

# SAS Panelists Express Full Support for Space Force; Warn of Personnel, Logistical Challenges of Standing Up New Military Branch



Sea services leaders at Sea-Air-Space – (from left) Navy Rear Adms. David Hahn and Christian Becker, Marine Brig. Gen. Lorna Mahlock and Coast Guard Capt. Greg Rothrock – showed support for the U.S. Space Force, but warned standing up a new military branch is a significant personnel and logistical challenge – and won't happen overnight. Lisa Nipp

NATIONAL HARBOR, Md. – Sea services leaders expressed unwavering support during a May 6 panel discussion for the nation's future ventures in space – no matter whether the effort is split among the nation's existing military branches or a new United States Space Force is created.

The panelists at Navy League's Sea-Air-Space 2019 reiterated the need to increase the nation's space initiatives as rival nations such as

China, Russia, India and Japan build their push toward the stars.



The panelists debate the U.S. Space Force. Lisa Nipp "Space is no longer an uncontested environment," said Rear Adm. Christian Becker, commander, Space and Naval Warfare Systems Command.

As other countries stake their spots in space, the U.S. needs to hold its "ground," like when the maritime forces were first formed, Becker

explained.

“Space is very much akin to the maritime,” Becker said. “We first went to sea to trade, and then we went to sea when we realized other people could stop our trade. ... Made sure we can maintain freedom at sea.”

Don't expect the U.S. Space Force to appear overnight, however. Services like the Navy, Marine Corps and Coast Guard are still evaluating the personnel needed to staff an agency dedicated to the Final Frontier.

*“Space is no longer an uncontested environment.”*

*Rear Adm. Christian Becker, commander, Space and Naval Warfare Systems Command*

“We are assessing as part of the [Navy Department] how we can meet the mission needs of the Space Force,” Becker said. “We're not there yet at our level of understanding, but that's what we have to pursue.”

Finding and retaining the talent necessary to develop a fully operational Space Force is a significant challenge, said Brig. Gen. Lorna Mahlock, the Marine Corps' chief information officer.

“It's exciting to think about space ... but we have to make sure we develop the skill [to maintain a Space Force] and do it right,” Mahlock said.

However, she emphasized that, no matter the obstacles, the Marine Corps “embraces building the Space Force” and will offer its full support.

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# Sailors, Marines Head to Australia for 6 Months of Intense Training, Exercises With Pacific-Area Allies, Partner Nations



U.S. Marines with Mike Battery, 3rd Battalion, 11th Marine Regiment, 1st Marine Division, fire an M777 Howitzer at known targets during training last August at Mount Bunday Training Area, Northern Territory, Australia, during MRF-D 2018. Credit: MARINE CORPS / Photo by Staff Sgt. Daniel Wetzel

A combined-arms task force of about 1,700 U.S. Marines and Sailors have deployed into Australia for six months of intensive training and an array of exercises that will involve contact with perhaps a dozen allies and friendly nations in strategically vital Southeast Asia and the southern Pacific.

The deployment, called Marine Rotation Force-Darwin (MRF-D) 2019, will provide the Marine Air Ground Task Force (MAGTF) a smorgasbord of training – some in jungle and mountain terrain – practicing amphibious and humanitarian-assistance, disaster-relief operations and combined-arms, live-fire drills in a training area the size of Connecticut, said Marine Col. Charles A. Western, the liaison officer to Australian Defense Forces for Marine Forces Pacific.

Asked the value of the Darwin rotations, Western emphasized “readiness.”

Noting that he had made three deployments to Okinawa with an

infantry battalion, he said, "When you go to Okinawa, you are at the top of your readiness spectrum when get there," having conducted all the extensive pre-deployment training, including live-fire drills.

But in Okinawa "some of the training is circumscribed by what you can fire, by how big the training areas are," Western said.

What Darwin and the Northern Territory of Australia provides "is the ability to maintain that level of training when deployed, if not increase it. ... When they deploy here, along with the Australians, they focused on their training and their readiness. So, it's really a great opportunity for them to come out here," he added.

