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Discussion:

ADMIRAL KARL SCHULTZ
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P R O C E E D I N G S

MR. O'HANLON: Greetings, everyone. I'm Michael O'Hanlon from Brookings and I have the honor today of speaking with the 26th Commandant of the U.S. Coast Guard Admiral Karl Schultz who has now been in this job for just over three years, so he has been leading one of the most important services for the American military in terms of its day-to-day interaction with Americans and their wellbeing of any of these services even though his is the smallest with the exception of the new Space Force, and his is the only one that in peacetime is funded and administered outside of the Department of Defense being as we know part of the Department of Homeland Security.

But Admiral Schultz is a remarkable American from the great state of Connecticut, raised there, went to school there at the Coast Guard Academy, later went back to the University of Connecticut for graduate work, took a potentially unfortunate turn up to Massachusetts for his final graduate degree at Harvard but otherwise has an unblemished academic record with outstanding geographic routes.

In his distinguished Coast Guard career, he's served really all over the world, but as I read his biography I'm particularly struck by several tours in the broader Atlantic Ocean, Caribbean and South American regions although certainly with specific experience as well which we know is relevant to today's national defense strategy as so much of the Department of Defense, but also the Coast Guard are focused on challenges and the broader Indo-Pacific region, and we'll certainly talk about those today as well.

In just a second, I'm going to give the admiral a chance to say hello to all of you and ask for sort of a virtual round of applause, if you will, but let me first explain the basic process for the next 60 minutes. We will speak and I'll ask him about a few subjects. As I think you all know, the Coast Guard does a lot with day-to-day boater safety and other safety and environmental stewardship and drug war undertakings, and a broader national safety and security purpose for serving the American people, and it does it all with a small budget and only about 50,000 fulltime employees, about 42,000 uniformed, and another 8,000 civilian.

Then it has a reserve component and an auxiliary component, but the entire Coast Guard however you define it is still less than a hundred thousand people which is half the size of the Marine Corps and a tiny fraction compared to the Department of Defense.

In any case, we will talk about some of the Coast Guard's activities. I want to talk about the Arctic Ocean specifically and also the Indo-Pacific region with integration with DOD efforts to monitor and watch the rise of China and make sure we protect our interests as that process continues, but the admiral may have other interests and so may you, so please feel free to email your questions, if you haven't already, to events@brookings.edu. Again that email address is events@brookings.edu, and about 35 or 40 minutes into the conversation, I'll start to read some of your questions and then articulate them for the commandant's response.

But, one more time, Admiral Schultz, thank you very much for joining us today, sir. It's wonderful to have you with us at Brookings.

ADMIRAL SCHULTZ: Well, thank you, Michael, and I understand you may have a connection with a grandpa that was in the Coast Guard Auxiliary, so it's great to be here, and I very much look forward to the conversation today.

MR. O'HANLON: Thank you kindly for remembering, and, yes, so first I wanted to ask you, sir, about the state of the Coast Guard. Here we are as we end the first half of 2021, and also essentially 16 months into the COVID pandemic tragedy, but I know it's affected you in a lot of ways, you as a Coast Guard, and from most of what I can see from the outside you've handled it with flying colors, no surprise there, but nonetheless, I'm sure there were challenges and I'm sure you still have concerns, both in terms of how you serve the country at this time of pandemic, but also the inner health and readiness of the Coast Guard.

You've got your people and your Coast Guard families to worry about in terms of their health; you've got the industrial base and the maintenance base that serve you and keep your ships and planes operational. How are you fairing at this point in the broader COVID crisis?

ADMIRAL SCHULTZ: Yes, Michael, thanks for the question, and I think it's been obviously a daunting, challenging time for all Americans, all members of global society, no different

for the Coast Guard, a seagoing service, we have not been busier. So we've deployed ships throughout the pandemic, you know, on important search and rescue work, present, you know, projecting cyber presence in the high latitudes.

Our counter narcotics work is as, you know, as sustained, and some -- you know, really we had a plus-up from April of 2020 through the end of the calendar year, so we've been removing a list of narcotics from the street, sending men and women to sea, on a, you know, fairly small environment, think a national security cutter force in 18 linear feet, you know, 175 plus or minus crew members in close proximity interacting with maritime smugglers who present some threats.

I'm very proud of how our Coast Guards has been, and the Coast Guards of family upstate, ready, you know, as that involves. You know, we're a young workforce writ large. We know the cross-your-arm forces, so conducting themselves responsibly in the workplace, choices they make off-duty, bringing those risks to the workplace, so we have fared well. Our active-duty workforce, they have not lost any active members. We tragically lost, you know, four civilian employees here over the course of the 15 months, but writ large, we've been blessed, and I attribute that to the resiliency of our Coast Guardsmen and their families.

MR. O'HANLON: Well, thank you, and thank you to them, and for all they've done to keep us safe through that process. At the end of our conversation, or maybe before the audience questions, I want to come back. You mentioned the National Security Cutter and the fleet and the strains and the readiness challenges, I want to ask you some budget questions, not so much about this year's budget request, but big picture, big-sky questions about whether the Coast Guard today is really big enough, well enough funded for the challenges that we ask you to address.

But let me get into some of those specific challenges first if I might, and I do want to ask you about the Arctic strategy, your service, and now all the naval services have put out strategy documents explaining the importance of the United States essentially showing the flag in the northern-most part of the world at a time when much of the ice up there is, you know, liberating

the seas to travel. We know that Russia has ambitions for a northern sea route that would potentially be beneficial to global commerce, but of course the Russians are going to look out for their own national interests as they try to create that, maybe put some fees on people, maybe put some demands on people.

I wondered if you could explain the importance of the U.S. Coast Guard, in particular, but the whole United States government being up north and being in the Arctic beyond sort of the simple phrase of showing that, the flag or being present. I know those concepts have importance all their own and I don't want to denigrate those, but I wondered if you could operationalize it a bit more for us. What are we actually trying to do; when we send ships to the Arctic, what are their activities and what are your goals for what more they should be able to do up there?

ADMIRAL SCHULTZ: Sure, Michael. So I will start with what you ask me not to do, but I will say presence equals influence in the Arctic, and right now, you know, we're woefully lacking as a nation in terms of our capacity. We've got one 45-year-old heavy icebreaker Polish Star which normally doesn't make it to the Arctic. It does a trip down to McMurdo, annual resupply mission to the National Science Foundation.

Last year, they waived (phonetic) off at the National Science Foundation because of COVID on that mission because of the risks and the needs weren't quite as high as is typical. And so we sent that ship to Arctic and they had the chance to train, had some international partners, did some science work, but it is important to have a presence. You know, geo-strategically the Arctic is absolutely a critically important area.

