

NAVAIR Admiral: System Reliability Key to Aircraft Readiness

WASHINGTON – The admiral in charge of Naval Air Systems Command said that aircraft readiness hinges on reliability of the systems and the maintenance that keeps them mission-capable.

“Reliability is just as critical as lethality,” said NAVAIR’s commander, Vice Adm. Dean Peters, speaking Oct. 1 at a luncheon of the Greater Washington Council of the U.S. Naval Academy Alumni Association in Washington, noting that the Navy had to take a different view of how to achieve more reliability as it endeavors to improve aircraft readiness.

Peters said he would like to turn all 10,000 engineers in the Naval Aviation Enterprise into reliability engineers.

One challenge to achieving high readiness is the lagging provision of things like vital spare parts, technical manuals and ground support equipment. Peters cited the 2003 introduction of the Marine Corps’ UH-1Y Venom helicopter to replace the UH-1N in Afghanistan and Iraq. He said the UH-1Y deployed with inadequate spare parts, manuals and ground support equipment as the Navy continued to buy the aircraft while shorting the necessary support.

“We are mesmerized by quantities,” Peters said, explaining that Congress often is focused more on the aircraft – the “above-line costs” – rather than the supporting items – the “below-line” costs.

“This is just not the way to align our fleet,” he said.

The admiral said the Navy is establishing a new program

executive office for common parts, such as radios and other systems used in multiple platforms, with a civilian program executive officer, to raise the procurement of such systems to a higher visibility.

He pointed out that throwing money and spare parts at the Navy is not going to solve the readiness problem, but that the sea service needed to change its way of fostering reliability and maintenance, balancing sustainment with new capability.

Peters praised fleet readiness centers for their progress in improving the readiness of Navy and Marine Corps aircraft. The Navy consulted with airlines to see what they did to sustain high aircraft availability. He said that every supporting function had to own the outcome.

“It’s really about bringing accountability to everyone involved,” the admiral said.

One factor in improvement was bringing the management, planning, logistics and maintenance all at the same site.

Peters said the Navy established a reliability control board to identify the factors that degrade aircraft readiness.

For one example, the Navy found that a component of the E-2D’s APY-9 radar was lasting only 600 hours rather than 6,000 hours.

In another example, an F/A-18 that had been inducted into a fleet readiness center had not flown a single hour since it emerged from its last induction six years prior.

Peters said the fleet readiness centers at Naval Air Station (NAS) Lemoore, California, and NAS Oceana, Virginia, delivered 36 F/A-18 strike fighters in fiscal 2019, each of which was completed in 60 days and flown within seven days after delivery.

The 80% readiness goal for the F/A-18 fleet that then-Defense

Secretary Jim Mattis set was met and exceeded by the Navy. The goal of 341 of 550 aircraft to be mission-capable was exceeded, reaching 379 aircraft on Oct. 1.

“People are starting to believe we can do it,” Peters said. “It’s not all about efficiency.”

Faller: Partnerships Vital in Countering Threats



Adm. Craig S. Faller, commander of U.S. Southern Command, speaks Sept. 30 at the Gen. Bernard W. Rogers Strategic Issues Forum, an event sponsored by the Association of the United States Army and the Navy League of the United States. Danielle Lucey

ARLINGTON, Va. – The commander of U.S. forces in Latin America and the Caribbean Sea said that the U.S. strategy in the region is designed to secure a prosperous hemisphere and to counter threats that would undermine the security of the region, including the issues brought about by the increasing great power competition.

“The best way to counter threats is partnership,” said Adm. Craig S. Faller, commander of U.S. Southern Command, speaking Sept. 30 at the Gen. Bernard W. Rogers Strategic Issues Forum, an event sponsored by the Association of the United States Army and the Navy League of the United States.

Strengthening partnerships “wins in life, wins in war,” Faller said.

