NATIONAL PRESS CLUB LUNCHEON WITH ADMIRAL JOHN RICHARDSON

SUBJECT: ADMIRAL RICHARDSON DISCUSSED THE U.S. NAVY'S ROLE IN THE GLOBAL MARITIME ENVIRONMENT, INCLUDING THE ISSUES AND CHALLENGES PRESENTED BY RUSSIA, CHINA, NORTH KOREA, IRAN AND ISIS. ADDITIONALLY, HE UNVEILED HIS STRATEGIC GUIDANCE TO THE FLEET, INTENDED TO ENSURE THE UNITED STATES AND ITS PARTNERS SUSTAIN MARITIME SUPERIORITY.

MODERATOR: JOHN HUGHES, PRESIDENT OF THE NATIONAL PRESS CLUB

LOCATION: THE NPC BALLROOM, WASHINGTON, D.C.

TIME: 12:30 P.M. EDT

DATE: JANUARY 11, 2016

(C) COPYRIGHT 2008, NATIONAL PRESS CLUB, 529 14TH STREET, WASHINGTON, DC - 20045, USA. ALL RIGHTS RESERVED. ANY REPRODUCTION, REDISTRIBUTION OR RETRANSMISSION IS EXPRESSLY PROHIBITED.

UNAUTHORIZED REPRODUCTION, REDISTRIBUTION OR RETRANSMISSION CONSTITUTES A MISAPPROPRIATION UNDER APPLICABLE UNFAIR COMPETITION LAW, AND THE NATIONAL PRESS CLUB RESERVES THE RIGHT TO PURSUE ALL REMEDIES AVAILABLE TO IT IN RESPECT TO SUCH MISAPPROPRIATION.

FOR INFORMATION ON BECOMING A MEMBER OF THE NATIONAL PRESS CLUB, PLEASE CALL 202-662-7505.

JOHN HUGHES: (Sounds gavel.) Welcome to the National Press Club. My name is John Hughes. I am an editor for Bloomberg First Word, that is Bloomberg's News's breaking news desk here in Washington. And I am President of the National Press Club. I want to welcome you today. Our speaker is Admiral John Richardson. He's the Chief of Naval Operations for the United States Navy. But first I want to introduce our distinguished head table. This includes members of the National Press Club as well as distinguished guests of our speaker. I ask people to stand when I mention their name.

Vago Muradian, Editor of *Defense News*. He's also host of *Defense News with Vago Muradian* every Sunday at 11 on ABC 7. Max Letterer, publisher of *Stars and Stripes*. Michael Phelps, former Naval Officer and former publisher of *The Washington Examiner*. Tony Capacchio, Defense Reporter for Bloomberg News. The Honorable John Dalton, a member of the U.S. Naval Academy Class of 1964 and former Secretary of the United States Navy. The Honorable John Warner, a World War II sailor, Korean War Marine, a former Secretary of the Navy, and a former Senator from the Commonwealth of Virginia, and, in fact, is the second longest-serving Senator in the history of the Commonwealth of Virginia. Angela Greiling-Keane, White House Correspondent for Bloomberg News and a former President of the National Press Club.

Skipping over our speaker for a moment, Kevin Wensing, retired U.S. Navy Captain, a member of the USS Constitution Museums Board of Overseers, and the

National Press Club member who helped arranged today's event. Thank you so much, Kevin. Vice Admiral Peter H. Daley, U.S. Navy Retired, and CEO of the U.S. Naval Institute. Lolita Baldor, Pentagon and Counterterrorism Reporter for The Associated Press. Rachel Oswald, Foreign Policy Reporter for Congressional Quarterly. Jim Noone, Navy veteran and member of the National Press Club American Legion Post.

[applause]

I also want to welcome our CSPAN and Public Radio audiences and remind you you can also follow the action on Twitter. Use the hash tag NPCLive. That's NPCLive on Twitter.

Well, to put it simply and directly, the U.S. Navy faces an awful lot of challenges. There is the South China Sea, where the Chinese have been building island bases. There's a growing Russian Naval presence in the Mediterranean Sea. There are ISIS and Al Qaeda terrorists who are being bombed with the assistance of U.S. Navy aircraft carriers. And, closer to home, there are always humanitarian missions, counter-drug efforts. The Navy faces issues on cyber security, recruiting and retention of the forces, and of course budgetary challenges.

At the center of all this is Admiral John Richardson who, since September, has served in the capacity as the 31st Chief of Naval Operations. He is a 1982 graduate of the U.S. Naval Academy and a career Navy submarine officer. He served on several boats, and he commanded the USS Honolulu. He served as Commodore of Submarine Development Squadron Submarine Group 8 as Commander of the Submarine Allied Naval Forces South, as Commander of Naval Submarine Forces, and as Director of Naval Reactors.

Admiral Richardson will discuss the U.S. Navy's role in this global maritime environment. He will lay out his strategic guidance to the fleet and how the U.S. and its partners can maintain maritime superiority. Ladies and gentlemen, please give a warm National Press Club welcome to Admiral John Richardson.