You know, you think about a trillion dollars of minerals on the ocean floor that are aboard. We see some of these rare-work (phonetic) minerals that make chips and things. We see all the manufacturers stopping the manufacture vehicles because of the availability of chips and that ties back to minerals. You know, about a third of the world's unkept L&G that's on the Arctic sea floor, 13, 15 percent of petroleum products, so it's a resource-rich area on our Outer Continental Shelf. That's important.

You know, from a strategic defense standpoint, if you had Glen VanHerck and his predecessor General O'Shaughnessy here, they would talk to you about the strategic criticality of defending over the northern poles. We see increasing presence of Russian long-range Bear flights operating there, and, you know, we are in the process and have cited fifth generation fighters up there, so it's from a military standpoint it's strategically important, and, you know, we watch migratory species with fish.

We look at, you know, when you think about the U.S. fisheries that meet our marketplace here, about 50 percent of all the fish we consume in this nation comes from Alaska waters, those migratory species are moving north, so I think the Arctic is -- and the Arctic and the Antarctic, but we talk the Arctic, you know, most of the time these days. There is economic aspects, there's security aspects.

You know, you talk about an increasingly, you know, Russia building out its military capabilities, the Arctic, you know, continuing to field more icebreakers, seeing the northern sea route as a potential toll road in terms of bringing it back and reestablishing their economic prowess in the world. They get about 22 or 24 percent of their GDP from Arctic activity, so it's critically important I think on all those fronts.

MR. O'HANLON: Do you see the Russian ambitions in the north as fundamentally adversarial and counter to our own or do you just -- do you feel like there's a potential way to channel them so that everybody can win? In other words, is this a 0 Sum Theatre of competition or are some of the Russian ambitions fine, but we just want to sort of be up there helping set the rules, helping set the norms, and not assuming that they will bear good will towards everyone else?

ADMIRAL SCHULTZ: Michael, I think in my personal opinion, it's the latter. I think Russia has a hugely large, Arctic coastline, and, you know, they have legitimate access and rights to Arctic -- what we can -- what we're concerned about is how they conduct that no space. You know, the same concerns we have about rule-based international order and adherence to that, you know, modern maritime governance.

I think the Coast Guard brings a lot of street creds to that. We're recognized

across the globe as adhering and modeling those behaviors, and I think the Arctic could be one of those, you know, potential places for future freedom of navigation operations if you're not a responsible actor up there, and so that's where I think it's important and, you know, you need to be able to project presence up there.

We're building out a fleet of Polish security cutters. You know, it's a program of record (phonetic) of three ships and I'm sure you want to talk that later, but those are ships that have the ability to operate up there more days and months of the year than we do today, and I think it's critically important that we can go to places and show that, you know, the United States government absolutely is about adherence to that, you know, post-World War II rules based international order. That is important.

So I think we need that capability, but, you know, I don't want to accuse Russia of anything definitively, but I think what we've seen in terms of a propensity, you know, to sort of aggressively -- of course we'd press into place that it's something we need a countering temporary enforce for.

MR. O'HANLON: You mentioned economic interest in the north as well and a number of different examples, but you also mentioned continental shelf, and to me this is intriguing as I tried to form a picture of the north because I know that there are certain areas that are within the continental shelf of one country or another, right, going out 200 nautical miles effectively in an exclusive economic zone.

I'm not sure if that's the way you define continental shelf, and I know there is different possible interpretations, but we have Canada, Russia, United States, Denmark, largely through Greenland, Norway, and then other interested parties as well, right, and so to what extent is your primary concern protecting access to the American exclusive economic zones and continental shelf regions versus the international water space where, you know, maybe no one has a claim or where it could be somebody else's exclusive economic zone, but we still have the right to trans dip?.

When you allocate the relative importance of our own territorial waters and our own continental shelves, that's one category, versus other countries' exclusive economic zones and international waters, are you trying to be equally active in both or is

your primary concern, you know, the more American kind of direct claims?

ADMIRAL SCHULTZ: I think, Michael, if I was tipping it, I would say, you know, clearly activities on our outer continental, extended outer continental shelf is probably where I would start that conversation, but we are interested in water going on in the EEZs, the international waters. You know, we operated this past summer up there in concert with the Russians, and they had a big training exercise out there.

We had the Healy operating up there -- excuse me -- the Polish Star operating up there, and we want to have a cooperative dialog with Russia. The previous year there is a Russian vessel up there with one of our ships and those are good things because, you know, we see tensions related to malware, cyber-ware attacks, other things, but, you know, search and rescue, fisheries cooperation, environmental cooperation, those are places where, you know, what is advantageous to U.S. interests and Russian interests that we cooperate up there.

So I would say we are interested in OCS, Outer Continental Shelf, Extended Continental Shelf activities, pretty high on the calendar, but we're also, you know, very cognizant of what goes on in the international waters and that they -- like I said, they're allowed to be free and open, you know, in terms of commerce. We see an increasing likelihood of more, you know, expeditionary type cruise activity. Obviously, cruise came to a complete stand until this year and that's coming back, but we need to pay attention to, you know, large expeditionary cruise vessels with hundreds of passengers onboard. There is risk there. And we have statutory authorities that extend out there in our U.S. waters up there, so that's where we have to have the ability to access the area and project Coast Guard capabilities of capacity where we have, you know, domestic interests.

MR. O'HANLON: In a second, I wanted to ask you to talk about those ships that you mentioned a second ago that will have more capacity for operating in the north, but what we're talking about Russia, you know, it's really intriguing to me, and it also foreshadows one of the directions I want to go in our conversation about the Indo-Pacific and China in a second.

I want to ask you does Russia almost show more collegiality, if you will, or

willingness to work with the U.S. Coast Guard than perhaps with the U.S. Navy because historically we know that Russia and the United States obviously in the Cold War era competed with each other across all domains including nuclear domains in the northern waters, and the Russian ballistic missile submarine fleet largely based in the north and American naval assets historically have been focused in part on preparing for the possibility of pursuit of those Russian nuclear assets which from a Russian point of view is not a particularly friendly mission, right?

So, I would expect when the Russians see U.S. Navy up north, they may act differently than when they see Coast Guard because even though you're obviously a military service and you obviously have a lot of combat capability within certain parameters, your overall purpose is really different. Do you sense that the Russians are more willing to work with you than they might be with the U.S. Navy?

ADMIRAL SCHULTZ: You know, Michael, I would say yes. I don't want to speak for the CN over (phonetic) or the Navy, but I believe there's a pragmatism there with the Coast Guard, and, you know, we partner in the North Pacific Coast Guard forum regarding fisheries activities in the North Pacific Ocean region that's the Japanese, the Canadians, the Russians, the South Koreans, the United States Coast Guard. That's very practical, very pragmatic. I think the Russians bring a practical approach to that.

