

**Center for Strategic and International Studies**

**Maritime Security Dialogue with Admiral Paul Zukunft**

**“U.S. Coast Guard: Priorities for the Future”**

**Welcoming Remarks:**

**Kathleen H. Hicks,  
Senior Vice President; Henry A. Kissinger Chair;  
Director, International Security Program, CSIS**

**Featuring:**

**Admiral Paul F. Zukunft,  
Commandant,  
U.S. Coast Guard**

**Moderator:**

**Vice Admiral Peter H. Daly, USN (Ret.),  
Chief Executive Officer,  
U.S. Naval Institute**

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KATHLEEN H. HICKS: Good morning, everyone. Welcome to CSIS and to our Maritime Security Dialogue. It's my pleasure today to be doing the introduction for the event.

Before we begin, I just want to remind everyone of our basic safety precautions in our building. We, as a convener, have a duty to let you know where the emergency exits are. Of course, the glass doors behind you lead out to Rhode Island Avenue. Behind you – behind me, excuse me, you'll see two exits that lead back into the alley behind our building. Should a fire alarm or something go off, I will be in the room with you and I will let you know which direction we'll head.

Maritime Security Dialogue is a joint venture co-hosted by CSIS and the U.S. Naval Institute, and we use this forum to highlight current thinking and future challenges facing the Navy, Marine Corps and Coast Guard. And our event today is the third Maritime Security Dialogue, excuse me, in 2017. We have more coming for you in the fall, so we appreciate you joining us here on the first day of August. In Washington is normally a sleepy time, but we know today's event will be a very lively engagement.

We want to thank in particular – both USNI and CSIS want to thank Huntington Ingalls Industries and Lockheed Martin for their support of the Maritime Security Dialogue. This is what makes it possible for us to convene these events.

Today we're having a discussion with Admiral Paul Zukunft, who is the commandant of the U.S. Coast Guard. For those of you who have been watching our Maritime Security Dialogue over the years, you will know this is not his first – his first foray into MSD. And we really appreciate him coming back and keeping us up to date year in and year out for what is happening inside the Coast Guard, his vision and leadership at the Coast Guard, and where we are going in both maritime security and other missions related to Coast Guard duties.

As a reminder Admiral Zukunft, is the 25<sup>th</sup> commandant of the Coast Guard. He is a native of Connecticut. And, as I have mentioned before in this forum, he served as the federal on-scene coordinator for the Deepwater Horizon spill, where he had to direct more than 47,000 responders, 6,500 vessels, and 120 aircraft in response to the largest oil spill in U.S. history. He has many other things that he has been engaged in, and I know from the backstage conversation that he and my cohort and companion in crime, Vice Admiral Pete Daly, will have much to discuss in the moderated session that follows. But before that, please join me in welcoming the commandant for his remarks. (Applause.)

ADMIRAL PAUL F. ZUKUNFT: Kat, thank you. And thanks to CSIS, Vice Admiral Pete Daly. Thanks to U.S. Naval Institute. And I want to thank those who took time to be here or who are here remotely as well.

So in three days the Coast Guard will celebrate its 227<sup>th</sup> anniversary. What was significant was back in 1790 we did not have a United States Navy. I don't use the term that we are the oldest continuous seagoing service, but sometimes I'm introduced that way. But what happened in 1790 is we were a bankrupt nation. You know, our war for independence bankrupted the nation, and we could not afford a U.S. Navy. So, under the vision of Alexander Hamilton, we created a Coast Guard so we can collect tariffs. It's also the birthdate for U.S. Customs Service as well, because they collected those tariffs.

I would like to say that since 1790 the Coast Guard and the Navy found itself funded on an equal level, but that is not the case today. (Laughter.) When I'm looking at a total appropriation of something just south of \$11 billion, that pays for everything – pay, retirements, new acquisitions, and then operating today.

And so, when I came into this job three years ago, we found ourselves in what I would call a slow decay. It was trying to recapitalize and bring on new assets at the same time we were offloading people. And I've seen other services pay that price. To recapitalize, you have to mortgage your workforce. And so when you start looking at, you know, 10, 20 years down the road as you've done a recapitalization, who's going to operate? Who's going to leverage and make best use of these new resources that you're bringing onboard?

And what really hit home with me, I was only in the job for a week and the prior first sea lord, George Zambellas, approached me. He was in town. And they were faced with a dilemma: they were going to have to tie up frigates because they didn't have the crews to man them. And the manning that they were lacking were skilled engineers, and it just so happened that their propulsion systems, auxiliary systems, nearly identical to the plants that we have in the United States Coast Guard.

So how did the Royal Navy arrive at that point? Well, 15 years prior to that, a decision was made to cut costs, don't bring new people onboard, don't add to the payroll. And then, when 15 years go by, you don't have those senior technicians in your fleet, and literally they would have had to tie up their fleet. So we have sent 40 members of the Coast Guard and their families, and they serve full-time in the Royal Navy, and we will do so for a period of about six to seven years.

The Japan Coast Guard, when I meet with my commandant counterpart, is recalling retirees if they will come back to serve in their fleet. With zero population growth and other opportunities, are people wanting to serve in Japan Coast Guard? And the answer is they are struggling.

So if you're going to recapitalize, don't mortgage your future. Don't mortgage your people as you go along.

