NAVSEA Commander: Bullish on Ford Aircraft Carrier; Columbia Submarine "On Track"

WASHINGTON – Despite the continuing problems with some of the advanced technology systems and the extensive overruns in cost and schedule with the next-generation aircraft carrier, "15, 20 years from now, we're going to be very happy we have that Ford class carrier around. It's an amazing platform that can do incredible things," the Navy's top shipbuilding official said Feb. 19.

"I'm very bullish on [Gerald R.] Ford. We will work our way through the technology challenges we have with that ship" and will have overcome those challenges for the next ships in the class, VADM. Thomas J. Moore, commander Naval Sea Systems Command (NAVSEA) said.

Moore also said the first Columbia-class ballistic-missile submarine is "on track" to meet the critical 2031 operational date to replace the aged Ohio-class boats in the strategic nuclear deterrence mission, but he is concerned about the potential impact the high cost of the 12 Columbias could have on other shipbuilding programs.

And Moore said increasing the capacity and performance of the private ship repair yards in order to keep existing ships in service longer, which could be key to reaching the goal of a 355-ship fleet, "is the number on challenge that I have in NAVSEA right now."

Moore spent a large part of a breakfast session with the Defense Writers Group answering questions about the Gerald R. Ford, the first of a dramatically redesigned class of nuclear-powered carriers, which has become an example of the problems of attempting too much innovation in a single step.

“This is a completely new ship in almost every aspect beside the design, the shape of the hull. A lot of learning is going on there,” Moore said.

The admiral said the criticism that the Navy attempted too many technology leaps with Ford, designated CVN 78, was “probably a fair assessment. The original plan was not to put all the technology on the first ship, but to build it in stages… We probably bit off an awful lot on Ford, and we see the net result of that.”

Some of the biggest problems that are still being resolved were with the Electro-magnetic Launching System (EMALS) that replaced the traditional steam catapults, the Advanced Arresting Gear (AAG) in place of the hydraulically restrained system, and the Advanced Weapons Elevators.

Although the Pentagon’s operational test director faulted the performance of the first two systems in a recent report, Moore said: “We did more (aircraft) launches and recoveries than we had planned – almost double – during the shakedown

period. And the components of those systems got better as we learned how to operate them… So I’m not at all concerned that EMALS and AAG will ring out the technical issues and the reliability will go up.”

The Navy certified the first of the 11-planned weapons elevators in December, 18 months after accepting the Ford from Newport News Shipbuilding. Moore said the second one would be accepted “shortly,” and the goal was to have them all installed and tested before Ford finishes an extended yard period this summer.

The main problem was with software for the sophisticated electronic control systems, he said. NAVSEA has recognized that it made a mistake in not creating a land-based test facility to work out problems with the elevators, as it did with EMALS and AAG, and now is building that test site.

The Navy’s top procurement priority is the Columbia SSBN to replace the Ohio class subs that provide 60 percent of the nation’s strategic deterrence capabilities and are considered the most survivable element. Despite a problem with faulty welding on the missile tubes, Moore said, “we’re still on track to deliver the ship on time to start its first patrol” in 2031.

He said Electric Boat is “well on its way” to building the first hull and the powerful electric motor that will drive the sub is being tested at a facility in Philadelphia.

Key members of the congressional seapower panels have expressed concern that the estimated $7 billion cost of the Columbia boats will eat up a large share of the annual shipbuilding account when they go into serial production, starting in 2026.

To avoid that, they created the National Sea-based Deterrence Fund to pay for Columbia. But the Pentagon has not been putting money into the separate fund.

Moore said NAVSEA is a supporter of the Deterrence Fund and noted that when serial production of the Columbia’s start, the Navy also will be building the Flight III DDGs and the new frigates, starting the future surface combatants and committed to a two-ship buy for the aircraft carriers. “It’s an aggressive shipbuilding program and clearly the cost of the Columbia on top of that is a challenge.”

Moore explained that the Navy has determined that it cannot reach its 355-ship goal just by new construction and is working on keeping its existing warships in service for at least 45 years, rather than the normal 30 years. But key to that is regular and on-time maintenance, which is handicapped by the lack of capacity in the private repair yards. Designing policies that will give the private yards the predictability needed to maintain an adequate workforce and improve their

facilities is a priority, he said.

