

Navy, Marine Corps Dismissals for Refusing COVID-19 Vaccinations Now Total More Than 3,000



Hospital Corpsman 3rd Class Darion Wilson, left, administers a COVID-19 test in the vehicle stowage area aboard amphibious assault carrier USS Tripoli (LHA 7), May 19. Tripoli is underway conducting routine operations in U.S. 7th Fleet. *U.S. NAVY / Mass Communication Specialist 3rd Class Maci Sternod*
ARLINGTON, Va. – More than 2,000 U.S. Marines and 1,000 Sailors have been separated from the sea services for refusing vaccination against the COVID-19 coronavirus since the Defense Department ordered mandatory vaccinations late last year.

In its weekly COVID-19 Update on June 8, the U.S. Navy reported 1,099 separations for COVID-19 vaccine refusal. They included 980 active component Sailors, 98 Reservists, and 22

entry-level separations of new recruits during their initial training periods.

The Marine Corps, which shifted from a weekly to a monthly COVID update in mid-April, announced June 2 that 2,715 Marines have been separated from the Corps for vaccine refusal. There was no breakdown showing how many of those dismissed were active duty, reservists or recruits.

The fiscal 2022 National Defense Authorization Act enacted in December 2021 requires discharges of military personnel for vaccine refusal must be either honorable or general under honorable conditions.

According to the weekly Defense Department COVID update, 6,417 Marines and 6,806 Sailors are at least partially vaccinated and 194,639 Marines and 383,564 Sailors are fully vaccinated as of June 8. Both the Navy and Marine Corps, as well as the Pentagon, consider COVID-19 a readiness issue requiring full vaccination for all military personnel.

The Navy said 3,906 active duty Sailors and 3,279 personnel in the Ready Reserve remain unvaccinated as of June 1. The Marine Corps report doesn't give specific figures, only stating fully and partially vaccinated percentages that indicate just 2% of the active force and 7% of reservists remain unvaccinated.

The Navy has granted 227 medical exemptions for COVID vaccination to active duty Sailors, all but 14 of them temporary. Only one of the 79 medical exemptions granted reservists was permanent. The Marine Corps said 742 requests for medical or administrative exemption from vaccination have been approved. As of June 1, the Marine Corps has received 3,719 requests for vaccination exemption on religious grounds. Only seven have been approved.

The Navy has gotten religious accommodation requests from 3,351 active duty Sailors and 864 in the Ready Reserve. Only 13 of the reservists' requests have been conditionally

approved and just one active duty Sailor's was approved.

The Navy has been unable to discharge vaccine refusers since a federal judge in Texas granted a preliminary injunction in March barring the Navy from acting against the thousands of Sailors seeking exemption from vaccination on religious grounds. The U.S. Supreme Court later ruled the Navy could consider a Sailor's vaccination status in making deployment and other operational decisions while a lawsuit on the Pentagon's mandatory vaccination policy moves through the courts.

**Berger, Del Toro: New
Technology Combined With Old
Platforms Can Thwart
Adversaries**



U.S. Navy Sailors refuel UH-1Y Cobras during Composite Training Unit Exercise aboard the USS Kearsarge (LHD 3), Jan. 24, 2022. The 22nd MEU and Amphibious Squadron 6 are underway for COMPTUEX in preparation for an upcoming deployment. COMPTUEX is the last at-sea period in the MEU's Predeployment Training Program; it aims to test the capabilities of the ARG/MEU and achieve deployment certification. U.S. MARINE CORPS / Sgt. Armando Elizalde

WASHINGTON – U.S. Marine Corps Commandant Gen. David Berger and Secretary of the Navy Secretary Carlos Del Toro are promoting air, surface and undersea unmanned vehicles, and some new uses for old platforms, as a way for the redesigned force to keep adversaries off balance.

Discussing the state of the Marine Corps at the Modern Day Marine exhibition May 10, the two leaders also explained the importance of Berger's Force Design 2030 plan to prepare the Corps for future challenges from near-peer competitors like China and Russia, and other adversaries in a rapidly changing environment.

"Today's Marines confront a threat environment characterized

by rapid mobility, anti-access/aerial denial systems and cyberwarfare,” Del Toro said, adding that he has “strongly supported Gen. Berger’s Force Design 2030 since his very first day as Navy secretary.

