

Keel Laid on Future USS Bougainville



PASCAGOULA, Miss. – The keel-laying and authentication ceremony for the future USS Bougainville (LHA 8) was held March 14 at the Huntington Ingalls Industries (HII) Pascagoula shipyard, the Naval Sea Systems command said in a release.

The ship's sponsor, Ellyn Dunford, authenticated the keel by having her initials welded into the keel plate.

Traditionally, keel laying marks the first step in ship construction. However, with today's advanced modular shipbuilding, the keel-laying ceremony now recognizes the joining together of a ship's components and is a major milestone in the ship's construction. Fabrication of Bougainville began in October.

"We are honored to have Ellyn Dunford with us today to commemorate this milestone," said Tom Rivers, Amphibious Warfare program manager, PEO Ships. "The production team has made steady progress and we look forward to bringing the next generation of amphibious capabilities to Navy and Marine Corps warfighters."

The future USS Bougainville is the third ship of the America (LHA 6) class of amphibious assault ships built to facilitate forward presence and power projection. LHA 8 is the first Flight I ship of the America class with a reincorporated well deck to increase operational flexibility while maximizing the aviation capability inherent on the Flight 0 ships, USS America and the future USS Tripoli.

Designed to support the Marine Corps tenets of Operational Maneuver from the Sea and Ship-to-Objective Maneuver, America class ships are capable of rapid combat power buildup ashore

the America class accommodates the Marine Corps' Air Combat Element, including F-35B Joint Strike Fighter and MV-22 Osprey, essential to maintaining power projection, air superiority and theater logistics.

HII's Pascagoula shipyard also is in production on Tripoli (LHA 7), the guided-missile destroyers Delbert D. Black (DDG 119), Lenah H. Sutcliffe Higbee (DDG 123), Jack H. Lucas (DDG 125), and amphibious transport dock ships, Fort Lauderdale (LPD 28) and Richard M. McCool Jr. (LPD 29). The shipyard also is

under contract for six Flight III Arleigh Burke class destroyers awarded as part of the fiscal 2018-2022 multiyear procurement.

Corps Committed to National Defense Strategy While Continuing to Fill Traditional Missions, Commandant Tells Defense Forum



WASHINGTON – Although the Marine Corps is responding to the National Defense Strategy's focus on preparing for the return to great power competition, "we still have to operate across

the full range of military operations,” the Marines’ top officer said March 13.

While the potential risk from a major regional fight against a peer competitor is high, it’s hard to say what is the probability of that occurring, Marine Corps Commandant Gen. Robert B. Neller said.

“How much of your force do you focus on that? How much of your force do you focus on the day-to-day capacity” for missions such as humanitarian assistance, disaster relief, crisis response, Neller asked rhetorically.

In addition to explaining the major changes in training the Corps is making to prepare for a possible high-end conflict against a great power rival, Neller noted that the counter-insurgency, counter-terrorism fights the Marines have been waging for 18 years “is still going to go on.” The “physical caliphate” created by the ISIS extremist in Iraq and Syria may be about to be eliminated, “but ISIS is not going to go away.”

“Ninety percent of what we do will not be against peer competitors, it will be against somebody else,” Neller told the audience at the McAleese/Credit Suisse defense forum.

Working from that conclusion, Neller made a strong argument for the amphibious force, which he said was “the capability that allows you to do 80 to 90 percent of everything you do day to day,” to get where needed, to do exercises with allies and friends, to establish strong presence and to go ashore if needed without worrying about sovereignty issues.

With a strong amphibious fleet “you can operate across nearly 90 percent of the range of military operations,” up to a high-end conflict. “At the end of the day, it gives the nation one of two forcible entry capabilities,” he said. The other being an Army airborne assault.

“I think the value it brings to the nation is incredibly

important.”

The question then is how many amphibious ships are needed, what capabilities they have, and that debate is going on, Neller added.

Asked his reaction to the fact that the Navy’s requested fiscal 2020 shipbuilding budget, which would buy 12 ships, does not contain any amphibs and there are only three in the five-year budget plan that seeks 51 ships, Neller said: “We know we have to compete against other capabilities.”