[applause]

ADMIRAL JOHN RICHARDSON: Well thank you for that very kind introduction, Mr. Hughes. And I'd also like to just pay my respects to our distinguished members of the head table, Senator Warner, I know I'm in good company, that we've all been schooled by you in so many ways. And I appreciate everything you taught me. Senator Dalton, thank you so much. And John, thank you for that kind introduction again, and also for your tenure here as the President of the Press Club, which comes to an end on Friday after a year of distinguished service. So I think we all owe Mr. Hughes a round of applause here.

[applause]

And I'd like to thank everybody for just having me here. It's a real honor and a privilege to be in these halls for the very first time. You know, it has been—I took over as the Chief of Naval Operations in September, as has been mentioned. And so, you know, we're past 100 days now, so certainly the honeymoon is over. But I will tell you that I still remember very vividly the moment that Secretary of Defense Carter called me and said, "Hey John, I just want to tell you that the President is going to nominate you to be the Chief of Naval Operations."

And I will tell you that my mind flashed back in an instant to my very first assignment, reporting aboard to my very first submarine, the USS Parche in Mare Island, California, in 1983. And I just remembered, you know, there is Ensign Richardson reporting aboard his very first boat. And you know, who could have thought, at that time, that it would have led to this? Who could have looked forward, you know, 33 years, and thought that I would ever be getting this call to be nominated to be the Chief of Naval Operations?

And my Commanding Officer on that submarine, who was just an absolutely fantastic guy, he certainly was surprised, right. [laughter] I mean he—In fact, he has been calling me up surprised for every promotion I've had since Lieutenant Commander, right. [laughter] He's like, "Are you kidding me?" you know.

And so, you know, I found out today that this is Captain Pete Graff, who I am still in very close touch with, was a shipmate of Secretary Dalton on the—with the Blueback, right. And so, you know, it's just a commentary on what a small world we live in. But, you know, as I thought back, and it shaped my thinking going forward as the Chief of Naval Operations, when I entered the service a mere 33 years ago, we truly did, at that time, live in a different world, didn't we? I mean it was different in so many ways. Our enemy, the enemy at that time that we were focused on was the Soviet Union, right. It was a bipolar world in so many respects. We loved ET, the Extraterrestrial at that time. And we listened to Michael Jackson, you know, starting to really become the pop star that he was. And we listened to him on those cassette tapes on our Walkmans. And boy I'll tell you, you know, when you were underway, you know, that thing was a Cadillac to have. If you had a Walkman, you were styling, right, because you could listen to your tapes and, you know, not disturb everybody else, particularly on a submarine.

The commercial internet did not even exist at that time, right. And in fact, the inventor of Facebook, Mr. Zuckerberg, had not even been born. He was still a twinkle in his mother's eye, as they say, having been born in 1984. And so, you know, the world has changed in so many ways.

One way that I like to talk about how things have changed, you know, maybe from a technological standpoint, and is timely, because we're sort of getting into playoff season and the Super Bowl, is you know, as a Navy guy, as a submariner, how we enjoyed the Super Bowl. And so a lot of times we talk about, "Hey, how many Christmases are you away, and holidays, and anniversaries, birthdays," you know, that's all true. But, you know, everybody knows how many Super Bowls they were underway for, right. [laughter]

And, you know, my first Super Bowl, in 1983, the entire game would go on—You had no awareness of it at all. And at some point later on down, after the game had finished, you would get a one-line message in the next sort of news broadcast, and it would just give you the score. And that score was, you know, Washington Redskins 27, Miami Dolphins 17. And so it truly was a different era, wasn't it? [laughter] And so that's kind of my first Super Bowl underway in 1983.

Fast-forward to another pivotal time in my career, was the early '90s, late '80s, early '90s. At that point, Soviet Union had collapsed. The wall had come down. And about that time, I was XO on a submarine in 1994. And what we would do is we still couldn't get the live feed for the game. We just didn't. But we had Sega Genesis, right. And we had Madden NFL on Sega Genesis, and we would just get the two teams and put it in auto mode. And we would just watch the two teams on a big screen, you know, as much as we could. And I'll tell you, it was like it was real, right. I mean there was no hints that there was any pretend. And people were cheering for their teams. And people would make good plays. And it had nothing to do with the real game. But that was pretty real for us. And you would get all the whole smack talk in, and scuffles and everything else that would go on. It was great. So we watched the Cowboys and the Bills duke it out in complete simulated cyberspace. And then, you know, later on down, we would get the score.

By the time I had command, and to this day, if you're in the right place where you can put an antenna above the water, you can now watch the Super Bowl play out in real time. I mean it is just like you're there in your living room. And so, you know, just sort of one kind of vignette, in terms of how things have changed over time, you know. And that world that we grew up in has changed so dramatically, and not just from technology. I would say—I like sports analogies, and it's very timely. You know, we've got the game tonight. Not only have the teams changed on the field, but I would say, just like in the NFL, you know, the character of the entire game has changed.

