Navy Planning Major Combat System Upgrades to Littoral Combat Ships

An MH-60S Sea Hawk assigned to the “Wildcards” of Helicopter Sea Combat Squadron 23 picks up pallets of food from Chilean Navy replenishment oiler CNS Almirante Montt (AO 52) to deliver to the Independence-class littoral combat ship USS Gabrielle Giffords (LCS 10) during a vertical replenishment Nov. 25, 2020. U.S. Marine Corps / Cpl. Camila Melendez

ARLINGTON, Va. — While grappling with reliability and maintainability of its littoral combat ships (LCSs), the Navy this year is planning major upgrades to the ships’ combat systems in 2023.

Rear Adm. Casey Moton, program executive officer for Unmanned and Small Combatants, speaking Jan. 15 at a webinar in the Surface Navy Association virtual symposium, said the LCSs “right now are starting to get Over-the-Horizon [for the

RGM-184 Naval Strike Weapon) but starting in [fiscal 2023] they will get a more comprehensive update to improve their lethality and survivability. Design efforts are proceeding in earnest this year along with PEO IWS [Integrated Warfare Systems]."

The admiral said the current main focus of the LCS program is improving the reliability and maintainability of the ships.

"The bottom line is that the availability of the ships to the fleet commanders has not been what it needs to be in reliability areas such as propulsion, cranes, radars and some other areas," Moton said. "We set up a strike team that is a cross-functional mix of our shipbuilders and sustainers and they are working very hard going after specific problems, an effort first looks at reliability to makes sure that we have all the feedback from our recent deployments in terms of what systems need to be reworked."

The admiral said the program also is "working hard to reduce the amount of time once a system does go down how long it's going to take to get that system up."

He said the team is "working with industry how to get the original equipment manufacturers out there where we need to get the repairs. The other aspect is to improve the Navy's self-sufficiency."

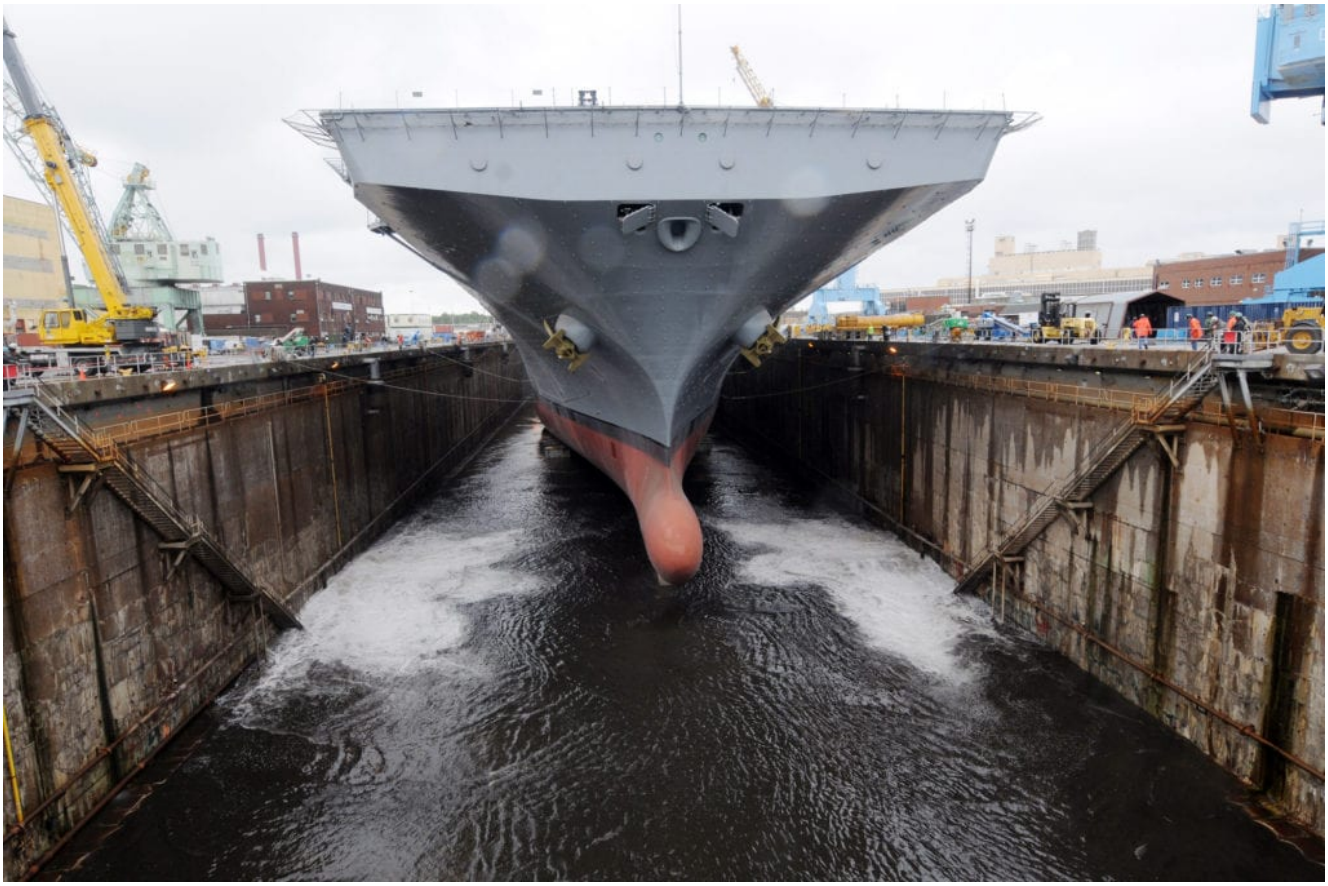
A specific focus of the strike team is the Freedom-class LCS's combining gear, which is being looked at as a material issue.