He said the Marines would have liked to have the first amphibious transport dock (LPD) Flight II, which will replace the aged and low-capability dock landing ships, moved forward. The LPD is planned for fiscal 2021. Neller said he would “make my case as best I can” to the House Armed Services Seapower and

Projection Forces subcommittee chairman, U.S. Rep. Joe Courtney (D-Conn.), and the subcommittee’s ranking member, U.S. Rep. Rob Wittman (R-Va.).

The budget plan also delays the next amphibious assault ship, LHA-9, until 2024, despite concerns from the amphibious shipbuilding industry that the delay would make it difficult to maintain skilled workers and suppliers.

Asked in a separate session with reporters about the low priority for amphibs, Chief of Naval Operations Adm. John M. Richardson said the shipbuilding budget reflected “warfighting priorities.” And he said the LHA-9 “is good where it is.”

Neller described in considerable detail what the Marines are doing to prepare for a potential high-end fight, including developing capabilities to engage in information warfare, offensive and defensive cyber, training to operate in an information-denied environment and conducting intense force-on-force exercises. The Corps also is seeking better long-

range, precision-fire weapons, air and missile defenses and the capability to help the Navy fight for sea control against a peer adversary.

He also said he did not ask for an increase in personnel because “I want to be able to train the Marines I have” and did not want to grow the force during a time of rising budgets and then “have people who don’t have the gear they need” if funding was cut.

House Panel’s Dissatisfaction With President on Afghanistan, Syria, Africa Cuts Across Party Lines

Members of the House Armed Services Committee expressed bipartisan concern and opposition to President Donald Trump’s policies and statements on Afghanistan, Syria and Africa, with Republicans and Democrats throwing critical questions and opinions at the commanders of those crucial areas on March 7.

The criticism started at the top, with committee Chairman Adam Smith (D-Wash.) saying the “decisions by the administration appear to be uninformed, without the consultation of senior leaders in the [Defense Department] and – importantly – without consulting our allies and partners,” which “are clearly impacting our alliances and partnerships.”

U.S. Rep. Mac Thornberry of Texas, the top Republican, said he “shared” Smith’s concerns about “where we are going from now” in the fight against the ISIS extremists in Syria and Iraq.

"We need to keep pressure on the terrorist networks," despite the liberation of most of the ISIS territory, Thornberry said.

That line of questions and statements continued down to the most junior members of the panel, many of whom are veterans of those conflicts.

Army Gen. Joseph Votel, commander of U.S. Central Command, and Marine Corps Gen. Thomas Waldhauser, commander of Africa Command, tried to strike a positive tone in assessing conditions in their areas of responsibility, but conceded under the persistent questioning that some of the president's decisions and statements could have negative effects.

Votel, who is set to relinquish his command later this month, was particularly concerned about the president's repeated declarations that ISIS has been defeated in Syria and Iraq, which justified major reductions in U.S. forces there.

While noting that the U.S.-led coalition had reduced ISIS' self-proclaimed caliphate from 243,000 square miles to less than one mile, "the fight against violent extremists is far from over," Votel said.

What we are seeing now is not a surrender of ISIS" in the shrinking pocket of land in Syria, but "a calculated decision" to protect its fighters "while waiting for a chance to re-emerge," he said.

Votel, who has said he was not consulted before Trump declared ISIS beaten and ordered all U.S. forces withdrawn from Syria, said he is proceeding with a phased withdrawal of his forces with a primary focus of protecting the small number who now are expected to remain.

Asked how the Russians reacted to Trump's decision to leave Syria, Votel said it was "positive" as the Russians believed they would be "filling the vacuum" and perpetuating their relations with Syrian President Bashar Assad.

Votel said he was “confident” that the small U.S. force, now expected to be about 400, that Trump later decided to retain in Syria could keep ISIS from regaining ground. But, he added, it would be “not just U.S. forces, but our partners.”

Asked if he agreed with the president’s decision to remove most U.S. forces from Syria and at least half of its troops from Afghanistan, Votel said, “most of us would say these decisions have to be based on conditions at that time.”

As for Afghanistan, he said his advice would be that any decision on forces “should be done in full consultation with our partners.” He added: “We have not received any orders to withdraw” forces from Afghanistan.