Recently we passed the leadership of the Arctic Council, the Arctic Coast Guard Forum to the Russians, so, you know, we sit here at the Arctic Coast Guard Forum. I represent U.S. interests there, and, you know, we have a very pragmatic dial (phonetic), and I think Russia has many -- dozens of activities as they hold the Chair of the Arctic Council this year where they will want to have their leadership out there talking about their legitimate interests in the Arctic, so -- but I do think there is a practical functional approach that Russia takes toward the U.S. Coast Guard in these spaces, and that's a positive thing.

MR. O'HANLON: Thank you. I will come back to the broader budgeted question later, but I wanted to ask you specifically on this matter of the class of new ships that you're building now that are -- that's intended largely for operations in northern waters, did you want to say

anything more about how they're coming along and what your ambitions are there?

ADMIRAL SCHULTZ: Yes, Michael, absolutely. So the program of record for what we're naming the Polish security class ship, the Consolidated Appropriations Act which came through, you know, late December of 2020 for Fiscal '21, that has production for the second Polish security class, so we are funded for long lead and production on both Polish security cutters number 1 and 2.

That is a program of record up to three ships. The '22 budget includes the long lead time. That's the budget that you'll recall sea stage presented to the Congress now for action here for Fiscal Year '22 which starts 1 October of this calendar year, so we are in a solid spot in terms of funding for the program. We're building that ship down at VT Halter in Pascagoula, Mississippi.

They tell me we should be cutting steel on the first articles here in the coming months, so hopefully they're steel cutting this year and contractually, you know, we're on contract for that ship late '24. We have not built a heavy icebreaker in this nation, you know, for a good part of half a century, so that's different kind of steel work and all, but we're guardedly encouraged that the post security program is moving ahead on pace.

You know, we took what's normally a 9 to 10-year period to build the ship and tried to compress that down on a very aggressive, you know, 6-year timeline, so there are probably going to be a little bit of maneuver space in there, and then I would think the real conversation, Michael, just to wrap up the thought is, there's probably a conversation for more than three Polish security cutters.

You know, we've done some work with the former National Security Council, the current National Security Council by broadening that conversation, but I am encouraged that after a decade-plus of talking about the needs for new ships where we got funding for the first two, on track for the third, and having conversations about additional ships. That's a much better place for our nation to be, but it takes time to build those ships and it takes money.

MR. O'HANLON: Thank you. Now, if I could shift to the Indo-Pacific and

especially the competition with China, I wondered if you could just give us a snapshot of the Coast Guard's role in that broader deterrence and presence (phonetic) set of missions, and then I will have a couple of follow-ups about specific things you may be doing out there, but I wonder if you could first begin by painting us a broad picture and also maybe a little bit of historical perspective, how much has that changed in recent years as we've adopted a national defense strategy that prioritizes great power of competition?

ADMIRAL SCHULTZ: Yes, thank you, Michael. You know, we've been the Pacific Coast Guard for more than 150 years, so it's in our DNA when you think Pacific and you think about Alaska or our early rules up there of Seward's Folly. You know, when you sort of pivoted to the Indo-Pacific region, you know, you think back to the Second World War and you think about coasties on the beaches, you know, are our most celebrated era on the Coast Guard is Douglas Munro, Signalman First Class, who pulled out Jesse Bullard's Marines off the beaches of water canal here, you know, and that is a seminal moment in the history of the Marine Corps and U.S. Coast Guard, so we are a Pacific-based Coast Guard.

You know, I look at the world on this continuum. I talk about this cooperate, compete, and lethal continuum 0 to 180 degrees, this flat table in front of me. And, you know, 0 to 150, we can argue exactly where, but that's cooperating, compete space. You know, I think Jim Mattis really talked about cooperate where you can, compete where you mostly talked about the facing threat of China back on his watch, and I sort of adopted that.

You know, what I think we bring to the conversation is we're that bridge between Department of State Diplomacy and Department of Defense Lethality, and I think in that -- in that region of the world, a Coast Guard in a region that's really building out their coast guards, you look at the Japanese, the Chinese, the Philippines, the Malaysians, they're all building up their coast guards.

They, you know -- 75, 50 percent, Philippine multi-hundred percent of additional capacity frontage across their coast guard fleets, so they see coast guards as a really useful tool where they can enforce their domestic laws; they can bring some, you know, arguably military might

punch to disputed regions, and I think what we bring -- and this captured nicely I think in the tri-service advantage for sea.

We signed it up as CNO, the Commandant Marine Corps, myself last fall. It really looks at how does the Coast Guard trend (phonetic) at the naval forces, an integrated all-domain naval power in the region. I think we are absolutely, you know, a key part, not in huge capacity because we're finite in scope, and you framed that nicely at the end, but we bring people-to-people opportunities, relationships, so let me stop there and I'm sure you want to take it down different directions here.

MR. O'HANLON: Yes, but natural -- you know, the natural concluding question is going to be given what you can do in that space between diplomacy and defense, are you big enough, because it strikes me that's a pretty big space. It might be the most important single function or task we have before us as a nation, and so I wanted to ask -- let me focus in geographically on the South China Sea, and ask about whether you have, you know, a concept for how often you want to be there, whether the frequency of Coast Guard deployments into that broader region has changed, whether it's increased enough if that's been one of your goals.

And specifically, do you feel like we're working towards at least a temporary *modus vivendi* with the Chinese where even though they claim essentially the whole South China Sea is territorial waters with their nine-dash-line, that they know that we're not going to concede that and that you are starting to feel that there has been some success in signaling that we're not going to concede that with the Coast Guard a big part of that overall effort or do you feel like this is still the Wild West; the rules of the road are still being, you know, recontested, reassessed, and it would be good to have maybe a lot more Coast Guard presence in the South China Sea as a way of showing China, on the one hand, we're going to stay, but on the other hand, we're not looking to have a fight here?

We're looking to be present and be active but not to have a fight, therefore the Coast Guard becomes a very important tool. Where are you closer to feeling, that we're doing pretty good and the Coast Guard's playing its appropriate role, or that we still have a long ways to

go and, you know, you still wake up at night sometimes worries about that theatre?

ADMIRAL SCHULTZ: Yes, let me start by saying, you know, what does it mean for the Coast Guard to be there, so, you know, the Coast Guard to be there, there's many answers to that. We just put an attaché this past summer in Australia. That attaché will serve as Papua New Guinea and New Zealand as well, so that is someone working with the country team, with the key partners, fly partners with the Kiwis (phonetic). I'll be actually on the phone coincidentally with Admiral Proctor from the Royal New Zealand Navy, set, and we'll talk about collaborative opportunities.