Now, one area where the Coast Guard has struggled is it's great that we have 11 statutory missions, and we'd always name the last one military/defense operations. And by doing so, if you're giving a sermon, you usually have three themes, and people are going to forget the 11<sup>th</sup> one because they've already tuned out after you've given a third theme to your sermon. And yet, we are a military service, and that really needs to be first and foremost. We have participated in every military campaign since 1790. Every COCOM has Coast Guard in it. Coast Guard is deployed off all seven continents today. The J6 in the Pentagon is a Coast Guard vice admiral. Twenty ships are chopped to DOD combatant commands as I speak today, 11 alone serving under SOUTHCOM. When our heavy icebreaker gets underway, it's deemed not to be a DOD asset, then why is it chopped to PACOM? I don't own that ship when it gets underway.

So a big part of our Coast Guard is military, yet 4 percent of my less than 11 billion (dollar) net budget – 4 percent – is funded by defense discretionary spending. The other 96 percent comes from non-defense discretionary, which is how a Coast Guard finds itself doing more with less. And when you answer to 22 committees, and many of these are authorizing committees that say “you shall do the following” – and if they don't talk to the appropriators, then you find yourself doing more with less. You have to do these things by law, but you haven't been funded to do that. We're the only military service that finds itself and our operating expense in the basement of the Budget Control Act. My other

service chief counterparts, they lament the day they ever see the floor. And as I'm sitting in the basement looking up at the floor, I'm here to say the view from the basement is not that pretty. It's like the New York Mets of 1962, you have no place to go but up. And we must go up.

So what are we doing? I mean, how do you leverage this fifth armed service in the 21<sup>st</sup> century today?

When I spoke at the International Seapower Symposium in Newport, Rhode Island, last September, I talked about some of the maritime threats that are facing us today. We talked about piracy, and there's a lot of that going on. When you have ungoverned territories, piracy fills its void. It goes all the way back to the Barbary pirates back in the late 1700s. We have the largest flow of refugees since World War II. We have illegal, unregulated, and underreported fishing when 3 billion people in the world subsist on fish today. And these fish stocks are non-sustainable as we see our world population continuing to grow. And in fact, a lot of maritime conflicts today are among fishermen or among competing claims of who owns a 200-mile EEZ, and also further contested claims over sovereign rights – the Nine-Dash Line. And also, as I look at what is playing out in the Arctic, looks eerily familiar to what we're seeing in the East/South China Sea and with what Russia is doing up there as well. We're seeing the movement of transnational criminal organizations who realize that we – most of our trade moves by water, and they're using these same trade routes to move people, to move weapons, bulk cash, and the like.

So when I gave that talk before 108 navies and coast guard in Newport, Rhode Island, for the next three days all we talked about were coast guards. And finally, it was the Indian Navy who said, hey, the CNO hosted this event; can we go back to talking about theater ballistic missile defense and traditional naval conflict? And so we did. But what it underscored is the fact that many of our maritime threats are – require unique authorities, require coast guard authorities. And many maritime nations, they certainly can't afford a navy seapower like we have, and so they model themselves after the Coast Guard. But time and time again, they came up to me and said, we want to be like the United States Coast Guard.

And so for years and years we would always compare ourselves to the Navy. And you cannot compare – if you just look at the size of our service, how they're funded, the systems we operate, you know, it's not an – it's not a fair comparison to make. But if you compare ourselves to other coast guards that want to be like this Coast Guard, we are the world's best coast guard. And over the last three years, I have been around the world several times now, and time and time again I hear more and more we want to be like the United States Coast Guard. Twenty-six international students at our Coast Guard Academy so they can grow future generations of officers that understand maritime governance, that understand the unique aspects of a coast guard in a very complex world today. Where, at the end of the day, I mean, trade needs to continue to flourish, but how do we isolate licit from illicit trade? And that doesn't happen unless we share information, share best practices, and many times they look to us to do just that.

So I thought I'd use that as a primer, if you will, to – before we open it up to Q&A. And I want to turn it over to Pete Daly, and I think we'll go into a facilitated discussion, and then open up to the floor to questions and answers. So, again, thank you for being here on the first day of August. (Applause.)

VICE ADMIRAL PETER H. DALY (RET.): Well, sir, you started – first, thank you for coming today. And you started your remarks with the context of the Coast Guard, what the Coast Guard does, and then you wrapped up on the budget theme. So I thought I'd pick up right there.

When the first skinny budget that the administration came out with came out, it did not smile upon the Coast Guard. And things have gotten a little better, but I'd like to ask you about making the case – the case you just talked to us about – within the administration and on the Hill. And the big one – the big one to me is the balance between soft power, the police authorities that you have – the law enforcement authorities, I should say – and then the hard power contribution that you make as a military service. Is it the diversity of that? Is it the complexity of that? Like you said, 11 major missions. How is it making that case? And do you feel you're being successful now?

ADM. ZUKUNFT: Yeah, so when we went from 11 statutory missions to providing context in the 21<sup>st</sup> century, the first thing I looked at was in 2014, unprecedented flow of unaccompanied minors. In fact, those numbers are starting to creep up again. And as our Department of Homeland Security was looking at detention facilities and how do we place all these kids, I was looking at, well, why did they leave in the first place? So rather than study that from behind my desk in Washington, D.C., I went down and I met with the presidents in El Salvador, Guatemala and Honduras, and they said we are a victim of our geography. We live just north of the largest cocaine-producing country in the world in Colombia; and then to the north is the largest consuming country of cocaine in the world, the United States of America. And what is happening – and this was in my interaction with President Hernández down in Honduras – he said bulk shipments of drugs arrive, and our economy cannot compete with the dollars that can be made by moving illicit drugs. Violent crime in 2014 was nearly a hundred per 100,000 in Honduras, making it the most crime-ridden nation in the world. And how did it get there? The violent crime was a direct result of drugs coming into the country.