"We're very close to wrapping up a root-cause assessment," he said. "Clearly, coming through hat is going to be critical."

Moton said the LCSs are proceeding well through trials.

Fabrication has begun on all but two LSCs, both Independence-class ships being built at Austal USA in Mobile, Alabama.

Admiral: Earlier Contract Awards to Help Shipyard Planning a ‘Sea Change’ for Navy



The amphibious assault ship USS Kearsarge is shown commencing a dry dock flooding operation at Norfolk Naval Shipyard in this 2009 photo. The Navy is moving to award ship maintenance contracts of at least 120 days in advance of the work, to help shipyards plan and order materials. U.S. Navy / Petty Officer 1st Class Emmitt Hawks Jr.

ARLINGTON, Va. — The Navy admiral in charge of maintenance of surface warships is pushing to award ship maintenance contracts at least 120 days in advance of the start of work in order to help shipyards plan the work and order materials and

to improve the delivery time of ships back to the fleet.

“We are on track this year to award at an average 120 days prior to avail [availability, or maintenance period] start,” said Rear Adm. Eric Ver Hage, commander, Regional Maintenance Centers, speaking Jan. 14 in a webinar of the Surface Navy Association convention.

“That is a sea change for us,” Ver Hage said. “Just a couple of years ago we were averaging around 60 days. That time allows industry to plan, get subcontractors aboard, to develop a quality integrated master schedule, procure the materials that they need to execute the mission.”

Ver Hage also praised the use of horizontal bundling, where the shipyard leadership is given planning funds and involved in planning for a subsequent availability well in advance.

“The admiral said that as of Jan. 13, of the next 24 maintenance availabilities ahead, only one has long lead time material behind schedule “and we know by the use of data what corrective action we need to take.”

Ver Hage said that best value criteria have been applied to awarding most contracts.

“What that allows us to do is avoid a race to the lowest price that is technically acceptable,” he said. “That’s not always in our interests and it’s not always in industry’s interests. It’s harder to do; we have more training to take before we have all of the evaluation criteria.”

