Navy Orders Materials for 16 P-8A Maritime Patrol Aircraft

PHILIPPINE SEA (Feb. 4, 2019) A P-8A Poseidon assigned to the Golden Swordsmen of Patrol Squadron (VP) 47 performs a fly-by next to the Arleigh Burke-class guided-missile destroyer USS Preble (DDG 88).

ARLINGTON, Va. – The Navy has awarded a $429 million contract modification to Boeing for long-lead material and activities for 16 P-8A Poseidon maritime patrol aircraft.

The contract modification, awarded by Naval Air Systems Command, will support the procurement of Lot 11 aircraft for six P-8As for the U.S. Navy, four for the Royal New Zealand Air Force and six for the Republic of Korea Navy.

New Zealand and South Korea are the latest nations to order the P-8A. Earlier international customers include Australia, the United Kingdom and Norway. India has acquired the P-8I version.

Last month, the Navy awarded Boeing a $2.4 billion production contract for 19 P-8As, including 10 aircraft for the U.S. Navy fleet, all five ordered by Norway and the final four of nine P-8As for the United Kingdom, which will receive its first P-8A this year. Norway will receive its first aircraft in 2021.

All of the customers except the United Kingdom and India are replacing P-3 Orion maritime patrol aircraft with the P-8.

Navy Undersea Warfare Director: 'We Cannot Be Out-Escalated' in Nuclear Deterrence

WASHINGTON – The Navy's director for undersea warfare said the nation's nuclear submarine-based strategic deterrent is more important than ever and that the 12 planned Columbia-class ballistic-missile submarines (SSBNs) are needed to sustain a credible strategic triad for the future.

Speaking Feb. 2 at a discussion of the Columbia SSBN event at the Heritage Foundation, a Washington think tank, Rear Adm. John W. Tammen pointed out that, with the new era of great power competition, "the need for deterrence has never been greater. That's based on the destructive [power] of modern-day weapons and the competitive landscape that we are seeing with [Russia's and China's attempts] to make their place in the global domain.

"We have to own the top rungs of the escalation ladder," Tammen said. "Our competitors must understand that we cannot be out-escalated in our part of the [strategic] triad and we must have the will and the credible capability to respond as necessary to their aggression and the cost that they would take would be greatly outweighed by any perceived gains."

Tammen said that all three legs of the U.S. strategic deterrent triad – bombers, intercontinental ballistic missiles (ICBMs) and submarine-launched ballistic missiles – are important, as are the command, control and communications systems associated with those weapons.

Tammen said the most survivable leg – the SSBN – "gives the president time to make a decision. He does not have to worry

that he is going to have an attack that will decimate his ability to respond."

The requirement for at least 12 Columbia-class SSBNs is predicated on having 10 available for deterrence patrols while two are in deep maintenance. The 12 new subs, which replace 14 Ohio-class SSBNs, will have 42-year service lives because their reactors will never need refueling.

Tammen said that, with the Columbia class, the nation will get an ultra-quiet platform that will benefit from the success of the Virginia-class attack submarine program, that will leverage more than 50 years of SSBN experience, and that will deploy a weapon – the Trident D5LE missile – that has had 11 successful test launches.

Navy Admirals: SWO Proficiency Standards Toughened With New Checkpoints

WASHINGTON – The Navy's efforts to improve training and the readiness of its surface warfare officers (SWOs) now include longer initial sea duty tours and a series of checkpoints that must be passed before an officer can command a ship.

The new standards result from the Navy's reassessment of surface warfare training in the wake of the fatal collisions of the Arleigh Burke-class destroyers USS Fitzgerald and USS John McCain in mid-2017.

Testifying Feb. 26 before a joint hearing of the Readiness and the Seapower and Projection Forces subcommittees of the House Armed Services Committee on Capitol Hill, Adm. Christopher W. Grady, commander of U.S. Fleet Forces Command and U.S. Naval Forces Northern Command, and Adm. John C. Aquilino, commander of the U.S. Pacific Fleet, also told Congress that ships will not deploy without having met the training standards.

Grady said the Navy is working to develop a culture where "we view standards as the absolute minimum."

