

CNO: 'More Sporty Security Environment' Will Affect Next Force-Structure Assessment

ARLINGTON, Va. – The Navy's top officer said that a forthcoming force structure assessment will reflect the guidance of the National Defense Strategy, the changing security environment and emerging technology.

"The security environment has only gotten more sporty, so we'll take that into account," said Adm. John M. Richardson, chief of naval operations, speaking Feb. 1 to reporters in the Pentagon, referring to the emergence of increased and sometimes aggressive naval activity in recent years by the Russian and Chinese naval and air forces.

Richardson also said that "technology is starting to come into play, so what counts as a naval platform is going to be an interesting discussion in this new force structure assessment. We want to make sure we are moving forward in a very evidence-based way, so that we're not counting on something that hasn't been relatively proven when it comes to the security of the nation, but we also want to make sure we're moving fast."

Increased agility in operations and more rapid development of technology are themes that Richardson has emphasized in recent public addresses.

Although the CNO did not discuss further what counts as a naval platform, the issue is likely to come forth as the Navy develops large and medium unmanned surface vessels as part of its Future Surface Combatant fleet. Unmanned underwater vehicles such as the Orca and Snakehead may also blur the definition of a platform and hence what counts as a ship to be counted in the fleet.

“We’re on a path to grow the Navy,” he said. “The last force structure assessment was done about 18 months ago, put out this 355-ship number. There is structure within that 355, so sometimes people don’t recognize that. ... That 355 number really came about by a number of studies that were conducted inside the Department [of the Navy] and outside the department. They consistently advocated for a stronger naval force, more naval power. The all converged into something in the mid-to-upper 300s in terms of numbers of platforms.”

The 355-ship Navy was codified by the Congress in the fiscal 2018 National Defense Authorization Act. The Navy determined its goal of 355 ships in a force structure assessment released in December 2016.

Richardson said the new force structure assessment report is due later this year.

“We’ll see where that goes,” he said. “We’ll get a new number. We may hold to it, we may not. The analysis is in process.”

Navy Begins Competition for New Training Helicopter

ARLINGTON, Va. – The Navy has issued a request for proposals (RFP) for new training helicopters to replace its fleet of TH-57 Sea Ranger helicopters in the Navy’s aviation training command.

The Naval Air Systems Command posted the RFP on Jan. 28 for the TH-XX program, designed to produce a new helicopter to succeed the TH-57B/C in rotary-wing training, including training in Instrument Flight Rules.

The Navy began using the TH-57A helicopter in 1981 to train rotary-wing pilots for the Navy, Marine Corps, Coast Guard and some foreign militaries. The helicopters were later upgraded to the TH-57B form primary training and TH-57C version for advanced and instrument training. Three helicopter training squadrons of Training Air Wing Five at Naval Air Station Whiting Field, Florida – HT-8, HT-18 and HT-28 – train student aviators in 41 TH-57Bs and 72 TH-57Cs.

The Navy expects to use the new helicopter and associated ground-based training systems to train at least 600 rotary-wing and tilt-rotor aviators per year, a number expected to increase through 2040. More than 50 percent of naval aviators are rotary-wing and tilt-rotor pilots.

The TH-XX helicopter will be one component of the Advanced Helicopter Training System, which also will include a Ground-Based Training System and contractor logistics and maintenance support.

The RFP announcement on the FedBizOps website states that the Navy expects the full and open competition to result in a single firm fixed-price contract for a total of 130 commercially derived aircraft through the base contract award and up to four options.

Three helicopter manufacturers are expected to submit proposals. Bell is expected to propose its Model 407GX_i – a twin engine helicopter – and its single-engine Model 429. Airbus is expected to offer its model H135, a twin-engine helicopter, while Agusta-Westland is expected to propose its single-engine TH-119.

The proposals are due to Naval Air Systems Command by April 2. The Navy expects to award a contract in the first quarter of fiscal 2020.

Navy Orders 79 Net-Enabled Harpoons from Boeing

ARLINGTON, Va. – The Navy has exercised a contract option to order 79 Block II+ kits for Harpoon cruise missiles, the Defense Department said in a Jan. 30 release.

The \$16 million order by the Naval Air Systems Command comprises the second production order of Block II+ kits for the air-launched AGM-84 Harpoon, which is deployed on the F/A-18 strike fighter and P-3 and P-8 maritime patrol aircraft. The order follows a batch of 15 kits delivered in 2018.

The Block II+ version of the Harpoon is a net-enabled weapon that can receive target updates via data link to more refine the missile's radar acquisition. Jim Bryan, director of Cruise Missile Systems for Boeing Missile and Weapon Systems, in a Jan. 16 conversation at the Surface Navy Association symposium, said a Block II+ kit runs in the range of a couple hundred thousand dollars, much cheaper than delivering a new missile.

