

Navy Orders Full-Rate Production for BQM-177A Aerial Targets From Kratos



The BQM-117A is the newest subsonic aerial target for the U.S. Navy through the recently announced \$29.2 million contract. KRATOS DEFENSE

ARLINGTON, Va. – The U.S. Navy has awarded \$29.2 million contract to Kratos Unmanned Aerial Systems Inc. for Lot 1 Full-Rate Production of the company's BQM-177A subsonic aerial target.

The Naval Air Systems Command awarded the firm-fixed-price contract to Kratos for 35 BQM-177A targets along with technical and administrative data in support of its Aerial Targets Program Office, according to the Defense Department contract announcement.

The BQM-177A is the U.S. Navy's newest subsonic aerial target. It can be used to simulate hostile aircraft or highly dynamic, high-subsonic, sea-skimming anti-ship cruise missiles. The target is capable of speeds in excess of 0.95 Mach and a sea-skimming altitude as low as 6.6 feet, according to the Kratos website.

The BQM-177A can carry "a wide array of internal and external payloads, including proximity scoring, identification friend or foe, passive and active radiofrequency augmentation, electronic countermeasures, infrared augmentation (plume pods), chaff and flare dispensers, and towed targets," the website said.

Delivery of the 35 targets is expected to be completed by February 2022.

Moton Sets Fiscal 2021 Priorities for Navy's Unmanned and Small Combatants



ARLINGTON, Va. – The Navy's program executive officer for unmanned and small combatants (PEO USC) has set an ambitious plan to push development of the systems in his portfolio on the eve of fiscal 2021.

Rear Adm. Casey Moton, speaking Sept. 30 at a Special Topics Breakfast webinar sponsored by the Navy League of the United States, said his PEO is excited to be overseeing the introduction of five new classes of warships over the next few years: the FFG(X) New Guided-Missile Frigate, the Large Unmanned Surface Vessel (LSV), Medium Unmanned Surface Vessel (MUSV), Orca Extra-Large Diameter Unmanned Underwater Vehicle (XLUUV) and Snakehead Large-Diameter Unmanned Surface Vehicle (LDUUV).

Moton set six major program priorities of advancing current systems and introducing new systems.

Continue steady execution of littoral combat ship (LCS) building. This includes starting construction of the last two LCSs, laying keels for three LCSs, launching and christening of three ships, and commissioning four ships. Five additional ships will transition from post-delivery phase into sustainment.

"I will continue to expect improvement in cost and schedule," he said.

Field the LCS Antisubmarine Warfare (ASW) Mission Package. The variable-depth sonar (VDS) had been deployed on an LCS in 2020 and is in testing, which is expected to be completed on the Freedom-variant LCS, allowing achievement of initial operational capability in 2021 and the beginning of testing on the Independence-variant LCS.

“The [VDS] is detecting and tracking submarines now, and its critical offensive ASW capability will be ready to field on LCS, ” Moton said. “Our work on this resolution is critical because FFG(X) will operate this same VDS as part of its multi-mission capability.”

Complete Operational Test on Mine-Countermeasures (MCM) Systems and demonstrate them together on the LCS. Individual systems are being tested operationally first before the full package. The Airborne Mine Neutralization System and the Airborne Laser Mine-Detection System are fielded in the fleet. The Block 1 Knifefish UUV, the Unmanned Influence Sweep System and the Mine-Hunting USV will be tested in 2021. These ASW Mission Package systems also can be deployed on other vessels of opportunity.

“The package-level test is important as a demonstration of the system-level test that we’re doing now on and off LCS where we show that we can find and kill mines reliably,” he said. “FY ’20 was a big year, but FY ’21 is a critical year for us.”

To prove LCS reliability and maintainability. Moton the four production LCSs that deployed in fiscal 2020 “have been successful and accomplishing their missions in support of our fleets and combatant commands, but the reliability must improve. ... Our focus in reliability is in key ship systems such as propulsion and controls, deck and handling systems and radars.”

Moton said a cross-functional LCS Strike Team has been formed to us a metrics-based approach “focused on availability

drivers to generate and execute action plans ... and on maintainability. ... We want to ensure the Navy has the ability to better organically support the ships, including improvements in Navy ability to troubleshoot, to source spare parts and to perform appropriate levels of maintenance ourselves.”