"Speaking from a tactical level, this is me with my Marine infantry hat on, the biggest reason for us to come to Australia is this big, huge training area – the Bradshaw Field Training Area."

The MAGTF also will participate in numerous multilateral exercises along the northern and eastern coast of Australia and as far away as Thailand, building relations with close allies and partner nations, Western said.

"That's one of the pillars of MRF-D, the multilateral engagement. We are arm-in-arm with the Australians in everything we do. And there are 10 or 11 multilateral events that we participate in while we're here."

The MRF-D deployments have gradually increased in size since the first Marine Rotation Force-Darwin in 2012, taking advantage of the extensive open area and established Australian bases in the sparsely populated Northern Territory and building on a century of close relations with the Australian military.

"Last year, 2018, was designated the Year of Mateship,"

Western said, a play on the Australian habit of calling friends “mates.” Last year marked 100 years since U.S. troops fought alongside the Australian Army in World War I in Europe. “We’ve been shoulder-to-shoulder everywhere since.”

U.S. and Australian forces also fought together extensively in the southern Pacific during World War II and again in Korea, Vietnam and some of the 21st-century fights against violent extremists.

MRF-D 2019 involves a MAGTF that consists of an aviation combat element (ACE), Medium Tilt-Rotor Squadron 363 from Kaneohe Bay, Hawaii; a ground combat element (GCE), 1st Battalion, 1st Marines; a logistical combat element (LCE); and a command element from Camp Pendleton, California, Western said.

VMM-363, a MV-22B squadron with 10 tilt-rotor Ospreys, will be augmented by four AH-1Z Viper attack helicopters and three UH-1Y Venom utility choppers.

The force of 1,705 Marines and Navy support personnel, such as doctors, nurses, medical corpsmen and chaplains, may be augmented by additional Marines for Exercise Koolendong, the capstone event at the end of the rotation, he said.

U.S. forces began arriving in April and will depart in October.



Capt. Benjamin J. O'Donnell, an infantry officer with 2nd Battalion, 4th Marine Regiment, 1st Marine Division, views targets while providing indirect fire support from M777 artillery, 81 mm mortars and close air support during training last year at Mount Bunday Training Area, Northern Territory, Australia, during Marine Rotation Force Darwin 2018. Credit: MARINE CORPS / Photo by Staff Sgt. Daniel Wetzel

The GCE and LCE will be based initially at Robertson Barracks in Darwin and the ACE at Royal Australian Air Force Base

Darwin. During the rotation, the Marines will conduct training and exercises at the Bradshaw and Mount Bundy training areas in Northern Territory, a jungle training area on the east coast, and at multiple other locations along the east coast for Talisman Saber 19 and other bilateral and multilateral events, Western said.

Talisman Saber is a U.S. Pacific Command exercise, held every two years, that will involve U.S. Navy ships, the MRF-D Marines, Australian, Japanese and Canadian forces and "a bunch of other nations participating," Western explained.

"A big chunk of Talisman Saber is really about sea power, with the Marines and Australians and the Japanese Army amphibious forces." U.S. Marines will embark on U.S. or Australian amphibious ships and conduct combined amphibious operations with the Australian landing forces.

"All the [U.S.] services are involved. It's a joint and combined exercise with the Australians," Western said. "So, the U.S. Air Force is coming down.

"The MRF-D is really just a small part of that," he said, providing forces to the Okinawa-based III Marine Expeditionary Force, which will command the combined landing force.

MRF-D also will participate in exercise Southern Jackeroon, which will be conducted in the Australian training area, with Australian, Japanese and U.S. Army elements, Western said. They also will provide some subject matter expertise in engineering to the Australians, "a train-the-trainer kind of thing. And we are participating aboard the HMAS Canberra, one of their LHDs [amphibious assault ships] in an exercise in Thailand.

"We are providing some Marines to PacFleet for one of their CARAT exercises, which goes throughout the Pacific area," he added.