They have a new auxiliary ship, and I think we're going to talk about how we might work in the region. The Australians have a patrol boat program. I met with the Australians out there. You know, they're sprinkling a, you know, finite number of patrol boats throughout the Oceania Pacific Isle nations there, and he said, how do you layer in maybe some Coast Guard maintenance supports some Coast Guard law enforcement training to help these Pacific Isle countries recognize or, you know, protecting their sovereign interests? They are based -- economies are based on their GDP 50-percent plus from the sea. So, we layer in, and we have a new attaché going to Singapore next summer. I put a new Coast Guard 06 Captain on the 5-3 (phonetic) staff at the USINDOPACOM. I've got a new Coast Guard captain position 06 working with Pete Gumataotao who's in from the Asian-Pacific Center for Strategic Studies (phonetic).

Pete was in the building today here meeting with the Vice Com when I caught up with Pete a little bit. We go back a bunch of years, but very excited about having not just an 06 but 05 there to formulate the thinking space. We've got mobile training teams that operate through the region, and we bring Indo-Pacific partners into our courses here, our schoolhouses here from International Maritime Officers Course to technical skills, the Bacoma (phonetic) and Indonesia just opened up a new training center.

They broke ground on that. We've been tied with that. We've got an advisor in Vietnam, excess defense articles; we've sent three former high endurance cutters to the Vietnamese. We've got Coast Guardsmen in Vietnam helping them build up the Coast Guard.

Philippines went from about a 5,000-person Coast Guard. They're about 15- 16,000 today marching to 40,000, so I look at those Asian partners, and you say what are those different ways to touch them? You know, capital assets, 2019 we had two national security cutters here for back-to-back five-month deployments.

You read about, you know, some transits through the Taiwan Strait. They were there at a time when the U.S.S. Fitzgerald, the U.S.S. McCain were out of service getting repaired, so we could, you know, maybe backfill a Navy ship, and you needed a ballistol shooter to do something else. We did sanction work against the North Koreans. We did capacity building partnerships with the Philippines and the Bakamla from Indonesia, the MMA, Maritime Agency for Malaysia, so there's a lot of ways the Coast Guard could be there, Michael.

I would say, yes, more Coast Guard clearly gives you more options. I'll be going out to Guam and we're commissioning three new fast response covers. That's a hundred and fifty-four-foot 300 gunship, 44 foot more waterline than the 110s (phonetic) I replace, about 10,000 miles of range; team them up with the Buoy Tender in Guam and you can do some really creative, you know, out area, and maybe deploy for 30, 60 days, touch a lot of countries capacity building, a Uman (phonetic) partnership that's an alternative to maybe Chinese's, you know, checkbook diplomacy.

I mean, clearly a check has the impact a check has, but I'm not so sure the mindsets, the hearts and minds out there aren't allowed -- are more aligned with Western democratic ideals, so we can press into that I think, too, so let me stop there.

MR. O'HANLON: That's really helpful, and a testament to just how varied and flexible you are. By the way, I read your State of the Marine Corps speech and even though this is a slight deviation from our conversation about the Indo-Pacific to which I'll return in a second, I was struck by one of your Guardsmen that you celebrated who had, you know, some kind of a mountain rescue, a Hiload --

ADMIRAL SCHULTZ: Yes.

MR. O'HANLON: -- (phonetic) and then shimmied down and built a little camp for

an injured hiker and overnighted with that person, and so being airlifted up the next day. I wonder -
- it's quite remarkable what your small organization does around the world.

ADMIRAL SCHULTZ: Yes, Michael, that was, you know, of someone climbing the cliffs out there in the state of Oregon, in the rocky cliffs, and that's what our folks do. When we get these great young men and women who want to serve their country, they'll find their way to the Coast Guard. That's a whole separate conversation off the bed of this to find those men and women, keep them in our ranks, but they do some remarkable things.

They just had this bias for action to serve their country maybe here a little bit, so we're very proud of that coastie up there, and those kinds of cases replicate themselves all over the Coast Guard every day.

MR. O'HANLON: So you gave a good picture of all the activity in recent years in Southeast Asia, but I wondered if I could come back one more time to the South China Sea specifically where of course the Chinese have been most resistant to the idea of any foreign ships and specifically U.S. military ships feeling that they could have, you know, access, and yet we all know that that would be -- if the Chinese really tried to keep us out, that would be an extremely serious, you know, action that would risk war if not virtually guarantee war in my judgment, and so the last thing we want to do is have a Navy-to-Navy showdown which makes me feel like the Coast Guard is a wonderful instrument of national policy to have sort of semi-regularly and frequently in the South China Sea.

Is that the way you think of the Coast Guard, or do you just go in when called upon on one-off missions to backfill, you know, a Navy absence or for some other targeted specific purpose? Is this now a general presence or is this a bunch of individual missions?

ADMIRAL SCHULTZ: Michael, I would say it's a general presence. I think, you know, former Indo-PACOM Commander Phil Davidson, now Admiral Chris Aquilino, absolutely sees the Coast Guard as part of that conversation. Again, there's a capacity dialing; you can only put your hand in and turn up so much. But I think when I look into the Indo-Pacific region, you know, and you know we hear the voice of the central Communist Party, you know, they keep their

Chinese navy at bay.

You know, hey, we're not militarizing it; it's you're militarizing it here, United States government. I would tell you, you know, they're using their China Coast Guard which has ships bigger than a DDG hardly broke the store that don't leave the first island chain. You know, we've got large ships in the Coast Guard not that big that are global deployers I think doing global good, helping protect African interests off the African Continent with, you know, their IU fisheries, the same thing off Brazil. We're in the Arctic, we're protecting the environment.

I will tell you the Chinese Coast Guard is antagonistic, of course, of running down, you know, Philippine, Indonesia, and Malaysia fishermen in disputed spaces, and they have this other organization, the People's Armed Military Militia, Maritime Militia. You know, arguably state sponsored, brought on state-sponsored vessels, so I think what we bring is when you talk about the recognized world's best Coast Guards, we don't act that way.

You know, we don't use our Coast Guard as an arm of the government, you know, to press in coercively over disputed regions. Our Coast Guard is recognized, and if you look at the Coast Guards across the world including the China Coast Guard, White-Hull, the words "Coast Guard" emblazoned on the side. You know, that we have that iconic orange-blue racing stripe. They have a stripe on their ship. It sort of replicates our look in visual optics but in behavioral patterns, you know, that's not how the world's best Coast Guards operate.

So I think we bring a strong, compelling voice to that to say, "Hey, this is not how the world's best Coast Guards operate, so how much Coast Guard goes to the region, that that's the conversation, but I anticipate us being throughout the Oceania region with those patrol boats, some periodic national security coverage. We just had the Kimball come back. She as out operating as far out as Fiji. We have another ship, the Monroe, that's going to be operating in the Western Pacific, IU fishing, and other type of capacity building here at the stall (phonetic), so I think there'll be a steady drumbeat of Coast Guard presence. You know, it's episodic; it won't be around the calendar.