Ver Hage also advocates expanding rotatable pools of large ship components, such as propeller shafts, main reduction gear components and major diesel overhaul kits that take a long time to procure.

“We’d like to reduce time in dock and the time in the yard [overall],” he said. “If we can just pull out a shaft and

stick a brand new one or a recently overhauled one in [the ship], vice including the overhaul time [of the shaft] in the overall project, that is where we want to be."

Wolfe: Navy Plans to Start Development of Nuclear Sea-Launched Cruise Missile in 2022

The USS Philippine Sea launches a Tomahawk cruise missile to conduct strikes against ISIL targets as seen from the aircraft carrier USS George H.W. Bush in this 2014 photo. The DoD's previous nuclear-armed cruise missile was based on the Tomahawk, but development of a new one is expected to begin in

2022. U.S. Navy / Mass Communication Specialist 1st Class Eric Garst

ARLINGTON, Va. – The Navy plans to wrap up an analysis of alternatives (AoA) for a ship-launched nuclear-armed cruise missile in 2021 and begin development of the missile in 2022, said the admiral in charge of strategic weapons .

“We will finish the AoA this year per what was required by the NDAA [National Defense Authorization Act],” said Vice Adm. Johnny Wolfe Jr., director, Strategic Systems Programs, speaking Jan. 14 in a Nuclear Deterrence Forum webinar sponsored by the Mitchell Institute for Aerospace Studies, a Washington think tank. “With that AoA, going forward and with the Department of Defense’s concurrence, design would start in [fiscal] ’22.”

The Defense Department’s (DoD’s) 2018 Nuclear Posture Review (NPR) said the department would pursue a Sea-Launched Cruise Missile – Nuclear (SLCM-N), “leveraging existing technologies to help ensure its cost effectiveness. SLCM will provide a needed non-strategic regional presence, an assured response capability. It also will provide an arms-control compliant response to Russia’s non-compliance with the Intermediate-range Nuclear Forces Treaty, its non-strategic nuclear arsenal, and its other destabilizing behaviors.”

The review asserted that a SLCM “will not require or rely on host nation support to provide deterrent effect. They will provide additional diversity in platforms, range, and survivability, and a valuable hedge against future nuclear ‘break out’ scenarios.

“In the 2010 NPR, the United States announced the retirement of its previous nuclear-armed SLCM, which for decades had contributed to deterrence and the assurance of allies, particularly in Asia,” the 2018 NPR said. “We will immediately begin efforts to restore this capability by initiating a capability study leading to an Analysis of Alternatives (AoA)

for the rapid development of a modern SLCM.”

The previous nuclear-armed SLCM was a version of the Tomahawk cruise missile.

Wolfe said the strategic Systems Program Office will be briefed “up through the Navy and OSD [Office of the Secretary of Defense] which will eventually go to the CAPE [Cost Assessment and Program Evaluation]. Based on what the AoA says would be the right course of action to have a sea-launched cruise missile, then we would start taking whatever the AoA said and then start to look how would I design it, how would I start to integrate it.”

The Navy would request funds in the fiscal 2022 budget to develop the SLCM-N based on the decision of the DoD.

President Authorizes U.S. Atlantic Fleet Designation for Navy’s Fleet Forces Command

Chief of Naval Operations (CNO) Adm. Mike Gilday meets with Sailors during a 2020 visit to Naval Expeditionary Intelligence Command. U.S. Navy / Mass Communication Specialist 3rd Class Marissa Vermeulen

ARLINGTON, Va. — The chief of naval operations (CNO) said President Trump last week signed off on the secretary of the Navy's proposed re-designation of U.S. Fleet Forces Command as the U.S. Atlantic Fleet. A timetable for the change has not been announced, but Fleet Forces Commander Adm. John Grady is proceeding with implementation.

Speaking Jan. 11 in a webinar of the Surface Navy Association convention, CNO Adm. Michael Gilday discussed the pros of the redesignation.

