

Admiral John Richardson, CNO
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Admiral Richardson:

As I get going, and it always takes a little bit of time to warm up in these speeches and really kind of get in the zone. I just wanted to ask you a quick question. It's an audience participation. It's my favorite way to do a talk.

How many in the audience here have had the chance to do a staff ride or a battlefield walk of a battle? Raise your hand if you've had a chance to do that. If you've served at high levels of command or on a staff, they're great. A great one is Antietam, and the docents up there will lead you around and give you a terrific tour of the battlefield. And there's nothing like walking that terrain to see, holy cow, Pickett's Charge. That really comes alive when you look across that field and you look up and you see where the artillery was emplaced and you think that took a lot of guts to even start that charge. You get out to Little Roundtop and you see where the 20th Maine did their business. Or you get to see Antietam or any of those battlefields. If you go over to Europe you can see Normandy, and you get a chance, just what it took to execute those campaigns. You get to walk the terrain.

It's even better if you're assigned as a formal staff walk because you can role play, right? You sort of take on the role of one of the leaders in those battles and you get to rethink it through and you lead the team through that talk and you're there on station. It's a very educational experience, and I've always envied the opportunity to do that, and I always envied these land battles, and the Army or the Marine Corps that fought them because in our business we have nothing like that. Right? We can study our battles but we have nothing like that. At the end of our conflict, at the end of our battles, the winners sail away victorious and the losers sink to the bottom, and the sea washes over them and soon after, there's almost no trace of what happened. Maybe, if you want to reach, you can think about walking the Constitution, and you get a chance to see what war at sea in the age of sail might have been like. Maybe you can walk the USS Missouri and you get a chance to see what fighting that battleship in World War II might have been like. In fact Peral Harbor, a naval battle of sorts, and you can see where the

terrain might have played a role. But in general, we don't get a chance to do anything close to a staff ride, and it's a stark testament to the unforgiving nature of our environment, and it imposes a level of accountability far greater than any administrative measures that any Navy could ever take.

One might think of the sea as hostile, but of course it's not, right? The sea has no knowledge that we're there. It's just tough on everybody. Just tough operating at sea.

So it makes one think. What's the difference at the end of the battle between those who sail away and those who sink? And as you've no doubt realized and it's a topic of a lot of this SNA Conference, there's a lot of things that go into that. Right? You've heard a lot about those earlier today. Certainly equipment bears a big role, it takes a big role. Warfighting concepts play a big role. And these are crucial, and they can make a difference. But they'll all fall short. In fact any external contributions will fall short without effective command.

As we think about things, this evening I just want to spend some time talking about command. Like many of you in here, I've spent a fair amount of time thinking about this. We wrote a lot about this in the Leader Development Framework. And as we think about 2018, what will define a successful year in 2018? And indeed, define becoming a more effective and more lethal Navy in combat. I'm convinced that discussions and centering our efforts around leadership in command will be absolutely essential.

As we craft our way forward, we must revolve around a Navy that values and treasures command. Never lose sight of that. The preparation, the support, the execution, indeed, the celebration of command.

So I want to talk about what it will take to fight and win in this competitive maritime environment by looking at command through the lens of unit command and then fleet command, and then I'll wrap up with maybe some words about what I can do as the Chief of Naval Operations to support that. What's my role?

So I'll take a little bit of time just to appreciate that major elements of the leader development framework, which is focused on command. And it's a supporting document for the design for maintaining maritime superiority. And which that design outlines, when it was written in 2016, a return to a competitive

environment. A return to great power competition. And it speaks to the imperative, the framework does, to develop leaders, especially commanders, who know how to go out into that great power competition and come back winners. And I'll just highlight the goal as expressed in the framework.

The top leaders or commanders inspire their teams to perform at or near their theoretical limits, and by making their team stronger, they relentlessly chase best-ever performance. They study every text, they try every method, seize every moment, and expend every effort to out-fox their competition. They ceaseless communicate, train, test and challenge their teams. They are toughest on themselves. They routinely seek out feedback and are ready to be shown their errors in the interest of learning and getting better. When they win, they are grateful, they are humble, and generally spent from their efforts. And by doing all these things great leaders bring their teams to a deeply shared commitment to each other in the pursuit of victory.