And that's the thing that captures my attention as I begin my tenure as the Chief of Naval Operations. And, you know, in particular, the pace of things has become so accelerated from even the time in the early '80s, that if we do not respond to those changes, if we do not recognize and adapt to the changing character of the game, we are a Navy that is at risk of falling behind, you know, shooting below our potential, or worse, falling behind our competitors.

Now I'd like to just sort of set the stage if I could, a little bit, knowing that I'm fully mindful of the crowd that I am addressing. You know, National Security professionals speak very plainly and often about the teams and the competition. And we will know them. And I will say a few words about them, Russia, China, they've already been mentioned, North Korea, Iran, ISIS. But there's much more to the story, as I said. The character of the game has changed.

And I'm focused on three forces that, for the Navy, are sort of defining our way forward. Three forces that are causing our world to be more used, more trafficked, more stressed, more important, and perhaps most interestingly, more competed than ever. And I'll lay out these three forces. One is the maritime system itself, which is becoming increasingly important and contested. The second one is this information system, a global information system, also just exponentially more used and contested. And then the third force is the introduction of technology, the pace at which it is being introduced and adopted.

And so, you know, when I was an ensign back in 1982, when I graduated, and through my first tour, certainly the maritime system, the physical system of oceans and seas looks much like—looked then like it does today, right. The oceans are still in the same place. They are still the same geographic choke points which define our sea lines of communication. There were the same resources that were available on the seabed. And, you know, there was plenty of shipping that transited on those sea-lanes through those choke points.

And so, and today, the physical part of that is about the same. Nothing has dramatically changed, except that the use of this system has changed in spectacular ways, increasingly used. In 1992, sort of the middle point, the Cold War had just ended as I said. Soviet Union had dissolved. Since 1992, maritime traffic has increased by a factor of four, you know, leading up to today, okay. This far outpaces, by the way, the change in global GDP, which is just shy of doubling. It's increased by about 80 percent.

And so it gives you a sense of how much this maritime system is being used, how accessible it is. And it's becoming more accessible, right, for a number of reasons. We are seeing new trade routes open as the Arctic—climate change affects the Arctic. This past September, for instance, the extent of the sea ice in the Arctic was almost 30 percent less than the average over most of my career, over those 33 years, okay. And it was the fourth lowest it has ever been since we started keeping those records.

Today, the maritime route north of Europe, northern sea route north of Russia, is open to water about two weeks a year. And by 2025, climatologists predict that it's going to be open three times as much, six weeks a year. So you know that that is going to be exploited. This is going to be something to which we must pay attention. That route shaves the transit from Northern Europe to Asia in half, right. So this is going to be something of great interest to commercial partners throughout the world.

And it's not just accessibility due to climate change, right. Technology is also making previously unreachable parts of the ocean floor now accessible. So for undersea resources, like minerals, oil and gas, these deepwater oil production, for instance, oil and gas production is expected to grow by 50 percent in the next 15 years, as technology just makes it more and more easy to access those resources.

As those resources present an alternative to land-based resources, and the technology matures, the idea of offshore exploration becomes more and more feasible. And it's not just the natural resources, right. As we go into that part of the world, as we explore the ocean floor, then there is a resulted infrastructure on the seabed that arises. And so you can think of the piping and the structures that are going to be necessary to get at those oil and gas, mineral resources.

And then, there is a growing network of undersea cables that connect us from continent to continent, part of this oceanic internet. This is the information system. And it's a nice way to sort of transition or segue into talking about the next system which is this global information system.

Before I leave that, there is, as I said, there is infrastructure to the system. When we log onto your computer, it's all there at your fingertips. But the truth of the matter is, that there is an infrastructure to this. There are choke points. There are nodes, even in this global information system, which must be acknowledged, because they can be exploited. And on those undersea cables rides 99 percent of the transoceanic internet traffic. And so something that we've got to pay very close attention to.

So this information system, now, is comprised, you know, not of the technology and the hardware so much, as the data and the information that rides on all those servers, undersea cables, satellites, and the wireless networks that increasingly envelop and connect the globe. And it is pervasive, and it is changing fast, right. According to IBM, 2.5 quintillion bytes of data are created every day. And this exponential curve is such that 90 percent of the data available in the world today was created in the last two years, right. So you get a sense of the acceleration. It almost sort of, you can feel yourself being thrown back in your seat when you hear data like that.

And the cost of entry is getting lower and lower and lower. Back in the early '90s, again, when I was a Lieutenant Commander, just finishing my tour as Executive Officer, in that year in 1995, a gigabyte of memory cost \$625 dollars, all right. And, if you wanted to buy a hard drive, that was about as big as you could buy at that time, okay. Now, in 2014, let's say, a gigabyte of data costs five cents. And you can get a hard drive that's six terabytes. You can just buy them, you know, at Amazon, off the internet.