"It underscores the importance of the Atlantic in a way that the title 'Fleet Forces' doesn't," Gilday said. "It actually is a testament to recent tangible decisions that we made to increase our power in that body of water, to include bringing Second Fleet back, standing up SubGru 2 (Submarine Group Two). It will also include standing up [NATO's] Joint Force Command

Norfolk, which is focused on the Atlantic."

Gilday said, "in a day and age when the homeland is no longer a sanctuary, and homeland defense is at the fore of every plan the combatant commanders have put together, the name 'Atlantic Fleet' always carries some gravitas with respect to defense of the nation."

He noted the complexity of the re-designation, saying the command "also has responsibilities as a component [command] for [U.S.] Northern Command and the Eastern Pacific that extend up to the Arctic as well as their role as component of the [U.S] Strategic Command. They really have a global responsibility with respect to the command and control of our SSBNs [ballistic-missile submarines]."

Grady seconded the complexity in a Jan. 13 webinar at the convention, noting the "downside "might be that we would lose emphasis on what we do for the homeland. Indeed, I control forces in both the Pacific and down south [in U.S. Southern Command area of responsibility].

"So, we will balance all that, and in the end the name change is an important branding opportunity, and we will move out on that," Grady said.

"We are walking through this very methodically and deliberately before we finally execute," Gilday said.

The re-designation plan originally was announced by Navy Secretary Kenneth J. Braithwaite, testifying Dec. 2 before the Readiness and Management Support subcommittee of the Senate Armed Services Committee, noting that the changing world requires that the Navy must evolve to meet the threat.

"Our existing structure operates on the premise that we still live in a post-9/11 state, where NATO's flanks are secure, the Russian Fleet is tied to the pier, and terrorism is our biggest problem," Braithwaite said. "That is not the world of

today. As the world changes, we must be bold, evolved, and change with it. Instead of perpetuating a structure designed to support Joint Forces Command, we are aligning to today's threat.

"To meet the maritime challenges of the Atlantic Theater, we will rename Fleet Forces Command as the U.S. Atlantic Fleet and will refocus our naval forces in this important region on their original mission, to controlling the maritime approaches to the United States and those of our allies," he said. "The Atlantic Fleet will confront the re-assertive Russian navy, which has been deploying closer and closer to our East Coast with a tailored maritime presence, capability and lethality."

The U.S. Atlantic Fleet commander will have two numbered fleets assigned, U.S. Second Fleet, headquartered in Norfolk, Virginia, and U.S. Fourth Fleet, headquartered in Mayport, Florida. The U.S Second Fleet was reestablished in August 2018 to confront the increasing Russian activity.

Navy Discusses Plans for Limited Optional Manning for Large and Medium USVs

Sea Hunter, the developmental Medium Unmanned Surface Vehicle (MUSV), shown here in 2018. U.S. Navy photo

ARLINGTON, Va. – The Navy has discussed plans for its forthcoming large and medium unmanned surface vehicles (USVs) to be optionally manned for limited purposes.

Capt. Pete Small, the Navy's Unmanned Maritime Systems program manager, speaking Jan. 13 at a Surface Navy Association convention webinar on the Navy's unmanned surface vehicles, said both the Large USV (LUSV) and Medium USV (MUSV) will have some capability for being manned for certain limited purposes, but not for their primary functions.

Small said the MUSV will be "essentially unmanned," but will be equipped with a pilot house for such short-term evolutions as getting underway from and returning to a pier, refueling and anchoring. However, the MUSV will have no berthing accommodations for personnel.

The LUSV, Small said, will in its initial construct feature a pilot house and will have accommodations for personnel who "might need to be onboard for a variety of reasons that do not necessarily include vessel operations." He said those reasons might include payload, security, test and evaluation, or in a CONOPS [concepts of operation]-driven environment."

The MUSV prototype now is under construction by L3Harris.