Strengthening partnerships is Faller’s top priority as he works with the nations of the region and their militaries. He

said that partnership is the best way to achieve his second priority, countering threats to the region. His third priority is to “build our team,” strengthening the forces available to secure the peace in the region.

“The best way to counter threats is partnership.”

Adm. Craig S. Faller, U.S. Southern Command

Faller pointed out as good news that 27 of the nations in his area of responsibility are democracies. He also noted that some nations, such as Colombia, are now not only providing their own defense but are providing security assistance to other nations in the region.

The admiral stressed the importance of promoting shared values – professionalism, respect for law, respect for human rights – as a means to address the regional problems of weak democracies and institutional corruption and of countering transnational criminal organizations engaged in activities such as drug running, human trafficking, weapons running and illegal fishing and mining. He said that combatting international terrorism, such as that sponsored by Iran, comes under the purview of U.S. Special Operations Command.

Faller said he considered Russia and China to be “malign actors” in the region that have “moved in a way that all of us should find alarming.”

China is working on 60 seaport access deals across the hemisphere, 56 in the Southern Command region, he said.

Faller said that 67% of the goods that pass through the Panama Canal are U.S. goods, but he noted that China has signed 45 agreements with Panama during the last U.S. administration “and locked up port deals at either end of the canal.”

“I do consider China a threat to the democracy, to the stability of this neighborhood,” Faller said, noting the

support of China and Russia for Venezuela's Maduro regime. He also said that Maduro's presidential guard is provided by Cuba.

He said that the Panama Canal is vulnerable to terrorist and cyber threats.

Faller praised the partnership between the United States and Brazil during World War II, when the U.S. 4th Fleet was based in Brazil, and the two countries operated together to counter the German submarine threat in the Atlantic.

"Brazil would say they should be part of NATO, and I don't disagree with them," he said. "There is a lot of opportunity there."

The admiral also stressed the importance of the U.S. naval base at Guantanamo Bay, Cuba, which is the southernmost U.S. facility in the region. The U.S. stages aircraft at Soto Cano in Honduras and has some pier space in Curacao, an island owned by The Netherlands.

The 4th Fleet has no ships permanently assigned to the Southern Command, but Faller is looking forward to one ship being assigned there. Typically, five Coast Guard cutters are in the region on drug and migrant interdiction missions.

Navy Awards Contract for 9 E-2D Aircraft for Japan



An E-2D Hawkeye prepares to launch from the flight deck of the Nimitz-class aircraft carrier USS Abraham Lincoln. The Navy has ordered nine of the aircraft for Japan. U.S. Navy/Mass

Sweeping for Navy



The AQS-20C mine-hunting sonar in action at the U.S. Navy's ANTX 2019. Raytheon

ARLINGTON, Va. – Raytheon has demonstrated the ability to detect and identify a mine-like object and position an unmanned underwater vehicle to be in position to neutralize it, a company official said on Sept. 26.

The Aug. 29 “detect to engage” demonstration was one event in the Navy's ANTX (Advanced Naval Technology Exercise) 2019 held at Newport, Rhode Island.

“We view it as a tremendous success,” Andy Wilde, director of strategy and business development for Raytheon Undersea, said in an interview with *Seapower*. He said it was a “great example of the great work the Navy and industry can do when we co-invest in critically important projects like this to solve very, very difficult problems.”

Wilde cited the success as an example of a “high-velocity outcome” of a “best-of-breed” technology being rapidly prototyped and tested and able to be fielded very quickly, a process championed by former Chief of Naval Operations John M. Richardson.

Raytheon's AQS-20C towed sonar was pulled through the water by a surplus riverine craft acting as a surrogate for the Textron-built MCM unmanned surface vehicle (MCMUSV) that will be a component of the MCM mission package for the littoral combat ship (LCS).

Under the concept, an MCMUSV is launched from an LCS and deploys the AQS-20C. Once a possible sea mine is detected by the AQS-20C's synthetic aperture sonar, a Barracuda expendable semi-autonomous mine neutralization unmanned undersea vehicle is – on the same pass – launched into the water from a A-

size sonobuoylauncher on the MCMUSV.