The Block II+ kits are being delivered to Naval Air Systems Command for air-launched weapons. Bryan said Boeing stands ready to build kits for the surface-launched and submarine-launched versions of the Harpoon should the Navy determine a requirement.

The Harpoon is now fielded by more than 30 nations. The Block II, version which is not net-enabled, is marketed to international customers. Bryan said Boeing has the largest order backlog in the Harpoon program's history and will be meeting demand by expanding its manufacturing facilities.

CNO Defends Survivability, Utility of Aircraft Carriers

WASHINGTON – The Navy’s top officer defended the notion of survivability for U.S. aircraft carriers and their battle groups in an era when great power competitors are developing advanced weaponry such as hypersonic missiles.

“There is a great virtue to being able to move an airfield 720 miles in a day,” Adm. John M. Richardson, chief of naval operations, said Jan. 28 to an audience at the Brookings Institution, referring to the mobility of an aircraft carrier as opposed to a land-based airfield.

Stating that the topic of hypersonic missiles necessarily involved classified information that he could not discuss, Richardson said that the Navy was very much engaged in ensuring the survivability of its aircraft carriers.

“So rather than talk about the vulnerability of the carrier strike group, we should think about it as the most survivable airfield in the region,” Richardson said. “If you look at the history of the vulnerability of aircraft carriers, we’re less vulnerable now than we have been since and including World War II.

“In the Cold War, the Soviet submarine force was out there in great numbers, so there was vulnerability associated with that. So a combination of operational concepts and defensive systems – it is a give and take as we go – those carriers are able to have a big impact on the operational space.”

CNO: 'We've Got to Restore Agility'

WASHINGTON – The Navy must be able to rapidly adjust to changing geopolitical situations and technological advances to maintain maritime superiority, the Navy's top officer said.

"We've got to, in the Navy, restore agility," said Adm. John M. Richardson, chief of naval operations (CNO), said Jan. 28 to an audience at the Brookings Institution, a Washington think tank.

Richardson was not talking just of acquisition agility, a recent theme of other Navy officials to make the weapons procurement more responsive to emerging requirements, though he touched on that need as well.

The CNO said that agility has three dimensions, one of which is conceptual agility in the way the Navy operates.

"Frankly, we just need more imagination," he said. "We have a conceptual or imagination challenge to be competitive at the low end of the spectrum [of naval warfare]. At the high end there is this capability challenge as technology moves faster and faster and more tools become available. We want to make sure that at the high end we get things done, get them done faster, get them out to the fleet faster so that we will compete."

The second dimension is geographical agility.

"The Navy got very, very good at putting strike groups together," he said. "Those strike groups would leave Norfolk or San Diego and book it to the [Persian] Gulf. They would do

their operations and stay there as long as they could and then they would come back. We got excellent at that. But that was very predictable. We had the Optimized Fleet Response Plan, optimized to get the most presence for the least amount of resources. It got pretty optimized that way.

“It wasn’t very flexible, it wasn’t very dynamic, and it wasn’t very agile,” Richardson said. “As we regain that muscle memory [and] go back and do those sorts of things, this geographic agility, going to places we haven’t been in a long time, we’re doing so a little bit less predictably [with] fewer indicators of where we’re going to go, is a big part of our business.

Richardson made the same point with the Navy’s role in ballistic missile defense (BMD).

“We’ve had some ships protecting some pretty static assets on land for a decade now,” he said. “That [BMD] ship is designed to be a maneuver force. If that asset is going to be a long-term protective asset, then let’s build something on land and liberate these ships from this mission.

“[BMD] is an important mission,” he said. “We will be there as long as we need to, but it seems that land-based system is better suited to protect a land-based asset than a ship. Then I can take

a ship out of those small boxes where they have to stay for ballistic missile defense and get them moving again.”

The CNO noted the recent voyage of the USS Harry S. Truman carrier strike group north of the Arctic Circle as an example of geographic agility, the first such carrier operations since 1991.

Speaking of the third type, technological agility, the CNO said, “We simply have to get better at this. It’s a strategic Achilles’ Heel. It’s the lack of tempo in terms of how we can

field technology to the fleet. We cannot get outpaced in this.”

Richardson also said the current great power competition “is going to be a long competition. We have to think in terms of infinite-game-type strategy.”

He pointed out that, at the high end of the warfare spectrum, “the U.S. Navy must always de-escalate on the high end on our own terms. Which is another way of saying we want to have the best capability on the water.”

Navy is Pushing Advances in Offensive Mine Warfare

ARLINGTON, Va. – While mine countermeasures dominate the Navy’s efforts in mine warfare, the service has accelerated improvements over the last two years in its weaponry in offensive mine warfare, the ability to lay anti-ship and anti-submarine mines.