SASC Chairman Inhofe: '$750 billion is where we need to be' for 2020

WASHINGTON – The Senate Armed Services Committee chairman is less concerned about whether overseas contingency operations (OCO) funds are increased to get the right top line for defense funding as long as the total is $750 billion.

"We've got to have adequate funding," Sen. James Inhofe said Feb. 12, when asked about reports that the Trump administration would propose a major increase in OCO funds to get the defense top line to over $700 billion without breaching the spending limit set by the 2011 Budget Control Act, which goes back into effect next year unless Congress suspends it again.

"I don't know how much it's going to be, but I think it's going to be an exaggerated figure to get up to what we need to defend America," Inhofe told a Defense Writers Group breakfast Feb. 12 on Capitol Hill.

Inhofe referred repeatedly to last year's report from the National Defense Strategy Commission's warning that the U.S. military was falling behind Russia and China and needed to have steady funding increases of 3 to 5 percent above inflation to regain its lead. That means $750 billion in the fiscal 2020 defense funding, he said.

Both Congress and the administration have argued in the past

that money for the on-going conflicts and other global crises should be moved into the base budget to help the armed services better plan for the future. OCO spending is not counted against the BCA funding caps and has been used in the past to add weapons already being bought in the base budget.

“I’ve been guilty of that myself,” Inhofe said.

But, he said, “$750 billion, I think that’s where we need to be. How we you get there? Are you going to be using some amount of OCO? … You need the money, $750 billion.”

In response to a later question about the administration’s newly released demand for an accelerated drive on artificial intelligence (AI), Inhofe said, “to me, there are other things we need to do first.”

While conceding that “China is ahead of us” on AI, “I’d like to look at the other areas where Russia and China are ahead of us.” He emphasized artillery, which has long been a major priority to him, partly because the joint artillery center of excellence is at Fort Sill, in his home state of Oklahoma. He also cited the high percentage of vintage F/A-18s that are considered undeployable because of mechanical problems.

“These are things that need to be done. Our peer competitors – China and Russia – they have a lot of things that are better than ours. To me, that’s the priority. Behind that, things like AI.”

Inhofe also supported a rapid increase in F-35 production, even those the Lockheed Martin fighter is not expected to complete the comprehensive operational testing to prove it is fully combat ready until next year.

Noting the number of allied nations that are buying F-35s, in addition to the U.S. Navy, Marine Corps and Air Force, he said, “what we really need now, what our allies need, is the F-35.”

Inhofe said his committee plans to have the new National Defense Authorization Act on the Senate floor by June, despite not receiving the detailed defense budget until late March. He also urged the appropriations committees to get busier so the defense funding bill can be enacted before the Oct. 1 start of the new fiscal year.

Asked about President Donald Trump's threat to transfer money from other accounts if Congress does not provide the $5.7 billion he wants for the Mexican border "wall," Inhofe said, if it becomes necessary, I believe he will do the emergency … If it has to be that way, leave MilCom (military construction) alone."

Advanced 3-D Printing Allows Marines Quick Material Production in the Field

QUANTICO, Va. – From a small plastic clip that keeps a snowshoe fastened to a multi-ton concrete replacement bridge and a wide range of items in between, Marines are using advanced manufacturing, commonly called 3-D printing, to produce in the field or in garrison rather than waiting days or weeks for the normal supply system to respond.

"We're going hot and heavy" into advanced manufacturing, using materials from plastic to aluminum and other metals and even concrete, Capt. Matthew Friedell, the team leader on advanced manufacturing in the Rapid Sustainment Office at Marine Corps Systems Command said Feb. 7.

Systems Command has sent more than 100 3-D printers to Marine units, mostly small, desktop size instruments, but also a number of mid-size devices in 20-foot shipping containers and three huge machines at the Marine supply depots, Friedell told reporters in a telephone conference call from Marine Corps Base Quantico, Va. Some of the printers, called tactical fabricating kits, are in the hands of infantry units, he said.

They also send training teams to help the field units learn how to use their new equipment and provide a support service that can develop the data required to produce the needed item and email it to the requesting unit, Friedell said.

Other crucial services the SysCom office provides are conducting tests of the material needed for the item to determine if it can be safely printed by the field unit, and studies of the original commercial source of the item to protect the company's intellectual property rights, he said.

Industry has been very cooperative, but their data rights need to be protected, he said.