The Barracuda deploys a float that serves as an RF datalink to the CUSV and an acoustic data link to the Barracuda. The tactical mission plan is downloaded from the LCS to the Barracuda via the CUSV. The Barracuda starts a search track and, once it acquires a mine, it maintains position at the mine. The operator on the LCS confirms the object is a mine and commands the Barracuda to detonate the mine with a charge. The MCMUSV would then continue its mission on its planned track.

During the demonstration, the towed AQS-20C detected a mine-like object moored in Narragansett Bay. The surface craft launched a Nemo, the prototype of the Barracuda developed with the Office of Naval Research. The Nemo located the mine-like object and hovered with it, keeping station. Having transmitted imagery of the mine-like object to the control station, the Barracuda was commanded to touch the mine-like object to simulate firing a shaped charge, Wilde said.

Wilde said the Barracuda has station-keeping technology that enables it to remain position to fire the shaped charge at the mine even in currents that cause a moored mine to drift position on its tether.

In an Aug. 15 interview, Wilde said that unmanned systems will revolutionize mine countermeasures (MCM) that currently take weeks or months to clear minefields and put minesweepers at risk. The Navy is developing an MCM mission package for the littoral combat ship that will rely largely on unmanned systems.

He also said the MCM mission concept could be expanded to other missions, including by use of a B-size sonobuoy launcher with other payloads. The AQS-20C sonar is now in production. Raytheon is developing the engineering development models of the Barracuda and recently completed the

Navy's preliminary design review.

Wilde said Raytheon is in discussions with the Navy about other missions to which the Barracuda could be applied.

Concerns Over Component Reliability Delay Trident Nuclear Warhead Upgrade



An unarmed Trident II missile launches from the Ohio-class ballistic missile submarine USS Rhode Island off the coast of Florida in May. The planned upgrade of the nuclear warhead on some U.S. Navy sub-launched missiles has been delayed for 18 months by unacceptable reliability of some components. U.S. Navy/John Kowalski

ARLINGTON, Va. – The planned upgrade of the nuclear warhead on some U.S. Navy submarine-launched ballistic missiles (SLBMs) has been delayed for 18 months by unacceptable reliability of some components.

Testifying Sept. 25 on Capitol Hill before the House Armed Services Committee's subcommittee on strategic forces, Charles P. Verdon, deputy administrator for defense programs for the National Nuclear Security Administration (NNSA), said that during stress tests to certify some electrical components of the weapons, some capacitors for the Navy's W88 Alteration 370 warhead for the Trident D5LE SLBM and the Air Force's B61 Mod 12 nuclear bomb did not meet the stringent reliability requirements. The capacitors were commercial-off-the-shelf (COTS) components.

Verdon said a blue-ribbon panel established by NNSA formed to

study the matter “advised in June 2019 that the prudent approach was to accept the delay of these programs and replace these components rather than risk component failure in future years.”

The recommendations were accepted by NNSA at that time, Verdon said, noting that NNSA is developing a specific production schedule and initial operational capability dates are being explored.

Verdon said the capacitor of insufficient reliability was a \$5 part, whereas the replacement capacitor – being built to a new standard that did not exist at the time the original capacitors were procured – cost \$75. Although the figures for program delays are not yet final, he said the delay would cost NNSA an additional \$120 million to \$150 million for the W88 Alt 370 and \$600 million to \$700 million for the B61 bomb.

Verdon also said the additional costs could be mitigated by balancing the workload within NNSA’s modernization portfolio. He said that any increase in funding would not be needed until fiscal 2021.

Vice Adm. Johnny Wolfe, the Navy’s director of strategic systems programs, also testifying before the committee, said the upgrades for the W88 Alt 370 begun in 2008 focused on procuring the arming, fuzing and firing units and replacing the warhead’s high explosives. He said the installation of the Alt 370 was delayed to a start of December 2019, “removing any schedule margin for the refurbishment effort.”