The service now is developing the Clandestine Delivered Mine (CDM), Capt. Danielle George, the Navy’s mine warfare program manager, said Jan. 17 at the Surface Navy Association convention in Arlington. The Navy is conducting testing of the new cylindrical-shaped mine and is scheduled to conduct end-to-end testing during the second quarter of fiscal 2019. Initial deliveries are scheduled for 2020. George said she was not at liberty to reveal the delivery platform(s) for the CDM.

Another new mine program, started in 2018, is the Hammerhead, an encapsulated torpedo designed to lie in wait for submarines. The capsule for the torpedo would be anchored to

the ocean floor, much like the Mk60 CAPTOR mine of Cold War vintage that housed a Mk46 anti-submarine torpedo. (The CAPTOR was withdrawn from the Navy's inventory in 2001.) The Hammerhead will be designed to have modular architecture to allow for technology insertion. The Navy expects to issue a classified request for information for the Hammerhead this year.

Until recently, the Navy's mine inventory was limited to the Mk62, 63 and 65 Quickstrike air-delivered mines and the Submarine-Launched Mobile Mine. The Mk62 and Mk63 Quickstrike mines are blast/fragmentation 500-pound Mk82 and 1,000-pound Mk83 bombs, respectively, equipped with influence target-detection devices for use in shallow water. The Mk65 is a thin-walled casing with a 2,000-pound warhead and equipped with a target-detection device for magnetic, seismic and pressure detonation.

For these air-delivered mines, the Navy has ordered new target-detection devices and adapters from Sechan Electronics Inc. during the last quarter of fiscal 2018. The Navy also has adapted the Joint Direct-Attack Munition (JDAM) guidance kit for the Quickstrike weapons, allowing for more precise seeding of the mines. This capability was demonstrated in Exercise Valiant Shield in 2018. In addition, an extended-range version of the JDAM Quickstrike – through installation of a wing kit – will be tested during the third quarter of fiscal 2019.

The Navy has not laid aerial mines in a conflict since Operation Desert Storm in 1991, when A-6E aircraft seeded mines in Iraqi waters. The capability remained intact, though low-key, in subsequent years.

LPD 17 Program Manager: These Ships 'Can Do Anything'

ARLINGTON, Va. – The San Antonio-class amphibious transport dock ships (LPD 17s) in production are incorporating improvements as the class progresses to the Flight II configuration, the Navy's program manager said.

"The mission remains the same," Capt. Brian Metcalf, the LPD 17 program manager, noted Jan. 16 at the Surface Navy Association symposium of the role of the 14 older Flight I LPDs and the forthcoming Flight II ships.

The Flight II LPD 17 ships, beginning with LPD 30, will incorporate improvements that include the Enterprise Air Search Radar (EASR), Consolidated Afloat Networks and Enterprise Services (CANES) architecture, a destroyer-style mast, boat deck, SLQ-32 Surface Electronic Warfare Improvement Program Block, and the Rolling Airframe Missile. The Flight II will retain the same hull form and propulsion plant as a Flight I ship but have improved fuel efficiency and electrical distribution. The Flight II will be capable of handling the CH-53K King Stallion heavy-lift helicopter.

The future USS Fort Lauderdale (LPD 28), a Flight I ship, will be the first LPD to have CANES installed and be fitted with a destroyer-style mast. The ship is scheduled for delivery in fall 2021. Metcalf said CANES will be back-fitted to older ships of the class.

The future USS Richard M. McCool Jr. (LPD 29), the last Flight I ship, will have the EASR installed. The ship is scheduled for delivery in 2023.

The Flight II ships will replace the Navy's eight Whidbey Island-class and four Harpers Ferry-class dock landing ships.

Metcalf said the Flight IIs will be interchangeable with and operate in the same manner as Flight I ships and improve an amphibious ready group's (ARG's) communications, enhancing the ARG's ability to operate in a disaggregated manner, which is more typical of operations in recent years.

"They can do anything," Metcalf said of the San Antonio class, including "recovering spacecraft or put 800 Marines in your back yard."

The 11 commissioned ships of the San Antonio class have completed 21 deployments, he said.

USS Portland (LPD 27) is the next to deploy, departing in 2020. It will have a solid-state laser weapons system installed.

Metcalf stresses that the LPDs were not just troop carriers, but are combatants built to military specifications.

"They will have to fight to get to the fight," he said, speaking of the need to operate in a high-threat environment.

The Navy plans to procure 13 Flight II ships. Metcalf said the Navy has the option of a block but not yet the authority for one from the Congress.