The cell phones, as you all know, carry a tremendous amount, more computing power than the entire system that landed on the moon in 1969. And the links, you know, between the different nodes on this system have multiplied as well. The first server came online in 1993. You can see what a rich time that was, when the wall came down, right. So much of this had its origins at that time. And in just the first quarter of last year, 2.7 million servers were shipped worldwide. Satellites now envelop the globe. There are more than 1,300 satellites in orbit today monitoring everything from weather, communications, sensors, space exploration, really kind of covering the globe.

But if you look at a picture of the satellites as they orbit the earth, again there, it is not homogeneous. There is structure. There is form there. And again, just like the cables,

just like the physical system of the season oceans, that structure provides opportunities and vulnerabilities.

The third force that I think is very important for us to consider is technology itself, the introduction and the rate at which technology is being introduced, and the rate, even more importantly, at which it is being adopted. And this goes far beyond Moore's Law, you know, in information technologies. Things are changing stunningly fast in that domain for sure. But as you all know, I'm also talking about rapid advances in material science, in robotics, in genetic science, in artificial intelligence, it is coming at us faster and faster. And they are being adopted by society just as fast.

So when the original telephone was introduced, it was Alexander Graham Bell's telephone, it took 46 years before 25 percent of Americans had a telephone, okay. For the smart phone, that was seven years. And for Facebook, within three years, 25 percent of America was on Facebook. And so not only are these tools coming at us faster and faster, but it seems—you know, the usability, and the rate at which they're being adopted is also accelerating as well. So you get more people in the game using those tools faster and faster.

So those are the three forces that have captured my attention. Certainly, the physical maritime system, no surprise there, I think, to anyone who's in the Navy, right, a Navy guy talking about the seas and oceans should not be a surprise. This information system, certainly not exclusive to the Navy, changes everything that we do. You know, I'm preaching to the converted here in the National Press Club. But it does change things for us as well.

And then, this increasing rate of technological creation and adoption. These forces, I think, are fundamentally important to being effective as a Navy and, as I said, I think change the character of the competition. Right. But, as I mentioned, the teams have changed as well. Back in 1982/83, we were at the height of the Cold War. The chips were down. And it was that bipolar world, right. How easy—I mean how easy is that, right, to appreciate?

Today, really, it's much more multi-polar, as you know. And I think of our challenges, our competitors, really in terms of three groups. In one group you have Russia and China. In another group you have competitors, threats, just like Iran and North Korea. And then there is this pervasive threat of international terrorism.

For the first time in what I would say is 25 years, the United States is back to an era of great power competition. When I was deployed in 1983 in support of the Soviet Union, it was a different world. But when the Soviet Union dissolved, Cold War ended, we really entered a period where we were not very—you know, we were not challenged at sea, okay, not in a very meaningful way. That era is over. Today, both Russia and China have advanced their military capabilities to be able to act as global powers again. Their goals are backed by a growing arsenal of high end war-fighting capability, many of which are exploiting those three forces that I mentioned and are focused specifically on

our vulnerabilities. And so this is a competition where every competitor, every team is learning and adapting.

And there are increasingly designed, from the ground up, to exploit the advantages, the opportunities, of those three systems, of the maritime system, the information system, and for incorporating new technology. They continue to develop and field information-enabled weapons, both kinetic and non-kinetic, that result in increasing range, increasing precision, increasing effect, and potentially increasing destructive capacity.

Both Russia and China, it's not all at the high end, right. As we have seen, they're engaged in competition and coercion just below traditional thresholds of high end conflict and exploiting weaknesses in the norms of space, cyber, and the electromagnetic spectrum. And part of our challenge, going forward, is to think hard and to come up with some options to address that type of competition. I've said it before, the Russian Navy is operating at a frequency and pace I've not seen for more than two decades. The Chinese Navy, the People's Liberation Army Navy is extending their reach around the world. This is great power competition.

But importantly, Russia and China are not the only teams seeking to gain advantages in this emerging environment. Others are also pursuing advanced technology, including military technologies, technology that was once really the exclusive purview of great powers. And this trend will only continue. The cost of entry, the proliferation is going down, right. Proliferation going up, cost of entry going down.

Coupled with a continuing dedication to furthering its nuclear weapons and missile program, North Korea's provocative actions continue to destabilize North Asia and beyond. And while the recent international agreement with Iran is certainly intended to curb its nuclear ambition, Tehran's advanced missiles, proxy forces and other conventional capabilities continue to pose threats to which the Navy must remain prepared to respond.

And then finally, there is the international terrorist groups. And they have proven to be adaptive and resilient and pose a long-term threat to stability and security around the world. So the competition has sped up. It is moving faster. I will tell you, the thing I'm trying to communicate to my team is that we must respond. We must speed up. The margins of victory in this environment are razor-thin, but they are absolutely decisive. And so we have to turn to our task and fight for advantages with a sense of urgency, because this is truly a game of inches.

All of these actors that I described seek to exploit all three forces that I mentioned, speed, precision and reach, that the maritime and information systems now enable, bolstered by new technologies, to counter any U.S. advantages, threaten the rules and norms that have really been the basis of prosperity for everybody who would want to engage for the last 70 years.

