Industry Offers Alternatives to Achieve 38 Amphibious Warships, Recapitalize MSC Fleet

QUANTICO, Va. – Three of the Navy's biggest shipbuilders offered alternative plans they said would enable the Navy to get the 38 amphibious warships it needs and to recapitalize the Military Sealift Command's (MSC) ancient fleet faster and cheaper than what the Navy now plans.

Their proposals included moving up construction starts for the two newest classes of amphibious ships, to avoid creating a cold shipyard, to gain the efficiency of block buys, and to drop the concept of a single common hull design to replace all of MSC's widely different ship classes and instead adapt several of the amphibious and auxiliary ships currently being built.

Speaking Aug. 9 at the closing day of the Seabasing Operational Advisory Group's 2018 session, the officials from Huntington Ingalls Industries (HII), General Dynamics NASSCO and Austal also agreed that the U.S. shipbuilding industrial base is capable and ready to make the major increase in construction that would be necessary for the Navy to reach its goal of a 355-ship fleet.

They were joined in that view by Jeff LeLeux representing Swiftships, which builds a variety of patrol craft and has the contract for the Landing Craft Utility 1700, formerly called the ship-to-shore connector program.

Congress and others have expressed concern that the industry could not ramp up production enough to help the Navy reach its 355-ship goal.

Jon Padfield of HII said the “amphibious ship availability doesn’t seem to be getting any better and may be getting worse,” despite the Navy’s commitment to meeting the long-standing requirement for 38 amphibs.

To avoid making the situation even worse, the Navy should accelerate construction start on LHA-9, the fourth in the America-class amphibious assault ships, and the LPD-17 Flight II replacements for the aged Dock Landing Ships, Padfield said.

The first three America-class LHAs are operational, being built or set to start construction next year, he said. But there is a multi-year gap between construction of LHA-8 and the planned start for LHA-9, which would force HII to close the line. “In order to keep the production line hot and to get to 38, we need to accelerate LHA-9,” Padfield said.

He also said the Navy could save money by moving up production of LPD-31 and 32, the second and third of the Flight II ships, formerly called LX(R).

General Dynamic’s Tom Wetherald and Austal’s Larry Ryder criticized the Navy’s proposed Common Hull, Auxiliary Multi-purpose Platform (CHAMP) concept to replace MSC’s fleet, which includes maritime prepositioning (MPS), strategic sealift, crane, Marine Corps aviation maintenance, submarine tenders, command and hospital ships.

Wetherald said the CHAMP concept made sense for the large MPS ships, but suggested the expeditionary transport dock and expeditionary seabase ships that NASSCO builds would be better fits for other types. He joined Ryder in proposing variations of Austal’s expeditionary fast transports as more reasonable forms for other MSC ships.

They also proposed the LPD class as a better platform for some of those auxiliary ships than the CHAMP idea, to which Padfield nodded agreement.

Later in the day, two MSC officials highlighted the problems the command has with its outdated fleet, most of which are steam-powered, which are difficult to maintain and take larger crews to operate. But they indicated they had not been involved in creating the CHAMP concept.

SECNAV Spencer: Navy, Marine Corps 'More Ready, Lethal' Now than Last Year

ARLINGTON, Va. – The civilian head of the Department of the Navy said that measures taken over his first year in office have improved the condition of the Navy and Marine Corps forces and enabled future growth of the fleet.

"We're a more ready and lethal force than we were last year – in both services," said Navy Secretary (SECNAV) Richard V. Spencer, speaking Aug. 7 to reporters at a media roundtable in the Pentagon.

Spencer said that as he dove into his job last year he "did not have a full appreciation of the readiness hole, how deep it was, how wide it was."

Having commissioned his Strategic Readiness Review, Spencer set out to change the culture of the Navy and Marine Corps, adopting best practices from corporations that executed successful turnarounds from crises.

A data sheet for the roundtable said that "all of the recommendations of the Readiness and Reform Oversight Council are in progress; 78 will be implemented by the end of the

fiscal year (out of 111 under review).”

Spencer cited improvements in aviation readiness, particularly progress in processing aircraft through depot-level maintenance and saving labor time when the aircraft were returned to their squadrons.

Regarding sustainment, Spencer said the historical emphasis on acquisition of new systems lacked focus on sustainment over the life of the systems. He said the Navy is trying to bake that sustainment into the total process.

Surface ship maintenance, which the Navy has struggled to sustain for years, is an area that remains of concern to the secretary.

“We have a capacity issue that we are going to have to deal with,” he said, a challenge that will increase as the fleet grows to the mandated 355-ship battle force.