The Navy has six studies under contract to develop concepts for the LUSV and also is developing government-furnished equipment to be installed in the ship.

The primary role of the MUSV is envisioned to be intelligence, surveillance and reconnaissance.

The LUSV is envisioned to be fitted with missile launchers. Small said the Navy in 2021 will begin an analysis of alternatives for offensive surface fires of the LUSV.

The Navy's Surface Development Squadron One is operating the Sea Hunter developmental MUSV for experimentation. A second Sea Hunter, the Sea Hawk, is scheduled for delivery in 2021.

The service also is conducting experimentation with two optionally manned Project Overlord ships to develop and demonstrate autonomous operations at sea. Two more Overlord ships will be delivered in 2022 and 2023. Small said the Overlord USVs were "demonstrating increasingly autonomous operations."

"It is too early to say where we will end up across that portfolio, but we are investigating a range of options via our prototyping efforts," Small said.

Naval Surface Force Grapples with Instability in Ship Manning

Sailors and Marines man the rails aboard the Harpers Ferry-class dock landing ship USS Oak Hill (LSD 51) during Maryland Fleet Week and Air Show Baltimore in this 2018 photo. U.S. Navy / Mass Communication Specialist 2nd Class Joseph E. Montemarano

ARLINGTON, Va. — The Navy is working hard to solve a persistent manning shortage in its surface fleet, the commander of that force said in an address to the force.

“We need to man our ships to the right requirement across the OFRP [Optimized Fleet Readiness Plan], not just when they are ready to deploy,” said Vice Adm. Roy Kitchener, commander, Naval Surface Forces, speaking from San Diego in a video shown Jan. 12 during a webinar at the Surface Navy Association convention.

“We’re making progress with our manning issues, but many

challenges remain," Kitchener said. "We continue to fund more DDG [guided-missile destroyer] billets but it will take time for those Sailors to arrive on the waterfront. Our sea-duty gaps have been reduced to below 11,000 and that reduction is projected to continue to 7,500 by September 2021. But in the last fiscal year, we still resorted to 1,760 temporary personnel assignments to fill the remaining gaps for deployers.

"That is not a long-time solution," Kitchener said. "It adds stress on our Sailors, and thereby the force."

He pointed out that the manning readiness of a ship "has always been the product of a complex interplay of requirements and funding, inventory and distribution policies, fleet policies and actions, and the frictions between them. Ultimately, this readiness starts with getting the readiness requirement correct. The requirement must consider both in-port and at-sea work, including all of the maintenance you do."

He added, "achieving an accurate distribution of manpower is not only important for the short-term ship employment but also to the long-term proficiency and experience of our technicians, operators and maintainers, which we need to better value."

Kitchener is implementing an analytics-based project called Surface Manning Experience (SURFMEX), which "will define standard methodology for quantifying and tracking a Sailor's proficiency and experience as they progress through those career-spanning training continuums."

SURFMEX is intended to help assign Sailors "to the right places, first to learn, and then to perform."

The project is designed to help distinguish between Sailors who attended a training course years ago and a Sailor who just graduated who look on paper to seem equally prepared for a

demanding shipboard billet and to tracking and evaluating their individual fleet experience and proficiency.

Kitchener identified six ratings that will come under the SURFMEX project: sonar technician, Aegis fire controlman, gas turbine system technician (electrical and mechanical), quartermaster and engineman.

Navy: Construction of New Frigate Starts in Early Fiscal 2022

An artist’s rendering of the guided-missile frigate FFG(X). The new small surface combatant will have multi-mission capability to conduct air warfare, anti-submarine warfare,

surface warfare, electronic warfare, and information operations. Construction on the lead ship is set to begin in the first quarter of fiscal 2022. U.S. Navy
ARLINGTON, Va. – The Navy plans to start construction of the lead ship of the Constellation-class guided-missile frigate (FFG) during the first quarter of fiscal 2022 (the fall of calendar 2021), a Navy official said.