Critics of the force redesign have faulted Berger for shrinking the size of the Corps, eliminating all of its battle tanks and much of its towed artillery, but the 38th commandant has said he is investing in equipment and tech-savvy Marines that will be more effective in a widely distributed, highly mobile and stealthy force using unmanned systems, sensors, and anti-ship and anti-aircraft missiles to dominate the littorals of the Indo-Pacific region and other maritime choke points.

However, he told the Modern Day Marine audience there are existing platforms like amphibious ships, which can be used in innovative ways, especially when paired with unmanned systems. “As more and more uncrewed technology comes to maturity and the cost of production goes down, I think new capabilities are within reach,” Berger said.

“Drone technology over the last 20 years has been transformational on the battlefield,” Del Toro said, “and exactly the kind of technology we need to embrace.”

Berger suggested an Amphibious Ready Group-Marine Expeditionary Unit could launch unmanned undersea vessels from an amphib well deck for antisubmarine warfare, counter reconnaissance, finding minefields and ISR. “No platform, no unit, is capable of a more diverse set of missions across the range of military operations than an ARG-MEU,” he said.

Initial experimentation with the long-range unmanned surface vessel, armed with loitering munitions “has demonstrated the potency of that kind of capability,” Berger said, adding the potential use of UUVs launched from an amphibious well deck is limited “only by your imagination.” On the other hand, a well deck “taxes the imagination of the adversary,” because it

conceals what's on it, Berger said. "If you can't figure out what's on the inside, you're going to spend a whole lot of time trying to do that. It slows down their decision-making. That's what we want." Another way to keep an adversary off balance is with drone-delivered loitering munitions. "There's a psychological impact. You don't know whether it's got a camera system or a warhead on it," Berger said.

Berger: Marines Need More MQ-9 Drones for 'Organic ISR'



The Marine Corps' first MQ-9A at an undisclosed location in the Central Command area of responsibility. *U.S. Marine Corps*

WASHINGTON – The U.S. Marine Corps will expand its fleet of MQ-9 Reaper drones to meet growing intelligence, surveillance and reconnaissance needs, the commandant said May 10.

“We’re going to move from three squadrons right now to perhaps double that,” Gen. David Berger told an audience at the Modern Day Marine exposition. “And the reason why is the need for organic ISR.”

The MQ-9A Block 5 aircraft can stay aloft for more than 26 hours, attain air speeds of 220 knots and can operate to an altitude of 45,000 feet. Manufactured by General Atomics Aeronautical Systems Inc., the Reaper has a 3,850-pound payload capacity that includes 3,000 pounds of external stores. It provides a long-endurance, persistent surveillance capability with full-motion video and synthetic aperture radar.

Berger said that ISR needs were increasingly critical for Marine Corps units, large and small. “So absolutely, we’re going to expand in Group 5, large-scale, big-wing, medium-altitude, long-endurance, uncrewed aircraft. That’s so we can have, for the naval force, persistent organic ISR access from the MEF [Marine Expeditionary Force] level on down to the squad level,” he said.

Over that last year-and-a-half, the Marines have conducted nine force-on-force exercises at the Marine Air Ground Task Force Training Command and Marine Corps Air Ground Combat Center at Twentynine Palms, California, Berger said. All of them showed that “small, distributed lethal teams that can employ organic ISR, loitering munitions, and weapons like the Javelin and Carl Gustav [recoilless rifle] are much more lethal than larger formations that are using traditional force structures and concepts,” backing up the concepts behind his Force Design 2030 plan to retool the way the Corps fights.

The Marines began leasing two Reapers in 2018 under

a company owned/company operated agreement, later acquiring them from GA-ASI in 2021 as the first increment of the Marine Air-Ground Task Force unmanned aircraft expeditionary program of record. The Marines procured 16 more of the aircraft to operate in support of distributed maritime operations and expeditionary base operations, particularly in the Indo-Pacific region.