One measure undertaken by the secretary was to streamline and clarify the chain of accountability, with the type commander being “the belly button that’s responsible for the maintenance of the ships.”

Regarding the Optimized Fleet Response Plan’s record of ships emerging from planned maintenance on time, Spencer said he had seen demonstrable evidence that it’s better.

“I’ve seen little pockets of sunshine here and there. This is getting to the mantra that ‘You’ve got to keep to schedule.’ What will lit take to get us back to a fleet schedule? That is about two years away.”

He also cited a savings of approximately $4 billion with multi-year procurements of the Virginia-class attack submarine, the F/A-18 Super Hornet strike fighter, the E-2D Advanced Hawkeye early warning aircraft and the SM-6 surface-to-air missile.

Talking with defense industry representatives was critical to acquisition success and sustaining readiness, he said. He also pointed out that shared risk results in shared benefits, and that industry needs to make a profit to be able to provide the needed weapons.

The SECNAV also pointed out success in strengthening U.S. partners and allies with new and more weapons, with $25 billion of Foreign Military Sales (FMS).

“FMS now operates at the speed of relevance,” he said.

Spencer also pointed to the new initiative to develop a hypersonic weapon was benefiting from inter-service cooperation, with a tri-service memorandum of agreement in place to synchronize resources and expertise.

The focus on continuous education of the acquisition work force has yielded good results, he said, with 97 percent of the 55,000 workers having earned their respective certifications.

In a wrap-up, Spencer said that “we’re going to get to 355 [ships] – I’m totally convinced.

“We’re going to have to self-fund some of our expansion,” he added later in response to a reporter’s question.

MARAD Needs More U.S.-Flag Ships to Strengthen Maritime

Commerce and Transportation

ARLINGTON, Va. – Kevin Torkarski, associate administrator for Strategic Sealift for the Maritime Administration (MARAD), said strengthening maritime commerce and transportation are vital to controlling the sea, but MARAD can't meet those demands in its current state.

"It's great to have a naval force. The naval force isn't as strong as we want it to be, and we know that. But how are we doing with controlling the sea with maritime commerce? We're not," said Tokarski, during a Navy League special topic breakfast on Aug 3.

Our power as a nation comes from the ability to move weapons, ammo and resources to the right place, Torkarski explained. In that way, transportation not only enables the nation's economy but protect our nation as well.

"There are a lot of very important pieces," Torkarski clarified, "but when it comes to it at the end of the day, you got to be able to move people, put things in certain places. As we say in the transport community, 'Nothing happens until something moves.'"

Torkarski explained if you can't get resources to your bases of operation, you've more or less lost the battle – a lesson other nations have learned from watching the U.S as a powerhouse of the sea.

"All of us from a maritime perspective need to come together with the realization that we need a stronger maritime presence at sea," he said.

According to Torkarski, the current administration understands the need to strengthen maritime transportation. The next step, however, is how. How do you revive the U.S. maritime commerce to its former glory? Tokarski believes providing more U.S.-

flag ships would change a lot, including adding much-needed mariners.'

"Cargo preference is not a dirty word. Cargo preference is a sound policy that when the federal government buys things and ships goods and services, we're going to use U.S.-flag ships … to the maximum extent. My agency believes in that."

To further support the law, Tokarski added, "Cargo preference buys us readiness."

Tokarski knows him and his colleagues have been frequently repeating their cry for support as of late, but because of their consistent message, he believes MARAD could see beneficial changes to come in the near future.

"It is a message that is worth repeating," Tokarski said. "It's almost like sending out an SOS. You don't do it one time. You got to keep doing it. I think it's a good parallel of where we are at as a maritime nation."

Navy's Next Carrier Shuffle Slated

ARLINGTON, Va. – The Navy has announced plans for its next shuffle of nuclear-powered aircraft carriers (CVNs), a quadrennial event governed by the Refueling and Comprehensive Overhaul (RCOH) schedule of the Nimitz-class and, in this case, also including another shift of homeport for maintenance.

In an Aug. 2 release, a spokesman for the commander, Naval Air Forces, announced "that three Nimitz-class aircraft carriers,

USS Carl Vinson (CVN 70), USS Abraham Lincoln (CVN 72) and USS John C. Stennis (CVN 74) will conduct homeport shifts.

“USS Abraham Lincoln, currently located in Norfolk, Virginia, will rejoin the Pacific Fleet, making San Diego [Coronado, California] its homeport,” the release said. “Abraham Lincoln, commissioned in 1989, previously served in the Pacific Fleet from 1990-2011 before moving to Norfolk for midlife refueling.”