So we'll break down that statement just a little bit.

First, there's clearly an intense focus on winning. We are not in this except to win. Win in the competition that we face. And this focus for winning leaders, winning commanders, nears obsession. If you think about the leaders and commanders who have been persistent, consistent winners, they are newly obsessed. They are obsessed with victory.

Today's CO's must be prepared for winning in a great power competition war at sea. They must be preparing their teams on the bridge, in combat, in engineering, at their guns, to win in combat. And more than any readiness test, more than any outside team's exam, more than any DRSS report, more than any inspection results, they must be ready, the commander must be ready and competent to take their teams into combat against a competent and advanced enemy and win. To sail away with their crew and leave the enemy out of action, slipping beneath the waves.

This is a stark test. Right? If you're a commander and you don't feel that in your gut, if you don't feel a little bit nervous about that, you're not thinking hard enough. It's a stark test, but anything else, anything less is negligence.

I'll tell you, if you've got some experience in this business you can tell within five minutes of walking aboard whether that team is focused on that level of competition, winning in that

fight. Right? Those sailors are fit. You can see the good order and discipline right away, from the moment of crossing the bow. Formality and mastery seems routine on board. These sailors on that crew look you in the eye, and you can see in their eye that they are confident, they are proud, they are tough, and they're ready to show it if needed. In short, they are well led.

A second element of that goal statement talks about a deep sense of humility. I'm not talking about spiritual humility here. But a sense of the truth that somebody else besides the commander may have the best idea, and in combat, the best idea is the only thing that matters. And in that regard, they are their own worst critics. They are asking people to challenge their thinking, their ideas. Because they know it's much better to find a weakness, much better to find a flaw in the discussion in the ward room or with the Chief's quarters, or on the crew's mess and adjust before finding that flaw in combat. And combat will find that flaw.

Third, these commanders have a deep devotion to their team. Complete. They bring their teams into their obsession with winning, constantly communicating, constantly building them up, challenging them. Constantly.

Let me ask you another audience question. How many people in this room were members of some form of championship team? Whether it's a sports team, a chess club, a glee club, whatever. At the end of the season, you were the champion. Raise your hand up high. You've got to be proud of that. Look around. That's a lot of hands. That's a fair number of hands.

I'll tell you what, let me ask all those folks who had their hands up, did you work hard that season? Yeah, you're damn right you did. Right? And did you feel bad about that? No. Not a single one. Right? Of course you worked hard. Winning teams want to work hard, they want to be challenged, they want to be well led because those teams know what it takes to win at the highest level.

Think of those best commanders, those leaders. They are always testing their team. Your best COs were constantly asking you professional development questions, weren't they? They were constantly testing you as officer of the deck, as junior officer of the deck, as the conning officer. In fact, you didn't even want to pass them in the passageway, right? Because if you

weren't ready for the question, you knew it was coming, there was just hell to pay. Right? You stand by for the lookups.

These leaders are always stretching their teams. Stretching them to achieve their theoretical limits. And then the team that starts, it becomes a critical mass, right? They start to push themselves and one another, and they build toughness into themselves. Toughness focused on defeating an enemy, not toughness as focused on tearing each other down. They do so, they build that toughness, they build that mastery in a sustainable way, right? So they can go in and win today's fight, and they can come back and win tomorrow's fight and the next fight after that, because we are not a one-fight Navy.

Finally, through these efforts, these commanders achieve a combination or a shared vision of winning it all, and a shared commitment to that goal. Again, nearing complete obsession. And there emerges from that effort this effort to build in a sustainable way a deep commitment to one another. A bond that can really only be described as an affection that can't be duplicated anywhere else. These teams are not interested in discussing or hovering around the pass/fail line. They are not interested in the rules-based approach to business. They are shooting ever-higher towards a standard of excellence. And those of you that have been parts of those types of teams know exactly what I'm talking about. Right? You championship winners who raised your hand, about 50 percent of the people in here easily, you know what it's like to be part of a team and an effort like that. It's like magic.