And these forces don't—they're not independent variables, right. They interact and combine to create a maritime environment, as I said, that is increasingly used, increasingly stressed, increasingly important to us as a nation, and as I said, increasingly contested. And then, as Mr. Hughes mentioned, there is a fourth force, if you will, out there, is that for the foreseeable future, our resource environment will be challenging, right. We're not going to be able to buy our way out of this challenge. And you know, if you're a student of history, you know that the reality is, we never have been able to, right. We have always been working with finite resources.

So what is the role of the Navy in this changing world? Well I think, as always, our mission remains by and large the same. It's to keep the homeland safe, to protect American interests around the world, to protect our prosperity, that trade on which our prosperity is founded, in which so much, 90 percent of goods still travel over the sea. It's to guarantee and ensure our strategic influence around the world through our presence, through our high end competition, and, if necessary, through conflict.

Well we are going to have to answer these strategic challenges and posture ourselves to effectively compete. So if you think about those four forces that I mentioned, we have laid out—I have laid out a four-vector response, okay. In response to the growing importance of the maritime domain, we are going to challenge ourselves and focus back on high end operations in blue water. And we will focus on addressing those challenges just below the threshold of conflict, that gray war, or it has been referred to in many ways.

In response to the growing importance of the information system, we will double down on becoming an informationalized force, mainstreaming information warfare into our Navy. In response to the growing rate and adoption of technology, we will adopt, as well, faster, looking for ways to speed up our acquisition approaches, and develop and field technology more quickly. And then, in response to the fact that resources are going to be what they are, finite, we are challenging ourselves to look at combining existing things in new and creative ways, to develop capability that was hereto unforeseen, such that the system delivers something that is more than just the sum of the parts.

Now one aspect of this that's a main theme through my guidance, is that when things happen at this speed, you've got to fully exploit your advantages to fully capture the fleeting opportunities that will be presented. We've got to operate in a roughly decentralized manner, right. And to do that, we've all got to understand what the Commander's intent is. And so we spend a fair amount of time putting this design for maritime, maintaining maritime superiority, this document here, together.

And by virtue of that collaboration, that inclusive approach, in the end we build the familiarity and, more important, the trust and the confidence that's based on a clear understanding of that guidance, amongst peers and up and down the chain of command. We understand, through detailed engagements, through detailed conversations, how much risk can be tolerated. And in fact, you know, the discussions of the design, the most fruitful part of that has been bringing together Navy leadership, and putting this together as a team.

And it's not all about understanding the design too, right. I mean one of the things that is fundamental to us having trust and confidence in one another is that we are a profession that is bound together by core values, honor, courage and commitment. And so there is a fair amount of discussion in this design to enhance our professional identity. I list four core attributes that, if we abide by these attributes, integrity, accountability, initiative and toughness, then our behaviors should align with our values. And we are a force of integrity across the board.

And then, you know, with those four core attributes guiding our decisions, guiding our behaviors, we have laid out our plan along four lines of effort. First, as I said, we're going to strengthen our Naval power at and from the sea. Key word there is "at the sea," right. We've been "from the sea" for some time. Now we've got to sharpen our skills for operations and conflict at sea. We must modernize, first and foremost, the undersea leg of our strategic deterrent. If I go back to the sports analogy, if we don't do that, we are not even in the league, all right. We are not a great power. And so we must get that right.

But we also need to urgently respond to coercion that falls short of traditional conflict, and we need to get back in the fight in blue water. And we need to find ways to fully exploit the capabilities of the information system. And we will. And we'll do this learning as we go, through a program of war games, exercises, and fleet experiments.

Second line of effort is focused on our people, right. Everything we do comes by, with and through our people. This is the most important thing that we must focus on. So hiring, training and retaining a creative professional team, one team of sailors, Navy, civilians, and their families, is going to be absolutely key to our success. You know, if you think about it, that technology is the brain child of very smart and clever people. And it is built in exquisite manufacturing plants that are also designed and run by people. And then we turn those tools over to our fleet, and they are operated to their fullest potential by people.

And so we're working to make Navy careers more attractive to attract—to the most talented people that we can find. And I guess got to pause here and tell you that it is a stunning privilege to be able to go out and see our Navy. I just, you know, one of the first things I did was get into an—take a trip around the world. And we visited the Navy in the Seventh Fleet and Fifth Fleet and the Central Command. Seventh Fleet is in Asia, as you know. And then in the Sixth Fleet in the Mediterranean.

And everywhere I stopped, the talent, the focus, the enthusiasm of our Navy team blows me away. And these are people—And Admiral Carter here inducts about a thousand of those young people into the Naval Academy every year. You know, they're so—They could write their check and go anywhere they want. And yet, even after decade or more than a decade of conflict, this team raises their right hand and takes an oath to support and defend our Constitution. And they know what that means, right. And so I have tremendous respect for them. And we need to make our Navy as adaptable and attractive to that team as possible.