But most of the time, the request is for five to 10 small parts, for which there is no real profit interest for the producer. And often the needed item is no longer being produced due to the age of the equipment being repaired.

Items produced by Marines using 3-D printers cited by Friedell and other Marine officials include the snowshoe clip, a plastic buckle on a backpack, a compressor blade for an M-1 tank and a heavy concrete footbridge built by a Marine engineer unit in a test.

The long-term thrust for 3-D printing, Marine officials have said, is to greatly improve the ability of small combat units, well separated from senior commands and supply sources under the distributed forces concept, to sustain themselves by producing critically need parts.

Flexibility is another key contribution of the printers, Friedell said, noting that the prototype machine that produced the concrete bridge could also produce a security barrier or a shelter.

Electrical power is a crucial consideration, Friedell said, because the larger printers require huge amounts of power. Current tactical generators are able to provide the needed power and the services are developing hybrid power sources that combine high-efficiency generators with powerful batteries that can reduce the fuel demands of running the generators.

Marines to Leverage Unmanned Systems, More Capable Amphib Fleet to Fight Great Power

Competition

WASHINGTON – The Marine Corps and the amphibious fleet will be critical to prevailing in the emerging great power competition in which U.S. forces will have to "fight to get to the fight" against China's growing military capabilities, the Marine's top combat development officer said Feb. 7.

To meet that challenge, "We have to work on some things to make this amphibious force more lethal, more survivable," Lt. Gen. David H. Berger, the Deputy Commandant for Combat Development and Integration, told a Capitol Hill forum sponsored by the Amphibious Warship Industrial Base Coalition.

That would include installing vertical launch tubes, "or other ways to make the ships more lethal" to give them organic ways to defend themselves, "including air defense," Berger said, noting the services has had decades of not having to worry about being attacked from the air. Berger said. And they must do that while decreasing ships' electromagnetic signature because "if they can find us, they can target us."

In addition to their traditional role of projecting Marine forces ashore, Berger said the amphibs "can be mother ships," capable of launching and recovering scores of unmanned systems "from sovereign territory. Why wouldn't you want to do that?"

Those unmanned systems could operate from shore or from ships, to observe and kill things. "We don't have the now, but they are coming," he said.

Citing his recent command of Marine Forces Pacific, Berger said China "knows they have one team to match" and have "poured 100 percent of their resources into overcoming us." As a result, the U.S. military is losing its traditional technological advantage.

While joining the industry representatives and an array of

House members in urging continued development of a larger and more capable amphibious fleet, Berger drew on his command's role in producing land combat equipment that can support the fight for sea control.

Noting that the National Defense Strategy advocates the Marines returning to their historic role of establishing and defending forward operating bases, he said they would "need long-range fires, from the ship, from the shore." In order to control land, they will need "platforms that can move from one to the other."

To do that, the amphibious force will need connectors, but not the current connectors of amphibious tractors, landing craft utilities and landing craft air cushions, but a new family of connectors being developed by Maj. Gen. David Coffman, director of Expeditionary Forces, who was in the audience.

Those will designed to go "ship to shore and shore to ship. If you're going to move a distributed force, it's going to be back and forth. It can't be the old connectors," Berger said.

Another thing they will need to operate in the littorals, he said, is anti-mine capability, an area where "we fell asleep… We have to have a mine clearance capability to move fast. If we are going to be moving around in the littorals, we need to fight mines." That is another threat Coffman's office is addressing.

Earlier in the forum, eight House members, most of whom serve on the House Armed Services Committee, supported the Navy-Marine Corps goal of expanding the amphibious force from the current 32 ships to 38, including building the new Amphibious Transport Dock (LPD) Flight II ships that will replace the aged Landing Ship Docks (LSD).

The industry representatives emphasized the need to move the planned procurement of the next "big-deck" amphibious assault ship, LHA-9, up from 2024 to 2021 to avoid a seven-year

production gap that will harm the shipbuilding work force and substantially add costs.

The House members, including Rep. Joseph Courtney, chairman of the House Armed Services Committee Seapower and Projection Forces Subcommittee, urged the industry coalition to put pressure on lawmakers to support the defense budget, particularly shipbuilding funds.

Courtney noted that the federal budget will not be released until March 12, more than a month late, which "will intensify the need" for industry pressure. "Things will move really fast."