General: Precise Sensors to Close Kill Chain is a Key Takeaway from Ukraine War



U.S. Marines with Combat Logistics Regiment 37, 3rd Marine Logistics Group, participate in a leadership reaction course during exercise Atlantic Dragon on Camp Blanding, Florida,

United States, March 31. *U.S. MARINE CORPS / Cpl. Alpha Hernandez*

ARLINGTON, Va. – Ukraine's widespread use of sensor technology to find, target and destroy Russian tanks and command structure is one of the early lessons learned from that conflict, the U.S. Marine Corps' top requirements officer says.

Discussing the Marines' Force Design 2030 modernization effort at the Center for Strategic and International Studies on May 4, Lt. Gen. Karsten Heckl, head of Marine Corps Combat Development Command, was asked what strategic and tactical lessons have come out of Russia's invasion of Ukraine.

"To me, and in conversations with other officers across various services, clearly the ubiquity and proliferation of sensors and the ability to close kill chains accurately, precisely on any target is a major lesson to take away," said Heckl, who is also deputy commandant for Combat Development and Integration.

While it was too soon to "draw any firm, fast conclusions," he noted Commandant Gen. David Berger had directed several of his deputies to "make sure we're harvesting the appropriate lessons from this thing."

Berger's Force Design plan seeks to retool the Corps, in size, focus and weaponry to deter a rising China, which the National Defense Strategy identifies as a "pacing challenge" to U.S. interests and the post-1945 world order. Heckl noted that a focus on loitering munitions and organic precision fires, like that seen in Ukraine and the 2020 war between Armenia and Azerbaijan, "is one of the routes Force Design went down early. And we are pursuing that in various forms."

Logistics is another crucial issue, highlighted by the Russians' struggle to advance their tank and truck columns.

"The pacing factor in Force Design is logistics in a contested

environment,” Heckl said. “As you saw with the Russian invasion of Ukraine, any armor is a massive consumer of fuel. We learned long ago in Iraq and Afghanistan, that fuel trucks on the road immediately became the target.”

While the Marines have disposed of their battle tanks, fuel dependence is still “a significant vulnerability,” for the widely dispersed expeditionary advanced base operations envisioned in Force Design, Heckl said.

“Sustainability, just like [heat] signature management, is first and foremost in every thought, through all our studies, analyses, experiments, exercises, all this campaign of learning. It’s the analytical rigor that underpins every decision the commandant makes on Force Design,” Heckl said.

**Corporate Cybersecurity
Expert Says Think Like an
Attacker to Improve
Information Security**



“You’ve got to be able to take a punch in this environment,” said Lt. Gen. Matthew Glavy, the Marine Corps Deputy Commandant for Information. *LISA NIPP*

NATIONAL HARBOR, Md. – The U.S. government, military and private sector need to change the way they perceive cybersecurity and look at it from the attacker’s point of view, the global head of IBM’s X-Force said.

“I think that we will look back at 2022 as a tipping point for information security and the way we work with each other: private sector, public sector. Really, all of these silos which we’ve built up are meaningless for attackers,” Charles Henderson said April 5 during a panel discussion on maritime cybersecurity at Sea-Air-Space 2022.

“They care about their rules, not yours,” he continued. “All too often in information security, whether it’s public sector, private sector or somewhere in between, we tend to think of our own goals and not the goals of the attacker. I think if we’re going to be successful, we need to turn that on its head and start looking at everything through the eyes of an

attacker.”

All of the panelists agreed that keeping information secure is essential to maintaining an advantage over adversaries and keeping them from gaining an advantage.

Navy Rear Adm. John Okon, the head of the Warfare Integration Directorate (N2/N6F) in the Office of the Chief of Naval Operations, said “Cybersecurity is really about warfighting. It’s important that we get cybersecurity right, up front, if we’re going to be a lethal, agile and ready force.” To underscore its importance, Okon called cybersecurity “commanders’ business,” but he added that “everyone that puts their fingers on a keyboard has a role in responsibility and accountability for cybersecurity.”

Okon said the Navy Department needed to shift its culture from compliance to readiness. “Expect what you inspect. That’s walking the deck plates every day, looking at your network every day.” Making sure that the speed from when a vulnerability is identified to a patch is in place comes not in weeks, “but minutes or seconds.”