USS George Washington (CVN 73) currently is going through its mid-life RCOH at Newport News Shipbuilding, which typically takes up four years and extends the life of a carrier up to 50 years. The RCOH of the Nimitz class is more than halfway completed. The fleet includes 10 Nimitz-class CVNs.

The announcement also said that John C. Stennis [CVN 74], commissioned in 1995 and currently homeported in Bremerton, Washington, will change homeport to Norfolk in advance of its RCOH.

The Navy also announced that USS Carl Vinson (CVN 70) will conduct a homeport change from Coronado to Bremerton “in advance of its docking-planned incremental availability at Puget Sound Naval Shipyard.”

Hypersonic Technology Becomes a Top Pentagon Priority

WASHINGTON – Although hypersonic technology originated in the United States, “we didn’t choose to weaponize it, but now we have to,” the Pentagon’s top technology official said Aug. 1.

“The enemy gets a vote. They have chosen to weaponize hypersonic,” Michael D. Griffin, the undersecretary of defense for research and engineering, said.

To respond to that emerging threat, the Pentagon has made regaining the advantage in hypersonic technology one of its top priorities and has brought the three military departments together in a multiservice effort to develop hypersonic weapons, Griffin told a briefing sponsored by the Senate Aerospace Caucus.

“We want to have some of our first hypersonic strike weapons fielded in the early 2020s,” and are working to meet Defense Secretary James Mattis’ “goal of dominance by 2028.” That means an air-breathing” hypersonic weapon capable of a “prompt conventional strike: that can “hold an enemy at risk,” he said.

Hypersonic generally means an air vehicle that can reach and sustain speeds of at least Mach 5, or five times the speed of sound, which could be more than 3,000 miles an hour.

Griffin said he was not prepared to say what form of hypersonic vehicle they would have by 2028, whether it would be solely an expendable weapon, or an aircraft that could carry and release guided munitions and return, and whether it would be manned or unmanned.

Each of those variables raises the technological challenge to the quest.

But by using the term “air-breathing,” Griffin is ruling out the simplest solution, a rocket-propelled missile that would have relatively limited range.

Robert A. Pearce, deputy associate administrator for strategy at NASA, noted that while the agency has close ties with the Pentagon, its main focus is on commercial use of technology

“Our primary concern is reusable systems,” Pearce said.

Congress has been increasingly vocal in its demands that the Pentagon match or exceed the hypersonic capabilities of potential adversaries.

Griffin noted that international media has reported that China has successfully tested hypersonic vehicles multiple times and that Russian President Vladimir Putin bragged on Russian television of advances in hypersonics.

That is why hypersonic weapons, along with offensive and defensive cyber, was among the top priorities Mattis gave him when he took the new technology and engineering job, Griffin said.

Those technologies are important, “because much of the world is catching up” and eroding the technological advantage that the U.S. military has had in conflicts since World War II, he said.

The United States would not win a “man-to-man engagement” with our potential adversaries and “we don’t want to engage in that kind of fight.”

The way to prevent that kind of battle is to regain the technological advantage with prompt conventional strike, electronic warfare, directed energy, cyber and space, Griffin said.

“Those are the high-leverage priorities that will allow us to regain the advantage,” and “when we appear to be so strong, people will not want to engage us. That’s the best way,” he said.

Navy’s Newest Carrier-Based Catapult, Trap Systems Steadily Advance Through Test

PATUXENT RIVER, Md. – One year ago, the Navy’s newest aircraft launch and recovery systems successfully conducted historic first sorties aboard the USS Gerald R. Ford . Today, the Electromagnetic Aircraft Launch System (EMALS) and Advanced Arresting Gear (AAG) progress through comprehensive test programs, Naval Air Systems Command (NAVAIR) said in a July 27 release.

“Data from shipboard testing indicates that both EMALS and AAG have demonstrated improved reliability projections over the solely land-based testing,” said Capt. Steve Tedford, former Aircraft Launch and Recovery Equipment (PMA 251) program manager.

Reliability is a key performance parameter for any new aircraft system, ensuring operational readiness for the fleet. EMALS and AAG are being put through the rigors to ensure they meet developmental milestones. Single-day shipboard operations show that both systems are capable of meeting operational requirements.

The EMALS and AAG teams, along with industry partner General Atomics, have developed numerous engineering changes to support the systems’ continued maturity and reliability growth, Tedford said.

Program management for both systems is multifaceted, and beyond the complex developmental engineering and test programs, the EMALS and AAG teams have remained focused on several critical support areas. In-depth logistics efforts have been underway to ensure adequate spares planning for the completion of the testing and full life cycle of these

critical systems; to create the maintenance requirement cards and tools Sailors will use to operate and maintain the new systems; and to provide those Sailors with interim and permanent training solutions.