It's the one goal, the Leader Development Framework talks about two lanes on a road to achieve that goal. Those two lanes -- competence and character. I'll tell you, competence in the job is the prerequisite for any credible leader. An incompetent leader is a recipe for disaster. The best they can hope to achieve is to stand by and look sincere, right? And they won't know disaster when it comes up and smacks them in the head. We've got to be competent. That credibility is established by being a master of our craft, but it's also earned by enforcing standards of accountability and conduct among the team, right? Because as commanders, we're not responsible solely for ourselves.

Competent leaders insist on rigid adherence to basic principles like watch-standing principles and those things. They enforce those. They have mechanisms to ensure that their watch standards live up to that standard. They demand these standards

of others and they demand them even more of themselves. And they're never satisfied with the status quo, are they? They show up each and every day, trying to achieve perfection and on the way finding excellence.

Committed to life-long learning, a hallmark of any high-performing organization. They embrace any mechanism for learning. The plan, practice, execute and review cycle for each of their teams. And we've got that going on right now, right? John Wade, I saw you coming in. Where are you? There you are. Your team's doing that, right? SMWDC has been a driving force in inculcating that cycle into each of the teams, and your weapons tactics instructors have really made a huge difference at sea in terms of just raising that standard of knowledge, showing people what that standard of excellence looks like, right? And maintained a constant feedback loop. Right? You have eyes on target in theater, bringing that back and learning and then sending the new lesson forward. Right?

These tactical experts like the WTIs and SMWDC encourage critical self-assessments and help build up teams of professionals. Teams who are as introspective and self-critical as John Wade's team is. All right? Because as he said, that's how we're going to get better.

There's an equally important trait of effective commanders, and that's the other lane in this road is character. Commanders of character embody those attributes of accountability, toughness, initiative and integrity. Commanders of character are mentors, but they go beyond mentors, right? They go beyond mentorship to becoming true advocates for their people. Actively seeking opportunities to reach out, find ways to propel their teams forward. Their individuals on those teams forward. They do so with confidence because they understand this is what establishes trust with the team mates. Creates buy-in, and powers others to peer in and contribute and to illuminate the darkness of our blind spots. Helps push that team to its theoretical limits.

And this character also serves as the proud stewards of our Navy legacy, right? In 2018 we'll mark two highly-related milestones. We'll commission the USS Thomas Hudner, named for the Medal of Honor recipient who just passed away last year. And in that same year, even as we commission that ship, we'll probably mark the birth of her last commanding officer. It's just kind of the way it works out with lifetimes of ships.

And then in terms of moving down that path, that two-lane road, those two lanes of competence and character, the Navy has been solid in providing three methods, I would say, to propel ourselves forward towards that goal. First, we have a robust constellation of training and schools. These must be rigorous and they must be challenging, right? They've got to be prototypic of the difficulty that we face. So we're working very hard to ensure that they are. And they must end with some kind of a rigorous certification or graduation event, an exam. So that's one way.

The second way is on-the-job training and qualification. Again, this must have rigor. The walk-throughs and exams must be done by competent people who understand that the difference between winning and losing in combat is the thousands of small things like qualifications and PQFs. That's the difference between a well-trained crew that is both tough and resilient, and one that is fragile. A brittle crew that will crumble under the first test.

A third way, we each control it ourselves. It's self-learning. And those top commanders, if you read back through history, read the biographies of those persistent combat winners. They don't wait around for the formal school to get started. They are insatiable readers, insatiable self-learners. They've got this unquenchable thirst for knowledge. Their obsession won't allow them to wait, will it? They're just after everything they can get their hands on to figure out how to outwit the enemy. They're going to study their opponent deeply. They're going to study their history. They're going to do everything to confound and defeat the enemy they teach themselves.