Third, we're going to expand and strengthen our network of partners. You know, we have never fought alone as a Navy. And we're, going forward, I don't see that being the case either. The United States Navy, as focused as I am on that, realize it is just a node in many networks. And so we are going to become—you know, enhance our participation as a member of the Joint Force, as a member of the government, the interagency process. And if you think about expanding that out to industry and academia, and then certainly overseas to our allies and partners. All of those people play a role in our success. And we need to be focused on being better partners to all of those different teams.

And finally, underpinning all these efforts, we're going to tune our processes to learn faster. We're going to focus on that, this learning process. We're going to become smarter and accelerate learning as individuals, and there's plenty of, you know, research and technology that's come into the system, that is focused on learning faster as the goal of that effort.

And also, you know, the system and the technology, the simulators, those sorts of things are becoming high enough fidelity that we can even bring teams and expand that out so that we are able to simulate so much more. I'm kind of a science fiction geek a little bit. And for those of you who share that vulnerability, if you've read *Ender's Game* is sort of where I'm going, right, even if you saw the movie, right, you can't tell the difference between reality and simulation. We're getting there, in many, many ways. And I think that there's an awful lot of gains there.

And we're going to be mindful that we do need to learn, which means that we've got to admit up front that we don't have it all right, right, that there is actually something to learn. And so, as we move forward, we're going to ensure that we have self-assessment baked in. Are we having the impact on the environment that we set out to have? Tremendously complex environment. We're not going to get it all right. But we can't sit and study it forever, right. This is not an academic institution. We've got to act and influence that environment, but we're going to be mindful that it may not turn out the way we thought. And we'll assess and adjust as we go.

And in the end, my hope is that we'll have a Naval force that develops leaders and teams that learn and adapt faster than any adversary, and that achieves the maximum potential that the system will allow. They maintain—achieve and maintain high performance standards to make them ready for decisive operations and combat. It's a strong commitment. It will require a lot of hard work on the part of many people. But our Navy is on the right track. I'm looking forward to the privilege of leading it for the next four years. I thank you all for coming today and hearing me. And I look forward to answering your questions. Thanks very much.

[applause]

JOHN HUGHES: Thank you, Admiral. Several questions about the South China Sea. Do you believe the Navy should be doing more routine passages by the Chinese built islands? If not now, when? And what steps are you taking to ensure that those patrols stay peaceful?

ADMIRAL JOHN RICHARDSON: Well certainly, this is an important part of what we do as a Navy. And you know, while the South China Sea has everybody's attention right now, it should be understood, in context, that these types of operations, freedom of navigation operations, have been the business of the Navy for a long time, and have occurred fairly routinely throughout the world.

And so there is an internationally recognized system of rules and norms. And we abide and operate in accordance with those rules and norms. And if there are challenges to those rules and norms, then we will do these freedom of navigation operations to make sure that we respond to that challenge and behave accordingly, right.

And so, you know, with respect to the South China Sea, it is no different than anywhere else. And so we need to establish a presence down there that enforces and reinforces the importance of those international norms that, you know, kind of challenges any sort of claims to those norms. And so, as you've heard from the President and the Secretary of Defense, we'll continue to fly and operate wherever those international rules permit as we continue to advocate for that rule system, which again has been the basis for prosperity, particularly for those nations around the South China Sea, in that part of the world.

And so I look forward to working with our partners in the government to be as forward-leaning in that area as we can. And so look, again, we want to make sure that what is understood as "normal" in that part of the world includes abiding and advocating for those international rules and norms.

JOHN HUGHES: Has China's introduction of the Dong Feng 21 Hypersonic Missile been a setback for the U.S. and its aircraft carriers? And has it, in fact, rendered our aircraft carriers obsolete?

ADMIRAL JOHN RICHARDSON: No. [laughter] [applause] It's tempting to just leave it at that, and that is the answer. But you know, a sophisticated analysis and understanding of that would—you know, I'm 100 percent confident because I've seen it, will give everybody confidence that the aircraft carrier, the surface fleet is as relevant and important today as it ever has been. And so is it causing us to think about, you know, employment options, the force offerings, fleet design? You know, we are going to have to adapt to that threat. But it really is not a matter of whether we employ surface forces and carriers, but how we will employ surface forces and carriers. And so that's just a little bit more than just my simple one-word answer. But there's a great future there.

JOHN HUGHES: How about North Korea? Are you planning any additional steps to monitor the situation there? Any thought of sending an aircraft carrier into that region?

ADMIRAL JOHN RICHARDSON: Well, you know, certainly there is always that question about what sort of operational response you're going to take. And, as you all have heard, I am not going to talk about specific operations, specific responses. But as I said in my remarks, that type of provocative action just continues to destabilize. And so we'll work with our allies and partners, the Republic of Korea and Japan, you know, sort of very important partners in that region, to continue to monitor and respond appropriately to that persistent unpredictable situation.

JOHN HUGHES: What's the greatest challenge to the effectiveness of the air campaign against ISIS?

ADMIRAL JOHN RICHARDSON: You know, it's really, as always, is just how do you connect the information? I mean the kinetic part is actually not the very challenging part. It's how do you get the situational awareness to know where the meaningful targets are, so that we can do this as precisely as possible, having the greatest effect on eliminating this enemy, destroying this enemy, and then leaving the rest as intact as possible. And so it's always a matter of the information that leads us to those types of decisions. Thank you.

