

General Lists Marine Corps VTOL Development Priorities for Congress



BALTIC SEA (May 18, 2022) U.S. Marine Corps Capt. Ryan Mortensen and Capt. Jeffrey Jaeckel, both AH-1Z pilots assigned to the Aviation Combat Element, 22nd Marine Expeditionary Unit, take-off during flight operations aboard the amphibious assault ship USS Kearsarge (LHD3) in the Baltic Sea, May 18, 2022. The Kearsarge Amphibious Ready Group and embarked 22nd Marine Expeditionary Unit are participating in the Estonian-led exercise Siil 22 (Hedgehog 22 in English). Siil 22 brings together members of the Estonian Defense Force and Sailors and Marines under Commander Task Force 61/2 to enhance Allied interoperability and preserve security and stability in the Baltic region. (U.S. Marine Corps photo by Staff Sgt. Brittney Vella)

WASHINGTON – The Marine Corps general in charge of aviation requirements detailed for Congress the service’s priorities for vertical takeoff and landing (VTOL) platforms during testimony regarding the 2024 defense budget hearings.

“Our VTOL Family of Systems has three lines of effort,” said Lieutenant General Michael S. Cederholm, deputy commandant for aviation, testifying April 19 before the Tactical Air and Land Forces subcommittee of the House Armed Services Committee.

“The first one is logistics,” Cederholm said. “We’re looking at a risk-worthy, unmanned logistics connector. We’re in the process of developing and working through our process and Initial Capabilities Requirement Document right now. That’s gone through and is sitting at the MROC [Marine Requirements Oversight Council] for decision.”

Cederholm said the second line of effort “is attack/strike. We have taken a different approach because we’re at different stages of modernization. The Marine Corps is in a unique position – a good one. The relative health of our fleet and the nascent age of our fleet of H-1s [AH-1Z and UH-1Y helicopters] and V-22s. We’re just transitioning to the 53Kilo [CH-53K helicopter]. This gives us an opportunity to – in the future – not wait but very expeditiously and thoroughly explore the intersection point between budget, requirements, and future capabilities. We can look at the attack/strike role and what are the advances in teaming, autonomy; advances in lethality and survivability.”

The general listed the third line of effort, “is to replace our extant platforms like the MV-22 when it ages out with the Next-Gen Assault Support.”

Cederholm said he “is excited [about] where the Marine Corps is. We have a sense of urgency, but we also have time to be thorough in our approach to unmanned in the future.”

Cold Waters Spark Warm Relationship

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Admiral: Analysis of Alternatives for MH-60 Helo Replacement Completed



ATLANTIC OCEAN (March 31, 2023) Sailors assigned to the first-

in-class aircraft carrier USS Gerald R. Ford's (CVN 78) weapons department, attach an ammunition crate to an MH-60S Knighthawk, attached to the "Tridents" of Helicopter Sea Combat Squadron (HSC) 9, during an ammunition on-load with USNS Medgar Evers (T-AKE 13), March 31, 2023. Gerald R. Ford is underway in the Atlantic Ocean conducting routine operations and training in order to maintain readiness. As the first-in-class ship of Ford-class aircraft carriers, CVN-78 represents a generational leap in the U.S. Navy's capacity to project power on a global scale. (U.S. Navy photo by Mass Communication Specialist 2nd Class Nolan Pennington)

WASHINGTON – The U.S. Navy has completed analysis of its options for future rotorcraft to replace the service's MH-60R and MH-60S Seahawk helicopters and has forwarded the analysis to the Office of the Secretary of Defense.

Rear Admiral Andrew J. Loisel, director, Air Warfare Division, testifying April 19 before the Tactical Air and Land Forces subcommittee of the House Armed Services Committee, said the Analysis of Alternatives for the Navy's version of Future Vertical Lift (FVL) has been forwarded to the OSD's Cost Assessment and Program Evaluation (CAPE) office.

"Once [CAPE] is done with that sufficiency assessment, then we will absolutely move on to selecting a preferred alternative for the Navy, and all the costing and acquisition documentation necessary to reach a Milestone A, likely in about the [fiscal] '25 time frame," Loisel said.

The admiral said the Navy's FVL effort, "is about five years behind the Army, as far as an acquisition program goes. [...] That fits with when we expect service life to be expired in our Sierra [MH-60S] and Romeo [MH-60R] fleet. "

The Navy has service-life extension programs underway or planned for both types of helicopters. The MH-60S extension is to extend their service lives from 10,000 flight hours to 12,000 flight hours, about seven years, into the 2030s.