And the other thing is, you know, right now we've got Coast Guard law

enforcement attachments operating on the U.S.S. Wichita, and, you know, doing the Tulsa Rail (phonetic) I think that's out there. Wichita is doing counter narcotics elsewhere with the Coast Guard team. We're doing ONSI, you know, Oceania Maritime Security Initiative, passing naval ships for the Coast Guard team onboard looking for violators of illegal unregular -- unreported fishing activities in the region, so there's a lot of ways we can bring Coast Guard capability and presence to the region if we think about this, you know, in a very sort of broad mindset.

MR. O'HANLON: I want to ask you about cyber in a second and then come back to the budget question before we go to audience, but I also just wondered when you think of all the assets you have deployed around the world -- I don't know if you get daily briefings or every two days or what have you on recent activities, but is there a certain part of the world that causes you the greatest concern based on just day-to-day challenges and dangers; is there also a part of the world that causes you the greatest sense of hopefulness and opportunity that you see new patterns emerging of cooperation? Maybe it's even the same region for both, but I wondered if you have any kind of a gut feel like that that you could share with us?

ADMIRAL SCHULTZ: Yes, so, you know, I do think -- I see a brief every day about what the activities are across the world, and then, you know, we get briefed on specific activities. You know, the common of the Coast Guard is interesting, Michael, in that, you know, I am the service provider in terms of force, man, and equip, and then by law I'm actually the senior operation commander, so it's a little bit of co-Com like and it's service chief; like that's unique here, and then we sit outside of DOD as you alluded to in the onset.

I sit inside DHS, so I was sort of secretary who's the Homeland Security secretary. You know, I look at -- you know, I have 250 men and women in the Arabian Gulf. So, I've got six patrol boats there, four -- you know, six island class. We just sent two new fast response cutters that I talked about going to Guam. The first two arrived there in late May, two more this fall, two more this spring. So, we work for the Fifth Fleet commander and the deal with the, you know, the breadth of Iranian behaviors on the Gulf. We've seen situations where Coast Guard cutters have used warning shots to fend off the vast Iranian -- and, you know, intercept their craft that have

been, you know, increasingly aggressive out there. That area of the world, you know, keeps my attention.

I don't know if you saw any of the pictures in the open source (phonetic), but the U.S.S. Normandy, a cruiser, had an entire flight that gets, what, a 567-foot ship, the entire flight deck was covered with different type of armament, you know, Russian armament, Chinese weapons, Chinese rifles like AK47 version (inaudible) of Chinese rifles. There was thousands of pieces of equipment. The investigator work isn't done, but previous cases where we've had our high-end interceptor team or AIT, Advanced Interdiction Team, that works on a rotational basis with the Marines in the region and the Seals, they've been on a couple of these takedowns, and, you know, historically those weapons are bound for the Houthis, so that is a sporty part of the world that it always commands my attention.

Counter drug, you know, activities here in the Western Hem, if you look at where the preponderance of our Coast Guard daily activity where are major capital assets is it's in the Western Hem. Counter narcotics mission is never safe. You know, we jump onboard at night. You probably saw the coasties on the drug sub banging on the hatch or a little bit of the movement sub, you know, so that commands my attention. The high latitude work is always very demanding when we send a ship up to the Arctic or down to the Antarctic, so I would tell you the Coast Guard work captures my attention, the Western rivers.

You know, that it's not a week goes by, usually a day go by there's not some kind of incident where a tugboat gets caught up in a high-water situation, caught up by the dam, and, you know, we're respond and rescues there, Michael, so I would tell you it's Coast Guard activity across the globe that catches my interest, always pay keen attention to the Arabian Gulf activities.

I pay attention when we have a ship deployed in other fleets. You probably saw then, and I'll wrap up here, you know, the Coast Guard Cutter Hamilton, one of those national security cutters got back a couple of weeks ago from being on the Fifth Fleet, up in the -- the Sixth Fleet, up in the Black Sea. So, there's talk about a cruiser and destroyer up there.

We just watched what transpired in recent weeks -- in recent days between the UK

Royal Navy and the Russians. We just finished a, you know, multiweek deployment in the Black Sea partnering with the Georgians, the Ukrainians. We've transferred excess Coast Guard cutters, excess defense articles we worked out, and you know, did some interoperability training, professional exchanges, so we're just in a pretty hotspot here in what we saw in recent days.

MR. O'HANLON: Fantastic and remarkable for such a small force to be punching so much above its weight, if I may say so. I wanted to ask you about cyber before coming back to your budget, and you set me up nicely by reminding people that you are in the Department of Homeland Security, and the way I think about the overall U.S. government approach to cyber security, this is going to be a bigger question than just about Coast Guard cyber systems.

I want to ask about your take on overall national cyber strategy and cyber protection because as we all know, the Department of Defense protects its own networks, and therefore those of the intelligence community, more or less. The Department of Homeland Security protects the rest of the federal government, and then there's really no government oversight, as I understand it, or at least no direct responsibility to protect any of the rest of the country's assets, private or even state and local, and I wonder, two-part question.

First, do you agree with this basic way we've done cyber security, or do we have to rethink it because a lot of systems, you know, pipelines, electricity grids are not being very-well protected as we see in the news all the time. And then secondly, within the Coast Guard itself, do you think that the Coast Guard's role for cyber, whether within the current DHS framework or maybe some new framework, should be increased or is that just too much to ask of a small force that's already doing so much?

ADMIRAL SCHULTZ: Yes. No, Michael, I think, you know, step back for a second and look at cyber writ large. I mean, the cyber threatscape, you know, I just look in recent weeks and months and you look at, you know, where we've been with the Russian hack here. We look at the Colonial Pipeline, very recent, you know, you think about 5,500 miles of twin pipeline that feed, you know, oil, aviation gas, diesel from the Gulf Region -- from the refineries.

They help set the price so our refineries compete in a competitive marketplace.

They push fuel up the Eastern Seaboard and the mid-Atlantic region, and, you know, they didn't shut the systems down, but they shut down the accounting system, and, you know, it reminds -- it's reminiscent of 2017 hurricane season when Hurricane Harvey hits Houston and they shut refineries down. You know, it's 72, 96 hours before your gas becomes a precious commodity in Washington, D.C. or New York, so we're in this sort of just in time distribution system, so the ability to shut down critical elements of infrastructure through cyber I think is all elements of government business, you know, inside -- you talked about DOD and perfecting their system, so we're about no organization.

Our email, our platform is on .mil, so our cyber team which is, you know, about 350 strong and growing, but we have just FOC, Full Operating Capability, of our first cyber protection team. We're building out a second team with the '21 budget and cyber mission team in the '22 budget, so we're building an organic cyber workforce. We work closely with CISA inside DHS. You know, we support them on election security and other things, but this is whole of government, and the Department as you say, you know, owns the infrastructure of the nation and the interface with, you know, state and local and, you know, private.