CARAT, or Cooperation Afloat Readiness and Training, is an annual series of bilateral exercises conducted by the Pacific Fleet with countries of the Association of Southeast Asian Nations (ASEAN). Bangladesh, Brunei, Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Sri Lanka and Thailand have participated in previous CARATs.

Other multilateral exercises the Marines will participate in include Exercise Carabaroo, with the Philippines and Australia; Southern Jackaroo, with Japan and Australia; and Indo-Pacific Endeavor, Western said. Carabaroo, which combines the names of the Philippine carabao and the Australian kangaroo, is an urban warfare training exercise conducted in Australia.

Marine Corps Commandant Gen. Robert B. Neller said in a March 18 memo to Navy Secretary Richard V. Spencer that the unbudgeted assignment of Marines to the Mexican border, the unfunded Pentagon-directed force increase for MRF-D, the need to repair more than \$1.7 billion in damage to two East Coast Marine bases and other unexpected activities are "imposing unacceptable risks to Marine Corps combat readiness and solvency."

The unexpected diversion of personnel and funds could force him to reduce support for Talisman Saber and cancel several planned international exercises, including two with Indonesia, Neller said in the March 18 memo.

Western said he is "tracking the possible impact of budget shortfalls. They will not affect the bulk of MRF-D that begins flowing in next month, just the possible Force Enhancement deployment of the Hawaii-based infantry battalion later in the summer."

Some of the MRF-D Marines will take advantage of their deployment to conduct training at the Australian jungle training center, experience that could be increasingly

important given the growing focus on Asia.

“Koolendong is really our capstone exercise, a combined force exercise with the Australians,” Western said. It comes at the end of the deployment, so they can demonstrate the skills built up during the six months in Australia, he said.

“We bring all elements of the MAGTF together to conduct a live-fire exercise” in the vast Australian training area. “It’s an opportunity to do a MAGTF-level live-fire event,” something that is difficult to achieve in other training ranges.

Although Koolendong is conducted primarily with the Australians, French troops also will be involved, Western said. “They send a platoon out every year” from their base in New Caledonia, he said.

The level of international engagements by MRF-D is increased because Australia makes a point of inviting the militaries from nations in the region to participate in or observe their exercises with the U.S. forces, Western said.

“It’s their country, and we are more than willing to work with the Australians in their efforts to invite multiple countries to come down and participate. Every year, they have an international observers program in which they bring senior international military officers from the region down to Darwin to see what the Marine Corps and the Australians are doing. It is a bit of outreach,” he said. “Regional engagement is one of our pillars for the MRF-D program.” ■

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# Richardson Prepares Sailors to Out-Learn and Be Ready to Out-Fight Adversaries



Admiral John M. Richardson, Chief of Naval Operations, in an interview with SEA POWER on Wednesday, March 27, 2019 at the Pentagon.

*Adm. John M. Richardson began serving as the 31st chief of naval operations on Sept. 18, 2015, and he's in his last year at the helm of the U.S. Navy. During the intervening years, Richardson has focused the Navy on the emerging "Great Power Competition" with Russia and China and has pushed for more agility and lethality in the fleet, higher velocity learning and rapid technological innovation.*

*At sea, Richardson served on two attack submarines and one ballistic-missile submarine before commanding the attack submarine USS Honolulu.*

*He also served as commodore of Submarine Development Squadron 12; commander, Submarine Group 8; commander, Submarine Allied Naval Forces South; deputy commander, U.S. 6th Fleet; chief of staff, U.S. Naval Forces Europe and U.S. Naval Forces Africa; commander, Naval Submarine Forces; and director of Naval Reactors. He also served as naval aide to the president.*

*The CNO discussed the Navy's posture with Senior Editor Richard. R. Burgess. Excerpts follow.*

**From the start of your tour as CNO, you spoke of the return of the "Great Power Competition." How has the Navy's posture shifted to counter that?**

**RICHARDSON:** We've shifted in a number of different ways. One is that the way we train and educate our people has changed.