Loiselle said a service life extension for the MH-60R can be delayed until the 2030s because the Navy has some new-production MH-60Rs in storage that can be brought into service.

Loiselle said the Navy is tuned in to the Army's FVL efforts and is predominately focused on mission systems.

He noted that of the Army's planned airframes, the Future Long-Range Assault Aircraft (FLARA) is too large for the flight decks of the Navy's destroyers and the Future Attack Reconnaissance Aircraft (FARA) is, "too small for our needs, so I don't see a direct correlation to our requirements to theirs, however, that does not mean we will not have numerous opportunities."

Senator Grills SECNAV on Amphib Ship Plans



SASEBO, Japan (Sept. 15, 2021) The amphibious dock landing ship USS Germantown (LSD 42) departs Commander, Fleet Activities Sasebo, Japan (CFAS), Sept. 15, 2021. Germantown will shift home ports from Sasebo to San Diego after serving as a forward-deployed ship in U.S. 7th Fleet since Jan. 5, 2011. (U.S. Navy photo by Mass Communication Specialist 3rd Class Jasmine Ikusebiala)

ARLINGTON, Va. – A senator used a congressional hearing to point out that the Navy would be violating the law by letting the number of amphibious warships drop below a Congressionally mandated level of 31 in fiscal year 2024.

The President's 2024 budget calls for the decommissioning of three Whidbey Island-class old dock landing ships and not procuring any Flight II San Antonio-class amphibious transport dock ships (LPDs) over the next five years to replace them. The National Defense Authorization Act (NDAA) of 2023 requires the Navy to maintain a fleet of 31 large and medium-size

amphibious warfare ships.

In an otherwise convivial April 18 hearing of the Senate Armed Services Committee, Sen. Dan Sullivan (R-Alaska), a reserve Marine Corps colonel, confronted Navy Secretary Carlos Del Toro about the Navy's shipbuilding plans.

"The 30-year [shipbuilding] plan shows that the Navy has no intention of meeting this statutory requirement," Sullivan said, noting that he worked with Marine Corps Commandant General David H. Berger to legislate the requirement into the law, the National Defense Authorization Act (NDAA) of 2023, a requirement which Berger affirmed during the hearing.

During the hearing, Sullivan read an excerpt from the law: "The naval combat forces of the Navy shall include not less than 11 operational aircraft carriers and not less than 31 operational amphibious warfare ships of which not less than 10 shall be amphibious assault ships."

The senator said he sympathized with Berger's awkward position.

"I want to compliment the commandant," Sullivan said. "It's not easy to be sitting next to your boss saying, 'We need this.' Your boss obviously doesn't agree, General."

Taking note of all of the planned studies and analysis on the subject, Sullivan declared all of it irrelevant in that the requirement has been set in law.

"The Congress of the United States did the balancing, Mr. Secretary, working with the Marine Corps," Sullivan said. [...] You are violating the law. Would you come before this committee and say, 'Sorry, we're not going to do 11 carriers'? [...] You can't do it sir. I simply find it unacceptable that that we're all just letting you say, 'Eh, maybe that was a suggestion by the Congress.' It wasn't a suggestion; it was a mandate."

Sullivan pursued the issue further.

“Why are you violating the law?” he asked. “And why does your shipbuilding plan have no remote interest for the next 3 years, as far as I can tell, of hitting the statutory mandate that we told you to hit. I have no idea what your answer is going to be, but you need to follow the law, sir. What’s the answer?”

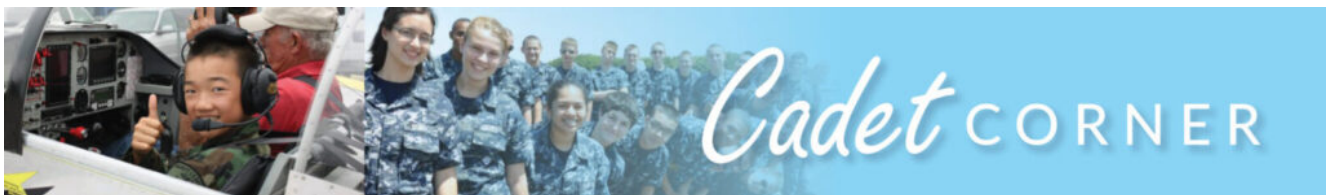
“Senator, as a member of the executive, it is my responsibility to follow the law,” Del Toro said. “It’s also my responsibility to ensure that we just don’t waste taxpayer money on vessels, for example, that will never see the light of day.”