So excellence, achieved through competence and character is the glue that binds us together, that gives us confidence in one another, and that really permits us to delegate. If we have competence and character, that leads to confidence. And trusting COs, that allows us to trust commanding officers, to take their teams and lead them over the horizon and come back with that team stronger than when they left.

This idea of delegation gets me to a quick discussion of command, not just at the unit level, but also at the fleet level. These characteristics of effective command and leadership, they don't reside just at the unit level. They translate up. But there are some differences. They are now fleet commanders. The commander of commanders. That's different. They have to exercise command at a distance. How do

you do that? Well, you've got to spend a lot of time crafting commander's intent, commander's guidance. And you've got to ensure you've got enough visibility to allow that subordinate commander to exercise all of the initiatives that you want to give them but still ensure that you've got sufficient visibility to make sure that standards are being met, that the teams are ready for the missions to which you are assigning them.

Fleet commanders must do that by allowing the unit commanders the time to train, the room to learn, and the space to operate. Provide them clear boundaries and the latitude to maneuver inside those boundaries. These concepts aren't new. They're inherent in the combined warfare concept principles of delegated authority and command by negation. These principles which make any military operation, but particularly naval operations, so effective. In these days of the ever-increasing speed of operations, particularly the speed and proliferation of information, it demands that we keep an eye on these principles so that we maintain that focus on commanders' initiative. So we don't create a cadre of commanders whose first instinct is to grab the telephone and call up for permission. That goes all the way down.

The fleet is the level where a unit in training becomes a unit deploying. Ready to take the fight to the enemy. Something I saw first-hand as I traveled around during the holidays to the 7th and 5th Fleets. I'm proud to see our fleets achieving exactly that. Through their command and their execution of concepts like the Third Fleet Forward, Distributed Maritime Operations, Electromagnetic Spectrum Management, networking. All of these force multipliers, making these concepts more relevant, more real, more important and more effective today than they have ever been.

So I told you I'd finish, perhaps, with a few thoughts on what I see as my role. What is my contribution?

Let me tell you first and foremost, does our Navy have things to fix? Certainly, and we will get after that. Can we get stronger? Yes, and we will. But let me be absolutely clear. I'd rather be a sailor fighting on a DDG in the United States Navy than in any other Navy, in any other surface force in the world. Okay? So let me make that clear right up front.

So it's my job to set the conditions to empower our commanders and our leaders to achieve their full potential, and I'm laser focused on knocking down obstacles that stand in your way. To

set the optimal conditions for our sailors and our commanders to fight and win.

This means reducing distractions, giving time back to commanders to train their team. This means creating clear, effective and simple C2 structures so commanders know exactly who they're working for and what their mission is. It means managing the supply and demand for how naval forces are sourced to meet combatant commander needs, and it means communicating our progress thoroughly by informing the fleet.

Now the playing field looks fundamentally different, right? Fleet operations, fundamentally different. Combat at sea, very different than when Tom Rowden and I took our oath nearly 40 years ago now, Tom. Right? But winning in any competitive environment, winning at sea, combat at sea demands action. And that starts with the leaders in this room and those listening around the fleet. With the commanders.

Everyone has a role to play, and you never know when your number's going to be called, and we have seen that played out in just recent years. And luckily, toughness is nothing new for our force. It's engrained in our warfighting ethos.

It was engrained last March when I visited the USS Ross and they got underway after I left the ship and went at a head flank to their launch basket to launch cruise missiles into Syria. It was engrained in USS Mason as they transited through the Bab el Mandeb. It was engrained in our six carrier strike groups deployed last year in support of defeating ISIS and safeguarding maritime security. And as I talk to you tonight, it is engrained in today's Navy with 93 ships deployed around the world right now manned by 61,000 sailors; three carrier strike groups with their embarked air wing; and one ready to surge on notice. Two ESG's are ARGs and another one ready to surge. Six DDGs on BMD station. Thirteen SSNs. I've got to mention them, even here. [Laughter]. Five SSBNS, who have been on alert patrol 100 percent of the time since 1960. They are ready and they are getting more ready every day. And they have their versions of past battle cries like "Damn the torpedoes," "Don't give up the ship," and "I have not yet begun to fight," that rise up from their captains and their crews.