He said the Navy and NNSA are planning for about an 18-month delay to the Alt 370 program and that the Navy is working with the ballistic-missile submarine fleet’s operational commander, U.S Strategic Command, to mitigate the effect of the delays and ensure that the nation’s strategic requirements are met on schedule.

“We will meet the requirements as we move forward,” Wolfe said.

Verdon said that “[a]s a root cause, we identified that our methodology for the insertion of COTS components into high-reliability, long-life nuclear warheads needs to be improved” to avoid such future delays.

He said the NNSA “underestimated the variability between lots” in COTS-procured capacitors.

A closed classified session was held by the subcommittee following the open hearing.

Official: Marines on Amphibs Need to Help Navy in Future Fight

QUANTICO, Va. – The return of the Marine Corps to the concept of the Fleet Marine Force means that the Marines must be active in defense of amphibious forces for amphibious missions to be successful, a Marine Corps official said.

Col. Kurt Schiller, director of Air Combat Element/Maritime Expeditionary Warfare Division, Combat Capabilities Directorate, speaking last week at the Modern Day Marine expo at Marine Corps Base Quantico, Virginia, said that “Marines cannot just be passengers” on amphibious or prepositioning ships ... “but need to help with fleet defense.”

“We need better self-defense capability on these L-class [amphibious warfare] ships,” he said.

Schiller discussed several trends that he has noted in the current and future amphibious platforms, some of which are problems being remedied and some which need addressing in an era of great power competition.

He sees a rise in force protection risks because of an adversary's more long-range precision munitions and more ISR (intelligence, surveillance and reconnaissance) capabilities, including unmanned aerial vehicles.

Second, insufficient platform availability limits the number of amphibious ships that can deploy on short notice. "We just don't have enough of them and can't keep them afloat as much as we'd like," he said.

Third, he noted insufficient capacity in the digital domain and the ability of adversaries "to take out our command and control systems."

Fourth, Schiller noted "insufficient planning and coordination spaces on the ships. There's not enough space on the ships for all of the things we want to do."

Fifth, he said that amphibious warfare ships need the C5I [command, control, communications, computers and combat] systems that enable them to operate independently from an amphibious ready group.

Sixth, amphibious warfare ships likely will need to handle greater capacity with regards to Marine Corps equipment, like the F-35 strike fighter, MV-22 Osprey aircraft and the Joint Light Tactical Vehicle, all of which are heavier than their predecessors.

"All the Marine [Corps] systems are getting heavier," Schiller said.

He also noted a decreased readiness and capacity of old

landing craft. The Navy is in the process of procuring new LCAC 100-class ship-to-shore connectors and new utility landing craft.

Navy Official: Amphibs Provide Presence, Reassurance, Deterrence



The Navy's amphibious ships and their embarked Marines, aircraft and landing craft – like this one leaving the well deck of the amphibious assault ship USS Wasp – provide an array of power that can influence world events and reinforce U.S. interests in a region, a Navy official says. U.S. Navy/Mass Communication Specialist Seaman Apprentice David Glotzbach

QUANTICO, Va. – The Navy's amphibious ships and their embarked aircraft, landing craft and Marines provide an array of power that can influence world events and reinforce U.S. interests in a region, a Navy official said, listing five roles of the forces.

The primary purpose of an amphibious ready group (ARG) is to provide a means for a Marine Air-Ground Task Group to conduct amphibious assault, Frank DiGiovanni, deputy director of expeditionary warfare, Office of the Chief of Naval Operations, last week at the Modern Day Marine expo at Marine Corps Base Quantico, Virginia.

DiGiovanni said the second role was presence, noting that “[t]he fact that you have a three-ship ARG with a bunch of firepower on it and 2,000 Marines” tells nations in the region

that the power of the United States is present, “that there is someone else here, too.”