Complete frigate detail design and prepare for production. “Fincantieri is well in progress on material procurement and they are executing their staffing plans. ... Our team is preparing to conduct a thorough baseline review with the prime contractor to ensure we have a good baseline to track cost and schedule,” Moton said.

Execute our unmanned systems prototyping and acquisition plans. “In the USV arena we are executing a robust prototyping plan using our sea-based prototypes in combination with land-based development and testing,” he said. “By the end of FY ’21, we will have four USV prototypes on the West Coast – two Overlord and two Sea Hunter-types.”

Moton said the two current Overlord USVs will be moved to the West Coast “and execute a busy year of testing which includes autonomous [increasing longer] transits and development vignettes.”

The Overlord USVs “will go through a full year of testing and experimentation, including government-furnished C4I payloads; combat system payloads; hull, mechanical and electrical upgrades, and with more complex autonomous behaviors.”

Moton said that testing with the Sea Hunter “has been and will be critical. Out FY ’21 plans include the use of Sea Hunter in multiple fleet exercises, tactical training events.”

He said the Sea Hunter and Overlord USVs will be used to exercise manned ship control over multiple USVs, test command and control, perform as part of surface action groups, and train Navy Sailors on these platforms.”

He also said the “Aegis Combat System is being adapted to make LUSV and MUSV part of our netted fleet.”

Marine Corps F-35B, KC-130J Collide in Mid-Air



No one was hurt in the collision between a Marine Corps F-35B Lightning II strike fighter and the KC-130J Super Hercules. KESQ RADIO

ARLINGTON, Va. — A Marine Corps F-35B Lightning II strike fighter collided with a Marine Corps KC-130J Super Hercules tanker/transport aircraft over Southern California on Sept. 29, resulting in the loss of the F-35B and a crash landing of the KC-130J.

“At approximately 1600 [local time] it was reported that an F-35B made contact with a KC-130J during an air-to-air refueling evolution, resulting in the crash of the F-35B,” the Marine Corps said in a release. “The pilot of the F-35B ejected successfully and is currently being treated. The KC-130J is on deck in the vicinity of Thermal Airport. All crew members of the KC-130J have been reported safe.”

A photo of the KC-130J published in the Palm Springs Desert News showed the KC-130J largely intact, having made a gear-up landing in a field in a carrot field in Thermal, California. The photo showed that the two starboard engines and external fuel tank had been heavily damaged. The F-35B crashed near Salton City, California.

The KC-130J was assigned to Marine Aerial Refueler/Transport Squadron 352, based at Marine Corps Air Station Miramar,

California. The squadron of the F-35B was not announced.

The F-35B crash is the second for the Marine Corps. An F-35B assigned to Marine Fighter Attack Training Squadron 501 based at Marine Corps Air Station Beaufort crashed in 2018. The Corps lost its first KC-130J in December 2018 in a mid-air collision during an aerial refueling with a Marine Corps F/A-18D Hornet strike fighter off Japan.

U.S. Space Force May Become a Possibility for a Few Naval Academy Graduates



Capt. Ryan Vickers stands for a photo to display his new service tapes after taking his oath of office to transfer from the U.S. Air Force to the U.S. Space Force on Sept. 1, 2020, at Al Udeid Air Base, Qatar. U.S. AIR FORCE / Staff Sgt. Kayla White

ARLINGTON, Va. – In the future, a commission in the U.S. Space Force may be a possibility for a few new graduates of the U.S. Naval Academy (USNA).

“USNA graduates select commissions into the Navy or Marine Corps,” said Cmdr. Alana Garas, a Naval Academy spokeswoman, in a statement to *Seapower*. “All midshipmen are eligible to request interservice commissions into other services. This is separate from the service assignment process. We expect future graduates of USNA to be able to request commissions in the U.S. Space Force, although it remains unclear if the Department of the Air Force will accept any Space Force interservice commission requests from the class of 2021.”

Garas said there are no quotas for any service regarding interservice commissions, “although there is a ceiling of 3% of the graduating class which can be accepted.”

She said the “U.S. Air Force Academy will serve as the primary commissioning service academy for the U.S. Space Force (both Department of the Air Force) in the same manner as the U.S. Naval Academy is the primary commissioning service academy for the U.S. Marine Corps (both Department of the Navy).”