Lt. Gen. Matthew Glavy, the Marine Corps Deputy Commandant for Information, said the side that is able to maintain the information advantage “has an edge.” That edge could be system overmatch, a good prevailing narrative of “trusted, competent, delivered with trade craft,” or resiliency. “You’ve got to be able to take a punch in this environment,” Glavy said “and the side that can take that punch and either counterpunch or begin anew, creates an edge.”

The Marines are in the final stage of crafting a new information doctrine, Marine Corps Doctrinal Publication 8 Information “all founded on our warfighting construct of maneuver warfare.”

“Protecting your own backyard, you’ve got to have a good defensive perimeter and terrain that you can defend to ensure

your capabilities are available where and when you need them. That's job one for us," said Rear Adm. Mike Ryan, commander of Coast Guard Cyber. He said the Coast Guard was following the lead of U.S. Cyber Command, generating forces that allow the agency to provide the entire spectrum of capabilities to protect the homeland, ensure mariner safety and secure the \$5.4 trillion economic activity that arrives on U.S. shores by maritime commerce.

Coast Guard's Atlantic Commander Says More Attention to South Atlantic Nations Needed



Vice Adm. Stephen Poulin discusses what the changing security environment in Europe means for the U.S. Coast Guard. *LISA NIPP*

NATIONAL HARBOR, Md. – The widening political and economic effects of Russia’s invasion of Ukraine may help focus attention on the strategic significance and strategic needs of the Atlantic Basin, a top U.S. Coast Guard commander says.

“The security environment in Europe has changed. I believe with that change will come a broad demand for the U.S. Coast Guard,” Vice Adm. Stephen Poulin told a panel discussion of the maritime security needs of the region April 4 at Sea-Air-Space 2022.

“Most of our Arctic partners are in the Atlantic. We have to maintain strong relationships with our European neighbors,” said Poulin, commander of the Coast Guard’s Atlantic Area. There is “a growing thirst” for U.S. Coast Guard presence “in certain parts of Europe, especially in the Mediterranean.”

There is an interconnectedness between Mediterranean security

and Atlantic security, Poulin said, noting the Coast Guard has built ties with maritime services in Greece, Malta, Italy, Lebanon, Jordan, Israel, Algeria and Tunisia. Four of six Fast Response Cutters have been delivered to Bahrain, where they are based with Patrol Forces Southwest Asia, the Coast Guard's largest unit outside of the United States. The final two FRCs are slated for delivery this summer.

The Biden Administration's \$13.8 billion fiscal 2023 Coast Guard budget includes \$40 million to support maritime security issues in the Atlantic Basin, including illegal, unregulated and underreported fishing, illegal trafficking and transnational crime.

Poulin said that move would allow him to achieve more persistent engagement with all the Atlantic nations "but in particular our African partners."

"This isn't just about IUU fishing," Poulin said, noting as much as 5% of illegal narcotics flow leaves South America and winds up going through Africa or Europe. There is a growing threat of armed robbery and piracy in West Africa's Gulf of Guinea, he said, adding "that is happening where there is a growing expectation in the future of higher offshore energy production."

Another panelist, Lyston Lea II, principal adviser to the U.S. National Maritime Intelligence Integration Office, said the prime security challenges facing the Atlantic Basin are climate change, illicit activities such as IUUF, and great power competition. Solutions, he said, include "meaningful unclassified data sharing and more partnerships between government, the private sector and allies."

Lea, who said IUUF was a bad acronym and he prefers calling it "evil fishing," said he was pleased to see so many policy makers taking IUUF seriously as an economic, political and environmental issue and not simply about "dead fish," as one

lawmaker told him in a contentious meeting in 2014.

Collaboration on Information Warfare Needed, But So Is Cybersecurity to Thwart Prying Eyes



Rear Admiral John Okon discusses Warfare Integration during a session in the exhibit hall at Sea-Air-Space 2022. *SOLARES PHOTOGRAPHY*

NATIONAL HARBOR, Md. – The U.S. Navy has to shift its focus from warfighting platforms to warfighting knowledge gleaned from information warfare resources if it wants to maintain an edge over pacing competitor China, says the admiral in charge

of integrating that vital information across the Navy.