So, as the commandant of the Coast Guard, I said, OK, well, we need to double down on this particular flow and stem this from coming into Honduras. So a year later I checked in with the president of Honduras and said, how's it going? He said, well, our murder rate has dropped 40 percent. So what have you done? He goes, well, when you put up that sea shield – and I didn't use any such term, but we sealed off the Honduran Rise – drugs were not arriving. The cartels, they folded camp and they moved – well, in this case they moved to Costa Rica. Drug flow went down precipitously. Unfortunately, it went up in Costa Rica as well. But we saw the direct correlation between drug shipment, violent crime, and why do parents put their life savings in the hands of a human smuggler. It's to get their children into a crime-free – relatively crime-free nation with an opportunity to prosper.

Now, the irony behind this is, you know, they're sending them to the drug-consuming country to leave their country that has been ravaged by drug flow, and they're nothing more than a thoroughfare between Colombia and the United States. So we wrote a strategy for that. The White House has a strategy. We did something similar for the Arctic as well. We've got another one on cyber. And I've got a fleet of 35 ships, very old ships, that enable \$4.6 trillion of maritime trade every year. And people say we can't afford to recapitalize that fleet; I don't think we can afford to let \$4.6 trillion slip out of our GDP.

So you talk about soft power. You know, a book I would commend to everybody is a book written Graham Allison. It's called "Thucydides's Trap." And on the – you know, "The Destiny to War" (sic; "Destined for War"). And this is with China. So, over time, you know, if you go back to Thucydides, he wrote about the Peloponnesian Wars. And you had a rising Athens, and Sparta didn't

like that, so they went to war. Well, there have been 16 other occasions where you've had rising powers, and in 12 of those 16 it resulted in war.

So what does a rising China really mean to the United States? You know, what other tools of diplomacy do we have? We already have the economic piece in terms of a trade relationships. So, today, there is a Chinese ship-rider on a Coast Guard cutter operating off the coast of Japan. There are Coast Guard C-130s flying out of Japan. We're working with Russia Border Service, South Korea, Canada. But what we're enforcing is this is illegal, unregulated, underreported fishing, illegal fishing in the Western Pacific. You can get countries that would not normally see eye to eye to rally around a maritime threat, an environmental threat, an economic threat, and using Coast Guard authorities to do it. Just one example of how we're using soft power, but also engaging Russia, also engaging China.

We're engaging Russia in the Arctic as well. We've got a lot of work to do. We've got a lot of catchup work to do in the Arctic as well.

ADM. DALY: Well, you mentioned several things, and also the global partnership aspect of it. But if you just come back to the Western Hemisphere for a minute, obviously, we have an administration that's very focused on border security. Some would – I would even use a stronger word; maybe they're obsessed with border security. But it's a strong focal point. Have you – you know, it just strikes me, the story you just told about El Salvador, Honduras, and meeting with the leaders of those countries, talking to them about really the source of the problem. And it speaks to defense in depth of, you know, do you really want to build the wall on your front yard, or do you want to deal with the problem where it's happening? And is that the only problem? Obviously, the Coast Guard has a huge responsibility for port security, and the volume that goes through those ports is immense. So have you been successful in making the case about the fact that it's really not about one wall?

ADM. ZUKUNFT: So when I look at it, defense in depth – defense is great, but I played quarterback as a younger kid. I like playing offense. So let me tell you a little bit about what playing offense looks like.

We have awareness of over 80 percent of the illicit drug flow that is eventually destined for the United States. It's dropped off in Central America, and then it's smuggled up the isthmus; and then eventually either through our border, commingled with licit trade, or under the border, or maybe in a boat around the border. But what's unique is we have 40 counterdrug bilateral agreements where countries like Honduras, Guatemala, El Salvador, that don't have navies, that don't have the maritime resources, to say, well, you police our waters. And by policing, I mean up to deadly force in their sovereign territorial seas to prevent these drugs from coming ashore, because they know when we stop them they're not going to pay a bribe. In fact, they're going to the Middle District of Florida for prosecution, and 585 smugglers were prosecuted last year in the United States, working with our Department of Justice – not just prosecuted. Now, they might get one or two years taken off a 14-, 15-year term if they provide us information on where is this coming from and who is moving it so we can go after the – you know, the center of gravity of some of these trafficking organizations, transnational criminal organizations. But you have authorities that extend way beyond the border.

And so that is the real value proposition, is that you can play offense but you just can't have a defense. The two must complement each other. And what we're seeing is that, for want of resources – the signal that we had last year when we were awarded to build the first nine of a fleet of 25 light frigates called an offshore patrol cutter, we awarded phase two to build out all 58 fast-response cutters, we had a ninth national security cutter added to our program of record when four years ago we were

struggling to get four or five of these on budget, and now we've doubled that as well. So the signal that we are seeing is we've got to invest in more resources.

Now, this is coming at a point in time where the National Military Strategy pulls the Navy in every direction around the globe, but not in the Western Hemisphere. So when the Perry-class frigates were retired, I can't go to my dear friend John Richardson and say, hey, we need more Navy, when he's got more Navy in the East/South China Sea as we look at the dark cloud over North Korea right now, and where the other fires that the Navy is putting out. How does the Coast Guard complement that? And so that is our role as we serve as a military service, of how to integrate with but don't replicate what our Navy is doing elsewhere around the world.

ADM. DALY: Sir, you talked about – you mentioned the combatant commanders and the fact you have to chop forces, even the icebreaker, to them when they operate. And, of course, the combatant commanders always fascinate me because they worry about today, they're riveted on regional requirements, and they're budget-unconstrained. You are riveted on the future because the Coast Guard that we have in 15 years will be the Zukunft Coast Guard, you are budget-constrained, and you've got a lot of – a lot of priorities to service. One of those priorities you mentioned was the workforce. You mentioned that people have to sometimes mortgage their workforce to get something done. Where do you want to take the Coast Guard workforce? What should the Coast Guard workforce look like five, 10 years from now? What are the skillsets you're emphasizing? How does it need to change to meet the future?