USNA graduates have long been eligible to request commissions in the U.S. Air Force.

“USNA graduates will continue to be able to request interservice commissions into the U.S. Air Force,” Garas said. “The last U.S. Air Force commission from USNA was one graduate in the class of 2020.”

Berger: Marine Corps Needs More Diversity — In Amphibious Ships



The Tarawa-class amphibious assault ship USS Saipan (LHA 2) steams alongside the Nimitz-class aircraft carrier USS Dwight D. Eisenhower (CVN 69). U.S. Navy photo / Mass Communication Specialist Seaman David Danals

ARLINGTON, Va. — The commandant of the Marine Corps said the Corps needs the Navy to broaden its family of amphibious warfare ships to create a more distributed, survivable force to operate in a future high-intensity conflict with a peer

competitor.

Gen. David H. Berger, Sept. 24 speaking during an online interview by Defense One, said the three types of large amphibious warfare ships currently in the Navy's fleet – the amphibious assault ship (LHA/LHD), amphibious transport dock ship (LPD), and dock landing ship (LSD) – “have done great for us in the way that we needed to operate so far. But that's not the only way we're going to need to operate going forward.”

Berger said that “those three families of pretty expensive, high-end ships are not enough. We need a more diverse family of ships in order to compete every day, in order to be ready for a crisis or conflict, hence the light amphibious warship [LAW].”

Berger is in the midst of redesigning the force structure of the Marine Corps with his Force Design 2030 plan to meet the challenges of future potential conflict with powers such as China.

“We know we need something that's smaller, that doesn't have as much draft, that can move us around from ship to shore or shore to shore over great distances, but is affordable,” the commandant said. “Whatever that turns out to be, it will broaden the portfolio and give us more tools. I need to give commanders the means, the mobility to move in a distributed operating environment. The [LAW], what ever that turns out to be, is part of that.

Berger noted that, “so far, within the Navy, within the Department of Defense, every single wargame for the past five months has borne that out. If you don't have that, they're going to know how you are moving around and you're easier to target. We've got to make it hard [for the enemy to target].”

The general said commanders “have to distribute the force first of all to give the adversary a lot of looks from a lot of different directions in every single domain. You make it

very difficult for them to focus their strengths.”

Berger also pointed out that medical facilities will need to be brought more forward in a high-intensity conflict to care for casualties. He also said protection of logistics and of command and control, which long have been taken for granted in the wars that the United States has fought over several decades, can no longer be taken for granted.

Marine Corps Restores Priority to Ground-Based Air Defense



Capt. Christopher Lowe, (left), assigned to the 26th Marine Expeditionary Unit (MEU), and Cmdr. Don Wilson, the chief staff officer of Amphibious Squadron (PHIBRON) 8, pose for a photo next to an L-MADIS aboard the amphibious assault ship USS Bataan. U.S. Navy / Mass Communication Specialist 2nd Class Anna E. Van Nuys

ARLINGTON, Va. – After two decades of land combat in wars with no air threat beyond small drones, the Marine Corps is putting a high priority to ground-based air defense (GBAD) as it redesigns its force for expeditionary advance base operations in an era of great power competition.

The Marine Corps used to have batteries of Hawk surface-to-air missiles and later the Avenger system, augmented by short-range Stinger man-portable air-defense missiles (MANPADs) in their low-altitude air-defense battalions. Only the Stingers survived by the mid-2000s. In Afghanistan and Iraq, with no credible air threat, GBAD fell in priority in budgets and

development as the Corps focused on ground combat systems such as armored vehicles, artillery and tactical aircraft.

With the Force Design 2030 plan of the commandant, Gen. David H. Berger, to re-shape the Corps into a force that can operate and survive inside the area of operations of a peer competitor equipped with advanced manned and unmanned aerial systems and cruise missiles, GBAD has been restored to a higher priority in the defense budget and in the Corps' acquisition programs.

John Garner, program executive officer for Land Systems, has reorganized the PEO's program offices directorates to include one for GBAD. The four major GBAD programs being developed or deployed were outlined Sept. 22 by Garner in the Virtual Modern-Day Marine exposition:

- MRIC – Medium-Range Interceptor Capability
- MADIS – Marine Air Defense Integrated System
- L-MADIS – Light Marine Air Defense Integrated System
- Advanced MANPADS/Stinger

The MRIC is likely to be a vehicle-mounted missile system with a 360-degree fire-control radar to handle aircraft and cruise missiles at medium ranges.