“This Congress has given you multi-ship procurement authorities in the past three NDAA’s,” Sullivan said. “This is the third year in a row that amphibs are not being procured with this cost-saving authority. So, it’s a little rich when you talk to me about taxpayer savings when you’re not using the ability to save money that we gave you on amphibs. ... I’m requesting that you come back to this committee soon and tell us how you’re going to follow the law. That’s your only option, Mr. Secretary.”

“Senator, you have my commitment that I will come back to you with a statement on how we can fix this,” Del Toro said. “Yes, sir, it is my intent to follow the law. [...] As we develop the president’s budget for ’25, I will look at that as an option that we can pursue to get us back on track with multi-ship procurement for LPDs.”

“It’s not an option for you, Mr. Secretary,” Sullivan replied. “The committee, the Congress, the President have spoken. [...] This is a big issue, and right now the secretary of the Navy is ignoring the Congress of the United States. This is unacceptable.”

Sea Cadets at Sea: Tall Ship Sailing in Southern California



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Navy to Christen Future U.S. Navy Ship Cleveland

Release from the Department of Defense

The Navy will christen and launch the newest Freedom-variant Littoral Combat Ship, the future USS Cleveland (LCS 31), during a 10:00 a.m. CDT ceremony on Saturday, April 15, in Marinette, Wisconsin. This event marks the last planned side-launch of a ship at the Fincantieri Marinette Marine, Marinette, Wisconsin Shipyard. Follow-on ships are planned to be launched using a shiplift system.

The principal speaker Mr. Andrew Haeuptle, director of Navy staff, will deliver the ceremonial principal address. Remarks will also be provided by Rear Adm. Thomas Anderson, program

executive officer, ships; Mr. Austin Davis, senior policy advisor, City of Cleveland, Ohio; Mr. Steve Allen, vice president, small combatants and ship systems, Lockheed Martin Integrated Warfare Systems and Sensors; and Mr. Mark Vandroff, chief executive officer, Fincantieri Marinette Marine. Mrs. Robyn Modly, wife of former Acting Secretary of the Navy and Cleveland native, the Honorable Thomas B. Modly, will break a bottle of sparkling wine across the bow to symbolically christen the ship.

“This christening is a significant milestone for the future USS Cleveland, the ship’s sponsor Mrs. Robyn Modly, and the prospective crew,” said Secretary of the Navy Carlos Del Toro. “LCS 31 will be another step closer to joining our fleet, sailing the open seas, continuing to defend our nation, and representing the strong connection our Navy has with the city of Cleveland.”

Cleveland is the 16th and final Freedom-variant LCS and the fourth ship to be named in honor of the city of Cleveland, Ohio. Previous USS Cleveland’s were the World War I cruiser (C 19), the World War II light cruiser (CL 55), and the Vietnam-era amphibious transport dock (LPD 7), decommissioned in 2011.

The Littoral Combat Ship (LCS) class are fast, optimally-manned, mission-tailored surface combatants that operate in near-shore and open-ocean environments, winning against 21st-century coastal threats. LCSs integrate with joint, combined, manned, and unmanned teams to support forward presence, maritime security, sea control, and deterrence missions around the globe.

The LCS class consists of two variants, Freedom and Independence, designed and built by two separate industry teams. The Freedom variant team is led by Lockheed Martin (for the odd-numbered hulls, e.g. LCS 1). It is a steel monohull design constructed by Lockheed Martin in the Fincantieri

Marinette Marine Corporation's shipyard in Marinette, Wisconsin.

Media may direct queries to the Navy Office of Information at (703) 697-5342. More information on the Littoral Combat Ship Program can be found at: <https://www.navy.mil/Resources/Fact-Files/Display-FactFiles/Article/2171607/littoral-combat-ship-class-lcs/>.

Marine Corps to Activate Second F-35C Squadron



Caption: PHILIPPINE SEA (April 19, 2022) An F-35C Lightning II, assigned to the "Black Knights" of Marine Fighter Attack Squadron (VMFA) 314, launches from the flight deck of the Nimitz-class aircraft carrier USS Abraham Lincoln (CVN 72),

April 19, 2022. VMFA-314 will be joined this month by VMFA-311, being re-activated to be the Marine Corps' second F-35C squadron. (U.S. Navy photo by Mass Communication Specialist 3rd Class Javier Reyes)

ARLINGTON, Va. – The U.S. Marine Corps is scheduled to activate its second F-35C Lightning II strike fighter squadron at the end of the week, Headquarters Marine Corps announced in a media announcement.