ADM. ZUKUNFT: So when I look at the new platforms that we're delivering right now, and the next wave is, you know, autonomous systems. We are just – you know, we're probably – you know, for me, I believe we are a decade behind where this service needs to be in operating autonomous, especially in the ISR realm. I can request forces, but, you know, those are, you know, precious commodities right now when you look at what our ISR needs are around the world. And so maybe the Western Hemisphere or maybe the Arctic doesn't rack and stack high enough. So I need to invest in that as well.

We need to invest in cyber. I was just out in L.A./Long Beach Friday, and I met with the port director at APM-Maersk to find out what happened earlier, at the end of June, which shut down Maersk shipping for four to five days.

ADM. DALY: The cyber event.

ADM. ZUKUNFT: The cyber event. And what concerns me there is we're seeing a number of shippers, especially in containerized shipping, consolidate, fewer of them. And what if this was a coordinated event that would shut down multiple shippers? And when I look in the Rust Belt, when I look at the manufacturing floors, they usually have about three to four days of inventory on hand. Their warehouse is on a railcar, and from there it's on a container ship. But that just-in-time inventory does not compensate for any disruption in any of that product moving from ship to shore to ultimate destination. So a real challenge there.

Now, the good news is Maersk notified us. They called our National Response Center so we could activate our Area Maritime Security Committees about this threat, that literally wipes your database clean. It's not even ransomware. You know, what's the point of paying a ransom when all your data is lost anyway? You're going to have to go out and recapitalize your entire IT system, and Maersk was able to do just that. But I would put Maersk in the responsible shipper. But they were able

to share with us, and very discreetly, some of the vulnerabilities that we learned from, but I would just end that discussion there. But we need to be involved in that world of work.

The new ships that we're building, very complex. Upwards of two years of schooling to operate some of these systems on these national security cutters. So you're coming back to sea again in the Coast Guard. You know, you're going to do that ship tour. We'll put you on the beach servicing one of those ships. But we're going to need for you to come back a second time around to leverage the training that we have invested.

Now, everyone doesn't relish going to sea, unless you're like me. And you talk about the future. Maybe you know, Pete, but my name literally translates to "future" in German. So, you know, maybe it's my prophecy, I don't know. But the people piece, we have got to get this right as you're looking at more and more specialization in your workforce.

And I was talking to John Hyten. He is STRATCOM. And he was coming to work one day, and an airman – an E3 – drives up in his Tesla S series. And he has to ask the question: How does an E3 afford a Tesla S series? And he goes, well, General, I'm a reservist, and when I'm not a drilling reservist I'm a security officer for a company called Google. That's how an airman can afford a Tesla S series.

But I say that because if you ask any airman, any Marine, any sailor, soldier or Coast Guardsman, they don't serve for a salary. I mean, they really serve our nation. I mean, this is the best armed service that I have seen in my four decades of wearing this uniform, and they want to serve. They want to be empowered. They don't want to be micromanaged. They want to go out and change the world. The worst thing I can do is stand in their way. And give them the tools that they need to succeed.

The good news is what we're recapitalizing, the old ships that are being replaced with new ships are a quantum leap in the right direction. I just can't get there fast enough.

ADM. DALY: You know, one of the things that comes up from time to time is, with all the diversity of mission that you have, that some people express concern occasionally about the demise of the cutterman; you know, that the going-to-sea aspect of the Coast Guard, which is core, can get lost in the other things that you have to service as missions. Could you talk a little bit about that? I mean, you've already mentioned that it's more complex, stand by, you're going to go back to sea, and that's – you'd be OK with that. But have you had to do some self-talk within the service about the important core of the seagoing aspect and the military aspect?

ADM. ZUKUNFT: So I talked about, you know, force strategies, and these are really regional operational – Western Hemisphere; Arctic; our maritime transportation system, the \$4.6 trillion; and in cyber. Well, there's a fifth one, and this one has no end because it's going to continually evolve. But we – you know, a year and a half ago I pushed out a human capital strategy of how do you recruit, how do you train, and how do you retain a military workforce in the 21<sup>st</sup> century with all the other competing factors that are around us – an aging population, maybe more and better job opportunities in the civil sector. How do you keep these folks in the service?

And we've gone out and we've done a number of listening sessions, and one of the number one dissatisfiers are the number of times you move in a military career. Now, I've moved 21 times in 40 years. That's probably insane. But if you start looking at ship-to-shore rotations – and one reason why

we want to cluster where we home-port our ships, because we also build the bases to support those platforms. So when you leave sea duty, you go to a base. You don't tell the family, you don't tell your spouse, OK, you may not have a job where we're moving to; kids, sorry, you're going to a different school. But if we can do fewer moves, and especially in our seagoing community, where folks can really home-port in a location for multiple tours.

And the first thing we've done is remove any stigma whatsoever associated with geographic stability. We used to frown on that. Now I embrace it. It does three things for us.

The first thing it does it you have people familiar with the platform, the area of operations, and so it's good for readiness.

The next thing, it saves real money. You heard what my budget is, under \$11 billion. So each year, by not moving people or assigning them to the same geographic area at no cost, or fleeting officers up to the next tier on the ladder, we avoid over \$60 million in PCS cost.