Third, he said, is reassurance.

“The people in this region need to know the United States of America is on watch, and we have combat capability within our reach,” DiGiovanni said.

Deterrence is the fourth role, one that discourages aggression from nations intent on aggression or harassment.

The fifth is logistics.

DiGiovanni mentioned “not only the logistics to support the Marines ashore by the ship to shore, but once that ship is empty, and the Marines are being sustained, what should we do with those ships? Do they serve a purpose to support other logistics needs, particularly in a contested environment? It’s a hypothesis we’re thinking about it.”

Western Canada ‘Wexit’ Party Supports U.S. Access to Arctic Northwest Passage

ARLINGTON, Va. – A political movement to break Canada in two because of political and economic grievances between the eastern and western regions of the nation is addressing several domestic issues, but also supports the access of U.S. military ships to the Northwest Passage, which Canada claims as territorial waters.

In a Sept. 19 release, Wexit Canada, the voice for the

separation of the Western Canadian Province – British Columbia, Alberta, Saskatchewan, and Manitoba – from the Government of Canada, protested some of Eastern Canada's agricultural, industrial regulation, taxation and social policies.

“In addition, the Government of Canada continues to agitate our southern neighbor through weak law enforcement, compromised intelligence and border security, unsustainable unvetted immigration, susceptibility to espionage, and most importantly – geopolitical opposition to America's legitimate claims to the Northwest Passage situated in the Arctic,” the release said. “Western Canadians do not share the same hostility, as Eastern Canadians do, towards our No. 1 military and economic partner. A confederation of Western Canadian Provinces would be a better partner to the United States of America than they currently enjoy in Ottawa.”

The United States does not recognize Canada's claim to the Northwest Passage. In a May meeting of the Arctic Council, U.S. State Secretary Mike Pompeo termed the Canadian claim as “illegitimate,” according to a June 27 article in Quartz by Zoe Schlanger. The conflicting positions are a rarity in the usually close U.S.-Canadian military and diplomatic relations.

Canada considers the Northwest Passage as internal waters because the passage is within the waters of the 20,000 islands of Canada's northern archipelago. The United States regards the passage as an international strait, with the freedom of navigation standard for such a strait.

Schlanger wrote that under a 1988 treaty, the United States worked out a compromise to the dispute: “the U.S. doesn't officially recognize the Northwest Passage as Canada's, but it agrees to ask for permission to pass through it. Canada, in turn, agrees in advance to always grant permission.”

If the coverage of Arctic ice continues to lessen, the increased shipping in and exploration of Arctic waters may result in an increase in international tensions in the region.

U.S. Navy Secretary Richard V. Spencer has focused increased attention of U.S. interests in the Arctic region and sponsored an exercise this month in the Aleutian Islands.

Navy Considering Marine CAC2S System for Amphibs to Exploit Strike Fighter's Capabilities



F-35Bs conduct flight operations aboard the amphibious assault ship USS Wasp. Navy officials say the service is considering installing a modern Marine Corps command and control system on amphibs to take advantage of the F-35's capabilities. U.S. Navy/Mass Communication Specialist 1st Class Daniel Barker QUANTICO, Va. – Navy officials said the service is considering installing a modern Marine Corps command and control system on large-deck amphibious assault ships.

“The Navy is looking to purchase CAC2S [Common Aviation Command and Control System] and put those on L-class ships so that they can do some of the same things we do on L-class ships the CAC2S can pull down off an F-35. It will help build situational awareness for the SWOs [surface warfare officers] on the ship,” said Col. Kurt Schiller, director, Air Combat Element/Maritime Expeditionary Warfare Division in the Capabilities Development Directorate, speaking at a panel discussion sponsored by the Amphibious Warfare Industrial Base

Coalition at the Modern Day Marine expo at Marine Corps Base Quantico, Virginia.

CAC2S, built by General Dynamics Mission Systems, provides a complete and coordinated modernization of Marine Air Command and Control System (MACCS) equipment.