I see my role, I see the Coast Guard's role as really looking at Secretary Mayorkas as a secretary. We're going to own this wet piece. We're going to own the Marine transportation system, the cyber as an interface is a 360-plus ports of 25,000 miles, you know, of nautical miles of waterways to the nation, but that's a big statement. You know, 90 percent of the nation's, you know, commodities, goods, come in via Maritime means, so we go back to Natalya (phonetic) back in 2017, summer of 2017.

I think Maersk had a bill somewhere between \$200 and \$300 million when they came in and took their systems -- their inability to access their cargo systems offline, I think they recapitalized 50,000 laptops, but that tells you how vulnerable -- and, you know, Maersk does about 20 percent of all the global shipping, but if you can shut down an organization and the private organization like Maersk that touches 20 percent of global population with a ransom attack, I think that's a valid data of how, you know, important this cyber threatscape is.

There is clear Coast Guard work for that. Yes, we can take it on. Matter of fact,

we'll be going public with a new what I call "strategic outlook". You know, we have one on the Maritime commerce outlook. We have one on, and you mentioned earlier, about the Arctic. I did a refresh on that back in the spring of 2019. We rolled out a IUU, Illegal and Regular Unreported Fishing outlook this past fall. This is going to be a new cyber one that updates our previous site because it's such a dynamic changing landscape, but we absolutely are relevant in that space.

We need to grow our game, our organic capabilities, our partnerships, and it's a regulatory functionality, so, you know, we regulate environmental issues, safety issues. We're working to say how do you regulate in the cyber domain; how do you get folks to say, "Hey, we had an attack." You know, how do you get them to be transparent and open, and then when you understand it, you can start to figure out how you help them mitigate, how they can build resilience into their own systems.

So, there's a lot of work, burgeoning work for the Coast Guard for the Department, and we're a key element I think of DHS's efforts on this part, and the whole of government efforts.

MR. O'HANLON: Thank you. So, now, my last question, although I'm sort of backed up here by Jon Harper of *National Defense Magazine* think who's added a similar question in the chat, and it gets to the budget, and he's focusing more on this year's budget and the fact that your request is essentially flat which was perhaps not your choice, but, you know, whether that's adequate, my question goes beyond to, you know, blue skying the question of how big should our nation's Coast Guard be at this point, and if we were going to, you know, have the Coast Guard we really should want, just as the Navy has a vision for a 355-ship fleet it may never actually reach, but it has a vision; what would your vision be above and beyond the year-by-year request?

So, is the Coast Guard roughly big enough; should it be 10-percent larger as measured by people or ships or aircraft or however other metric you might want to employ? But Jon's question again is more about this year and whether you're happy with the Fiscal '22 request.

ADMIRAL SCHULTZ: Let me take Jon's question and your question, Michael, kind of make it an answer to both. I would say, you know, this is just a statement of fact, not a statement of value or not. So, the previous administration in 2018 about a 12-percent bump up to the Armed

Forces in DOD for readiness. They recognized they're pulling along a lot of baggage in terms of the readiness of the Forces. We were outside of that and just not part of that. The Trump Administration very supportive of Coast Guard. Biden Administration very supportive of Coast Guard.

We made some catchup ball in the '19 budget, '20 budget, '21 budget. If you look at the last three year's budget, you're starting to see some positive growth, particular on our operations support budget, but we didn't get that 12 percent. That was like a booster shot to get you healthier. We missed that, so we're playing catchup ball, '22 budget that went to the Hill upward at congressional stage now, actually has a little bigger shot in the arm on operations and support, so that's a good thing. It's a really positive starting point.

Congress has generally put some more money on top of the President's request. If you look at '22 versus '21, their top lines are a small movement, but the PC&I capital acquisition budget is down a little bit, but, you know, sometimes you know when you don't have \$555 million chunk in therefore the next Polar Security Cutter, that can deviate a little bit, but we are actually making some positive slope progress on operations and support, so that's a good news story there.

What we need, you know, I'm hesitant to say how many more people we need. We talked that way for a bunch of years and it just didn't play out. What I need, and I've talked about it consistently, is a ready Coast Guard. I need about 3 to 5 percent of annual budget growth. If we can do that based on the last couple of years of budgets, the '22 strong proposal from the administration, I can deliver and my successor can deliver a healthy Coast Guard I think, get after these things across the globe.

I mean, there's a -- you got to, you know, not overshoot your skis here in terms of your appetite for things, but we can take on risk position. We can push more Coast Guard to the Indo-Pacific. We can push more Coast Guard to the Arctic, some key LNOs, Liaison Officers, attaches. We can do those things that really push a ready Coast Guard into the conversation space.

MR. O'HANLON: So in talking that way, and in -- you know, and I'm not really

asking you to obviously help us at Brookings get into a big national debate, one part of the government against the other, but what I notice is you mentioned 3 to 5 percent real growth. That's the kind of real growth the Pentagon wanted under Secretary Mattis, and that was associated with proper implementation of his national defense strategy, and then, as you pointed out, DOD got a decent boost, not just in ONS, not just in operating funds but across the board during the Trump presidency, and as much as the Trump presidency may have been friendly to you, I think it was perhaps even friendlier to DOD, and now most people at the Pentagon are not really, at least as best I can tell, they aren't really asking for 3 to 5 percent real growth anymore because they probably have figured out it's not going to happen.

They sort of got their boost in the Trump years, and now a lot of them -- again, I don't want to name names, but I've heard enough people testify this spring that it looks to me as if a lot of people at DOD would be happy just to have the budget stay relatively flat or go up a little, but they've given up on the 3 to 5 percent annual real growth whereas you just articulated it again, and it's only fair because you have a much smaller budget, you know, even adjusting for, you know, mission and size, and you haven't benefited quite as much from the largesse of the last few years, so are you really -- are you now suggesting that the Coast Guard budget should grow faster in percentage terms than the DOD budget; is that what I'm hearing?

ADMIRAL SCHULTZ: Well, I suspect if the Chairman was next to me at the service chiefs, you know, that I'm not going to speak for them. I would tell you that's the pace the Coast Guard budget needs to grow at, and I think, you know, when you look at a 13-billion-dollar top line, that's not a big budget, and I look at, you know, what we bring across the globe, we've talked across some of those things, you know, what we can bring with, you know, partner nations coming here on our schoolhouses, what we can do with mobile training teams. They well-place attaché, well-place Coast Guard liaison, building a capacity of Asian region Coast Guards.

I think you get a lot for that \$13 billion, and when you sort of back out the retirement fund, you back out the PC&I budget, it's about \$9 billion of operation and support budget. That's not a big budget to deliver global capabilities and protect the \$5.6 trillion of activity that occur

on the Marine Transportation System at home that supports 31 million jobs. I look at, you know, it's the hurricane season that kicked off on 1 June, I look at 17, 18, 19, 20; last year was the busiest Atlantic base of hurricane season in the history of the nation.