Special Ops Leaders: SOFs Essential but Must Not Lose Irregular Warfare Skills

ARLINGTON, Va. – Because of their agility and relatively low cost, special operations forces (SOF) will continue to play a key role in meeting the global security threats, even with the new emphasis on preparing for the return of great power competition. But SOF and the conventional joint forces must not lose the irregular warfare skills honed in nearly two decades of conflict, two top Special Operations civilian leaders said Feb. 5.

Russia and China are engaging in activities below the level of armed conflict to challenge America's global influence, but "that is SOF's specialty," Owen West, the assistant defense secretary for Special Operations and Low-Intensity Conflict (SO/LIC) said.

Addressing the National Defense Industrial Association's annual SO/LIC conference, West said he did not think the Special Operations Forces would have to change to meet the new era of competition, but the entire defense departments will "have to establish an understanding of what irregular warfare is."

"Clearly we have adversaries that are playing by a different set of rules" that the United States would not adopt. "But at some point, we have to understand the rules by which they play," West said.

West repeatedly cited the flexibility and relative low cost of small SOF units and their global footprint, so wherever an adversary appears, SOF can respond. He said one of his jobs as head of SO/LIC is helping the Special Operations Command determine what its priorities are.

"We have to be cheaper, but we have to be flexible and shift forces to the new priorities," he said.

Speaking earlier, Andrew Knaggs, the deputy assistant defense secretary for Special Operations and Combating Terrorism, said the "National Defense Strategy" created last year by then Defense Secretary Jim Mattis has become the "foundational document" that is shaping Defense Department policies and the way it sees itself, the world and the future.

The mandate from that strategy means "DoD will likely operate with a smaller footprint overseas," meaning that "agility will be more important for success." And because adversaries are employing irregular warfare tactics to undermine the foundations of U.S. global status, the department must preserve the lessons learned from two decades of irregular warfare and counter-terrorism operations. And it will need "to reorient that to the era of great power competition."

Knaggs recalled the U.S. military's history of shifting from the irregular warfare on the Western frontier to high end

conflict in the two world wars, “which left us unprepared for irregular war far into Vietnam.” And then again in Afghanistan and Iraq, “we have favored conventional approaches over IR. When given an opportunity to right-size the force, we too often have gone to the conventional approach, which leaves us unprepared for the broad spectrum of threats we face today.”

The current adversaries “have shown the ability to use IR tools to reshape the environment” in which U.S. forces must operate. “We should do the same,” he said.

West made similar points, noting that under the “National Defense Strategy” irregular warfare had become a part of department policy in an effort to end the “boom and bust” practice of standing up and shutting down irregular warfare capabilities.

The policy now is to establish a standard so that a part of the joint force will be ready for irregular warfare. “SOF has always been a part,” he said.

Responding to questions from an NDIA moderator, West said the charges of allegedly criminal actions against a number of SOF personnel is “not indicative of what the force is.”

But he said the alleged actions can erode the trust within the command and “if this trust is jeopardized in any way, it is felt well beyond our walls and will affect the whole force.”

All allegations of criminal behavior will be fully investigated and anyone found guilty will be punished, he said.

West said he did not think the decade-plus of intense operations was a cause for the alleged misbehavior, but if he knew what the cause was, “we’d have fixed it.”

While citing the value of SOF’s low cost “compared to some of the high-end weapons,” West said SOCOM and his office were

disappointed that the Air Force stopped its quest to buy a cheap, turbo-prop light attack aircraft, which would have been geared to low-intensity conflict.

Hypersonic Weapons, Cruise Missiles Gain Greater Focus in New Missile Defense Review

WASHINGTON – The primary value of the recently released Missile Defense Review is to expand the focus of missile defense to include the new threats from cruise missiles and hypersonic weapons, and to provide clear guidance, focus and integration of views to the programs, two of the top leaders on the issue said Jan. 23.

The review "really does usher in the next generation of missile defense" against "not just ballistic missiles but also cruise and hypersonics," said John Rood, the undersecretary of Defense for Policy, who led the effort to draft the new review that was released Jan. 17.

Noting the early resistance to a comprehensive program to defend the nation against ballistic missiles, Rood said, "we have come a long way," and have a goal "not to just pursue the initial stages of missile defense, but to outpace the threat, against missiles of all variety."

