San Diego, the Program Executive Office–Ships said in a July 21 release. APL 67 will eventually be delivered to Yokosuka, Japan.

APLs are 82-meter-long barges that can berth up to 611 people, 74 officers and 537 enlisted personnel. Mess seating is available for 224 enlisted personnel and 28 officers in 20-minute intervals, allowing food service for 1,130 personnel to have three meals a day.

APLs are equipped with offices, classrooms, washrooms, laundry facilities, a medical treatment facility, a barber shop and a

fitness center.

“The modern APLs make the lives of our Sailors easier while their ships are in port for maintenance or training events.” John Lighthammer, acting program manager, Support Ships, Boats and Craft, Program Executive Office Ships. “We look forward to continuing to get these vessels delivered to the fleet to provide support while our Sailors focus on mission.”

VT Halter Marine is in production on APL 68 and three other APLs.

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# Surface Boss: Navy Considering Light Amphibious Warships for Junior Officer Command


The Cyclone-class coastal patrol ship USS Tornado (PC 14) conducts a man overboard drill Sept. 16, 2020. *U.S. NAVY / Mass Communication Specialist 3rd Class Dan Serianni*

ARLINGTON, Va. — With the Navy planning on decommissioning its remaining Cyclone-class coastal patrol ships over the next two years, the opportunities for junior officers to command ships early in their careers are drying up. A new ship now being planned for the fleet may provide a solution to the problem.

Most Navy warships — destroyers, littoral combat ships (LCSs), amphibious transport dock ships and dock landing ships — are commanded by surface warfare officers with the rank of commander. The forthcoming Constellation-class frigate likely will be the same. Cruisers are commanded by captains who previously have commanded a smaller ship.

In an earlier era, such as World War II, many small warships, such as destroyer escorts, were skippered by lieutenant commanders. Antelope-class patrol gunboats during the Vietnam War were commanded by lieutenants. Today the Coast Guard has many ocean-going cutters, such as Sentinel-class fast response

cutters, that give lieutenants early command experience. Command at sea for a junior officer has been shown to produce a more mature, experienced mariner accustomed to facing hard decisions that require sound judgement.

Vice Adm. Roy Kitchener, commander, Naval Surface Forces, was speaking July 22 to reporters at a media roundtable when asked about the diminishing opportunities for lieutenants and lieutenant commanders to gain experience in command of a ship.

“I think about that a lot,” Kitchener said. “I’m a big believer in early command opportunity if you’re truly trying to develop good COs [commanding officers] at the O-5, O-6 [commander, captain] level. It really gives them a broader understanding of the force.

“One of the things we’re looking at right now, tracking pretty closely, is the Marine Corps’ initiative for the LAW, the Light Amphibious Warship,” he said. “I see that as perfect opportunity for early command for our future officers. I think that’s a great mission for them. Right now, I think on that we’re on track.”

Kitchener said he has “looked a little bit at about LCS, but not where I want to talk about my thoughts on it, but I do think the LAW is something perfectly suited for [early command].”

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# Sea-Air-Space 2021 Prequel:

# Next-Gen Attack Sub Will Be Ultimate Apex Predator, Admiral Says


USS Seawolf, shown here in Japan in 2009. The Navy aims to combine the Seawolf-class's speed and payload, Virginia-class acoustics and sensors and Columbia-class longevity into the next-generation nuclear-powered attack submarine, the SSNX. *U.S. NAVY / Lt. Cmdr. Greg Kuntz*

ARLINGTON, Va. — The U.S. Navy's next-generation nuclear-powered attack submarine, SSNX, will combine the best technologies and capabilities from earlier submarines to produce the finest hunter the world's oceans have ever seen, according to the service.

"We're looking at the ultimate apex predator for the maritime domain," said Rear Adm. Bill Houston, director, Undersea Warfare, Division, Office of the Chief of Naval Operations, who has been selected to be the Navy's next commander,

Submarine Forces, speaking in a pre-recorded webinar of the Navy League's Sea-Air-Space Prequel.

Houston said the SSNX has "got to be faster, carry a significant punch, a bigger payload, a larger salvo rate. It's got to have acoustic superiority and simultaneously we're going to work on operational availability with respect to maintenance and life of the ship.

"We're taking what we already know how to do and combining it together," he said.

The Seawolf-class SSN, which entered service in the late 1990s, "has incredible speed and payload," he said. "We're going to take that Seawolf trait of payload and speed; we're going to take Virginia class acoustics and sensors; and then we're going to take Columbia's [nuclear-powered ballistic-missile submarine, or SSBN] operational availability and life of ship.

"We're going to put that all together [for SSNX] – the apex predator – because it really needs to be ready for major combat operations," he said. "It's going to need to be able to go behind enemy lines and deliver that punch that is going to really establish our primacy. It needs to be able to deny an adversary's ability to operate in their bastion regions."