And it helps retention. And the retention piece – we enjoy the highest retention right now of any armed service. Forty percent of our recruits coming out of Cape May, 40 percent of them will be on active duty 20 years from now. Sixty percent of our officers who are commissioned will be on active duty 20 years from now. And, as you know, in our officer community, you know, we have opportunities for election – selection; you fail promotion, you know, the upper route thing. So very high retention rates. I might also add here, high recruiting rates from the other services who wish to join the Coast Guard. So we're open for business. If you want to hang up your other military uniform and wear this one, come see me afterwards.

ADM. DALY: Nicely done, sir. Just one last question and we'll open it up. But folding back on, you know, law, rule of law, Law of the Sea comes to mind. And Senators Murkowski and King recently reintroduced some legislation to ratify the Law of the Sea Treaty. And, you know, here's this treaty that we were seminal – we were the push behind this treaty. We've obviously meticulously adhered to it over all these decades since '82 and '94 respectively. And yet, we're not a signator. And in that respect, we're in the company of North Korea, Libya, Syria as the standout countries that have not signed up. Can you talk a little bit about how that being the case, the fact that we're not signed up, we never ratified it, affects the Coast Guard's ability to do its mission?

ADM. ZUKUNFT: Yeah, Pete, that's a great question, and it's a timely one. The reason I say it's timely is that the Coast Guard, one of our icebreakers, the Healy, has followed U.N. protocols in mapping our extended continental shelf up in the Arctic. And so this area is about the size of the state of Texas, beyond our traditional 200-mile limit. And what's below this water on the seabed and below the floor is 13 percent of the world's oil reserves, about a third of the world's gas reserves, and about a trillion dollars-worth of rare earth metals. And technology will get to the point where it'll be economic feasible to harvest all three of those.

Now, the reason I say it's timely is because the snow dragon or otherwise known as the Xue Long, is on her way up to the Arctic from China. And they routinely stop and do research in our extended continental shelf. They've established a pattern there. So if and when we ratify the Law of the Sea Convention, I would expect those who had ratified will protest and say, well, that's part of the global commons. And we, China, have always operated there. Also, Russia has claimed most of the Arctic Ocean, all the way up to the North Pole, as a signatory of the Law of the Sea Convention, and has filed this claim.

And obviously, we've seen what's happened in the East/South China Sea. Even though the U.N. tribunal found in favor of the Philippines, it has not altered the behavior of China in the East/South China Sea. So it's one thing if you ratify, and it's one thing if you have a ruling in your favor, but what you have is a piece of paper at the end of the day. If you don't have the means to enforce this aspect of the law, then what you really have is nothing more than a paper dragon to counter a snow dragon.

So just leave you with that thought. So do we need to ratify? You know, I cannot state, you know, more profoundly, you know, the fact that we are not in the best of company of the non-ratifiers. And it's time for us to join the club and ratify the Law of the Sea Convention.

ADM. DALY: Yes. I think it's important to have a seat at the table too, to be on the inside of that process. As you say, if people can go out, I think it's 600 miles, for the extended shelf for the bottom rights, it's a pretty big deal.

So I will open it up to questions from the audience and take this gentleman right here to start.

Q: Good morning, Admiral. Jim Olson from the White House Office of National Drug Control Policy.

You talked about the counter-narcotics mission. Looking into the future, what do you need the most? What does the Coast Guard need the most going ahead? Do you need more cyber intelligence? Do you need more ISR capability? Do you need more big data analytics to really figure out how where to put ships and boats and planes? Or what do you see in the future would help you the most in that – in that effort?

ADM. ZUKUNFT: Yeah. Thanks for that question, Jim. And so the fact that – you know, working across the entire enterprise – and this is just my Coast Guard – in terms of our domain awareness and, you know, our intelligence queuing, if you will. As I alluded to earlier, you know, we have a good awareness of about 80 percent of illicit flow whose ultimate destination is here in the United States. It really comes down to a matter of resources.

So last year, a record year for drug removal for the United States Coast Guard. In fact, we remove over three times the amount of cocaine than all of law enforcement – that's federal, state and local – combined, as a – you know, as a military service. We don't do it alone. Great support across the interagency to help us target that. But we just don't have enough planes and we didn't have enough ships to target all these other events. And so it really comes down to a numbers game. And right now, those numbers are not stacked in our favor.

Can the United States get after this alone? And the answer is, absolutely not. At the same time, we see record amounts of coca being cultivated in Colombia. In fact, Jim Olson and I were just in Bogota not that long ago. In fact, before that we were in Quito. And we have not had the best relationship in the past with Quito. But what's happening in Quito now is that all of the production of cocaine is now seeping south of the Colombian border. And now Ecuador is dealing with high rates of consumption, high rates of violent crime.

And now they're looking to the Coast Guard. Can we help them offshore to stop some of this movement as well? And I heard the same from Mexico all the way down to Central and South

America. Can we have more Coast Guard? I said, well, I'd love to, but I only have this much, and you need that much. So we're helping some of these nations actually develop their Coast Guard, to get their platforms out at sea and join us as well. We have a very good trusted relationship with two key nations on either end of this, rather prosperous nations. That's Mexico and Colombia. And how do we work multilaterally with these two countries to help the others who are really besieged by the amount of flow coming in?

But the other piece of that is ISR. Today I've got 11 ships shipped to SOUTHCOM. It's a pretty big number. But what we don't have now is enough aerial surveillance. So it's great you've got all this presence on the water, but now we're lacking in ISR. Which is now we're looking at unmanned aerial systems, the endurance they provide, the queuing they provide to close some of those gaps for us. But that, you know, it's really a ship and ISR number that really befuddles us right now.

ADM. DALY: Front row there, Megan.

Q: Hi, sir. Megan Eckstein with USNI News.