“Everything we do in the Navy has IW [information warfare] capability,” Rear Adm. John Okon, head of the Warfare Integration Directorate (N2/N6F) in the Office of the Chief of Naval Operations, said at Sea-Air-Space 2022. “We speed the kill chain and deliver kinetic and non-kinetic effects to the enemy.”

When he sees a destroyer now, Okon said, “I don’t see a destroyer. I see a truck that carries information warfare capabilities. I see radars, communications, kinetic and non-kinetic effects.” The destroyer now is a platform with integrated technologies that “really deliver that warfighting capability.”

But precautions must be taken to ensure those capabilities don’t fall into an adversary’s hands. “The enemy is listening in on our phones and internet. We have to protect out intellectual capital,” Okon said, “Otherwise the next fighter from China will look exactly like ours.”

While the U.S. military lost its technological edge through the theft of its intellectual capital in previous decades, it still holds a knowledge edge with its smart and well-trained force. “China does not have a professional Navy. They don’t have professional sailors. That’s where our advantage lies,” Okon said. “It’s not just the information but the application of that information into knowledge.”

To maintain the edge, however, requires collaboration among the military and civilians, academic and industry, and especially with partner nations. He cited the Warfare Development Center as a game changer and the Fleet Information Warfare Command-Pacific, recently stood up at Pearl Harbor, Hawaii.

“We cannot go it alone,” Okon said, adding that partner nations need to be included. “It doesn’t matter the size of

the Navy but the capabilities of exquisite things that they are world class that we want to collaborate and leverage.”

But cybersecurity is key, especially in industry and academia. “It can’t be bolted on. It has to be there when you write the code,” said Okon. “China is watching us every day.”

Russia’s a ‘Threat,’ but China’s Still the Focus of New National Defense Strategy, 2023 Pentagon Budget



Deputy Secretary of Defense Dr. Kathleen H. Hicks and Vice Chairman of the Joint Chiefs of Staff U.S. Navy Adm. Christopher W. Grady deliver opening remarks on the President's Fiscal Year 2023 Defense Budget, the Pentagon, Washington, D.C., March 28. *DOD / Air Force Staff Sgt. Brittany A. Chase*

ARLINGTON, Va. – More money for science and technology research, dealing with climate change, modernizing the nuclear triad and deterring Russia in Europe and China in the Indo-Pacific region are among the priorities outlined in President Joe Biden's fiscal 2023 defense budget request.

The \$813 billion national defense budget request released March 28 includes \$773 billion for the Defense Department and more than \$40 billion for defense-related activities at other agencies.

The request reflects the updated National Defense Strategy, which continues to focus on the pacing challenge of China, Defense Secretary Lloyd Austin III said in a statement

accompanying the 2023 budget rollout. "It will help us prepare for other future challenges, as well, including those by climate change ... North Korea, Iran and violent extremist organizations."

While Russia's "brutal and unprovoked" invasion of Ukraine illustrates how Moscow "poses an acute threat to the world order," the 2022 NDS sees the People's Republic of China "as our most consequential strategic competitor and the pacing challenge for the department," Deputy Defense Secretary Kathleen Hicks told a March 28 livestreamed Pentagon press briefing on the budget request.

The same day, a classified version of the new strategy was delivered to Congress and a two-page unclassified fact sheet was released. It stated mutually beneficial alliances and partnerships are "critical to achieving our objectives, as the unified response to Russia's further invasion of Ukraine has demonstrated."

Additional Investments

The focus on China "required additional investments for both the Navy and the Air Force," said Undersecretary of Defense Michael McCord, the department's chief financial officer. While the U.S. Navy and Air Force are slated to receive more than \$230 billion each in the 2023 funding request, the Biden administration is seeking only \$173 billion for the Army.

The budget request is devoting \$134.7 billion to joint force readiness: Allocating \$29.4 billion to the Army, \$47.4 billion to the Navy, \$4.1 billion for the Marine Corps, \$35.5 billion for the Air Force, \$3 billion for Space Force and \$9.7 billion for Special Operations Command.