Houston said that the Navy is "confident we're going to be able to do that because we've already built that on those platforms. We know how to do that. We just have to mesh it together with one platform. The systems we have, with electronic design, the tools, the stuff that we've already developed, we're going to capitalize on that."

The admiral explained that the SSNX is timed to capitalize on the 'very robust" design team for the Columbia-class SSBN when that program is ramping down amid production of the SSBNs.

"We'll be ramping up in SSNX because we'll have the design and

the RDT&E [research, development, test and evaluation] done," Houston said. "It takes a significant amount of time and effort for that RDT&E to develop this apex predator. That's what we're going to do over the next decade working on the systems for SSNX. We're very confident we can get there. It's a daunting task, but the team is more than capable of doing it."

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# Sea-Air-Space 2021 Prequel: Sea Services Can Provide Great Opportunities, but More Work is Needed to Ensure Diversity, Speakers Say

Outgoing Defense Information Systems Agency (DISA) Central Field Command, commander, U.S. Army Col. Corey L. Brumsey, passes the command flag to director, DISA and Commander, Joint Force Headquarters – Department of Defense Information Network, U.S. Navy Vice Adm. Nancy A. Norton, during a change of command ceremony at U.S. Central Command Headquarters, June 28, 2019. *U.S. CENTRAL COMMAND PUBLIC AFFAIRS / Tom Gagnier*

Three top female service officials said the sea services and military can provide great opportunities for women and minorities, but more work needs to be done to encourage those people to join the armed forces and help them meet their goals once inside.

“I think it’s really important for us to recognize the value and significance of the leadership opportunities that we get in the military and in the Department of Defense as civilians, at a much more junior age, much younger than our civilian counterparts ever would,” said Vice Adm. Nancy Norton, who

retired as vice director of the Defense Information Systems Agency and commander of the Joint Force Heaquarters Department of Defense Information Network after a 34-year career.

“What we want to do, as women, is be great leaders, just like any man or woman in the military, and look for opportunities to better enable men and women across the board in all leadership opportunities,” she said.

Norton spoke on the “Women and Warfare” session as part of the Sea-Air-Space 2021 Prequel, along with Rear Adm. Melissa Bert, judge advocate general for the U.S. Coast Guard, and Col. Kelly Frushour, deputy director of the Communications Directorate at Marine Corps headquarters.

All the women said they weren’t expecting to make a career of it when they joined the military, but once inside what kept them going were the opportunities and the people.

“I never actually made a conscious decision to stay in the Navy, I just kept doing things that I loved, and the Navy kept giving me opportunities to do new things and to see new places, to go places I would never have had the opportunity to experience,” Norton said.

Bert joined the Coast Guard at a time when it was only 10 percent female and did two tours on ships where she was the only woman on board. That helped her decide she didn’t want a seagoing career, so the Coast Guard sent her to law school.

“Through a lot of great friends and mentors and coaches, I just stayed with it, and it’s been fun. My closest friends are in the Coast Guard and I met my husband, who is not in the Coast Guard, but I met him through the coast guard, so it’s just a second family to me, that’s why I stayed,” Bert said. “It wasn’t even the mission as much as the people.”

Frushour said she was an Air Force brat who attended a “hail and farwell” ceremony at the U.S. embassy in Norway, her

father’s last posting, for a departing Marine and his replacement.

For the new arrival, “it didn’t seem like a start over for him, it seemed like he had moved into a new family, into a new group of friends. As a military brat who had grown up all over the place, that really stayed with me. What a great thing, to be able to join an organization that is doing good work, to be able to serve my country, be able to travel, and wherever you go, you’re just joining friends and family that are already there.”

Norton said the military really is a meritocracy, and “frankly, one of the reasons I’ve loved being in the military is from the time I started I’ve always felt like the military has led society in diversity and equality in many, many ways … If you work hard and are dedicated to the people and the mission, you can be successful, and I think it’s important that we in the military, and those of us who are retired and continue to influence the Department of Defense, continue to make it a leader in our social change and social justice across the board.”

However, changes still need to be made, Bert said.

“We still have model, because it was formed by men, we have a model that is for a stay at home person, whether it’s a husband or wife, who’s raising the kids, we don’t really acknowledge that having a family is part of most people’s lives,” Bert said. “It should not be a choice … either six years at sea as a SWO [surface warfare officer] and then deciding, I can’t have this lifestyle, or just moving all the time.”

That model is “a great way to drive out really talented people, not just women. It’s not a lifestyle choice [where] we’re going to get the best in American society. … We need to start listening to women and underrepresented minorities and

look at ways we can change.”