To date, Sailors from CVN 78 have been trained on EMALS and AAG. Development of a curriculum and instruction of system-specific courses has been conducted by the General Atomics and Navy team.

“We are extremely pleased to see how well General Atomics’ EMALS and AAG operations and maintenance training program has served CVN 78 Sailors at both our Shipset Controls laboratory in San Diego and at NAVAIR’s land-based test sites,” said Scott Forney, president of General Atomics Electromagnetic Systems Group.

“The dedicated EMALS and AAG teams have excelled in overcoming numerous challenges and will continue charging ahead, completing these concurrent test programs, continually increasing confidence in these technologies and getting both systems mission ready,” said Tedford.

Courtney Urges Pentagon to Keep Columbia-Class Funding Separate

WASHINGTON – The provision for separate funding for the Columbia-class ballistic-missile submarine program is not being followed by Pentagon budget officials, which could “put tremendous pressure on the rest of the shipbuilding account,” the top Democrat on the House Armed Services Seapower and

Projection Forces subcommittee said July 24.

Rep. Joe Courtney, D-Conn., noted that in 2014 he and former Rep. Randy Forbes, R-Va., then-chairman of the Seapower panel, introduced legislation to create the National Sea-based Deterrent Fund to provide funding for the Ohio-replacement submarine.

“We proposed to take funding for the Columba-class program out of the shipbuilding account as a way of taking the pressure off the rest of the Navy’s fleet, that was under its own pressures due to the existing [budget] top lines,” Courtney told a Mitchell Institute breakfast.

The legislation was passed and still is law, he said.

“But the real question is whether the Pentagon will treat it as really a separate account,” he said.

Right now, Columbia still comes out of overall pie that pays for shipbuilding.

“It’s still got issues as far as the budget folks over in the Pentagon,” said Courtney, who represents a Connecticut district that includes the New London submarine base and the Electric Boat submarine construction yard.

Currently, funding for Columbia is relatively low, paying for final design and fabrication of the missile compartments. But with an estimated price tag of more than $7 billion each, paying for Columbia construction would “put a big hole in shipbuilding,” he said.

Full construction of the first Columbia is scheduled to start in fiscal 2021. A total of 12 are planned, to replace the 14 Ohio-class boats that are nearing the end of their service lives.

“This has been a totally a non-contested issue,” Courtney said.

There have been a lot of complaints about the enormous cost of the entire program to modernize all three legs of the nuclear deterrent triad, with the Air Force working to replace its Minuteman III intercontinental ballistic missiles and buying the B-21 bomber to replace the B-52s and B-2s in the nuclear delivery mission.

But, Courtney said, “the sea-based deterrent, I think, is the least-contested leg of the triad.”

He noted that the compromise version of the fiscal 2019 National Defense Authorization Act was approved by House-Senate conferees the previous evening and probably would be passed in the House on July 26.

The bill provides “roughly $3 billion,” for Columbia detail prototyping and construction of the missile compartments, which also will go into Great Britain’s new ballistic-missile sub, the Dreadnaught, Courtney said.

“The program is moving forward. Our biggest problem is to prevent any slowing down,” because the Ohios’ service life has been extended to 42 years, which is considered the absolute limit to their ability to submerge for deterrent patrols.

The first Columbia is expected to go into service when the first Ohio must retire.

The Navy missile boats are “the work horse of our national deterrence. … To have one of the old ships go off line, and not have a Columbia ready to replace it, obviously would create risk,” Courtney said.

Coast Guard Icebreaker Healy Deploying to Arctic Ocean

SEATTLE — The Coast Guard Cutter Healy is scheduled to depart July 24 for a four-month deployment to the Arctic Ocean to carry out multiple scientific research missions, the 13th Coast Guard District announced in a release.

Healy will provide presence and access to the Arctic while conducting three major science research missions. In partnership with the National Science Foundation, National Oceanic and Atmospheric Administration (NOAA) and the Office of Naval Research, scientists will conduct physical and biological oceanographic research in the Arctic Ocean.

Healy's first mission is a NOAA-sponsored mission to increase understanding of biological processes along Alaska's Continental Shelf. This mission comprises three mission subsets: Distributed Biological Observatory, Northern Chukchi Integrated Study, and the Ecosystems and Fisheries-Oceanography Coordinated Investigations.

The second mission of Healy's Arctic deployment is sponsored by the Office of Naval Research and is focused on understanding how upper-level ocean stratification and sea ice in the Beaufort Sea is responding to inflow and surface forcing changes. The Stratified Ocean Dynamics of the Arctic project aims to increase understanding by deploying subsurface moorings and specialized on-ice instruments to observe the fluctuations across an annual cycle.