Pressed repeatedly about the negotiations with the Taliban, conducted by Zalmay Khalilzad with no involvement by the Afghan government, Votel said those talks are in the early stages and any agreement would have to be made by Kabul. U.S. goals in the negotiations are to protect U.S. interests and ensure the security of the Afghan government.

Waldhauser was more sanguine about the troop reductions ordered in his command, noting that his initial instructions were to withdraw about 10 percent of his counter-terrorism forces, which are primarily special operations personnel, while keeping the 6,000 conventional troops advising and assisting local forces. Those troops would be distributed based on the status of efforts to improve the capabilities of local forces, he said.

Asked if he considered that enough of a force, he said, “adequate.”

EA-6B Prowler Naval Electronic Attack Aircraft Set for Retirement



CHERRY POINT, N.C. (Feb. 28, 2019) Two U.S. Marine Corps EA-6B Prowlers assigned to Marine Tactical Electronic Warfare Squadron (VMAQ) 2, fly off the coast of North Carolina, Feb 28, 2019.

ARLINGTON, Va. –The Northrop Grumman EA-6B Prowler electronic attack aircraft will be retired from naval service on March 8 in ceremonies at Marine Corps Air Station Cherry Point, N.C.

The last squadron to operate the Prowler, Marine Tactical Electronic Warfare Squadron Two (VMAQ-2) will say farewell to its last two –which reportedly are bound for museums–of six Prowlers as the squadron is deactivated.

VMAQ-2 returned to Cherry Point in November from its final deployment at a base in the Central Command area of responsibility.

VMAQ-2 is the last of four VMAQ squadrons to operate the Prowler. The other three squadrons –VMAQ-1, VMAQ-3 and VMAQ-4, two of which were formed from detachments of VMAQ-2 and one of which became a fleet replacement training squadron (VMAQT-1) until it was no longer needed –have been deactivated, one each year –over the past three years.

The VMAQ squadrons have deployed their EA-6Bs to numerous bases and aircraft carriers over their service, providing electronic jamming and attack in support of joint forces, including participation in combat operations in Libya, Kuwait, Iraq, Syria, Bosnia, Serbia, Kosovo and Afghanistan.

The Marine Corps is not fielding a direct replacement for the

EA-6B, instead relying on other platforms like the F-35B, organic electronic warfare systems such as the Intrepid Tiger pod and the Navy's electronic attack squadrons.

The Navy retired the EA-6B from operational squadron service in 2015. The Prowler entered combat during 1972 over North Vietnam and served in numerous conflicts and crises since, most notably in Operations El Dorado Canyon, Desert Storm, Southern Watch, Allied Force, Desert Fox, Enduring Freedom and Iraqi Freedom. The service now flies the EA-18G Growler electronic attack aircraft from aircraft carriers and in expeditionary roles from land bases to support joint forces.

Marine Corps Seeks Ideas, Information for Optical Communication Transmission System



A U.S. Marine with Special Purpose Marine Air-Ground Task Force-Crisis Response-Africa performs a radio check during a training event with German soldiers in Seedorf, Germany, Dec. 6, 2018. This event, which focused on infantry tactics and maneuvers, marked the first time U.S. Marines have trained with German Fallschirmjäger Regiment-31. SPMAGTF-CR-AF is a rotational force deployed to conduct crisis-response and theater-security operations in Europe and Africa. (U.S. Marine Corps photo by Sgt. Katelyn Hunter)

MARINE CORPS BASE QUANTICO, Va. –Marine Corps Systems Command (MCSC) has released a Request for Information (RFI) to identify a nondevelopmental solution to provide a complete

Line of Sight (LOS) Optical Communication Transmission System (OTCS), the command said in a March 5 release

.According to the RFI, released on the Federal Business Opportunities website, the OCTS system must be capable of providing a high-bandwidth transmission path used for voice, video and data communications

.For program officials, this capability will consolidate capabilities into a complete LOS transmission capability

."The adage, 'Move, shoot, communicate' hasn't changed, but how we communicate is rapidly changing," said Maj. Eric Holmes, MCSC project officer. "Given the rapid pace of innovation in technology, the Marine Corps is currently evaluating maturing capabilities.

"Optical communications support greater bandwidth and provide additional relief for frequency allocations in an already constrained spectrum

."The Marine Corps is turning to industry to help rapidly develop and field this technology to protect vital command and control emissions from advanced adversaries," Holmes said. Responses to the RFI must be received by 1 p.m. on March 19.