Navy Awards Lockheed Martin Contract for LCS 31

ARLINGTON, Va. – Naval Sea Systems Command has awarded to the Lockheed Martin LCS team a fixed-price, incentive-fee contract for an additional littoral combat ship, LCS 31, the company said in a release.

LCS 31 will be built in Marinette, Wisconsin, at teammate Fincantieri Marinette Marine's (FMM's) shipyard. The ship will be the 16th Freedom-variant LCS ordered by the U.S. Navy to date.

"The team will leverage capital investment and improvement in the shipyard and efficiencies created with serial production to maintain high quality at an affordable cost," said JoAnn Grbach, senior manager, Naval Programs Communications, Lockheed Martin Rotary and Mission Systems. "Today, there are seven ships in various stages of construction. The Navy just commissioned LCS 13 (Wichita) and we're preparing to lay the keel for LCS 25 (Marinette).

"We are excited to continue our partnership with the U.S. Navy and FMM to build and deliver capable ships to the fleet," said Joe DePietro, vice president and general manager, Lockheed Martin Small Combatants and Ship Systems. "With the Freedom variant in serial production, we continue to enhance efficiency and incorporate capability while maintaining ship and program affordability."

The value of the contract was not released by the Navy yet because of ongoing competition.

Austal USA Reveals Features of Its FFG(X) Conceptual Design for Navy Competition

ARLINGTON, Va. – Austal USA officials have revealed features of its conceptual design for the Navy's competition for the Future Guided-Missile Frigate (FFG(X)), an evolution of its

Independence-class littoral combat (LCS) design.

The company has provided an artist's concept and displayed a model Jan. 15 -17 at the Surface Navy Association symposium.

The general form of the Independence is preserved – the trimaran hull, the large flight deck aft, the Mk110 57 mm gun – but many changes are featured.

The Austal FFG(X) design has a longer hull with deck space aft of the flight deck. Occupying that space is a 32-cell-array Mk41 Vertical Launching System battery and two sets of tube launchers for the Naval Strike Missile. The SeaRAM launcher is forward of the bridge rather than on the aft super structure atop the helicopter hangar.

The helicopter hangar is large enough to accommodate an MH-60 helicopter and an MQ-8C Fire Scout unmanned aerial vehicle. On top of the hangar, where the SeaRAM launcher is on the Independence class, the space was blank.

Terry O'Brien, Austal USA's vice president of business development, said the space was reserved, per the Navy's requirement, for a future directed-energy weapon.

The face of the deckhouse superstructure is not as streamlined as on the Independence. The ship's speed requirement is less than the 40-plus knots of the LCS, and, accordingly, it would be driven by twin controllable-pitch propellers rather than waterjets.

Navy's DDG 51 Manager Reveals

in Program Stability

ARLINGTON, Va. – The program manager for the Navy's new-construction Arleigh Burke-class (DDG 51) guided-missile destroyers reveled in the stability of the program in wake of the passage of the 2019 defense budget and the approval of multiyear procurement of 10 destroyers.

The first passage of a defense budget in 10 years without a continuing resolution enabled the Navy to proceed early in the fiscal year with a multiyear procurement for fiscal 2018 through 2022 of six DDGs for Ingalls Shipbuilding and four for Bath Iron Works, with each contract offering an option for five more DDGs.

Each shipyard was awarded a DDG in the 2019 budget and Congress awarded a third DDG, with the Navy giving the ship award to Bath Iron Works.

"You know, here we are in January and all my ships are awarded," Capt. Casey Moton, the DDG 51 program manager, said Jan. 16 at the Surface Navy Association symposium. "It's a good deal. I like that."

Moton said the multiyear procurement was "very important to us" and would bring cost savings in terms of economic quantity of order.

He said that the program has 22 ships under contract, 10 of them currently under construction. The first Flight III version, DDG 125, is one of the ships under construction at Ingalls. Its keel-laying is scheduled for June. The first Flight III ship to be built at Bath Iron Works is DDG 126, the construction of which will begin this year. A total of 13 Flight III ships are under contract.

The Flight III has capability enhancements including the Raytheon-built SPY-6 Air and Missile Defense Radar and Aegis

Baseline 10/Technical Insertion 16 software. The SPY-6 gives a 15-decibel increase in sensitivity over the SPY-1 radar on the earlier DDG flights. An air conditioning capacity of more than double the current capacity will give the increased cooling needed by the Flight III ships.

Moton said the testing of the SPY-6 "has gone very well" and has performed successfully in 14 ballistic-missile tracking events, with one more test to go.

He said that a SPY-6 radar will be installed at the Lockheed Martin facility in Moorestown, Pennsylvania, for "full array integration with the Aegis Baseline 10 Combat System.

Despite the favorable fiscal climate, Moton stressed that "shipbuilders need to continually work to get cost down."