Speaking Jan. 12 at a webinar during the Surface Navy Association's annual convention, Capt. Kevin Smith, the Navy's program manager for the Constellation frigate, laid out a timeline for the FFG 62 program. The keel-laying of the Constellation is slated for the first quarter of fiscal 2023, and delivery of the ship to the Navy is scheduled for the third quarter of 2026.

The Navy plans to build 20 Constellation-class FFGs. Under the initial Detailed Design and Construction contract, the first Constellation-class FFG will be built, with options for nine additional hulls. Plans Three are funded one each in fiscal 2020-2022; two each in 2023-2024; three in 2025; and two each in 2026-2030.

The focus of the FFG 62 program office in 2021, Smith said, is on approval of the ship design; conducting the Critical Design Review and Production Readiness Review; and starting construction of the first ship.

Smith said the cost of the lead FFG will be $1.28 billion, which includes $795 million for the fixed-price design and construction contract, with the remainder covering the cost of government-furnished equipment and support. The Navy is required by Congress to keep the average cost of each of the nine follow-on ships between $800 million to $950 million in fiscal 2018 dollars. He said the average cost of the next nine FFGs is estimated to be $781 million in 2018 dollars.

Smith said the Navy is looking at potential need to extend production of the FFG to a second shipyard after the first 10

ships are delivered. With a second shipyard, the cost of a hull could change. He stressed the need to promote competition and affordability for a second order of 10 FFGs.

A slide presented by Smith gave more detail to the characteristics of the Constellation. It will have a length overall of 496.1 feet, a beam of 64.6 feet, and a draft of 18 feet. Fully loaded displacement will be 7,291 long tons.

The ship will have personnel accommodations of 200 personnel. The design crew will be 24 officers and 176 enlisted Sailors.

Weapon systems on the ship will include one Mk110 gun; 32 Mk41 vertical launch system cells; 16 launchers for the Naval Strike Missile, a Mk49 launcher for the Rolling Airframe Missile; the Mk 53 decoy launching system; and the SLQ-32(V)6 electronic counter-measures system.

Smith the FFG will have space, weight capacity, power and cooling for a future directed energy weapon, but not a railgun.

Combat systems installed will include the Aegis Baseline 10; SPY-6(V)3 Enterprise Air Search Radar; Mk48 gun weapon system; SQQ-89(V)16 undersea warfare system; and Variable-Depth Sonar System.

Aviation capability will include one MH-60R Seahawk and a vertical takeoff unmanned aerial vehicle.

Smith said with the lead ship contract award, the Constellation will have greater than 96% of U.S.-made content in terms of value.

The program manager said the Constellation will have tubes to launch 16 Naval Strike Missiles.

CNO: First Few New Frigates to Have Single Crews

An artist's rendering of the guided-missile frigate FFG(X). The new small surface combatant will have multi-mission capability to conduct air warfare, anti-submarine warfare, surface warfare, electronic warfare, and information operations. U.S. Navy

ARLINGTON, Va. – The chief of naval operations (CNO) said the new first few Constellation guided-missile frigate (FFG 62) will have single crews, a plan that will be in place while the Navy assesses its crew concept. The lessons learned during the littoral combat ship (LCS) program and its Blue/Gold crew concept will be used to inform the crew concept for the frigate.

"I'm going to move very deliberately and slowly in the crewing

concept," said CNO Adm. Michael Gilday, speaking Jan. 11 during a Surface Navy Association convention webinar. "I'm heading down the line of a single crew for that ship, at least for the first few ships. We've got to get that right. This is the Navy's 'Space-X.'"

"When we started building [the] frigate, we looked a lot at LCS, for example, the way we train on LCS, a really good model we're going to leverage for FFG 62," said Vice Adm. Roy Kitchener, commander, Naval Surface Forces, speaking to reporters in a Jan. 8 teleconference. "We did look at what we did on LCS, the Blue/Gold concept and how we're going to fit them [the ships] out, and we think that is probably the way to get the most presence as we usually do."