[We've] adopted a competitive mindset. The very first thing that we do with people from all over the country when we bring them into the Navy is send them to boot camp. We've been fortunate enough to meet our recruiting goals for more than 12 years now even with a Navy that is growing about as fast as we can bring people in. Of late, we've made the assessment and the corresponding decision in the Navy that if we're going to truly be competitive, we've got to sort of start at the very beginning to instill the attributes that will be decisive in that competition including, if necessary, combat. Those attributes are things like toughness and initiative and accountability and integrity. And so, we've ramped up the difficulty level of boot camp. We've made it tougher or harder. The response of the recruits has been stunning. Our retention has gone up. We have more recruits finishing even with the new curriculum than we did before. We're teaching them a lot of resilience skills in terms of how to manage stress on their own and as a team. Those Sailors are reporting to their commands, ships, submarines and squadrons much more ready to contribute to the running of their commands. That is the feedback we're getting from their chiefs and LPOs [leading petty officers], which is about as honest a feedback as we could ever hope to get.

We've put a lot of emphasis in the acquisition of technologies, tools and capabilities that would be decisive in the Great Power Competition to make sure that we are moving forcefully into the future to evaluate and assimilate technologies like directed energy, hypersonics and unmanned things like autonomy, artificial intelligence and machine learning – all of those things that are going to be a decisive part of Great Power Competition now and in the future. Not only are we moving into these technologies because they're important, but we're trying to move into them and get them into the hands of our Sailors much faster. We've had some successes moving acquisition into the future faster.

Finally, I would say that all of that is great, but you've got to go out and you've got practice, get ready, take your capability to sea and run it through its paces. That is the thing that combines both the people and the technology. We've been investing heavily in readiness since I got here, particularly in the last three years.

**You were a submariner in the Cold War. The Russian and Chinese navies are increasing their capabilities and quantities? Comparing then to now, what do you see are differences and similarities?**

**RICHARDSON:** The similarities are that it's really a global competition just as the Cold War was. It's a competition that I believe is going to define sort of the world order going forward. That's almost where the similarities leave off. This is a much more complex and complicated competition now with not just the bipolar Cold War phenomena that we had – really an exception to history to have the world in two camps – but now, a much more multipolar competition with both China and Russia already being global powers. With the idea of China being an Asian power, there are different aspects of that as we pivot to Asia. With the economic dimensions – with different allies and partners than during the Cold War – we've got to be mindful of the complexity that we face in this multipolar approach. Folks who take the approach that this is going to be a redux of the Cold War are really oversimplifying the challenge that faces us. We need to set our minds for the complexity that this new version of Great Power Competition brings to us.

**You've interacted with your Chinese counterpart numerous times. Has your interaction been able to affect the level of tensions in the South China Sea and the Taiwan Strait?**

**RICHARDSON:** That's a difficult question to answer. I hope that, by virtue of having a relationship and communicating frequently, we gain a deeper understanding of each other's

perspectives, be less likely to be surprised by one another and through that understanding we can make sure that there is a consistency. We can hold ourselves accountable to our actions being consistent with our words. We can also do everything we can to work together in areas where we have common interests. In those areas where we clearly have differing perspectives, we can manage and come to resolution on those perspectives in a way that minimizes the tension and particularly minimizes the chance for a miscalculation or something like that that could escalate. This communication channel allows us, if something should happen, to call one another up and, hopefully, keep it in perspective and de-escalate without it growing out of hand. Instead, we can mitigate that type of spread.