You know, we didn't have a Harvey-like storm, or Katrina-like storm, but we had two storms that smacked Lake Charles within, you know, 10, 14 days proximity, and if you live in that part of the world, it ripped up pretty horrific and devastating, you know, that we didn't have the horrific loss of life, but those things were hard, so your Coast Guard brings are, you know, contingency capability there. We're projecting the stuff we talked about earlier across the globe; we still rescued 20,000 mariners; we're protecting and securing our ports.

I think for a modest investment, you know, I absolutely think 3 to 5 is the minimum that would give you eh Coast Guard the nation needs, and we're pulling across, you know, really a backlog of maintenance and infrastructure projects. You know, we've been just patching leaky roofs, but if you want to invest and you cite our new ships we're building, that gets you the Coast Guard the nation needs, allows, you know, whoever sits in this Commandant seat, you know, when the White House says, "Hey, we want something that looks like more Coast Guard in the Indo-Pacific," you know, how fast do you want it versus what do you want me to stop doing?

And I think that's how I'm trying to posture the service, Michael, is to put as much Coast Guard into both the home game and to weigh opportunities. But I think we bring a really credible voice in that that diplomacy, you know, short of lethal, that middle space or that continuum, 0 to 150 degrees. A lot of the world looks like a demand for Coast Guard right now more than ever before in my 38 years of service.

MR. O'HANLON: It is interesting that 13 billion, your annual budget, is less than one week's DOD that's the equivalent. But there's a question about climate change, and just that it's a broad question, so take it wherever you wish of course, but how does climate change affect the Coast Guard's mission balance and also its large Cutter resource allocation?

ADMIRAL SCHULTZ: Yes, so, Michael, climate change clearly as we have all facilities and need to upgrade facilities, we need the fact that -- I look at places, you know, you talk

about climate change and sort of areas that are really focal areas. You look at that tidewater Norfolk region, you look at Florida, a lot of Coast Guard at both of those places, so as we cite new cutters, we need to think about that as we build our new facilities, repair facilities. I think about the Arctic, and clearly if you look at the ice set statin (phonetic) (inaudible) in recent years, you know, folks, all of the ice is melting. Really if the ice is melting you need more icebreakers because there's more ice that's not fast ice, it's dripping ice. It tends to when ice drifts together, it emylcamates on top of each other, very difficult to move through there, so there's safety aspects, so, yes, climate change factors into to our thinking a ton here.

You know, when you think about regulatory, I represent, you know, United States interests, Coast Guard interests at the International Maritime Organization. I think when we're looking at, you know, a move to lower carbon fuels, the Coast Guard will be in that conversation space. There is pending permits for I think something north of 1,700, you know, wind towers off the Eastern Coast of the United States, just in the Gulf region the other day in New Orleans, and they're looking at wind -- you know, alternative energy, wind in the Gulf of Mexico here as we're also still looking at, you know, deep ocean drilling and other type of events.

So, for us, and then increased space operations, and, you know, there is ties to, you know, the technological piece. There is safety aspects, but climate change I think is woven into everything we do, and I think the Coast Guard in this, you know, increasing sources for alternative energy, we never -- we're going to get even busier than we are right now. Waterways management, we're looking at port access routes from, you know, the Florida Keys up to Maine.

How do you move ships through increasingly congested areas; you know, how do you space wind towers; how do you allow fishing activities go, access in and out of ports. It's really sort of a boom cycle for the Coast Guard here back to the 3 to 5-percent growth that allows us to do all those important things, including regulatory work.

MR. O'HANLON: And there's a follow-up that asks about the specific issue of extreme weather events, and I think you mentioned in your State of the Coast Guard speech that last year was a record hurricane season; we just started a new one. Are you feeling the need

whether through for structure or training, anything else to prepare more for extreme weather events than you even have in the past?

ADMIRAL SCHULTZ: Yes, you know, I'm a Sailor in the Coast Guard, so I've spent a lot of years avoiding hurricanes, different parts, you know, mostly on the East Coast Sailor, but, you know, we've seen this rapid intensification process, you know, the way hurricane that was moving across, you know, the coast of South America ends up in the Gulf of Mexico looks to be not a big deal, then suddenly it pivots north, picks up speed, smacks Roberts, Texas, as a tornado, and then comes up and there's a rain event in Houston, and Beaumont-Port Arthur for multiple days, and, you know, draws 51 inches of rain and floods out the streets; never thought we'd rescue 11,000 folks from the streets of Houston.

You know, we generally operate over the water, not over cities, but, yes, this rapid intensification looks different to me. If you look inside of last year's 30-named storms, 6 hurricanes that hit the Gulf, 2 tropical storms. You look at what were hurricanes that are not, you know, Cat 1, Cat 2, now major hurricanes Cat 3 and beyond. I look at Michael that swacked the, you know, the Florida panhandle here back in 2018.

There's a lot of intense major storms more so than I remember previous years, so there's something going on there. I won't get into the science of it, but what I see is we need to be prepared, and the Coast Guard's ready. You know, we will roll out this year a little tougher, you know, in terms of preparations with some of our contingency prep work in the COVID environment, but I tell you that because we've been so busy -- you know, in 2016, the first storm we had was Hurricane Matthew that came up the Eastern Seaboard after smacking Haiti, that had been about a decade. We had some coasties, a lot of young coasties never dealt with hurricanes. We're pretty tuned-up here for recent years' activities, and we'll be ready to respond this year as necessary.

MR. O'HANLON: Fantastic. There's a question from someone who probably heard me ask you all these questions about the Arctic and Indo-Pacific, and then heard you mention issues with drug war and with hurricanes and the Arabian Sea and doesn't want the Atlantic to be left out of the conversation completely, and so the question is with a distinct focus on

the Pacific and the Arctic, how do you anticipate maintaining Atlantic-based relationships and alliances to combat such global threats as transnational crime, Arctic issues, fishing?

ADMIRAL SCHULTZ: Yes. First off, I would tell you the conversation in recent years from the Arctic has been predominantly about our Alaska-Pacific Arctic operations and really when I look across the Arctic Council, the Arctic nations, you know, Russia, Canada, U.S., got some Pacific dog in that fight, but really the other five countries are Atlantic-based Arctic partners, so this summer we will take the medium icebreaker, the Healy, which operates out of Seattle, do about 30 days of science work in the Pacific or Alaska Arctic.

Then are going to do a northwest passage transit, so through the North Coast of Canada here, we'll have a, you know, partnering with the Canadians, have some Canadian ship riders onboard. We'll be working with them. We'll have some UK Royal Navy Sailors from their icebreaking operations, their Polar operations. We'll have some King's Pointers and other folks on board, Coast Guard (inaudible) cadets. So will be a lot of stakeholder scientists, but we will press the Healy into the Atlantic, so we are absolutely committed to broadening the conversation.