Garner said the Corps expects to field a prototype of the MRIC "over the next two years."

The MADIS is mounted on a pair of Joint Light Tactical Vehicles, one with a turret launcher for four Stinger missiles and a 30mm cannon, as well as an optical sensor and shoulder-fired Stingers. The second vehicle is equipped with an RPS-42 360-degree radar, a 7.62mm M134 minigun, and electro-optic/infrared sensors, as well as shoulder-fired Stingers. On both vehicles is the Modi II dismounted electronic countermeasures system, which can be used to disrupt enemy drones, communications, and radio-controlled improvised explosive devices.

The L-MADIS is a counter-UAS electronic attack system mounted on a Polaris MRZR all-terrain vehicle. It features a 360-degree radar, a direct-fire capability, radio frequency jammers and electro-optic/infrared sensors. The L-MADIS is credited with downing an Iranian drone that flew in the close vicinity of the amphibious assault ship USS Boxer in July 2019.

Garner said the GBAD systems will fill “a major void” in Marine Corps capabilities.

Marine Corps' Amphibious Combat Vehicle Completes Initial Operational Tests



BAE Systems' ACV solution has completed thousands of miles of mobility testing and a full range of amphibious operations, including demonstrations of launch and recovery. BAE Systems ARLINGTON, Va. – The Marine Corp's new amphibious vehicle has completed a major step in its acquisition program and is on track for a full-rate production decision in November, a service acquisition official said.

The Amphibious Combat Vehicle (ACV), already in low-rate production by BAE Systems, completed its Initial Operational Test and Evaluation on Sept. 4, said John Garner, program executive officer for Land Systems, speaking Sept. 21 at the Virtual Modern Day-Marine Exposition.

Garner said early fielding of the personnel carrier version of the ACV to a Marine Corps amphibious assault battalion will

begin in the first week of October and be completed by the end of that month. Other variants of the ACV under development include a command-and-control ACV; an ACV armed with a 30mm cannon; and a recovery version designed to tow damaged vehicles to repair facilities.

The ACV is replacing the AAV7 family of assault amphibious vehicles. Garner said he expects there will be a robust Foreign Military Sales potential for the retired AAV7 vehicles.

Moton: Unmanned Vessels May Require Different Approaches to Maintenance



A Sailor and civilian technicians monitor an unmanned surface vehicle (USV), after it was launched from Military Sealift Command's expeditionary sea base, USNS Hershel "Woody" Williams (T-ESB 4), into the Chesapeake Bay, Sept. 14. U.S. Navy / Bill Mesta

ARLINGTON, Va. – The admiral in charge of developing the U.S. Navy's unmanned surface vessels (USVs) and unmanned underwater vessels (UUVs) said the maintenance strategy for the vessels may require different approaches to maintenance, particularly at the operational level (O-level).

Speaking Sept. 17 at a webinar panel of the Virtual Fleet Maintenance & Modernization Symposium of the American Society of Naval Engineers. Rear Adm. Casey Moton, program executive officer for Unmanned and Small Combatants, said that "for USVs, [that] probably puts a whole different take on O-level

maintenance.”

Moton said that “We are just in our initial prototype stage, so we haven’t actually picked what the maintenance strategy is going to be but looking at the maintenance strategy is part of our prototyping effort. So [Surface Development Squadron One] in San Diego is including looking at maintenance and helping us look at all that. The same is happening on the UUV side with [UUV Squadron One] up in Keyport [Washington].”

For small USVs and UUVs, Moton said that a likely outcome for 0-level maintenance would be like that performed by an aircraft squadron.”

As for the Intermediate- and Depot-levels, “We still have to sort that out,” he said. “My personal thoughts are that it goes from a range of making sure that a LUSV, MUSV in particular, are maybe not much different from other surface ship classes in terms of the [Regional Maintenance Centers] doing their role.”

Moton pointed out that the Navy also has “craft-level [UUVs and USVs] that are treated like a craft and [the question] is, “how are we going to maintain and modernize those?”

The admiral noted that “the prototypes are going to make that really interesting and we will figure that out in the next couple of years. ... We’ll try to make sure unmanned is not singled out as an aberration. I also don’t want to close the door to innovation. It’s more of a range of solutions.”