**In a recent forum you talked about trying to move the ballistic-missile defense (BMD) mission of Aegis ships in the Sea of Japan, for example, ashore to free up the ships rather than keeping them in a box. Has that gotten any further or is that still just something in discussion?**

**RICHARDSON:** I think it is moving forward. It is linked to this idea of dynamic force employment, which is linked to the idea that naval forces are fundamentally maneuver forces where ships are made to move on the sea and aircraft, obviously, are made to move through the sky. It's a bad matching of capability to mission if we have a ship that is persistently assigned to a BMD mission of a land asset. Often, it's a little bit mischaracterized. I'm 100% behind the BMD mission, which is a super important mission and one that the Navy can contribute to both with the Aegis weapons system afloat or ashore. My real comment is that in the execution of this mission, if you have an emergent asset that you want to defend and a ship can get there and be effective in its defense, then by all means, the ship is a good answer to that emerging challenge. But years down the road, if it looks like this is going to be a persistent mission, then it seems to me that we

should do something like build a capability ashore, a more permanent capability for a permanent mission. And then, you liberate that multimission ship to go back to its fundamental missions of being able to maneuver around the world and flow to where the challenges are.

**Do you have any concerns about the unpredictability of Dynamic Force Employment having a negative effect on the morale of crews with their schedules constantly in flux?**

**RICHARDSON:** That's the Navy I joined in the early '80s when I was commissioned, a very dynamic, unpredictable time. You may recall that it wasn't uncommon for us to be hanging out at home and, if the ship was ready to get underway, you could get that late-night call that said, OK, it's time for us to move out. Report to the ship, grab your sleeping bag and get on down, we're getting underway. We'd get underway at night and head on out. In my case, my submarine would be missing from imagery the next day, missing from the pier where it was the day before. In order to compete effectively in this Great Power Competition, we just can't be super predictable, and so, this idea of dynamic assignments, agility, all of that is an important part. We've started to get into this a little bit with the Harry S. Truman strike group, and we're mindful that this is a little bit of a new thing for many of our families.

Overall, our Sailors and their families have responded really positively. Both our Sailors and their families joined the Navy because they wanted to go out and respond to those places where the nation needed them and still needs them. We're seeing crews lean into this mission with a lot of enthusiasm. I will tell you, though, we are learning some lessons, too, in terms of how we can better take care of our Sailors and their families as we get back into this type of dynamic maneuvering. Each one of these deployments gets a little bit better than the one before.



Admiral John M. Richardson, Chief of Naval Operations, in an interview with SEA POWER on Wednesday, March 27, 2019 at the Pentagon.

**Your No. 1 priority is strategic deterrence. How confident are you that the Columbia SSBN's tight schedule and hefty budget will be met?**

**RICHARDSON:** It's not just the Navy's No. 1 priority, it's the nation's top priority to make sure that we maintain an effective strategic deterrent. Right now, the thinking is that the [nuclear deterrent] triad remains the best way at going about that. Of the three legs of the triad, the submarine is both the most responsive and survivable leg, so it's important for the whole nation, in fact, for the free world, to make sure that this is the capability that is reconstituted and is maintained. We've been on strategic alert since 1960, and it looks like we're going to need to remain on strategic alert. It's very important that this program deliver on time with the capabilities that it needs to do its job. It's got a tremendous amount of support across the entire enterprise – in Congress and the Department of Defense – that I feel pretty confident about. It's an incredibly complex thing to do, as you can imagine. We are challenging ourselves in terms of the timeframes in which we're going to need to build it, and so, that is my No. 1 call to the program. Right now, it's on track, but I need to get more margin into the schedule. It's complicated enough that once we start testing in sea trials, we're inevitably going to find things that are going to need fixing – unexpected things will pop up and we need to build time into it to get that done.

*“The workforce and materiel base don't respond well to fits and starts, peaks and valleys. Our hope is that by laying in a steady build rate – not only for submarines but for the rest of our Navy ships – that we've got inherent stability. In that way, we get the industrial base to a real healthy, stable condition.”*

**The desired attack submarine force level currently is 66 boats. Do you think that's achievable in the budget climate, especially when it looks like the budget might level off for a while?**

**RICHARDSON:** Yes, I think it is achievable. To get to a force level of 66 submarines, if it's a 33-year life, let's say, of a submarine, then that's two submarines per year. That's a pace that we've demonstrated that we can maintain. It's an interesting question you ask because it bears on shipbuilding. Our 30-year shipbuilding plan is a great read, if you're a scholar of this part of the business, and it advocates for exactly what you say – a steady approach, given the resources that we have so that the industrial base that builds and supports these ships can have some reliability and stability. The workforce and materiel base don't respond well to fits and starts, peaks and valleys. Our hope is that by laying in a steady build rate – not only for submarines but for the rest of our Navy ships – that we've got inherent stability. In that way, we get the industrial base to a real healthy, stable condition.