The biggest benefit to his agency was clear guidance and focus coming from the review and the strong endorsement from President Donald Trump, said Air Force Lt. Gen. Samuel Greaves, director of the Missile Defense Agency (MDA).

“We have direction and knowledge of where we need to go. It’s time to get things done,” Greaves said, joining Rood at a briefing on Capitol Hill sponsored by the Missile Defense Advocacy Alliance.

The expanded focus of the review was highlighted by the change in its title, dropping the word “ballistic,” which was in the previous reviews and in the early days of this one.

The added emphasis on hypersonic weapons is to account for their different flight paths, which significantly increases the need for space-based sensors and possibly space-based interceptors, the two officials said.

Unlike ballistic missiles that fly a high trajectory into space and generally plunge directly to their targets, hypersonic weapons can fly at a low altitude and at speeds exceeding five times the speed of sound. And, like the low-flying cruise missiles, they may maneuver to complicate interception.

Citing the reports of tests of hypersonic weapons by Russia and China, Greaves said the space component of the multilayered defense MDA developed to counter ballistic missiles “is absolutely critical” to be able to “find, fix and track hypersonics.” To intercept a maneuvering hypersonic threat, they will need “birth-to-death track. We will need to do that from space.”

Countering hypersonic weapons also accentuates the quest for directed energy, or lasers, as an interceptor, he said, while noting the challenge of developing that capability.

But while highlighting the new focus on the emerging threats, both officials stressed the need to continue progress on the existing primarily land- and sea-based sensors and interceptors

against the growing arsenals of ballistic missiles being

fielded by “rogue states” such as North Korea and Iran.

Greaves said his top priority was to “maintain the focus on sustaining” the fielded missile defense system, with the second priority to “increase the engagement capabilities of those systems – to do more with what we have.” His third priority was to “rapidly address the advanced threats.”

Improving the existing missile defense included fielding a “multi-object kill vehicle” for the ground-based interceptors in Alaska and California, new radars in the Pacific and Alaska, testing and fielding the SM-3 block IIA missiles for the Navy’s Aegis-equipped warships and enhancing the command and control network.

Rood said under the strategy set by the new review, “homeland defense will be prioritized against all others.” They will continue with “today’s generation of technology and field new technologies that are significantly more capable” to deal with the rogue states, he said.

But, he added, because Russia and China have very large arsenals of ballistic missiles, “we rely on deterrence,” meaning the threat of a counter strike by nuclear missiles.

That appeared to counter the impression left by Trump’s comments at the review’s unveiling that the proposed new defense would be able to defeat Russia’s missiles.

Russian Missile System Deployments Jeopardize U.S.

Commitment to INF Treaty

WASHINGTON – If Russia does not dismantle a cruise missile system that the United States believes violates the Intermediate-Range Nuclear Forces (INF) Treaty by Feb. 2, the U.S. will "suspend" compliance with the treaty and begin internal discussions on whether to declare its intent to withdraw from the 1987 pact, the undersecretary for arms control and international security said Jan. 24.

During negotiations last week in Geneva, the Russians acknowledged they have fielded the 9M729 Novator missile but denied it violates the INF range limit, Andrea Thompson said.

The meeting with Deputy Foreign Minister Sergey Ryabkov was "professional, not the usual bluster," Thompson told a Defense Writers breakfast at the George Washington University. "But at the end of the day, we didn't break any new ground. There was no new information."

Thompson said the Russians offered to allow U.S. experts to see "a static display" of the Novator, which was rejected as not providing any evidence of the missile's range. The United States has shared its intelligence findings that show the missile exceeds the 500 kilometers treaty limit (about 300 miles) with Russia and with U.S. allies and partners, she said.

She would not say whether U.S. intelligence has determined if the Novators are armed with nuclear or conventional warheads.

The Russians have deployed five battalions of the missiles, which could hit most U.S. allies in Europe, Thompson said.

"This is not a test system. Soldiers in uniform are manning it," she said.

The only way Russia could come back into compliance with the

INF is to destroy the missile and its launchers, she said.

If the U.S. terminates its commitment to the INF, it would be free to develop and field missiles that match or exceed the Novator, she said. European news services have reported that some NATO allies have expressed concern about ending the INF, fearing it would spur the Russians to field even more missiles. But Thompson said all of the allies and partners agree that Russia has violated the treaty.