"The crew on a frigate will be larger, so there's kind of inherently more capability in that crew," said Rear Adm. Paul Schlise, director of Surface Warfare in the Office of the Chief of Naval Operations, also speaking at the teleconference. "It's not a minimally manned platform as LCS was, so any margin for having a few extra people around was largely taken out of the LCS in our attempts to make that crew as minimally manned as possible."

Schlise said the new frigate's crew "will support being able to do more multi-mission sorts of things, whereas the LCS is more a single-mission, one-mission-at-a-time platform. And there's some more ability for the crew to do its own maintenance. Planned maintenance will be done much more so by the ship's force crew on a frigate, on the 'Connie' class, than on LCS."

Schlise said the LCS Blue/Gold crew concept is informing the FFG 62 crew concept.

"There's some ability to potentially deploy the ships for longer with a rotational crew model, and we are still learning about how to do that and what that right rotation is. So, it's

a little bit pre-decisional still with Connie," he said. "At least the first few hulls – and I'm not going to give you a number because we haven't decided yet – we will probably single-crew the first few hulls because there's a lot of test and evaluation to go through with a new platform like that, and wringing out the new systems, going through all the testing required to bring a new platform fully into this fleet, to get it to IOC [Initial Operational Capability] and FOC [Full Operational Capability]. If we do modify that crewing model farther down the road, that is something that's under consideration, and we're looking to of course give the best [availability for operations] to the fleet commander that we can with the platforms."

The first new frigate, Constellation, is planned for IOC in 2026.

CNO: Divest Aegis Ashore Sites to Ground Forces

The new Naval Support Facility in Redzikowo, Poland, home to the Aegis Ashore Ballistic Missile Defense System. Pictured: the Aegis Ashore "Deckhouse" command and control center. U.S. Navy / Lt. Amy Forsythe

ARLINGTON, Va. — The chief of naval operations has proposed the U.S. Navy divest its Aegis Ashore ballistic-missile defense (BMD) sites to another service in order to focus on its core missions.

In the Jan. 11 release of the Navigation Plan for the service, CNO Adm. Michael Gilday wrote of the need to divest capabilities to afford more lethality and sharpen focus.

"To remain ahead of our competitors, we will divest ourselves of legacy capabilities that no longer bring sufficient lethality to the fight," Gilday wrote in the document. "This includes divestment of experimental Littoral Combat Ship hulls, legacy Cruisers, and older Dock Landing Ships. It also includes divesting non-core Navy missions like Aegis Ashore. Transferring shore-based ballistic missile defense sites to ground forces enables Sailors to focus on their core missions at sea and frees up resources to increase our lethality."

Gilday also spoke of the need of the Navy to divest the Aegis

Ashore sites during his Jan. 11 address to the Surface Navy Association convention webinar, without adding more detail.

The Navy has built and operates two Aegis Ashore sites in Europe, one in Romania and the other in Poland. The sites include an Aegis Combat System and missile launchers that can fire Standard SM-3 missiles. The two sites, part of the European Defense Initiative to shield Europe from missile threats from such countries as Iran, are augmented by BMD patrols in the Mediterranean Sea by Arleigh Burke-class guided-missile ships based in Rota, Spain.

Plans of Japan to base two Aegis Ashore sites in Japan to defend against missile threats from such nations as North Korea were canceled in 2020, ostensibly because of concerns that missile booster stages would fall on populated areas. Japan also operates guided-missile destroyers equipped with the Aegis Combat System and SM-3 missiles.

In June 2018, then-CNO Adm. John Richardson advocated for the Navy to divest the BMD role in its cruisers and destroyers patrolling in the Sea of Japan to Aegis Ashore sites in Japan, saying the ships would be better used in more dynamic roles and the demands of geographically restricted patrols took a toll on ship maintenance and crew readiness.