CAC2S provides the MAGTF Aviation Combat Element with the hardware, software and facilities to effectively command, control and coordinate air operations integrated with naval, joint and/or combined C2 units.

CAC2S is made up of standardized modular and scalable tactical facilities, hardware and software to significantly increase battlefield mobility and reduce the physical size and logistical footprint of the MACCS.

“The F-35B brings extraordinary situational awareness capability,” Frank DiGiovanni, deputy director, Expeditionary Warfare, said during the panel discussion. “The CAC2S that the colonel was talking about brings the ground common operational picture to the ship and to the rest of the Navy.”

Navy Shallow-Draft LCS Increases U.S. Access, Presence in Southeast Asia



The USS Montgomery steams in the Gulf of Thailand during an exercise as part of AUMX. The first AUMX, co-led by the U.S. and Royal Thai navies, includes maritime forces from the U.S. and all 10 ASEAN member states. U.S. Navy/Mass Communication Specialist 1st Class Greg Johnson

ARLINGTON, Va. – When the littoral combat ship (LCS) USS Montgomery (LCS 8) visited Davao City, a port on the Philippine island of Mindanao, earlier this summer, it was the first port call there of a U.S. Navy ship in who knows how long.

Speaking to reporters Sept. 11 in a media roundtable teleconference, Cmdr. Edward A. Rosso, commanding officer of the ship's Blue Crew, was making the point that the LCS, with its shallow draft, allows the Navy to make port calls in locations that would not accommodate larger vessels such as destroyers, cruisers and amphibious warfare ships.

The draft of the aluminum trimaran-hull, Independence-variant Montgomery is 15.1 feet, compared with the 30.5-foot draft of an Arleigh Burke-class destroyer.

“The U.S. Navy, along with our partners and allies, has long known the importance and value of working together, and from my perspective, that is exactly what Montgomery has done during this deployment,” Rosso said. “We began our time in theater with a historic port visit to Davao City in the Philippines. It perfectly suited to receive our shallow-hull littoral combat ship. This was the first visit by a U.S. warship to that location in recent memory.”

“It was a great opportunity to build relationships, learn from one another, improve interoperability, and appreciate culture,” he added. “Overall, port visits like this allow us to demonstrate our commitment to maritime security in the region while strengthening relationships with our friends, partners and allies.”

The Montgomery is the first rotational deployment to the Western Pacific of an LCS in 18 months and is the first of three LCSs the Navy plans to deploy this year.

The last LCS to deploy, USS Coronado (LCS 4), returned from the western Pacific on Dec. 5, 2017. It had been preceded by

the USS Freedom (LCS 1) and its Freedom-class sister ship, USS Fort Worth (LCS 3), in 2015 and 2016, respectively.

During the deployment, Montgomery participated in the 25th annual CARAT (Cooperation Afloat Readiness and Training) exercise and the ASEAN-US Maritime Exercise (AUMX).

“Co-led by the U.S. and Royal Thai navies, AUMX consisted of pre-sail activities in Thailand, Singapore and Brunei, followed by a sea phase in international waters of Southeast Asia, including the Gulf of Thailand and South China Sea,” a Navy release said. “It concluded in Singapore. Participating nations included Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, United States and Vietnam. AUMX included eight warships and four aircraft from seven countries, and more than one thousand personnel representing all ten ASEAN member states and the United States.”

The Montgomery deployed with the Surface Warfare Mission Package, including an MH-60S helicopter and an MQ-8B Fire Scout unmanned aerial vehicle.

Rosso praised the value of the LCS Maintenance Support Team deployed to Singapore to support LCS deployments to the area. The team can stage to various ports in the region to rapidly respond to maintenance needs of a deployed LCS. In one such response, the team made a major repair at Sattahip, Thailand.

He also praised his crew, of which he said, “The things on this ship wouldn’t have happened without my crew,” whom he called “100 people of excellence.”