Marine Warfighting Lab Develops Roadmap on Robotic Experiments



Recognizing the impact that the rapidly expanding capabilities

of robotic systems will have in all the warfighting domains, the Marine Corps Warfighting Laboratory (MCWL) has developed a draft roadmap to prioritize its experimentation on the most immediate threats in a resource-constrained environment.

“We prioritize based on the perceived threat. ... And the biggest threat right now is to the infantry squad,” said Jeff Tomczac, the deputy director of the science and technology division at MCWL.

The roadmap emphasizes interoperability, modularity and providing “enhancements” to the squads, because “we don’t want to go after something that will be a liability. You want a battle buddy and you want something that is as good or better than what you have,” Tomczac said in a conference call with two reporters.

In the quest for interoperability, MCWL has created the Tactical Robotic Controller, “the universal controller for all the unmanned, robotic, or autonomous systems that we experiment with,” for air, ground, water surface and subsurface systems, he said.

To illustrate the scope of that controller, Tomczac said, “we have an effort down in Norfolk with our connectors. It’s an LCM-8, a Mike boat, that is now fully autonomous.” They are working with the landing craft because “we see an important role for autonomy,” with surface connectors, Tomczac said.

The Marine Corps is working with the U.S. Army on the controller “to create a set of standards that industry is going to have to adhere to for different robotic systems,” he said.

Tomczac said MCWL is working closely with the Army on other programs, which is important because the Army can buy systems in larger numbers, which increases the support for programs and reduces the cost for the Marines.

The need for a common controller has been recognized for years, he said, "otherwise your squad leader can have 10 different controllers in his pocket for each different type of system out there."

The infantry squads already are operating a small quadcopter unmanned aerial system.

Part of the focus on interoperability is to ensure the various robotic systems can communicate with each other, know where the others are and "can work sometimes in tandem."

The MCWL strategy also emphasizes "working on systems that are modular, so you can put systems on, take them off, depending on the mission, depending on what you want to do," he said.

An example of that is a current program called the Expeditionary Modular Autonomous Vehicle (EMAV), which is a tracked, flattop vehicle, that can carry up to 7,000 pounds of supplies or infantry gear, Tomczac said. It also "allows us to put on different types of sensors, communications equipment, different kinds of weapons."

It also can carry casualties from the battle line to a safe area or aid station, with only one Marine ensuring the wounded are "taken care of and protected," rather than the two or more Marines needed to manually transport a casualty, he said. The unwounded Marine then "can return with supplies, ammunition and gear."

MCWL has two EMAVs, will get two more shortly and has asked for another 10, which "will go out to an operational unit to conduct an extended user evaluation," to help refine the requirements to move the prototypes into a program of record for acquisition, he explained.

MCWL already has deployed the vehicle multiple times with operational units for limited evaluations, mounting sensors and even weapons on it, he said.

The EMAV can be controlled by an operator or programmed to make runs between supply spots and infantry Marines forward. But the emphasis is on using artificial intelligence and machine learning to develop greater autonomy, Tomczac said.

However, when the robotic system is armed, “the goal is always a man in the loop. A man will make the decision whether an engagement occurs,” he said.

While MCWL works toward new robotic systems, Marine explosive ordnance disposal specialists and engineers already are using five unmanned ground systems, which range from a 600-pound ordnance neutralizer down to the Ultra-Light Robot, a seven-pound remote sensor that can be thrown into a room or sent into a tunnel to look for enemy soldiers or improvised explosive devices.

Corps, DoD Test Office Differ on Effectiveness of New JLTV

The Marine Corps is beginning to field its new Joint Light Tactical Vehicle and, after improved training and some physical adjustments, the Corps believes JLTVs are “operationally suitable and effective,” the program’s manager said Feb. 27.

That conclusion is quite different than the findings released last week by the Defense Department’s Operational Test and Evaluation office (DOT&E), which said all four variants of the JLTV were “not operationally suitable because of deficiencies in reliability, maintainability, training, manuals, crew situational awareness and safety” and that the close combat weapons carrier was “not operationally effective for use in

combat and tactical missions.”