She said discussions on whether any of the allies would agree to field a new U.S. missile "have not occurred. We are trying to get Russia back into compliance."

Asked why the United States would need to develop a new missile when it already has weapons that could threaten Russia, Thompson said, "we need redundant systems to defend ourselves."

The Russians continue to claim that some U.S. missile defense systems, including the Aegis Ashore installations operational in Romania and under construction in Poland, violate the INF, despite their defensive nature.

Thompson said Russian violation of INF should not affect other arms control agreements. Discussions continue with Moscow on extending the New Start strategic forces treaty, which expires in two years, and the United States remains in compliance with the pact that limits the number of fielded strategic nuclear weapons and warheads.

Panel Outlines Navy's Push for Accelerated Acquisition

ARLINGTON, Va. – With pressure and support from the Navy's top civilian leaders, key officials in the research, development and acquisition community are pushing an accelerated acquisition process that one key official said was aimed at rapidly moving "those programs we cherish most" to the fleet.

The concept focuses on ensuring that those programs picked as priorities by Chief of Naval Operations Adm. John Richardson "meet the milestones" of the path from concept to deployment, Rear Adm. James Kilby, director Warfare Integration, said Jan. 16. Those include the MQ-25 Stingray unmanned carrier-based aerial refueling plane and numerous unmanned undersea systems, Kilby said in a panel discussion at the Surface Navy Association's annual symposium.

That accelerated procurement process is pushed aggressively by James Geurts, the deputy Navy secretary for Research, Development and Acquisition, and supported by Navy Secretary Richard Spencer, panel members said.

William Bray, Geurts' deputy, said his boss champions the four "Ds," with a primary one being "decentralization" – with "differentiate," "digitize" and "develop" as the others. Following that guidance, "we have pushed decisions down to" program executive officers (PEOs) and program managers (PMs), which "allows them to make real-time decisions," Bray said.

Geurts also has put out guidance on the new authorities granted by recent congressional reforms to the cumbersome acquisition process, "making sure we're moving the right things," Bray said. He also has promoted other transactions authorities (OTAs), which give the PEOs and PMs the tools to do things differently than following the traditional

acquisition rules.

“We’re not going to buy an aircraft carrier with OTAs,” but can acquire a lot of other systems that go into a carrier, Bray said.

Rear Adm. Douglas Small, PEO for Integrated Warfare Systems, which now includes unmanned systems, said in the process “from ideation to on ship, we’re setting a land speed record.”

Rear Adm. Ronald Boxall, director of Surface Warfare, said one of the systems that was moved to operational use on a ship was the experimental laser system initially deployed to the Persian Gulf on the USS Ponce.

Members of the audience, including former acquisition officials, questioned how the current procurement leaders were going to change the culture that tends to stay with the familiar, although slow, traditional process.

Bray noted that another of Geurts’ four Ds was developing a workforce that will keep the process going.

And Boxall said that of all his program managers, “none say ‘how can I slow this down?’ What we love about accelerated acquisition is the ability to move forward.”

Members of the panel sought to reassure skeptical members of the audience that the accelerated process did not look at just developing systems quickly but focused on how to get them integrated into ships and ensure they are useable by the warfighters.

Fleet Forces Commander: Careful Balance Needed Between Current and Future Readiness

ARLINGTON, Va. – The growing threat of great power competition and a shrinking industrial base means that being able to fight with the Navy the nation has now is as important as building the Navy the nation needs for the future, Adm. Christopher Grady said Jan. 17.

“That places greater emphasis on current readiness. … We must squeeze every ounce of readiness out of every dollar we get,” Grady, the commander of Fleet Forces Command, told the Surface Navy Association’s annual symposium.

Grady also warned that the Navy must rethink its traditional battle doctrine of concentrating forces against an enemy.

“We have to recognize that, given the reach and capabilities of our competitors, force concentration may be problematic,” he said. That means commanders must think of “massing effects rather than massing forces.”

That shift in tactics is indicated in Chief of Naval Operations (CNO) Adm. John Richardson’s new concept for maritime dominance that advocates distributed maritime operations (DMO), Grady said.