I wanted to follow up on the ISR piece. Given what you had talked about earlier with your limited budgets, I wondered what the Coast Guard's approach was for whether it makes more sense to develop your own ISR platforms that more closely meet your needs, versus buying what the Navy's working with, or perhaps investing in, you know, communications networks that tap into what other folks are doing.

ADM. ZUKUNFT: That's a good question. And it was probably about 12 years ago we thought we would go it alone. And we looked at different systems that could operate off a Coast Guard cutter. And, you know, if I was Google and doing R&D work – and I spent a fair amount of time in Silicon Valley. And most R&D efforts in Silicon Valley fail. But those that do succeed do exceedingly well. And Google's got obviously a great search engine. But we failed in our first attempt, and then we were punished. This is, well, how dare you fail at this? So then we looked at the Navy's Fire Scout for a while. And then we put it on one of our cutters.

But then, we saw 20 people come in behind it that need to support this unmanned – I would say it's unoccupied, but it's certainly not unmanned – (laughter) – when I look at the tail that comes with it. And I said, I don't have enough bed space for you all. So I need something that's less dense in terms of the support. So right now we're working within the Department of Homeland Security. Our customs and border protection air and marine branch, they operate nine MQ-9s. A couple of these have the Seaview radar, a very good maritime sensor, on it.

We've invested in R&D to look at state of the art sensors that can do all source exploitation, put it in the maritime environment, and then put it in the air for 18, 20, 24 hours. And maybe not based here in the United States, but based closer to where the threats are at. We have a forward operating base down in Comalapa in El Salvador. We've done flights out of Curacao in the past. So looking at where are the threats, but where can we provide persistent surveillance.

But working within the Department of Homeland Security as a military service, we bring our relationship with DOD in terms of best sensors available. MINOTAUR program which is being operated in DOD, is being operated on Coast Guard, which has now been adopted by CBP as well. So if you can leverage, you know, those systems, the economies of scale, the training, the spare parts and

all of that, I think there's a huge advantage in doing that. So that's where we're at right now. Thank you.

ADM. DALY: OK. This gentleman right here in the front row.

Q: Yeah. Hi. (Inaudible) – Defense Daily.

You mentioned Chinese making their way up the Arctic. And you have a mission need statement for three medium icebreakers and three heavy icebreakers. National Academy of Sciences probably said you should probably go for a cost-effective route, four heavy icebreakers. And I'm hearing now that you're looking more like it's six heavy icebreakers. So I'd like to know how your thinking has evolved in related to the icebreakers. And if it is going six, why six heavy?

ADM. ZUKUNFT: Yeah. As you know, yeah, and – what I liked in the analytics by the National Academy of Sciences – so we're looking at three heavy, three medium icebreakers. And in all likelihood, if you built three heavy icebreakers and say, program done, now we're going to build a medium icebreaker. Well, in all likelihood, any lead ship is going to cost more than its successors. And in all likelihood, that first medium will cost more than a fourth heavy icebreaker. So that's how you came up with the four heavies and, oh, by the way, you still have the Healy, one medium, in inventory. So you end up with five.

Now, our rationale behind six – and this was validated by a high latitude study, and you can use a Navy model. You know, if you need one of anything, you know, permanently present in a given reason, you probably have one in an overhaul and you have on in a workup and one on scene. So it takes three two make one. And maybe it's 2.8, but we round off and say roughly it takes three to make one. And that's how you end up with a net number of six. Can you do it with six heavies? Absolutely. I mean, it gives you many more options than three mediums. Our one medium icebreaker, Healy, last year, I had to medevac a crew member. And it took them 36 hours to break free of ice to then get that one crew member into helicopter range.

It is not ice free up there, even though ice retreats. The Healy was, you know, two-thirds of the way up to the North Pole. But there is heavy ice conditions, the wind shifts, pressure ridges. A heavy icebreaker would have been able to, you know, make it out of there within, you know, probably eight, 10 hours.

ADM. DALY: OK.

Q: Maybe not going in the right direction to have six heavy icebreakers.

ADM. ZUKUNFT: We're not there yet. Obviously, I got to get that first one fully funded. I need that first one in the water by 2023. And there's a lively debate. It's great we've got an integrated program office stood up with the Navy. There's \$150 million in the Navy shipbuilding account. That 150 million (dollars) buys you about 20 percent of an icebreaker. I need to get this first one fully funded. And then we look at doing a block buy to build out this fleet beyond one, recognizing a lead ship. I brought with me at a hearing last week a piece of steel. It's about 2 inches thick, about the size of a brick. It weighs about 20 pounds. That's the density of steel on a heavy icebreaker, and you have to bend it.

So our shipyards have not been building ships of this design in 40 years. So there's a front-end investment that industry has to make. But I have to demonstrate to industry that this is a worthwhile investment, not to build one ship, to build a fleet of ships, and certainly a fleet of heavy icebreakers. But I've got to get that first one in the water by 2023, because the one it will replace is living on borrowed time right now, and that's the Polar Star.

ADM. DALY: OK, this gentleman right over here.

Q: I'm John Wertman with the American Association of Geographers.

We had a bit of a kerfuffle here in Washington last week, Admiral, with the president's tweets on the transgender policy. You talked about the stability within your own workforce. How would any policy change transpire with the Coast Guard? And do you have any comments about that announcement?

ADM. ZUKUNFT: So I reached out immediately to now my former secretary, John Kelly, who also reached out to the secretary of defense. We've stood up a tiger team of our JAG officers.

But actually, that was the second thing I did. The first thing we did is we reached out to all 13 members of the Coast Guard who have come out under a policy, who declared themselves transgender. I reached out personally to Lieutenant Taylor Miller, who was featured on the cover of The Washington Post last week. Now, if you read that story, Taylor's family has disowned her. Her family is the United States Coast Guard. And I told Taylor: I will not turn my back. We have made an investment in you, and you have made an investment in the Coast Guard, and I will not break faith.