The proposed budget seeks \$6.1 billion for the Pacific Deterrence Initiative, including \$892 million for the defense of Guam including improved missile defense, command, and control capabilities, radar capacity and new construction. The

Indo-Pacific Command funding adds \$133 million for other base defense enhancements throughout the region. U.S. European Command would get \$4.2 billion for the European Deterrence Initiative, including \$300 million in security assistance for Ukraine.

To meet new technology challenges, the Pentagon is seeking \$130.1 billion for research, development, testing and evaluation – an all-time high, more than 9.5% above RTD&E funding in the enacted 2022 defense legislation – that includes artificial intelligence, machine learning and 5G wireless networks and investments in chemical production, bio-manufacturing and rare earth element supply chains.

Investments in the industrial base and supply chain include \$1.3 billion to improve critical naval infrastructure through the Shipyard Infrastructure Optimization Program; \$3.3 billion for microelectronics; \$48 million for casting and forging; \$43 million for batteries and energy storage, including establishing safety and testing capacity for future weapon systems; \$605 million for kinetic capabilities, such as expanding the industrial base for hypersonic missiles and directed energy weapons.

Other plans include \$543 million to strengthen the submarine industrial base through expanding sub-tier suppliers, and \$207 million to train the submarine workforce.

The budget invests over \$11 billion to continue modernization of cyber network defense capabilities for a more resilient Defense Department information network and defense industrial base.

For the first time, the budget is committing \$3.1 billion exclusively to dealing with climate change, including \$2 billion for installation resiliency and adaptation and \$247 million for operational energy and buying power.

“We have to be resilient to cyber threats, we have to be

resilient to climate change,” said Hicks.

The 2023 budget request seeks \$34.4 billion to modernize the nuclear triad, including \$6.3 billion to fully fund the Columbia-class ballistic missile submarine, the Navy’s top platform priority; \$5 billion for the B-21 Raider, the Air Force’s long range strike bomber, and \$3.6 billion for the next generation intercontinental ballistic missile system, the Ground Based Strategic Deterrent; and \$1 billion for the Long-Range Stand-Off missile.

The 2023 request includes a 4.6% pay raise for civilian and military personnel, the largest pay raise for all Defense Department workers in 20 years.

Inflation Effects

The \$773 billion 2023 budget request is a 4.1% increase, \$30.7 billion, over the fiscal 2022 budget passed by Congress in December and \$58 billion, or 8%, higher than the Biden administration’s initial \$715 billion fiscal 2022 request. However, taking inflation into account, McCord conceded the \$773 2023 request actually represents about 1.5% in real growth spending over the \$742 billion enacted in the fiscal 2022 budget.

Republican lawmakers say the increased budget request does not account for record high inflation. Sen. Jim Inhofe (R-Oklahoma) and Rep. Mike Rogers (R-Alabama), the ranking members of the Senate and House Armed Services Committees, announced March 29 they have requested information on the effects of inflation on the Defense Department budget from Pentagon leadership and the military services.

Inhofe and Rogers noted that current inflation is “effectively a 5% to 8% cut to the department’s buying power, which could amount to between \$20-\$30 billion in unfunded costs in fiscal year 2022 alone, not to mention lost buying power in fiscal year 2021 and potential lost buying power in fiscal year

2023.”

The 3rd Marines Come in First, As the First Marine Littoral Regiment



U.S. Marines with 3d Marine Littoral Regiment, 3d Marine Division march during the re-designation ceremony of 3d Marines to 3d MLR aboard Marine Corps Base Hawaii, March 3.

U.S. MARINE CORPS / Cpl. Patrick King

ARLINGTON, Va. – The U.S. Marine Corps has taken another step in its ambitious force redesign to contend with near-peer militaries like China and Russia in the 21st century: Creating the first Marine Littoral Regiment.

After more than a year of planning, the 3rd Marine Regiment

was redesignated the 3rd Marine Littoral Regiment in a ceremony at Marine Corps Base Hawaii, where the new regiment will continue to be headquartered.

While the 3rd MLR is not expected to be fully operationally capable for at least a year, its establishment demonstrates progress in the Marine Corps' Force Design 2030 modernization effort, a key priority of Marine Corps Commandant David Berger's 38th Commandant's Planning Guidance.