Marine Fighter Attack Squadron 311 (VMFA-311) will be re-activated from its former Marine Attack Squadron 311 (VMA-311) identity in ceremonies on Friday, April 14, 2023, at [Marine Corps Air Station \(MCAS\) Miramar](#), California. The squadron will become the second operational Marine Corps squadron to operate the carrier-based F-35C version. VMFA-314, also based at Miramar, was the first, and has completed one deployment with the F-35C, on board USS Abraham Lincoln.

VMA-311 was an AV-8B Harrier II squadron that was deactivated in October 2020. It was based at MCAS Yuma, Arizona. It had operated the AV-8 since 1988.

VMA-311 was established on December 1, 1942, as Marine Fighter Squadron 311 (VMF-311) and deployed to the Pacific Theater in April 1943, equipped with F4U-1 Corsair fighters. The squadron eventually operated from Okinawa in March 1945 and conducted dive bombing and combat air patrol missions.

The squadron became the Marine Corps' first operational jet squadron in 1948, operating F9F Panther fighters, and during the Korean War flew the Corps' first jet combat mission. After the war, the squadron upgraded to the F9F-8 Cougar. The squadron was re-designated VMA-311 on June 1, 1957, and by 1958 was operating the A4D Skyhawk.

The squadron flew its A-4s in combat in the Vietnam War from April 1965 through January 1973.

After transition to the AV-8B, VMA-311 deployed to Saudi Arabia, and, in Operation Desert Storm, became the first squadron to fly the Harrier II in combat. In November 2001, the squadron also became the first Harrier squadron to fly in combat during Operation Enduring Freedom in Afghanistan. The squadron also flew combat missions in Iraq beginning in March 2003 during Operation Iraqi Freedom.

Lt. Col. Michael P. Fisher will be the first commanding officer of VMFA-311.

NAVAIR Sees AI as Future of Air Wing



NATIONAL HARBOR, Md. – In a well-attended presentation by

Naval Air Systems Command (NAVAIR) on April 3 at Sea-Air-Space 2023, RDML Stephen Tedford, program executive officer for Unmanned Aviation and Strike Weapons (PEO (U&W)) explained the need for trust in autonomous systems while providing an overview of the Navy's unmanned aircraft, weapons, and target systems.

"If we have trust in autonomy, we can then make the move to truly artificial intelligence and in the future of the air wing," Tedford said.

He encouraged a real-world perspective when thinking about autonomous systems, remarking that, "I know many of you here that are in suits now are retired military. Many of you [...] flew jets. At some point all of you were up and trying to find the tanker late at night, trying to get on the back side of the hose to get home. We learned that lesson over Afghanistan."

"How can you make in-flight refueling autonomous possible?" Tedford queried. "What if a pilot just has to get close enough and then let the system take over for itself. And make it more reliable, make it consistent and make it easier," he continued.

Open architecture may be the key.

"We always want open architecture systems," Tedford said. "We need them for flexibility in our systems. Just like applications on your phone that you can add and get rid of. We need to be able to do that with our mission systems in the unmanned environment as well."

Tedford also focused on the people behind the tech and stressed that autonomous systems and artificial intelligence don't operate in a bubble. Fundamentally, an unmanned system is still a human system.

"We know that unmanned really isn't actually unmanned," said

Tedford. “There’s a huge support staff that’s involved in getting an aircraft in the air and conducting the mission. What we’re talking about [...] having direct connectivity between our unmanned platforms and a manned platforms where the unmanned becomes an extension of the manned mission.”

Combating Climate Change

Captured by SD 1078 in the Atlantic Ocean during Hurricane Fiona, Sept. 22, 2022. (Video: NOAA and Saildrone)

Excerpted from the upcoming article in the May 2023 issue of Seapower Magazine

As climate change increasingly affects weather patterns over the Atlantic Ocean and Gulf of Mexico, tracking hurricanes and monitoring their intensity has become more critical than ever.

The National Oceanic and Atmospheric Administration (NOAA) reports that between 1980 and 2021, hurricanes caused 6,697 deaths and over \$1.1 trillion in damages. Hurricanes’ massive waves and roaring winds can also have catastrophic effects on ships at sea, making accurate forecasting a must for naval operations.