After decades of unfettered control of the sea, “we are once again in a long-term strategic competition with nations that want to change the international order in their favor,” he said. In addition to being in an era of great power competition, “we are in a maritime era,” and with the CNO’s naval strategy and the new National Defense Strategy, the Navy

has a maritime strategy “to address the security challenges of this era.”

Grady said the new strategic era ends the 18 years of focus on land warfare in which fleet commander served as force providers to the combatant commander. Now, fleet commanders once again “can command and control forces at the operational level of war,” and employ the concepts of DMO to mass combat effects at the fight time, he said.

But in preparing the Navy for the new era, Grady noted the need to balance efforts to build the Navy the nation needs with the requirement to be able to fight today if necessary.

The Navy the nation needs is bigger, more capable and agile, he said. “But just as important as building the Navy the nation needs, is fighting with the Navy the nation has. … We aim to both build and sustain a lethal force” and to maintain a balance “between future readiness and current readiness” to be able to fight today.

The need to sustain the current force is made more essential due to the shrinkage in the industrial base, particularly shipbuilding, since the end of the Cold War and during the time of budget constraints and threat of sequestration, Grady said. “We are no longer the world’s largest manufacturer and have significantly less shipbuilding capacity that our rivals,” he said, apparently referring more to China than to Russia.

The smaller industrial base is aggravated by the highly technical nature of war and combat systems, he added. “It simply takes more time and superior craftsmanship to build a fifth-generation fighter than it did to build a P-51 Mustang” for World War II.

That means the U.S. industrial base is unlikely to be able to provide the surge of combat systems as it did in the 1940s, he said. And that demands greater focus on sustaining the current

fleet, speeding up the acquisition of new technologies and training the force to fight and win with the Navy the nation has, Grady said.

NAVSEA Officials Tout Progress in Building the Future Fleet

ARLINGTON, Va. – Two years of higher defense budgets and the 2019 funding approved early for the first time in a decade enable Naval Sea Systems Command (NAVSEA) to make significant progress in building the future surface fleet, four of its top officers said Jan. 17.

The increased pace of surface ship construction also was helped by the new emphasis and authorities for accelerated acquisition from Congress and the Navy leadership, and by NAVSEA's drive for greater commonality and modularity in programs across the wide range of surface warfare platforms, the panel led by Vice Adm. Thomas Moore, NAVSEA commander, told a Surface Navy Association symposium audience.

Rear Adm. William Galinis, program executive officer (PEO) for ships, cited a long list of accomplishments, including the five-year contract for 10 DDG 51 Flight III destroyers, the contract for the first six of 12 John Lewis-class fleet oilers, delivery of the second DDG 1000 Zumwalt-class destroyer, advances on two major amphibious ship programs and continued work on defining the next large surface combatant.

"The big thing for us was getting funding in September," ahead of the Oct. 1 start of the 2019 fiscal year. "We were able to

get a number of ships under contract," Galinis said.

Rear Adm. John Neagley, PEO for unmanned and small combatants, touted delivery of five littoral combat ships (LCSs) last year and four planned to deliver this year, nearing design completion for the new frigate and developmental work on a family of unmanned systems.

Getting the budget on time allows program officials to take advantage of economy of scale, Neagley said. He also noted being challenged by James Geurts, assistant Navy secretary for research, sevelopment and acquisition, "to go faster."

And Rear Adm. Douglas Small, PEO for integrated weapons systems, noted the "big push for us to get modular, scalable systems for a lot of ships," ranging from the LCS, proposed frigate and unmanned craft to aircraft carriers.

The common combat systems for a range of vessels will not only save money but reduce crew training as Sailors move between ship types, and could speed up integration of systems in new ships, Small said.

"We're also pushing very hard on how we integrate new systems faster," he said.

Moore asked his PEOs what they were doing to speed up ship programs and reduce costs, and they noted the advantages of block buys, applying lessons from early ships to cut time and cost of follow-on contracts, and earlier and expanded contact with industry.

The panel also talked about efforts to reduce life-cycle costs by considering sustainment factors in ship design and construction and allowing modernization of electronic systems by new software rather than hardware.

Moore said the effort to reduce costs and construction time went beyond surface warships. "We talk about one NAVSEA," he

said, noting the constant coordination with PEOs for submarines and aircraft carriers and more coordination between the public and private shipyards.

Getting more ships for a limited budget also can be aided by the push for more unmanned systems, which range from small to large diameter and include both surface and undersea vessels.