So here's what I ask of you and what I promise as my part of this. Show me things that distract you from warfighting and I'll work together, we'll knock them down.

Lead your team to pursue excellence every day, and I'll work alongside you.

Put your uniform, and especially your command pin on every day, committed to making your team the best they can be. Theoretical limits. Because our nation is counting on you.

And if we accomplish this, acting with command as our north star, we will gather next year for the SNA Symposium knowing that we have earned our place as the safest Navy in the world for our sailors, the strongest partner in the world for our friends and allies, and the most lethal Navy in the world for our enemies.

Ladies and gentlemen, fellow sailors, fellow commanders. This is how we celebrate command. The stakes are high, but we wouldn't want to be sitting at any other table, would we? So let's get to it and earn our future. Thank you very much. [Applause].

I look forward to any questions, and I think as Admiral McCullough said, try and save this time for a dialogue with the crowd, and we'll do a dedicated event for the media later on.

Or not. [Laughter].

Any questions at all? They even energized these mikes for you.

Okay, it's clearly that I'm standing between you and the reception. And I understand that's a hazardous place to be. Thank you all very much for the opportunity to -- all right, Admiral Hogg. He's going to -- dang it, man. Start with a hard one.

Audience: You've been the CNO now for over a year, and how have you met your expectations going into the position?

Admiral Richardson: Well, I think -- it's complicated. [Laughter]. The question is, I've been CNO now over two years, actually, and how has reality matched expectations.

I would say in the aggregate, I am always blown away when we get out to see and we see the talent that is resonant in our people. I've done a lot of All Hands Calls now. A tremendous amount. Thousands and thousands. And I can't think of a single time where we didn't leave those events, whether it's on the flight deck of a DDG or in the hangar deck of a carrier, or a room like

this that holds a lot of people. And whether it's a small crowd or a huge crowd, the talent and the astuteness, the respect, the enthusiasm of our sailors continues to exceed every expectation that I could ever have, and those are pretty high expectations, Admiral. So that would be the one thing that gives me great hope for our future.

Audience: I think the reason there's been no questions is that, quite frankly, your talk was one that was so compelling, that we're still thinking about it.

Admiral Richardson: Very polite. [Laughter].

Audience: My first CNO when I came into the Navy that I was really aware of, was Admiral Burke, who gave a talk on leadership the way you did. In fact I have half a dozen things I'm thinking about, and it's because of the way you brought them up. And I would hope that since there are a whole lot of leaders in this room, and each of you will have at least one good question for our CNO. [Laughter].

Admiral Richardson: Since you mentioned Admiral Burke, and I can never on my very best day hope to achieve anything close to Admiral Burke, but he does have this one great observation, and you may have heard of this, right? What's the difference between a good naval officer and a great naval officer?

Audience: Ten seconds.

Admiral Richardson: Ten seconds. That's it. Over-achiever. [Laughter]. Ten seconds.

We need to bring all of our teams into that ten second realm, don't we? That is not much margin for victory. Razor thin.

Audience: First, thank you very much for that great talk. Lieutenant Junior Grade Rick Capparaelli, Navigator, USS Champion.

Other than Rules of the Road and Neptune's Inferno, what books would you recommend for the SPOs in the room?

Admiral Richardson: I actually have a reading list. [Laughter].

Audience: Personally speaking, what would you say you would recommend?

Admiral Richardson: I'll tell you what I'm reading lately. It's not on the list right now. I think it has a lot, it bears a tremendous amount, it speaks to the future of our business. So two books that actually go together as kind of nice companion volumes. They are future looking, and they are not nautical. But one is Machine Platform Crowd. It's a follow-on by the same author, it's the sequel, I guess, to a book called the Second Machine Age which talks about this new age that we're going into and that is enabled by artificial intelligence, that is enabled by learning algorithms, learning machines, autonomy and those sorts of things that are really upon us now.