In 2020, Adm. Philip Davidson, commander, Indo Pacific Command, listed his top acquisition priority as being the installation of Aegis Ashore in Guam to defend the island and its facilities from ballistic missile launched from North Korea.

“My No. 1 priority, and the most important action we can take to readily and most fully implement the National Defense Strategy, as a first step, is a 360-degree persistent integrated air defense capability of what I call Homeland Defense System Guam,” Davidson said.

Davidson advocates deploying the Baseline 10 Aegis Ashore

missile defense system to Guam to supplement the Terminal High-Altitude Area Defense, or THAAD, system already in place on the island.

Gilday was not specific to which service – "ground forces'' – the Aegis Ashore sites should be transferred, but the U.S. Army is the most likely candidate because it provides BMD with its Patriot and THAAD missiles.

Navy Envisions Containerized Weapon System to Arm Amphibious Ships

A Naval Strike Missile is launched from the littoral combat ship USS Coronado (LCS 4) during missile testing operations off the coast of Southern California in this 2014 photo. the

NSM is a candidate to increase the lethality of U.S. Navy amphibious warfare ships. U.S. Navy / Mass Communication Specialist 2nd Class Zachary D. Bell

ARLINGTON, Va. – The U.S. Marine Corps general in charge of the U.S. Navy's expeditionary warfare directorate said the Navy is looking at options to increase the lethality of its amphibious warfare ships with a containerized weapon system. A demonstration of this capability may occur after a year of development.

Speaking to reporters on Jan. 8, MGen Tracy W. King, director of expeditionary warfare in the Office of the Chief of Naval Operations, did not specify which types of missile could or would arm an amphibious warfare [L-class] ship, but a leading candidate is the RGM-184 Naval Strike Missile (NSM) – built by a Raytheon-Kongsberg partnership, being installed on littoral combat ships and the Constellation-class guided-missile frigate.

"We have these magnificent 600-foot-long, highly survivable, highly LPD 17s," King said. "The LPDs need the ability to reach out and defend themselves and sink another ship. It's not from the aspect of using them as a strike platform; it will drastically increase their survivability if the enemy has to honor that threat. My intent is to ensure that my desire to increase lethality of LPDs doesn't interfere with [Director of Surface Warfare Rear Adm. Paul] Schlise's efforts to increase lethality on LCSs.

"We're working with Raytheon and other partners to see if they can increase production to get it [the Naval Strike Missile] out there. I suspect what you will see in the next year that we will probably test-fire a system off of an L-class ship and let the fleet play around with it, build up the doctrine on how we will use it and to confirm or deny whether it is worth the expense, which we think it is. We need the operators to confirm that."

King said that Vice Adm. James W. Kilby, deputy chief of naval operations for warfighting requirements and capabilities, has him conducting a formal analysis and running some excursions on what the war games would tell us about lethality, and survivability and would the enemy actually honor it. He would than show empirical data to the fleet commanders.

“It’s a legitimate concern [about] putting these very rare systems on an L-class ship instead of another kind of warship,” King said. “We’re going to do it cautiously. My prediction is that we will have one within the next 12 months. We will let the fleet play around with it probably a year or so and then decide how we’re going to field it.”

King said a likely solution is a containerized weapon system that the Marine Corps will be using.

“When we jump on aboard a ship, that [weapon system] becomes available to the ship’s captain,” he said. “So maybe we don’t need to install launchers and NSMs. Maybe the Marine Corps EABO [Expeditionary Advance Base Operations] forces serve as the main battery when we are moving out. To me that just makes sense. We give the latitude and flexibility to the ship’s captain to use those assets when he needs to.”

King acknowledged the concern of some in the Marine Corps that the missiles could be expended in combat at sea before the Marines reach their destination.

“I am a little bit dismissive of that complaint because the ship’s got to get there first,” he said. “So, I think you’re going to see us deploying containerized weapon systems that we can use wherever we want to use them.”