JOHN HUGHES: Questions about Russia. Russia has a growing Naval presence in the Mediterranean and through over flights. How can you and the Navy help be prepared in this area? And another person asked, will there be additional Navy deployments to Europe, Black Sea, Mediterranean? On what timetable?

ADMIRAL JOHN RICHARDSON: Another great one. [laughter] You know, this is sort of, as the Russians themselves have said, they're operating at a tempo that has not been seen since the mid '90s. They're operating in different places in the Eastern Mediterranean. During that trip that I took, the last stop was in Italy. And there was a regional sea power symposium there of the Eastern Mediterranean and Black Seas, the heads of Navy. And they were very focused on that rising challenge, the Russian maritime challenge.

They just put out—The Russians just put out a maritime strategy which is very forward-leaning. And so of course, we must, I think, respond to that threat, to do so would just be negligent. And so the details of that, of course, remain to be seen. And you'll see those unfold. And then there is sort of this persistent activity undersea which has been a signal that has not gone away as much as many would think. It's been kind of a steady business for the Russians in the undersea domain. And we're mindful of that as well.

JOHN HUGHES: There has been tension between the Navy and overall DoD over ship purchasing. And this other questioner notes that Secretary Carter has directed

cuts to the literal ship combat program. Does Secretary Carter's order to buy fewer ships in favor of jets and munitions hold water?

ADMIRAL JOHN RICHARDSON: Well, it happened, right. I mean it was a matter of time, I think, before that question—First of all, the specifics of that are still to be determined, right. So that budget has not been locked down yet. And so it's premature to comment on the exact shape of that going forward. And so—But what it gives rise to is a—You know, there's been a lot of questions about, okay, is it going to be capacity? Or is it going to be capability, right? What are you folks focused on? Or is it going to be presence, or is it going to be posture, you know?

And particularly for Naval forces, I think a more sophisticated appreciation would say that, you know, I'm responsible for delivering the nation. And I think the nation rightly holds me accountable that achieves a balance of all of the above. And so these are not either/or decisions, these are sort of both/and decisions. We will always strive to balance, you know, within our available resources, to deliver the Navy that the nation expects, to execute our mission to protect America, protect our influence around the world, protect our sea lanes and our prosperity. And so that's the real art of it, is to sort of, I think, try not to get drawn down into these either/or decisions. There's real traps associated with that, and to try and achieve the best balance. Thanks.

JOHN HUGHES: This questioner wonders how the Navy is doing in recruiting and retention, especially in high technology and high demand assignments, such as SEALs, SEABEEs and Cyber Warriors. And what about women? This questioner points to comments by General John Kelly and raises the question of whether the Navy will be able to recruit enough women for some combat jobs.

ADMIRAL JOHN RICHARDSON: Well I think, with respect to bringing the talent into the United States Navy, the goal, in particular lately, has always been that we want the very best talent that we can get our hands on. And you know, for those of you—I met a number of people in industry today, that you know how competitive that environment is, right. I mean it is just intensely competitive, particularly for those high end talented people, men and women. And you know, to artificially sort of restrict ourselves in that area through, you know, we're going to exclude women, or some part of that population, is to deny us access to that talent, and not to be the greatest Navy that we can possibly be, okay. And so that's sort of my overall approach and my overall thoughts in that regard.

As I said, I am very optimistic, given the signs that I have seen, that we will continue to attract and train some of the very best talent that the nation has, men and women. And we've been making great progress in that regard. After we're done here, talk to Admiral Carter about the journey he's been on, to bring women into the Naval Academy. It is a good news story.

Then it's a matter of, once they're in—you know, do our behaviors—They're attracted to our team, I think, by virtue of our values. They're attracted to our team

because they want to be part of something bigger than themselves. And so once in, we've got ensure that we have the integrity that—such that our behaviors align to our values. If there's disconnect there, if there's a mismatch, that's going to be detected instantly. And the smartest will leave first, right, because they don't want to work in an organization where there's a say/do mismatch or there's a climate of cynicism. And so we've got to work very hard.

That's why those core attributes, I spent a fair amount of time talking about those in the design, because it's absolutely critical to keeping that talent onboard. That's what attracted them, I'm convinced. And so we've got to follow through with that.

JOHN HUGHES: One questioner wants more details on your plan to implement faster learning. How will you do that? And this questioner says, "I don't quite understand what problem you are trying to solve. Can you lay out some specific examples of times the Navy hasn't learned fast enough and why you think the Navy isn't learning fast enough now?"

ADMIRAL JOHN RICHARDSON: Okay. It's been only a few months, and we're just getting started. But in terms of being agile—let's just talk about that—With respect to how we're going to get after learning, I think I mentioned that in my remarks. There's tremendous amount of science that's been done recently about how the brain works, how do people learn? Not everybody learns the same, you know. And we have the technology, now, to really tune a learning environment to the most receptive channels, if you will, of each of us at an individual level.