The other book that I was delighted by was a book called Humility is the New Smart. So I'd encourage you maybe to take a look at those.

Audience: Thank you, sir.

Admiral Richardson: That's coming to a reading list near you. [Laughter].

Audience: Good afternoon, Admiral. My name is Stan Wiggs. My question, last month, about three and a half weeks ago, a new National Security Strategy came out of the White House, presumably a new National Military Strategy will be forthcoming before too long from the Secretary and the Joint Staff.

How do you see this affecting the Navy's maritime strategy? Are we already on target? Are you looking at updates? And just based on your own ownership of it.

Admiral Richardson: I'll tell you that as I read the National Security Strategy, first, I think it outlines our security environment very accurately. And part of that is that there are an awful lot of responsibilities for us as maritime forces, as naval forces in the next 20-25 years in this emerging security environment. So for a lot of reasons that are discussed in that strategy, I think the National Defense Strategy to follow, there will be a Military Strategy and a Maritime Strategy, so we'll have a chance to tease that out in more detail in each one of those.

I think there's an awful lot for us to think about, a lot of responsibilities for us to execute. Again, kind of butterflies in your stomach level of responsibility.

Audience: Good evening, sir. My question is, in the context of those of us that want to be in command, those that have been in command, the gap in the age groups. You have the millennials, you have all the other way it's broken up. And even for those that have been in command and felt they had it figured out but they really didn't, what's the advice or thoughts on how to bridge the gap between all the different age groups, different levels of technological background, and bringing all that together for the unit, for the team?

Admiral Richardson: I'll answer by, I suppose, starting with first principles. And my experience, and this is backed up by a little bit of research, that if I put all those groups that you would want to define into separate rooms, and I asked them, hey, I'll tell you what. Please write down for me your top 20 values. The things that you value. And then I took all of those lists and compared them, there would be almost 100 percent overlap. And that's been shown to be true.

So my first order answer is, there's a lot more that we share in common than there is things that divide us. In fact almost all of the important things we share in common. And there's a reason that we're all here in uniform on those ships instead of anywhere else that we could have been. Today's Navy is as talented as it's ever been. By any measure of performance. Our sailors can write their own check when they get out of school or when they finish their enlistment, and they come and they raise their right hand and they take an oath. That oath binds us together much stronger than any kind of facility with a cell phone or whatever would hope to separate us.

In those other things, we just have to make sure we're all listening, don't we? There's things to be learned, certainly. And be open to those things that we have to learn, all commanders, and junior officers, sailors. But let's first and foremost be confident that we are bound together by an oath that we all took that outlines a set of principles that places great demands on us and fuses us together much more than anything can tear us apart.

Audience: Good afternoon, sir. Midshipman First Class Bohannan.

My question is, as you've traveled around over the holidays, is there a specific attribute or quality that when you see it in a young first tour officer that you can tell that they kind of

have it figured out and they're on the right path? Or if you don't see it, then maybe they need to figure that out?

Admiral Richardson: You teed it right up in your question, so it's kind of a softball, so I'll just smack it out of the park if you don't mind. [Laughter]. The junior officers that are on the right path realize they don't have it all figured out. Right? But I'll tell you what. They're not afraid to try stuff. They're eager to get in.

How do you become a better writer?

Audience: Keep writing.

Admiral Richardson: Right. How do you become a better tennis player?

Audience: Keep playing.

Admiral Richardson: You play tennis. How do you become a better officer of the deck? You stand watch, right?

How do you become a better decision-maker? You make a lot of decisions.

Our Navy, it's built into our system to allow you to go out and make all those decisions. And if you're junior, we're going to have somebody right over your shoulder to say not that one, stop right there. [Laughter]. And you're going to do this trial and error, and over time you're going to get better and better and better and better. But you're only going to do that if you engage, if you decide, if you learn. You've got to go out and do it. The system is built to protect you and protect the ship and the crew, so go out there and engage. Realize there's so much to learn. You don't have it all figured out. But boy, I'll tell you, it's a lot of fun giving it a shot.