While new technology has steadily improved hurricane-tracking forecasts since the 1990s, predicting how rapidly a tropical storm or hurricane may intensify has been more problematic. To understand storm intensity, scientists measure heat and momentum, collecting data on the exchange of energy between the ocean and atmosphere. But in order to do this in the most accurate way, scientists need data from inside the storm itself.

That's where uncrewed systems come in. "With uncrewed systems, we can either do what we're already doing, but do it more productively and efficiently, or we can go get data we just couldn't get before," said NOAA Corps Captain William Mowitt, director of NOAA's Uncrewed Systems Operations Center.

You can read the full article about how the U.S. Navy, NOAA, and private partners are using uncrewed systems and new technologies to forecast hurricanes in the May issue of Seapower Magazine.

Vicky Uhland is a Colorado-based writer and editor who also covers the Navy League's annual Sea-Air-Space conference.

Navy's Frigate Program Pushing Hard for 2026 Delivery of USS Constellation



Captain Kevin Smith responds to workforce pipeline question from Ann Tropea, Editor-in-Chief at Seapower. Photo Credit: Dan Goodrich

NATIONAL HARBOR, Md. –The Navy is pressing full bore to ensure that its new guided-missile frigate joins the fleet on time, the ship's program manager said.

"We're pushing hard with our industry partners to deliver that ship in 2026," said Captain Kevin Smith, program manager, Constellation Class Frigate, speaking to an audience at the Navy League's Sea-Air-Space Expo in National Harbor. "A lot of hard work has gone into the design, the production readiness, and now we're actually building it up in Marinette, Wisconsin."

A frigate, in modern terminology, is "primarily an escort for high value units that don't have their own self-defense," Smith said. "It's also to help offset some of the work of the large surface combatants like the cruisers and destroyers. It is a primary anti-submarine warfare platform, just like the FFG 7 [the Perry class frigates which have been decommissioned]."

"I am very happy with the performance we're seeing thus far," Smith said. "Obviously, we did change to a different variable to sonar a few years ago. ... The performance is astounding. ... Its integration with the [SQQ]-89 [antisubmarine warfare system] is going to be huge for the United States Navy and will be welcomed by the fleet."

Smith also said the Aegis Baseline 10 combat system and the Enterprise Air Search Radar will give the new ship "a lot of capability."

Fincantieri Partnership

The future USS Constellation (FFG 62) is one of three frigates under contract to Fincantieri's Marinette Marine shipyard, the others being FFGs 63 and 64, under a 10-ship contract,

including options. Smith said construction of FFG 62 will start soon and he expects the option for FFG 64 to be awarded this year as part of a four-ship buy.

The Navy worked with Fincantieri to design an advanced construction pilot, “to really exercise all of the capital improvements, all of their workflow processes, all of their instructions, all the way through the value stream ... from materials planning and getting the work orders to the workforce, making sure all those are understood.”

The frigate’s Aegis Combat System and SPY-6 Enterprise Air Search Radar are being integrated at the Lockheed Martin test lab in Moorestown, New Jersey, and at Wallops Island, Virginia. The propulsion plant and machinery control systems will be tested at a land-based test site in Philadelphia.

Need for Skilled Workforce

Smith said the Navy is working closely with Marinette Marine in strengthening the company’s supply chain and develop and retain its skilled work force “to make sure we have a good strong industrial base workforce to build these frigates for the next decade and decades to come. We need that as part of our industrial base risk reduction.”

The program manager also discussed the challenges of recruiting a skilled work force, in response to a question from Seapower.

“How do you build a community that people want to live and grow and raise families and be shipbuilders?” he asked rhetorically. “We have people on our staff that have experience in that. The other part is working with Marinette on how we can really build the workforce. There’s training, there’s investments on how they can get people to come work and stay and then be retained.”

“Some shipbuilding people come out of high school ... and they

stay there a year, maybe two," Smith said. "But if they don't make it past two years, they're not going to stay. So how do we get people to stay for longer than a year or two? And how do we how do we really get them excited about shipbuilding?"

"You may read about some of the things Colombia [the Columbia-class ballistic-missile submarine program] is doing," continued Smith. "We're looking at doing the same exact thing ... to think about Wisconsin ... There's other jobs out there that maybe are better ... but we're working on a lot of those things with the company and kind of coaching them with some of this funding we got from Congress. The big message here is I would predict that this company is going to be around for a long time and we need to get into the shipbuilding business long term as far as a prime and then we'll be able to count on them for decades."