"If ships of the Pacific Fleet aren't ready, they don't get underway," Aquilino said. Noting that manning challenges are being relieved by an additional 6,200 sailors earmarked fleetwide for ships, he said, "No [ship] deploys without the full complement of people that they will have."

Aquilino, who is briefed on the status of his ships three times per week and talks to his commanders weekly, said that since he took command of the Pacific Fleet, he has terminated the deployments of two ships that were not ready. He also said he has granted no waivers.

"We adhere to those [standards] rigorously," he said.

Grady said that commanding officers are required to submit letters to their type commander 90 days after assuming command on the readiness of their ships.

He said SWO training has lengthened, from 14 weeks to 23 weeks, with much more time in simulators. A few years ago, SWO school was only four weeks long and then was shut down altogether for a few years while officers learned via compact discs ("SWOs in a Box").

"The total duration at sea for a young division officer is now going to be four years," he said.

"We have recognized that it is all about the appropriate

experience," Grady said.

Ten milestone checkpoints in a career have been established to track the progress of a SWO from ensign to captain toward command of a ship. Three of these checkpoints are go/no-go decision points.

"If you fail one of those three checkpoints, we're not going to let you command a ship," Grady said.

"This is the culture of excellence that we're [inculcating] and, to this point, 5 percent of those folks have been asked to leave the command pipeline [because] they were not ready."

Aquilino said he was impressed with the effectiveness of the simulators for the littoral combat ships.

"That model is going to be transitioned into the destroyer [force] as well," he said. "The way we train is getting better. That will allow us to more quickly get those up to speed who haven't had it."

The fleets also are focusing on the training of enlisted operations specialists and quartermasters – the two ratings most involved in the navigation of a ship.

Grady also said "the complexity of a modern warship" demands that the Navy maintain its generalist approach that SWOs be both operations and engineering officers, unlike the Royal Navy, which splits SWOs into separate operations and engineering tracks.

Grady cited the example of the Ticonderoga-class cruiser USS Princeton that struck a mine during the Persian Gulf War.

"The two officers that were on watch and responded to that were the weapons officer and the engineering officer, both of whom so well understood the complexity of the integration of the combat systems and the engineering plant [and] how to maneuver the ship that they were able to keep fighting for 72

hours by pointing the deckhouse up-threat into Iraq," he said. "That's why you need officers who are both engineers and topside ship drivers."

Navy Requests Information for Unmanned Maritime Autonomy Architecture

Navy Requests Information for Unmanned Maritime Autonomy Architecture

By RICHARD R BURGESS, Senior Editor

WASHINGTON – The Navy has issued a Request for Information (RFI) from industry concerning unmanned autonomous maritime systems standardization to lead to more commonality in systems architecture.

The RFI, released on Feb. 15 by the Program Executive Office-Unmanned Maritime Systems and Small Combatants, is for Unmanned Maritime Autonomy Architecture (UMAA) for operation of unmanned undersea vehicles (UUVs) and unmanned surface vehicles (USVs).

"The intent of UMAA is to provide overarching standards that various UUVs and USVs can be built to in order to avoid creating multiple conflicting systems in the future," an official said.

The RFI, posted on the FedBizOps website, invites government organizations and industry "to participate in the development of the Unmanned Maritime Autonomy Architecture (UMAA). The UMAA is being established to enable autonomy commonality and

reduce acquisition costs across both surface and undersea unmanned vehicles.”

The RFI said that in 2018 “the Unmanned Maritime Program Office (PMS 406) chartered a cross-organizational team to develop the Unmanned Maritime Autonomy Architecture with the goal of standardizing autonomy interfaces across its growing portfolio of unmanned vehicles. Earlier this year, the team published the UMAA Architecture Design Description providing the initial framework for both service and interface definition. Additional design guidance will be provided through a series of Interface Control Documents (ICDs) in the areas below.

• Situational Awareness,

• Sensor and Effector Management,

• Processing Management,

• Communications Management,

• Vehicle Maneuver Management,

• Vehicle Engineering Management,

• Vehicle Computing Management,

• Support Operations”

An initial industry day will be held on March 4.

Navy Awards Orca XLUUV

Contract to Boeing

ARLINGTON, Va. – The Navy has selected Boeing to build the Orca extra-large unmanned underwater vehicle (XLUUV).