Audience: Captain [inaudible], the French Naval Attaché. Thank you very much, sir for your brief. And I fully agree with everything you said about leadership and command.

My question is about artificial intelligence. Since our navies and especially the U.S. Navy has become more and more advanced from a technological point of view and we see more and more smart systems, so how a modern commander should deal with artificial intelligence?

Admiral Richardson: It's an emerging question and I wish I had all those answers. But I'll tell you, it's one that we've got to confront with a sense of urgency. So even since I've been CNO this has moved forward in dramatic ways. When I started, we used to talk about Deep Blue the artificial intelligence agent that beat Gary Kasparov. And then we would talk about AlphaGo who beat the Go player, Lee Sedol. World Champion. A game that's orders of magnitude more complex than chess.

Now I'm reading about an artificial intelligence out of Carnegie Mellon that beats the world's experts in no limit Texas Holdem. Right? So this is a much more complex game. Lots more incomplete information scenarios. The possibility that a player could be bluffing, et cetera, et cetera. It's much more sophisticated.

So this is moving very, very fast and we've got to figure it out. We've got to confront it.

In these two books that I recommended, one of the hypotheses of those books is the things that used to define us as experts, and in many ways upon which I guess our bonafides as leaders is founded, will soon be done better by machines. In fact, maybe now.

So what is that unique contribution that a leader, a commander can make in the future to put together a winning team of all of the technology that's emerging, and their people to be able to out-fox, out-smart a competitor who's doing the same thing.

This is a question we're addressing with a lot of urgency. You start with those things that you know, and you proceed carefully because this is something that, it's very powerful.

I'll tell you what. Every time I talk to Admiral Prazuck in the French Navy, my counterpart, we're right shoulder to shoulder. We're steaming together, addressing these very advanced concepts. Just a wonderful partner Navy. Thanks.

Audience: CNO, Morgan Hames, retired SWO.

For decades here at the SNA Symposium one of our own, Rear Admiral Chuck Horn would get up and ask the question about what's being done to educate and train our sailors and officer cadres on mine warfare. And I think we've got a good handle on that at this point in time. There's always more to be done.

The current issue of Proceedings Magazine focuses heavily on cyber warfare, and my question --

Admiral Richardson: My current Proceedings has surface warfare on the cover. Admiral Rowden's signature article in there. [Laughter]. Anyway.

Audience: The question is, we all know that the Naval Academy has a strong cyber warfare program going on. Many of our midshipmen could address that who are here today. But what's being done at the deck plates level for all the communities other than the information dominance community? And I notice that we really don't have an IDC panel or somebody to address information warfare, information operations, soft kill, et cetera, in the symposium.

Admiral Richardson: I'll tell you what. I think that if you were to go out and observe Com 2X right now, the graduation exercise for the strike group. In fact I had the privilege, really of visiting the Theodore Roosevelt Strike Group, and I was on the Roosevelt and we had a great discussion of how they worked up, went through Com 2X and then did this basically a fight to Hawaii. The degree to which cyber and information warfare is completely engrained in that I think would stun you. Stun you. If I told you in this venue, I'd have to kill you. [Laughter]. But it's getting more and more every single day engrained in the way we do business.

Audience: Good to hear it.

Audience: Ted Kay, I'm with [SAERS], and this question has to do with engagement capacity.

In the future and in the present, we have a capacity to field ships and they can do their missions and meet various threats, adversaries. And in the future, we have probably another level of engagement capacity. Given our present training and readiness and our ability to project power, how do you forecast our engagement capacity over time. Not only with just new weapon systems and the ability to communicate, but with people.

Admiral Richardson: I'll tell you. I'm not sure I understand in enough detail what engagement capacity means when you say that. But we've done some serious work and others have done some serious work inside and outside the Navy to talk about I think what is the level or the amount of naval power that is required for the U.S. Navy to meet our responsibilities to the

nation? And there's a lot of ways to express naval power. In fact, I guess even more accurately, there are a lot of components to naval power. So part of that, I would say, is capacity. Right? More platforms. And we can have a rich discussion about what defines a platform these days. But particularly when you think about perhaps the unique attributes of a Navy, you've got to be there to provide credible options for decision-makers, or you've got to be close enough to respond in a relevant time frame. So that leads to kind of enough platforms to be there.