The DOT&E findings were “directly lifted from data” collected during joint Army and Marine Corps operational testing done a year ago and “does not take into account the effort and work that’s been done since then,” said Andrew Rodgers, program manager for Light Tactical Vehicles at Marine Corps Systems Command.

“As we are fielding, we have shown that they are operationally suitable and effective. As we push forward with our training, we will be able to validate that,” Rodgers said.

His responses to the DOT&E report came during a telephone conference call with reporters to announce the fielding of the first JLTVs to the Marines’ School of Infantry, West, at Camp Pendleton, Calif., the next day.

The JLTV is intended to replace most of the 1980s-era High Mobility Multipurpose Wheeled Vehicle, or Humvee, to provide greater crew protection, tactical mobility and high-tech communications. Oshkosh Defense will produce 49,099 of the vehicles for the Army, 9,091 for the Marine Corps and 80 for the Air Force.

Rodgers said the problems cited in the DOT&E report had been identified by the Army and the Marines during their testing and most of them reflected decisions made early in the program’s development to delay creation of training programs and manuals until the production contract was awarded to Oshkosh Defense in 2015.

“We were very aware that our training material was not mature enough,” he said.

After rushing to make up for the late start, the Marine Corps produced a 40-hour maintenance training package but quickly realized that “we were not imparting enough information to the maintainers.” There is now an 80-hour training program

for maintainers and a 56-hour package for vehicle operators. Operator training and electronic technical manuals also have been completed.

That has “gone a long way to help beef up the training,” which should improve reliability, Rodgers said.

He said the problems in operating the anti-tank TOW missiles on the close combat weapons carrier “can be solved with improvement in tactics, techniques and procedures (TTPs).

Once the Corps has the vehicle and begins working with it, Marines will modify their TTPs to account for the physical changes to the JLTV from the Humvee.”

Rodgers said the Army is testing larger rear windows and a front-mounted camera to address the problems with poor visibility and situational awareness cited in the DOT&E report, and problems with getting in and out of the JLTV can be corrected with adjustments to the doors.

Marines also are provided a secondary emergency exit in the new JLTV, he said.

The Feb. 28 delivery to Camp Pendleton is the beginning of fielding 55 JLTVs to supporting units by mid-May, followed by the first deliveries to operational units in July, starting with II Marine Expeditionary Force (MEF) at Camp Lejeune, N.C.

Rodgers said he expects to have fielded 250 to 300 JLTVs by end of this fiscal year and to deliver about 1,000 in fiscal 2020.

Corps Asks Industry for Longer Range, Mobile Fires Technologies for LAR Battalions

ARLINGTON, Va. – The Marine Corps is asking industry to show which technologies could be ready shortly to give its armored scout units a long-range, precision, on-the-move fires capability that could include unmanned aerial sensors, loitering guided munitions and command-and-control systems.

“We’re looking to give the Light Armored Reconnaissance (LAR) battalions this capability. What does industry have out there with range from 7,000 meters out to 100 kilometers?” Lt. Col. Bradley Sams, program manager for fires at Marine Corps Systems Command, said Feb. 25.

The Corps wants something with greater range and precision than the 81mm mortars that are carried by one version of its light armored vehicles (LAV). “Whether that [is] loitering munitions or a missile,” Sams told reporters in a conference call. “We’re asking industry to tell us what they have now or in development.”

The program, called Organic Precision Fires-Mounted (OPF-M), would be integrated into LAR battalions, probably co-located with the 81mm mortars company, with the weapons mounted on a LAV, a lightly armored, highly mobile eight-wheel vehicle that comes in multiple variants, said Jeff Nebel, the fires team leader. The new system would “take advantage of the sensors that already exist in the battalion. But we’re also interested in exploring other sensors that could support this capability.”

The combined systems “would support the LAR platoons up

forward," Nebel said.

The weapons employed by the OPF-M system could include loitering munitions, which are tube-launched, small rockets with optical or other sensors that can stay airborne for limited periods while the controller finds a suitable target. Later munitions might feature artificial intelligence and target-recognition capability to search for and strike defined targets, Nebel said.

Systems Command has issued requests for information (RFI) and an invitation to attend industry days March 13 and March 14 at Mary Washington University's campus in Dahlgren, Va.