**The new aircraft carrier, USS Gerald R. Ford, has had some difficulties. Are you confident that this class of ship is going to be affordable?**

**RICHARDSON:** Yes. We must step back and appreciate just what an amazing accomplishment the Gerald R. Ford-class aircraft carrier is. It's a brand-new class of super carrier, [with a] new propulsion plant, new reactor plant, lots of new technologies in terms of power generation, world-class electrical power generation – three times the electrical power of its predecessor – and doing that for fewer people through a lot more adoption of reliable automation. What are we using that extra power for? Things like electromagnetic catapults, arresting gear that can be tuned to the aircraft type, dual-band radar [and] very powerful sensors, new technologies like these weapons elevators. We made the deliberate decision when

we started this that we were going to put all these new technologies on the first ship of the class – so very, very ambitious.

By and large, we've got through all the technical difficulties for these technologies and are stepping through it. The electromagnetic catapults are working. The advanced arresting gear is working. The dual-band radar is on track. There are some other technologies – the weapons elevators – we're continuing to work through those. The ship is in PSA [post-shakedown availability] right now, the first PSA for the first ship of the class. It's not unexpected that you may learn some things that are going to cause you some delays. That is just the nature of doing innovation.

We're having that happen at a world-class level in the Gerald R. Ford, so, in the not-too-distant future, we're going to look back and say we did something that probably only the United States of America can do in terms of innovating something at this scale and complexity. It's going to break every record for every carrier that's ever sailed, and it's going to allow real innovation to occur at the air wing, the real punching power of the carrier. By virtue of all these technologies, we're going to be able to innovate an air wing that is going to be stunning in lots of variable types of aircraft, one of which is going to be the unmanned tanker, and so, we're going to, I think, really be happy.

Despite all of that aggressive approach to innovation, the first ship of the class, of any class, almost always sees some cost overrun. The overruns for the Ford have been below average for first ships of the class, and we just need to be mindful of perspective. All the analysis that we have shows that these carriers are going to be survivable even in the face of some of the emerging technologies that people talk about. I'm looking very forward to seeing the Gerald R. Ford get back to sea.

**With a new force structure assessment coming up at the end of the year, what conditions have changed since the last one was done that you think might have influence?**

**RICHARDSON:** What hasn't changed? This Great Power Competition is getting sportier every day. Both of our competitors – China and Russia – have increasingly capable armed forces, especially navies, so there is the force-on-force technological change, with technologies that are not just new at sea but new altogether. The geostrategic landscape is changing quickly as nations rise and nations shrink. China is certainly a nation with strategic expansion having a greater influence in the Asia-Pacific and around the world. For all those reasons – the geopolitical, geostrategic, technological landscapes and the human dimension of those landscapes – all of that has changed and it's changing faster and faster. Even though the last force structure assessment was done in 2016, you'd think you get a little bit of runtime on that assessment, but things have changed quickly enough that it's time to go back in and make sure that our assumptions are still valid, that we haven't missed an opportunity to take advantage of an emerging technology or an emerging geostrategic opportunity and just do that assessment again.

**Reading recently about the U.S. Asiatic Fleet in World War II and its submarine force, its performance was considered less-than-stellar. The Navy hasn't fought war at sea since World War II with the exception of a couple of confrontations like Operation Praying Mantis. What needs to be done to train our crews to be on the step for combat at sea?**

**RICHARDSON:** That's a great question, one that we think about a lot. You're exactly right. In that interwar period where we learned so much as a Navy, we had 20 years of practice to learn how to do naval aviation from aircraft carriers with visionaries like Adm. [William] Moffett and Adm. [Joseph Mason] Reeves. We did a lot of work in surface-to-surface types of engagements. And then we did a lot of the operational

strategic level planning in the interwar period. We did some work with the submarines but, strategically, we just got that wrong in the interwar period and, therefore, we built a submarine force that was largely focused on scouting and reporting and maybe closing to engage another warship.