And so that is the commitment to our people right now. Very small numbers, but all of them are doing meaningful Coast Guard work today.

ADM. DALY: Great. Over here, Sydney.

Q: Thanks. Sydney Freedberg, Breaking Defense.

To follow up in the icebreaker question, the figure I think that's against the first one in the budget is about \$1 billion, in nice round figures. And when you talk to, like, the Danes, for example, which I did a while back, they sort of look at that figure and scoff, saying there's – how could – no one but the Americans could spend a billion dollars on a heavy icebreaker. They think – the Nordic nations think that's ridiculously expensive. Now, of course, their solution may be to sell you one, which may or may not be possible. But how do you control that billion-dollar cost? Or is, in fact, every penny of that necessary?

ADM. ZUKUNFT: So always good to see you. I don't think you've missed one CSIS event, so I think you ought to get, you know, a meritorious award here.

ADM. DALY: There's a campaign ribbon associated with this.

ADM. ZUKUNFT: Absolutely. We're already doing those tradeoffs. And I am very confident we will drive the initial acquisition cost of this platform south of a billion dollars. The real costs are the – what it takes to stand up this capability in the first place. Five shipyards have been awarded industry studies. In fact, I would say they are ahead of the power curve in doing modeled ice trials, looking at

parent craft designs, and where you might even be able to make tradeoffs within those parent craft designs to meet requirements but recognizing affordability is built into this as well.

Now, make no mistake, this will be built in the United States with U.S. parts. You know, and that is – that signal has been sent loud and clear to every service chief in terms of what expectations are for military acquisitions going forward.

ADM. DALY: OK. In the center here, this young woman here.

Q: Hi. Hope Seck with Military.com.

So the Navy is in the hunt for its own frigate design right now. A possibility that has been mentioned, at least, is looking to the Coast Guard to inform that design. I was wondering if there are any inter-service conversations taking place around that at this point, and what you see as the feasibility of a move like that.

ADM. ZUKUNFT: Where's our Huntington Ingalls rep here? (Laughter.) He would probably say absolutely. I've seen the model, you know, at Sea, Air, Space, and other venues, where you take our national security design and you put forward a vertical launch capability. But we haven't had formal dialogues in that.

But it's probably worth a sea story. The sea story is the Coast Guard cutter Hamilton, you know, named after the father of the Coast Guard. So when I was at the International Sea Power Symposium, you know, they hosted a reception as they're getting ready to go out on their maiden voyage.

And so everybody says, wow, look at this big, white Coast Guard ship. This is awesome. Well, on their way south, Hurricane Matthew devastates Haiti. So Hamilton diverts. And they take their acting president, our ambassador, they do a bunch of medevacs. And so they're the first on scene. The storm passes clear, they're in the straits of Florida, they pick up hundreds of Cuban migrants, now trying to, you know, enter the United States. They pass through there. They go through the Panama Canal. And then over the course of the next three months, they confiscate nearly a billion dollars-worth of cocaine, 13 major drug interdictions.

Now, that is a career's worth on her maiden voyage. And she comes back, offloads this billion dollars-worth of cocaine, and literally the value of that removal is about 1 ½ times what we paid for the ship in the first place, a ship that will be in service 30, 40 years from now. So I would say that's a pretty good return on investment. And there were no hiccups. We didn't have to tow her back in. I mean, it was a great maiden voyage for the Coast Guard cutter Hamilton. So that's what these new ships are doing today.

But clearly, they're operating at the lower end. You would have to totally re-weaponize these platforms to operate at the higher spectrum of naval warfare, and that can certainly be done. Many of the systems on there right now are Navy type, Navy owned. It's one of these national security cutters that is the flagship for a surface action group during the Rim of the Pacific exercise. So we're used to operating – you know, interoperability with the Navy as well. So it is a platform. If nothing else, give them credit and count it towards a 355-ship Navy. (Laughter.)

ADM. DALY: OK, way in the back there. Yeah.

Q: Hi. Melissa Moses. I'm actually a Marine reservist part time, but I do work for SC&A.

Back in 2014, there was the Ebola outbreak. (Coughs.) Excuse me. And in 2015, General Kelly stated that one of his biggest fears or concerns for U.S. defense was the migrant surge coming up. How do you view the Coast Guard's role in interdicting infectious diseases, pandemic control, coming from a maritime threat, such as Ebola, or refugees coming from other countries?

ADM. ZUKUNFT: Good question. We're not seeing the big numbers. In fact, this year will probably be a record low number for illegal migration. Now, what happened? Well, the first thing that happened was the prior administration repealed the wet foot, dry foot policy. And so the illegal flow of Cuban migrants has nearly come to an end. At the same time, when we do apprehend migrants at sea, we do an expedited removal. By that, they're immediately returned to their country of origin.

And they'll go to great lengths to try to better their lives, but they need to do so through proper channels and not attempt to enter illegally. Very rarely – and I've had command of ships where we had 8(00), 900 migrants on my flight deck at a given time, one giving birth. Our immediate concern is tuberculosis, but we have not encountered any infectious disease as far as individuals coming here. I think the biggest threat is probably people coming through the air corridors.

What happened with the Ebola scare several years ago, we had a nurse on a cruise ship that had been exposed to the pathogen in a hospital in Texas. There was concern that she may have been infected. The ship was getting ready to pull into Belize. And the president of Belize refused the ship to make port there. They were going to go to Cancun. The president of Mexico said, they can't make port calls here either. So the ship's on its way back. And then I received an order for the – you know, put the nurse on one of our small boats 60 miles at sea, bring her in, then we'll draw the blood and then we'll determine whether she was infectious or not.