And so I look forward to exploring that science, bringing it into the Navy. We have, in many ways, an industrial learning training process, that hasn't changed fundamentally since well before I—you know, we sort of pegged this in 1982 when I entered the Navy. This system goes back much further. And so we're actually piloting a program, right now, that is looking to explore how we bring shipyard workers in and make them effective workers in the shipyard. So you've got this cadre of people. And actually, as some of you know, we've been hiring like crazy to increase the capacity at our shipyards.

And then, you know, so you're bringing people in the door at a great rate and a great commitment by the nation. And you run into a training program that really hasn't adapted for decades. And so there is this, you know, how long does it take to bring that new person in through the door, get them processed, and then make them an effective worker down on the shop floor, in the dry-dock, onboard, whatever their job may be?

And so we've got a program, now, using some people who are very attuned to high velocity learning, to go down and check out those processes, to make sure that we are getting people into the productive workforce as fast as possible. So that's just sort of one example. I'll tell you another kind of mundane example, but it hints at the potential. When I arrived in my job here, first of all, I got to confess it took me about three days to actually get to the backside of my desk, right. I just was like, "That's where the CNO sits. And this is going to take me a little while just to get used to the fact," you know, the respect for the office that I had.

But what I would get every morning was my daily read, my daily intelligence brief, my daily operations brief, that sort of thing, a number of different products. And they were all delivered in a binder that was about probably two to two and a half inches thick, and many, many, many pages. And so I said, "You know, how about if we throw all this on a tablet, right? Just give me an iPad or a tablet computer in the morning, and I'll page through all of that."

And, you know, the initial response was, "Admiral, you're the new guy here. Let me just explain to you how this works, and what's possible and what's just insane, right." And so we went through that phase. And I currently have a tablet. [laughter] And you know, it has all of that sort of functionality and capability that a tablet has. And so now I don't have to—If I want to explore more deeply a particular development during the day, I want to look at a particular ship class, or a person, or whatever more deeply, it's all right there. I'm just sort of—you know how it works, right? You just touch, touch, touch, touch, and there I'm reading somebody's bio, or I'm reading you know, the specifications for that particular ship. And so it's all there.

The classification, we've come through those issues. And so we've got it all down, right. And I wasn't the only one getting that binder, right. Most of my direct reports were getting that binder as well. And so there was this library of 25 binders that would go around on this big cart every morning. And then they'd be collected dutifully at the end of the day, and go back into the machine, right.

So by virtue of that small effort—and this is just a tiny effort—first of all, the most important thing to me was to respect the intellect and time and talent of the person who had to put that binder together, right. And so you can only imagine the agony each night for throwing that thing together, the printing, the punching the holes, the, "Oh, it's jammed," you know, the whole deal. And then, so that's now you plug in, you download it, and it's done, okay. Just vast amounts of time returned to that workforce. And it's already paid for itself, by the way. We save \$5,000 dollars a month in paper and toner and, you know, all that sort of stuff, consumables, that were going into that, right, tiny, tiny example. I don't mean to say that this is the revolution.

But, you know, it's nice to kind of dive into the 2000s here and bring this capability onboard. You know, my compadre in so many things is the Master Chief Petty Officer of the Navy, Mike Stevens. He's doing the same thing at boot camp. And so we did a pilot program there, where you know, instead of this gigantic library of books, you know, training manuals, rating manuals, etcetera, we put it all on a tablet, okay. And we're finding that those young recruits are learning so much faster by virtue of doing that, not only because that's kind of the way they've come to absorb information, but also because they can carry that thing everywhere, right. And so you can't carry that library of books to chow, but you can carry your tablet. And there you are, you know, kind of eating and reading. And it's, you know, these folks are focused on doing the best job they can. And this tablet allows them to do that.

So, you know, [00:58:52] and I have kind of decided, we have a pincher strategy, hammer and anvil strategy here, where he's going to kind of populate our recruits and junior sailors with these tablets. I'm going to come in over the top, getting the top-down focus. And, over time, we'll get this throughout the Navy. And I think that that's just one example of how we can leap forward.

JOHN HUGHES: Before I ask the final question, Admiral, I would like to present you with the National Press Club mug, highly valued, precious gift. And for the purposes of today, I noted that this is Navy blue in color. [laughter] [applause]

Final question. Navy has beaten Army on the football field for 14 years in a row. Is that right? [applause] Simple question. Will Army ever win again? [laughter]

ADMIRAL JOHN RICHARDSON: Well this is sort of a one-word answer as well. You know, yes. But not on my watch, right? [applause]

JOHN HUGHES: We thank you, Admiral, for coming today.

[applause]

JOHN HUGHES: I want to thank our audience. And I'd also like to thank the National Press Club staff including its Journalism Institute and Broadcast Center for all the work that went into organizing today's event. If you would like a copy of this program, or to learn more about the National Press Club, go to our website, that's press.org. Thank you. We are adjourned.

(Gavel)

END