You build more platforms, you get more naval power.

But we've also got to be mindful that if I modernize each platform with modern systems, new systems, and there are some terrific ones, and we've hinted at some of those even tonight. Then each one of those platforms becomes more powerful, and that also is a component for increasing naval power.

And then on top of that, history is replete with examples of how networking things together in a clever way or an adaptive way increases naval power even still.

And then finally, I would come to the component that you talk about which is our sailors, and how we recruit and train and retain the proper talent and generate those skills to fight that Navy with increased, and redefine platforms, with increased technical systems to manage the data that's going to come from that networking. That's going to take a new approach to training and education.

So this is how we're approaching naval power, and we're ready to go as fast as the nation will let us.

Audience: One follow-up, the comments about we're stretched thin. Yet our adversaries continue to push our need to respond in whatever form.

Admiral Richardson: I think if you look back through history, again, not a unique situation. In fact one of the greatest learning under fire sequences of events is the Solomon Islands campaign, right? That campaign in the Pacific, none of those commanders -- Nimitz, Halsey -- every one of them wanted more stuff. And at the end you just, you get what you get and we're going to fight. We're going to fight with that stuff.

Now, it's up to commanders, senior commanders, up to me, to make sure that as we exercise our engagement, that we do so in a way that is in the main sustainable. Right? And so that we don't drive our platforms down to bare metal by not doing the maintenance. That we don't drive our people into the stops by OpTempos that are unsustainable. So finding that supply-based, sustainable level of force offering, engagement capacity maybe, is something that we've got to define. We offer that up.

The world gets a vote. We can surge from that if needed, but we have to realize that we do so and we have to recover from that surge as well. So it's finding and achieving that level of sustainability. Okay?

Audience: Admiral, Pete Moreford, Afloat Training Group, Atlantic.

I don't know if you coordinated your remarks with Admiral Rowden, but I was very pleased to hear you both speak about the aspect of humility in --

Admiral Richardson: I have never met this man before in my life. [Laughter].

Audience: My question is, how do you go about promoting humility at all levels of leadership? And the corollary of course, how you combat hubris.

Admiral Richardson: I think maybe the most powerful, certainly we want to talk about it, right? And there are some great things. I offered a couple of things to read. But I would hope that this thing, it will only really start to spread through the power of example. So I hope, I try to demonstrate that. Through each of us, kind of thinking about that as we go in, doing our very best to demonstrate it. I think that will help it spread more than anything we can read or say.

Audience: Good afternoon, Admiral. Thank you very much for coming to share your thoughts with us.

I've noticed that our potential adversaries seem to spend a lot of time and expend effort to study our history and our intellectual heritage. I wanted to ask, and you kind of addressed this with your point about Solomon Islands, but what lessons and precedents from our own history would you choose to highlight to guide us?

Admiral Richardson: Where do you begin? [Laughter].

Audience: You asked for a hard question, sir. [Laughter].

Admiral Richardson: Well I guess I stand humbled, don't I? [Laughter].

All right. I'll tell you what. Read any of the, it's been mentioned a number of times. Any kind of history. Pick up naval history. World War II is a great, rich history because it was the last time we were in sort of major blue water combat, right? So lots of great lessons. And I would say read well-written history. These histories that are kind of replete with armchair quarterbacking and 20/20 hindsight, they don't really put you in the situation as much as a well-written history would do. And so there are a number of terrific naval historians. Horn, Fisher, Toll, those guys. Just pick up any book by those folks and start reading.

You read *Six Frigates*, and you realize that almost nothing has changed. [Laughter]. So much more is common. Fighting for the funding for those six frigates. Come on, I just want to build the Constitution, for crying out loud. All of those things. It's eye-opening, and it goes to validate that yarn that if you want a new idea, read an old book.

Thanks very much. Thank you all.

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