With a $43 million contract modification, the Naval Sea Systems Command ordered four Orcas and associated support elements, a Feb. 13 Defense Department contract announcement said.

The Orca – named for the similar-size marine mammal – is the largest unmanned underwater vehicle currently planned for the Navy's operational use. It will not be submarine-launched but autonomously launched from the shore and independently deployed.

The open-architecture, reconfigurable Orca XLUUV "will be modular in construction with the core vehicle providing guidance and control, navigation, autonomy, situational awareness, core communications, power distribution, energy and power, propulsion and maneuvering, and mission sensors," the announcement said. "The Orca XLUUV will have well-defined interfaces for the potential of implementing cost-effective upgrades in future increments to leverage advances in technology and respond to threat changes."

The XLUUV will be equipped with a modular payload bay with interfaces for future payloads.

The Boeing design is based on the 51-foot-long Echo Voyager, a large autonomous UUV developed by the company as a capabilities demonstrator.

The Orca program is managed by the Program Executive Office – Unmanned and Small Combatants.

U.K. Royal Navy to Establish Permanent Squadron in Middle East; QE to Deploy with U.S. F-35s

ARLINGTON, Va. — The United Kingdom plans to establish a permanent naval presence in the Middle East, putting more ships "East of Suez" and broadening the influence of the Royal Navy. The Royal Navy's new aircraft carrier, HMS Queen Elizabeth, will deploy to the region with an air wing that will include U.K and U.S. F-35 strike fighters. The United Kingdom also plans to develop a class of Littoral Strike Ships.

In a Feb. 11 speech, Defence Secretary Gavin Williamson, addressing the challenges of great power competition and ideological enemies such as al Qaeda, outlined measures the United Kingdom to build up its overseas presence and work with allies and partners, including the NATO alliance.

"In an era of 'Great Power' competition we cannot be satisfied simply protecting our own backyard," Williamson said. "The U.K. is a global power with truly global interests. A nation with the fifth biggest economy on the planet. A nation with the world's fifth biggest Defence budget and the second largest Defence exporter. And since the new Global Great Game will be played on a global playing field, we must be prepared to compete for our interests and our values far, far from home."

Williamson said he does "not underestimate the challenges that this approach brings. But we do start from a position of

strength. Our people are already acting around the world from the North Sea to the South Pacific to protect our interests, and we already benefit from strong international partnerships. But we cannot take such relationships for granted. Our global presence must be persistent…not fitful. Patient…not fickle."

He said that, "From this spring, [Type 23 destroyer] HMS Montrose, along with five other naval vessels, will be permanently based in the [Persian] Gulf using innovative crewing and support methods to keep the ship available for more of the time.

"Today, we also go further," he said. "And I can announce the first operational mission of the HMS Queen Elizabeth will include the Mediterranean, the Middle East and the Pacific region, making Global Britain a reality. Significantly, British and American F-35s will be embedded in the carrier's air wing. Enhancing the reach and lethality of our forces and reinforcing the fact that the United States remains our very closest of partners. We share the same vision of the world. A world shaped by individual liberty, the rule of law and, of course, the tolerance of others. We have the unique ability to integrate with US forces across a broad spectrum of areas. And, we are more determined than ever to keep working together.

"We will also be using our string of global support facilities and military bases more strategically…to consistently project power both hard and soft," he said. "The Duqm

port facilities in Oman are large enough to be able to support our aircraft carriers. The Al Minhad and Al Udeid Air Bases, in the Emirates and Qatar respectively, provide strategically important capabilities. In Bahrain, our naval base and our long-standing Maritime Command make a major contribution to our activities in the region but also beyond. Further afield we already benefit from facilities in Belize, in Brunei, in Singapore as well as our bases in Cyprus, Gibraltar and

Ascension Island.

“[The Royal Navy] is exerting British influence through greater forward presence,” he said. “I want to capitalize on that. Investing now to develop a new Littoral Strike Ship concept. And, if successful, we will look to dramatically accelerate their delivery. These globally deployable, multi-role vessels would be able to conduct a wide range of operations, from crisis support to war-fighting. They would support our Future Commando Force: our world-renowned Royal Marines – they’ll be forward deployed, at exceptionally high readiness, and able to respond at a moment’s notice bringing the fight from sea to land.