When the war broke out, we found out a number of things. One, there is nothing like combat, and so, even though we had a tremendous amount of work in surface tactics, we found that we needed to learn on the fly. We needed to learn our way from engagements like Savo Island, where we really got defeated. We had to learn on the fly in the whole Solomon Islands campaign such that almost exactly a year later we completely flipped the coin in terms of capability so that at the battle of Cape St. George it was complete victory – 5-to-0 – in terms of destroyers. And it's minds like Arleigh Burke's and such that led us through that, but also minds like our junior officers who designed the combat information center to make best use of technologies like radar. My point being that, with respect to preparing for combat, one, you must have a very sober view of what combat may bring. That's why we're making boot camp tougher. We're delivering tougher Sailors. We've got to do our very best to approximate what that might be, and then we've got to make our training as absolutely realistic and prototypic as possible. The more realistic you can make your training, the better you're going to be making that transition into combat.

Also, we are very mindful that, as much as we prepare, as good as our estimates are, it's going to be different when combat erupts on the opening rounds. So, we've got to remain flexible and continue to learn in the early parts of conflict, because it's the nature of our business. It's not going to go perfectly the first time. It's not going to go exactly how we foresee it. We've got to build in flexibility. That's why the "Design for Maintaining Maritime Security," both version one and now version two, puts such a premium on the ability and

the agility of learning, because the team that learns faster than the other is the team that wins. We basically just outlearned our enemies in World War II. That learning combined with our industrial capacity were the keys to victory. That learning happened at every single level in the Navy, from five-star Adm. [Chester] Nimitz all the way down to the junior officers and junior Sailors who were innovating and creating on the fly.

We've got to make sure that our connectivity – the network that connects us all – is more resilient than the enemy's. It will degrade, but we'll have to be more effective in the degraded state than our enemy, and we'll heal faster than they do, too, and we'll get reconnected faster. I think probably we'll see less operating independently than we did before.

I have great confidence that, as the network degrades and we're more autonomous, more on our own than maybe we are right now, we're going to be at a great advantage because of the way we train our officers to think on their own. The idea of mission command is an important part of our preparation for conflict right now.

### **Anything else you would like to add?**

**RICHARDSON:** We're starting and ending a lot of our talks, speeches and conversations with, I would call them, first principles. Our first slide in many of our briefs right now has a picture of George Washington and this quote: "It follows then as certain as that night succeeds the day, that without a decisive naval force we can do nothing definitive, and with it, everything honorable and glorious." We spend some time talking about what America means and represents to the world. That idea of life, liberty and the pursuit of happiness – those principles that are instilled in all our founding documents like the Declaration of Independence, the Constitution – are reflected in some of the greatest speeches that our leaders have given. Our Navy has been there since the

very founding of the country defending those principles. We have a responsibility as a military power, but also as a diplomatic power. Very important diplomatic events have happened on Navy warships in sovereign U.S. territory – signing of treaties, hosting by our ambassadors, that contribution to national power. At the very start of the Navy, we were out around the world defending our sea lanes. America is a maritime nation. Two-thirds of our trade, two-thirds of our jobs, two-thirds of our economy are tied directly to the sea, so we continue to be out advocating for a system of rules and norms that allows free trade across those sea lanes to go to and from America's markets, that allows access to markets overseas for us to sell and purchase our goods. It's important that the American people and our Sailors understand that the Navy is a principal advocate for everything that America stands for, and an American Sailor in uniform on a liberty call ashore is often the first person, the first American, that somebody overseas may meet. It's a great responsibility, but our Sailors are magnificently prepared to be warfighters at sea, but also diplomats defending our prosperity. ■