Healy's final mission is sponsored by the National Science Foundation and will examine the effects of the Pacific water inflow into the Arctic and its associated boundary current on the ecosystem. This study is part of a multiyear endeavor that combines shipboard measurements taken in the spring and fall,

with measurements from a subsea mooring deployed in the center of the boundary current.

Currently under the command of Capt. Greg Tlapa, Healy is the nation's premiere high-latitude research vessel and is one of the only U.S. military surface vessels that deploys to and is capable of operating in the ice-covered waters of the Arctic. In addition to science operations, Healy and the crew are capable of conducting a range of Coast Guard operations such as search and rescue, ship escorts, environmental protection and the enforcement of laws and treaties in the Polar Regions.

Healy provides access and presence throughout the Arctic region to protect U.S. maritime borders and to safeguard the maritime economy. Homeported in Seattle, Healy is the largest ship in the U.S. Coast Guard at 420 feet long with a displacement of over 16,000 tons and a permanent crew of 87.

Los Angeles SSN Life-Extension 'Creates Own Issues'

WASHINGTON — The ranking member of the House Armed Services Seapower and Projection Forces subcommittee said failure to fund extra Virginia-class attack submarines (SSNs) in 2022 and 2023 will aggravate the submarine shortage in the next decade, and a plan to extend the lives of five older Los Angeles-class SSNs has "its own set of issues."

U.S. Rep. Joe Courtney, D-Conn., told an audience at the Hudson Institute, a Washington think tank, July 18, that the option of extending the lives of Los Angeles-class SSNs should

be looked at carefully.

The Navy's SSN force stands at 53 boats today and is on track to decline to 42 in the mid-2020s. One plan to mitigate the decline is to fund three Virginia-class SSNs in both 2022 and 2023, when the submarine contractors Electric Boat and Newport News are building the first Columbia-class ballistic-missile submarine.

"If we don't do that, we're really going backwards," Courtney said, referring to the shipbuilding plan, now a matter of law, to build the Navy's fleet to 355 ships.

The Navy also is looking at extending the service life of up to five Los Angeles SSNs to help mitigate the gap.

"I'm not religiously opposed to that, but [life extension] creates its own set of issues," said Courtney, whose district includes Electric Boat. "These are old boats, built in the 1980s and '90s. They don't have the same capabilities that a Virginia-class [SSN] has. We have to refuel the reactor and you have to check the hull to make sure that it's okay. They've been running hard in the decades they've been out there.

"There's a whole separate issue," he added. "Technologies change in terms of shipbuilding: where you get the spare parts, where you find the [blueprints]. This thing is not as easy as it sounds. It's not like putting a quart of oil in your 10-year-old car and hope it runs for the next five years."

LCS Anti-Submarine Warfare Mission Package Completes Two Testing Milestones

WASHINGTON – The Navy's Program Executive Office Unmanned and Small Combatants announced July 16 the successful completion of two littoral combat ship (LCS) Anti-Submarine Warfare (ASW) Mission Package testing milestones.

The first was a 10-day Dockside-1 test event on the Dual-mode Array Transmitter (DART) Mission System Towed Body and associated launch-and-recovery assembly components in Fort Pierce, Florida. The second was a full-power, in-water test of the active array at the Naval Undersea Warfare Center Seneca Lake Detachment's test facility in Dresden, New York.

"The Seneca Lake test was a huge step forward for the DART System and the ASW Mission Package as a whole," said Capt. Ted Zobel, LCS Mission Module program manager. "This revolutionary technology is critical to countering the rising submarine threats worldwide."

The array previously was tested at Raytheon's shallow-water facilities in Portsmouth, Rhode Island. This test on Seneca Lake was the first opportunity for the new technology to be demonstrated in an open-water test environment, which allows better understanding of how the system will perform when deployed on an LCS. The successful completion of this test event provided Navy officials and industry partners valuable information on performance specifications and options for future modifications.

DART development includes incremental testing of the individual system components followed by progressively more inclusive integration and testing until the full ASW Mission Package has been tested.

The Dockside-1 test a week prior to the Seneca Lake event had LCS Sailors overseeing and actively engaging in the operation of the DART Mission System at the Florida Atlantic University Harbor Branch Oceanographic Institute’s waterside product integration, assembly and test complex.

Dockside-2 testing, planned for the fall, will expand the scope of DART system integration to add three additional Raytheon mission modules to complete the system. The Navy will take delivery of the DART Mission System from Raytheon later this year and plans to take the system to the Atlantic Undersea Test and Evaluation Center early next year for additional testing.