Williamson said his vision is for the Littoral Strike Ships to form “part of two Littoral Strike Groups complete with escorts, support vessels and helicopters. One would be based East of Suez in the Indo-Pacific and one based West of Suez in the Mediterranean, Atlantic and Baltic. And, if we ever need them to, our two Littoral Strike Ships, our two aircraft carriers, our two amphibious assault ships Albion and Bulwark, and our three Bay-class landing ships can come together in one amphibious task force. This will give us sovereign, lethal, amphibious force. This will be one of the largest and best such forces anywhere in the world.

“I expect the Royal Navy to deploy flexibly, to be capable of being in many places at once and to ensure we have an efficient fleet of warfighting ships, looking at how they can grow both their mass and their lethality,” he said.

Williamson’s entire speech can be viewed here: https://www.gov.uk/government/speeches/defence-in-global-britain

SECNAV Spencer: Navy Problem Solvers 'Need to Look Outside the Wire'

WASHINGTON – Naval officials need to seek solutions from industry and academia to meet the technological and acquisition challenges of the future, the civilian head of the Navy and Marine Corps said.

"One of the drums that I beat to everybody up and down the ladder is, if you are acquiring things, if you are looking for solutions to your problem, look outside the wire," said Navy Secretary Richard V. Spencer, speaking Feb. 8 at the Center for Strategic and International Studies (CSIS), a Washington think tank. "Because I will almost guarantee you: some organization out there, whether large corporate, middle corporate, or small company has probably gone through the same problem you are or have a solution or something that looks like your solution.

"This goes to 'should cost' before you find out what it does cost," he said. "Frame your argument, frame your data which you can glean from the outside. One thing that we have learned in this exercise is that corporate America and academic America will bend over backwards to help the services of this country."

Spencer said that the Department of the Navy and the defense industry are partners in solution-providing and that the department needs to be a "responsible client" of the defense industry.

"I have to be clear on what I need and what I can provide," he said, speaking of the need to set clear and firm requirements in an acquisition program.

With the additional resources for readiness provided by Congress in the fiscal 2017 to 2019, "the foundation for readiness has been set," Spencer said. "Everyone understands

they have the resources. This is all being done now to the mantra of urgency.

“We have money, we have plans, we cannot buy time, and that is the biggest stressing point we have right now,” he said.

Spencer said the department is “reviewing every single platform that we have as far as how we’re going to go forward with modernization, what we’re looking at to acquire, and what I call the Force 2.0, which are those weapons systems and concepts that we’re developing.”

Spencer was appearing at CSIS with his Army and Air Force counterparts, Secretary Mark Esper and Secretary Heather Wilson, respectively.

Analyst: Navy Needs to Re-Configure Carrier Air Wings for Future Fight

WASHINGTON – The Navy needs to change the structure of its future carrier air wings (CVWs) in the future to meet future threats, particularly in high-end combat against potential adversaries such as China and Russia, a team of defense analysts said in a published report.

“If the U.S. Navy is going to continue to invest in aircraft carriers, it need to re-consider how it’s going to configure its [carrier] air wings,” said Bryan Clark, a senior fellow at the Center for Strategic and Budgetary Assessments, a

Washington think tank, speaking Feb. 7 at the center about the new report, Regaining the High Ground at Sea: Transforming the U.S. Navy's Carrier Air Wing for Great Power Competition.

The Navy's current CVW "is not designed for the way we're going to
operate in the future," Clark said. "I would even go further to say,
unless the Navy is going to re-configure its air wings, it should
reconsider its continued investment in aircraft carriers."

Clark briefed the audience on worst-case scenario where an adversary such as China could launch a salvo of 600 1,000-pound-class weapons at a carrier strike group and recommended the type of defenses, including a CVW, that would be needed for a carrier to operate in the ocean in a high-end fight.

The report said that today's CVWs "lack the reach to operate at sufficient ranges from operational areas; the stealth to fight in contested environments; and the specialized capabilities in IRS&T [infrared search and track], EMW [electromagnetic warfare], and ASW [anti-submarine warfare] needed to defeat adversary platforms and systems."

Clark sees the need for a CVW to move toward including more unmanned aircraft. He recommended development of three new aircraft types: an unmanned air combat vehicle (UCAV); an unmanned refueling aircraft, initially the MQ-25; and FA-XX, a new fighter with a longer strike range.