"Marines on the leading edge of change is nothing new," Maj. Gen. Jay Barger, commanding general of 3rd Marine Division, told attendees at the May 3 ceremony. "We are honing our capabilities to integrate and coordinate joint and combined fires and effects, extending the reach of and providing more options to our forces."

The Marines' evolving Expeditionary Advanced Base Operations concept envisions littoral operations by specialized mobile, low signature units within larger distributed maritime operations areas.

Marine Littoral Regiments will be uniquely designed to maneuver and persist inside a contested maritime environment. The MLR is organized, trained and equipped to support sea control and sea denial operations as part of a larger naval expeditionary force integrated with the joint force and allied and partnered forces.

Equipped with rockets, missiles and other long range fires, as well as sensors like the Ground/Air Task Oriented Radar, the MQ-9A Reaper unmanned aerial vehicle for extended range intelligence, surveillance and reconnaissance, long-range unmanned surface vessels and light amphibious warships to increase mobility in the littorals, EABO units will control access to choke points while limiting an adversary's ability to target them.

The Marine Corps' second in command, Assistant Commandant Gen. Eric Smith, also attended the re-designation ceremony. Before leaving Washington for Hawaii, Smith told a Feb. 28 reporters' roundtable the Marines are "equipping, training and organizing [the MLRs] so they're able to deploy tonight – and I mean tonight – to do what they need to do."

The new MLR will be divided into three elements: a littoral combat team made up of a one infantry battalion equipped with a ship-killing missile battery, an anti-aircraft battalion and a combat logistics battalion. Unlike traditional Marine regiments that deployed with three large battalions, the new MLR will operate with much smaller groups, between 75 and 100 Marines, Smith said.

Plans call for two more infantry regiments, the 4th and 12th Marines to be converted to MLRs by 2030, but Smith told reporters the process could take longer than the 3rd MLR's conversion did based on lessons learned going forward.

Navy, Marine Corps Labs Exploring How to Keep Advanced Bases Supplied and Safe



Marines hold a support-by-fire position in an amphibious combat vehicle during exercise Iron Fist, a joint amphibious exercise with Japan, at Marine Corps Base Camp Pendleton, California, Jan. 14. *U.S. MARINE CORPS / Cpl. Sydney Smith*
ARLINGTON, Va. – In addition to developing expeditionary warfare concepts like Marine Littoral Regiments and the light amphibious warship that would transport and supply them, the Office of Naval Research is looking into how to keep both safe and unseen by adversaries.

The first Marine Littoral Regiment, or MLR, an evolution of a traditional Marine infantry regiment, is being built in Hawaii and expected to be fully operationally capable next year for live force experimentation, complemented by war gaming and simulations, Marine Corps Brig. Gen. Benjamin Watson told the National Defense Industrial Association's virtual Expeditionary Warfare Conference Feb. 10.

The light amphibious warship, an anticipated bridge between traditional big L-class amphibious warfare ships and smaller ship-to-shore connectors like the across-the-beach air

cushioned landing craft, is still in the concept stage, said Watson, the commanding general of the Marine Corps Warfighting Laboratory/Futures Directorate and vice chief of the Office of Naval Research.

Both the MLR and LAW are expected to be key factors in the expeditionary advanced base operations concept, which envisions littoral operations by specialized mobile, low signature units within larger distributed maritime operation areas. Small, maneuverable expeditionary advanced bases will conduct sea control and denial operations using advanced sensors and long range missiles and artillery.

But the heat and radiation emitted by such high-powered platforms can be a liability in a very degraded and denied environment, said Marine Corps Col. William DePue Jr., ONR's Expeditionary Portfolio director. "In this environment, if you emit, you're a target. If you don't, you're blind," he said.

ONR is working on technologies that will allow the expeditionary advanced base Marines to passively sense the environment and sense what adversaries are doing while managing their own signatures "so that we emit when it's smart to do so and in ways that limit or avoid detection by the enemy," DePue said.

Researchers are also working ways to reduce food and fuel demands, particularly the shipment of liquids to advanced bases that make them and their supply vessels vulnerable. How to access more energy is a multi-faceted problem, according to Watson.

"It's one we really need industry's help with," he said. "You can't just solve the problem with enhanced distribution and sustainment capabilities. You need to reduce demand."