Years back, we had many icebreakers and we had a presence routinely in the Atlantic basin talking about high-latitude issues. Previous years, we've had two of our medium endurance cutter 270s over around Greenland, we did a port call and nuke. The other ship partnered with the Danes and the French. We did some exercises, the Joint Arctic Command of the Danes, so I absolutely envision us thickening the lines. I mentioned those attaches and Coast Guard Liaisons in the Indo-Pacific region. I just put a coastie last summer over in Copenhagen to work with the Danes, and the Danes obviously have, you know, a role with Greenland and that's critically important, so that the -- well, excuse me -- the Healy will probably do a port call again in Greenland this summer to show our ability to work in that part.

We're as close as we've ever been as the Navy brought back the second fleet. We are partnering with our second fleet partners, counter drug work. You know, I commit four ships on a day-to-day basis as a minimum to the Department of Defense, probably sourcing that closer to six and a half to seven, so 175 percent of my global force stated commitment putting more ships in the

game because that mission is critically important to the loss of life on American streets or drug overdoses, drug-induced violence.

What we see in terms of activity at the southwest land border is very in large part fueled by corruption, instability in the northern triangle countries, things going on in Mexico, so I believe our away work shapes, you know, the regional stability. The vice president is down there trying to understand how do you sort of stabilize a region. I think part of that conversation is thwarting those drugs from making it into Honduras, Guatemala, El Salvador, and Mexico, so, yes, we're absolutely -- and the Atlantic basin is the homefield for us.

That's the preponderance of Coast Guard activity. We'll remain Atlantic based. We just had a national security cutter up the East Coast of South America. The Coast Guard Cutter Stone under a maiden shakedown voyage. She worked with the Brazilians, she went to Montevideo, worked with the Uruguayans, a little bit of relation with the Argentinians.

So, it's interesting. The Argentinians waved her off on a port call. That tied a little bit to the China conversation and some of the China investment there, so we will continue to be present and active in the Atlantic basin. You absolutely have my commitment to that.

MR. O'HANLON: And then just two last questions. I'll put them to you together and let you wrap up as we're almost at the end of the hour, and this has been fantastic. Thank you so much. But one question is about pilot shortage and whether you have a specific problem there right now in the Coast Guard, what do about it, and the other is about -- even though you've already spoken to cyber, about technology opportunities, any areas of particular technology promise that you're most excited about looking 5 and 10 years out. So, two very different questions, but I'll put them to you together to wrap up.

ADM. SCHWARTZ: So I would say this, Michael, on the pilot shortage, you know, just recently retired Admiral Ray who stepped down on the 18th of June here after a distinguished 40-year career as our senior aviator and, you know, when Charlie and I came into our respective jobs in June 2018, the pilot shortage, you know, the FAA had moved the rules of pilots could stay in the seat I think until 64, and, you know, sort of everyone's reaching the same point.

There was tremendous pressure on pilots. Pilots jumping from active duty to join the ranks of civilian aviation. You know, I had an 18 -- situation where I had an 18-year coasties flying C-130s two years from a retirement for the rest of their life and did the math, and said, "Hey, if I go now and get my numbers, you know, the A part civilian aviation like there's (inaudible) when to start your number as a -- they were jumping over 18 years.

I think the COVID crisis, some other things sort of stopped the bleeding there. We brought back some aviation incentive pays and some retention bonuses, and I think right now it's a little more stable, but I think we put a Band-Aid on that.

When I sort of look at where we are in the coming years, I think that same thing is foreshadowing again. So, we're going to have to stay focused on pilots. We're actually creating a reserve aviation program here in the Coast Guard. We have not had that. Maybe even that a reserve aviator or two in the past. We just brought back some opportunities for our aviation, list of members to serve in the Coast Guard Reserve. That stacks to a little more permeability with our workforce.

And then back to your other question here --

MR. O'HANLON: Technology areas of promise --

ADMIRAL SCHULTZ: Say that again.

MR. O'HANLON: Areas of big technology promise.

ADMIRAL SCHULTZ: Yes, (inaudible) technology. Thank you. Just had a loss of train of thought. Couple of things, is I would say inside the lifelines, we made many years of investment tradeoffs in not-invested technologies, so, you know, we were playing catchup ball, and we had a crushing really almost a crisis of proportions about our lack of technology, so we are investing in our software, in our hardware platforms.

I say a young man or woman that joins the Coast Guard team doesn't want more capability on their personal handheld device than I give them on their desktop, so we're trying to field mobility to our inspectors. Young men and women go out, they do port-state controls, foreign flagships. They crawl over ships all day, so they got to go back to the office and back-finger stuff,

but they should be all entered in the field, same with our boarding officers, same with our recruiters.

Our recruiters are losing in living rooms because they can't just seal the deal with a young recruit on the couch with their mom and dad. They got to bring them to the office. With the other service, they're able to do that. So, there is a piece about it's a competitive disadvantage for the bright young Americans that want to serve to not have, you know, mobility in their hands. It's a technological disadvantage that's the ability for our ships to do in from -- you know, do work at sea.

Sometimes they got to wait until they hit a port where they got a T1 line to load up all their procurement stuff. So, we've made a lot of investment here. I have launched what I call the tech revolution back in 2020 down in Charleston in my State of the Coast Guard down there, and actually we got some CARES Act money here for COVID that allowed us to really amplify our telework capability, and that's been terrific, and there's been some spiral off of that, so we are much more tech savvy. We're going to look at data for decision-making. We're spooling up a small cell here to help us use -- you know, get into to AI and machine wearing and those type of things. So, we're really up to our game and I'm excited about where we're going, but there's more work to do there, Michael.

MR. O'HANLON: Well, Admiral, thank you. There's always more to talk about as well, but this has been a fantastic hour, and I certainly have learned a lot. It's been a real privilege to be able to speak with you. I want to thank everybody in your amazing organization, the Coast Guard men and Coast Guard's women and their families and thank all the folks who have been part of this conversation as well today.

So, most of all, sir, commandant, we're very grateful and wish you the best for the summer and beyond.

ADMIRAL SCHULTZ: Well, Michael, thanks for the privilege of being here with Brookings, and to interact with you then, sir, and I will tell you, Coast Guard tyrants. We're looking for some of those bright young men and women that might be listening or sons and daughters of those listening, point them our way. We promise you an adventure, some unique opportunities, and again it's a privilege to be with you today, Mike. Thanks.

MR. O'HANLON: Very best wishes. Signing off now from Brookings. Thanks,
everybody.

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I, Carleton J. Anderson, III do hereby certify that the forgoing electronic file when originally transmitted was reduced to text at my direction; that said transcript is a true record of the proceedings therein referenced; that I am neither counsel for, related to, nor employed by any of the parties to the action in which these proceedings were taken; and, furthermore, that I am neither a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

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