The report's recommendations for re-configuring the carrier air wing by 2040 include:

* Sustaining planned procurement of the F/A-18E/F strike fighter through fiscal 2023.

* Sustaining procurement of the F-35C strike fighter through the first half of its planned production, ending in fiscal

2024.

* Develop an FA-XX fighter, a derivative of an existing fighter, by 2024.

* Develop a low-observable UCAV attack aircraft for production by 2025.

* Continue development of the MQ-25 aerial refueling UAV and increase overall number of tanker aircraft to 12 per air wing. Also,
develop the UCAV as a tanker for the mid-to-late 2030s.

* Retire the EA-18G electronic attack aircraft as they reach the
end of their service lives during the 2030s and replace them with
UCAVs equipped with the Next-Generation Jammer and also with expendable UAVs and missiles.

* Field a rotary wing MALE [medium-altitude, long-endurance] UAV
(in concert with the Marine Corps) to augment the carrier-based
helicopter squadrons and assume some of the ASW missions.

Clark’s team for the report included Adam Lemon, Peter Haynes, Kyle Libby and Gillian Evans.

CNO Richardson: ‘Looking at 25-50 years of a maritime-

centric world’

WASHINGTON – The role of the U.S. Navy as a diplomatic and economic actor in U.S. foreign policy and execution is as strong as ever and likely to remain so for the next several decades, the Navy’s top officer said.

“In general, we’re looking at 25 to 50 years – easy – of a maritime-centric world,” said Adm. John M. Richardson, chief of naval operations, speaking Feb. 6 to an audience at the Atlantic Council, a Washington think tank. “[There will be] lots of responsibilities for maritime forces coming in the next 50 years.

“Those responsibilities are not the only military dimension of national power, but the Navy has a tremendous history of enhancing the diplomatic element of national power,” Richardson said. “There have been major treaties and leader summits conducted on U.S. warships. Gunboat diplomacy—there is something to that still. When we visit foreign ports, it’s almost a given that the U.S. ambassadors to that country will host a reception on the ship because its sovereign U.S territory.”

The CNO noted the Navy’s rich role in U.S. diplomatic history, saying that there is “a role for that going forward.”

Regarding influence on economic power, Richardson said the Navy’s role “in preserving sea lines of communication – 90 percent of the world’s trade goes over the seas.”

Richardson said the maritime rules set developed over decades since World War II “provide that level playing field” that has benefited the nations, “perhaps most especially China, which has grown tremendously.

“We need to advocate for preserving that,” he said.

Richardson has advocated consistency in complying with and enforcing international rules regarding freedom of navigation in current areas of tension – the South China Sea and the Taiwan Straits – as necessary to preserve the freedom of maritime commerce in international waters.

CNO Richardson: Rail Gun Is a 'Case Study' in 'How Innovation Maybe Shouldn't Happen'

WASHINGTON – The Navy's effort to field an electromagnetic rail gun has taken too long to develop but is yielding other technological advances, the Navy's top officer said.

"I would say that rail gun is the case study that would say, 'this is how innovation maybe shouldn't happen,'" said Adm. John M. Richardson, chief of naval operations (CNO), speaking Feb. 6 to an audience at the Atlantic Council, a Washington think tank.

"[The rail gun project] has been around 15 years, maybe 20; 'rapid' doesn't come to mind in a time frame like that," the CNO said, having just addressed the need for rapid prototyping and acquisition agility in order to maintain a technological edge in great power competition.

"Now we've learned a lot [from the project], and the engineering of building something like that that can handle that much electromagnetic energy and not just explode is challenging," he said. "So, we're going to continue after this

– we’re going to install this thing, we’re going to continue to develop it, test it. It’s too great a weapon system so it’s going somewhere, hopefully.”

Richardson said that it was not uncommon in innovative approaches to yield unforeseen benefits.

The projectile conceived for the rail gun “is actually a pretty neat thing in and of itself,” he said. “The high-velocity projectile is also usable in just about every gun we have. It can be out in the fleet very, very quickly independent of the rail gun. So, this effort is breeding all sorts of advances. We just need to get the clock sped up with respect to the rail gun.”