He also said that lots of companies that are working the USV efforts, and that many “smaller and mid-sized yards able to participate. I’m really excited about that.”

Commander Praises Agility that Deployed Low-Yield Warhead for SLBMs



The Ohio-class guided-missile submarine USS Florida (SSGN 728) prepares to transit the Mediterranean, Oct. 15, 2019. Some Ohio-class submarines can carry the W76-2 low-yield nuclear warhead. U.S. Navy / Mass Communication Specialist 3rd Class Drew Verbis

WASHINGTON —The admiral in command of the nation's strategic deterrent forces defended the new W76-2 low-yield nuclear warhead before the Senate Armed Services Committee (SASC) in a hearing on Capitol Hill and praised the agile process that rapidly deployed the weapon.

The requirement for a submarine-launched low-yield warhead became a requirement noted in the 2018 Nuclear Posture Review. The result was the W76-2 warhead, which was deployed in 2019 on the tips of some Trident submarine-launched ballistic missiles carried by Ohio-class ballistic-missile submarines.

"I think it's an example that shows that we can move fast," said Adm. Charles A. Richard, commander, U.S. Strategic Command, testifying Sept. 17 before the SASC. "We still know how to do this. That is an example of where the threat changed, new capability was needed, we provided on an operationally responsive timeline [and] closed a potential hole in our deterrence strategy. We should be able to do that more."

Richard said the rapid development and deployment of the W76-2 was "a type of hedging strategy that enables you to react inside what somebody is attempting to do. That enhances a nation's deterrence by a nation's ability to do that."

Richard stressed that the strategic climate was changing as China and Russia began surging on their way to becoming peer competitors “that have to be deterred differently.”

NAVSEA Commander: Planning Critical to On-Time Maintenance of Ships



Gas Turbine System Technician (Mechanical) 3rd Class Jonathan Gancayco, from Oakland, California, right, and Seaman Brice Rodgers, from Philadelphia, operate a lift on the pier beside the Nimitz-class aircraft carrier USS Dwight D. Eisenhower (CVN 69). Ike is currently pier side in Naval Station Norfolk conducting routine maintenance. U.S. Navy / Mass Communication Specialist 3rd Class Asheka Lawrence-Reid

ARLINGTON, Va. – The on-time delivery of ships, submarines and systems from the Navy’s repair yards and the private shipyards as well as on-time delivery of new construction ships remains the Naval Sea Systems Command’s (NAVSEA’s) top priority, the NAVSEA commander said.

“It all starts with advance planning,” said Vice Adm. William Galinis, the NAVSEA commander, speaking Sept. 16 in a webinar of the Virtual Fleet Maintenance & Modernization Symposium of the American Society of Naval Engineers. “We’re going to be relentless to get the planning right.”

Advance planning is critical in determining what work a ship will need so that materials can be ordered and delivered in time and the necessary work force assigned and mustered to perform the maintenance before the work starts. Each day

matters, he said.

Galinis noted that the duration and complexity of ship maintenance and modernization availabilities is increasing.

“We need to be absolutely relentless in execution,” he said.

One of the planning actions that has proved beneficial is sending assessment teams to do ship checks, inspecting a ship in advance of the availability to determine the condition and needs of the ship to develop the work package as completely as possible.

Galinis said that one of the biggest challenges is unplanned work that emerges. Managing that change is critical to minimizing its impact on the schedule.

He also said, “We are challenged in some areas by capacity. We need to build additional capacity.”

The admiral said that currently 47 CNO [chief of naval operations] availabilities are being executed in private shipyards (including three nuclear-powered attack submarines at Newport News Shipbuilding). Of those, he said, approximately half are “tracking to the schedule,” he said, with the other half being challenges. In addition, 13 nuclear-powered ships – 11 submarines and two aircraft carriers – are in availabilities in the Navy’s shipyards.

Galinis stressed the importance of teamwork between the Navy, the ship repair industry and the supply chain in meeting the challenges of on-time delivery.

Achieving a predictable and stable workload in ship repair yards benefits both the Navy and industry, enabling the yards to hire and retain a skilled, right-sized work force, a feature that also enables suppliers to get backlogs of orders. It benefits the populations and economies of the communities located by the yards and suppliers as well.