"We are looking for what's in the realm of possibilities, what's available in the next year, year and a half," to help them clarify the requirements and the concepts of operations, Sams said.

The RFIs and industry days are "kind of a transition from work that's already been done on the capabilities side" at the Marine Corps Warfighting Laboratory (MCWL), which has been doing some experiments and demonstrations the last couple of years, he said. "This is a hand-off from experimentation to acquisition."

Sams said the U.S. Army has been working with the warfighting laboratory and has been helpful in sharing some of its developments in precision fires.

The current plan is to award a contract in the first quarter of fiscal 2020, with a demonstration of the proposed technologies eight to 12 months later, leading to low rate production and fielding an initial capability in the first quarter of fiscal 2022, Nebel said. Then an incremental approach would be followed to field newer technologies to enhance and upgrade the system, he said.

Marine Corps Systems Command said in a statement that the

program was part of Commandant Gen. Robert B. Neller's emphasis on rapidly fielded, longer-range precision fires in preparation for a conflict with a peer competitor, such as Russia or China.

General Dynamics Land Systems Receives Contract to Support Reset of U.S. Marine Corps Light Armored Vehicle Fleet

STERLING HEIGHTS, Mich. – General Dynamics Land Systems-Canada has been awarded a 37.2 million contract to deliver 60 hardware kits for the U.S. Marine Corps' Light Armored Vehicle (LAV) Reset Program.

The hardware kit addresses key obsolescence and readiness issues and consists of a modern powerpack, driveline system, driver's instrument panel and a new turret slip ring. The fully integrated kits will be procured by General Dynamics and delivered to the Marine Corps for installation at Marine Corps Production Plants.

The contract was signed through the Canadian Commercial Corp., a Crown corporation of the government of Canada, under the Defense Production Sharing Agreement (DPSA) between Canada and the United States.

Advanced 3-D Printing Allows Marines Quick Material Production in the Field



QUANTICO, Va. – From a small plastic clip that keeps a snowshoe fastened to a multi-ton concrete replacement bridge and a wide range of items in between, Marines are using advanced manufacturing, commonly called 3-D printing, to produce in the field or in garrison rather than waiting days or weeks for the normal supply system to respond.

“We’re going hot and heavy” into advanced manufacturing, using materials from plastic to aluminum and other metals and even concrete, Capt. Matthew Friedell, the team leader on advanced manufacturing in the Rapid Sustainment Office at Marine Corps Systems Command said Feb. 7.

Systems Command has sent more than 100 3-D printers to Marine units, mostly small, desktop size instruments, but also a number of mid-size devices in 20-foot shipping containers and three huge machines at the Marine supply depots, Friedell told reporters in a telephone conference call from Marine Corps Base Quantico, Va. Some of the printers, called tactical fabricating kits, are in the hands of infantry units, he said.

They also send training teams to help the field units learn how to use their new equipment and provide a support service that can develop the data required to produce the needed item

and email it to the requesting unit, Friedell said.

Other crucial services the SysCom office provides are conducting tests of the material needed for the item to determine if it can be safely printed by the field unit, and studies of the original commercial source of the item to protect the company's intellectual property rights, he said.

Industry has been very cooperative, but their data rights need to be protected, he said.

But most of the time, the request is for five to 10 small parts, for which there is no real profit interest for the producer. And often the needed item is no longer being produced due to the age of the equipment being repaired.

Items produced by Marines using 3-D printers cited by Friedell and other Marine officials include the snowshoe clip, a plastic buckle on a backpack, a compressor blade for an M-1 tank and a heavy concrete footbridge built by a Marine engineer unit in a test.

The long-term thrust for 3-D printing, Marine officials have said, is to greatly improve the ability of small combat units, well separated from senior commands and supply sources under the distributed forces concept, to sustain themselves by producing critically need parts.

Flexibility is another key contribution of the printers, Friedell said, noting that the prototype machine that produced the concrete bridge could also produce a security barrier or a shelter.

Electrical power is a crucial consideration, Friedell said, because the larger printers require huge amounts of power. Current tactical generators are able to provide the needed power and the services are developing hybrid power sources that combine high-efficiency generators with powerful batteries that can reduce the fuel demands of running the generators.