Now, that's maybe good advice if you've never been to sea. Now, first thing that happens, you get in a small boat, you go to sea, you get sea sick. And if you get sea sick, you must have Ebola. And so instead we flew a helicopter out there. We drew blood, but we met with the port authorities in Galveston. We alerted the governor. We alerted the community as said, you know, what conditions do we have to satisfy before the ship can return to its port where it departed, Galveston? They said, well, if you can get this bloodwork up to Austin and get it back, and if it's not infectious – which is what we did.

But we let the locals dictate the terms of what needs to happen. But very rare occasions where we see highly infectious diseases on people that take to the water, because I think just the conditions alone are so debilitating that's not their primary vector, if you will, to try to come into this country. Thank you.

ADM. DALY: OK. This gentleman right here. Right up front.

Q: Hello. My name is Russell Kim. I'm with General Atomics Aeronautical Systems.

I wanted to ask you, what type of activities does the U.S. Coast Guard conduct to build capacity of partner Coast Guards or border forces with a maritime mission?

ADM. ZUKUNFT: Yeah. So right now we're doing a lot of work with a number of countries. I have a very close working relationship with Japan Coast Guard. They're providing patrol boats for Vietnam and the Philippines. So they're providing a platform if I will provide the competencies. So we have training teams in Vietnam and the Philippines to give them the competencies to operate in that maritime environment. So if you look at this game of chess, if you will – Japan, Vietnam, the Philippines. Philippines and Vietnam, two ASEAN countries, perhaps the more vocal of ASEAN nations, in terms of encroachment on their EEZ by China. So we're working with those countries.

In Central America, we'll deliver two patrol boats to Costa Rica and help build out their capabilities as well, so that they have the ways and the means to better police their waters. And they have good judicial systems in place as well. What they lack is the interdiction capability as well. And then I was just down in Mexico and Colombia working with my naval counterparts in terms of how can we work multilaterally together, sharing information, leveraging resources, and where we can best apply those to a satisfactory end. But those are just several examples of where we're helping build capacity, building relationships with a – you know, not doing exercises, but actually doing operations on a regular basis.

ADM. DALY: I think we have time for just one more – one last question. This gentleman over here on this side of the room.

Q: OK. Thank you, Admiral. Are there missions that have been urged on the Coast Guard to which you have said, that's really not for us, or that's not the best use of our resources? And second, which country has the world's second-best Coast Guard? (Laughter.)

ADM. ZUKUNFT: Well, I'm given extreme latitude. And some people say, well, maybe the Coast Guard should, you know, change home ports and shift to the Department of Defense. So when we more than doubled the number of ships that we have supporting Admiral Tidd right now in SOUTHCOM, there's no – I don't have OSD, you know, breathing down my neck. I don't have to get all these mother-may-I's to move forces from one theater to the next. I answer to 22 committees right now. I don't get rudder commands in terms of how do I engage them. And so I get to know them on an upfront, personal basis.

But when I look at the priorities right now within the Department of Defense, when you look at Russia, China, North Korea, violent extremism, Iran, you know, the big five if you will, very little of those resonate with the Coast Guard. When you look at the dark cloud that sits over North Korea right now, we've got some diplomatic, some economic trade space, for a very limited amount of time before Kim Jong-Un has the capability to strike, with multiple ICBMs, the United States of America. I am not in the ICBM, the theater ballistic missile defense world. So if I was in the Department of Defense, I would probably find myself being a donor.

So I think we're a good fit within the Department of Homeland Security. The missions that we have taken on, you know, some I put at risk based on what intelligence that we have. So it's not just intelligence informs you where you operate, but just as importantly where can you go at risk because, like spreading peanut butter across a slice of bread, you need to stack, in this case, in some places and spread it thin in others. So I've been given the latitude to be able to do just that.

But I would not single out any one country. I will say the countries, of the many that we interact with, over 160 in a given year, is where you will find Coast Guard in different elements. And certainly their biggest challenge is their economics. Now, what's important about that because, as I

started this discussion, you know, we were a bankrupt nation back in 1790. And we created this thing called the Coast Guard.

What does not get a lot of airtime right now is our nation's debt. And it was a former chairman of the Joint Chiefs, Admiral Mike Mullen, who said the greatest threat to our nation's security is our nation's debt. So if GDP growth remains the same, interest rates remain the same, so service our nation's debt in 2026 you're talking about a – just to service that debt, you know, a nondiscretionary expenditure of over \$830 billion a year. Well, try to get a DOD budget north of 600 and lift budget caps, but eventually we're going to have pay the piper or something is going to have to change.

And so as I look at the Royal Navy, and if history is a lesson, look where the Royal Navy was in the – you know, in the 1800s and before that. They were a maritime hegemon. Where's the Royal Navy today? Where is our Navy today? But where are we going to be 50 years from now? And are we going to find ourselves in a Thucydides trap? Or are going to have to cooperate with other rising powers around us? That is the dilemma that we find ourselves in right now. But what I don't see is an absence of will by the other nations that we work with. What I do see is an absence of means to carry out their strategies.

ADM. DALY: Well, Admiral, thank you. We know your time is precious. We've enjoyed this chance to have this discussion. And on behalf of CSIS and the Naval Institute, we thank you. And we also thank our sponsors, Lockheed Martin and Huntington Ingalls Industries, for making this possible. But, sir, your time, very valuable. And again, thank you.

ADM. ZUKUNFT: Well, thank you, Peter. (Applause.)

(END)