

Center for Strategic and International Studies

TRANSCRIPT

Event

“Congressional Perspectives on Maritime Security”

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FEATURING

Rear Admiral Raymond A. Spicer, USN (Ret.)

Chief Executive Officer and Publisher, U.S. Naval Institute

Senator Tim Kaine (D-VA)

Ranking Member, Senate Armed Services Seapower Subcommittee

Senator Tim Sheehy (R-MT)

Member, Senate Armed Services Seapower Subcommittee

CSIS EXPERTS

Seth G. Jones

President, Defense and Security Department; Harold Brown Chair, CSIS

Transcript By

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Rear Admiral
Raymond Spicer
(Ret.):

Good afternoon, everyone. I'm Ray Spicer, CEO and publisher at the U.S. Naval Institute. And on behalf of the Center for Strategic and International Studies and the Naval Institute, we're proud to bring you this event as part of our 2025 Maritime Security Dialogue Series. This series is made possible through the generous sponsorship of HII, represented today by Betsy Bina, corporate director, legislative affairs. So, thanks to HII.

The topic of today's dialogue is Congressional Perspectives on Maritime Security. And our guests are Senator Tim Kaine of Virginia, Senator Tim Sheehy of Montana. Representing the state of Virginia, Senator Kaine was elected to the Senate in 2012 and serves on the Armed Services, Budget, Foreign Relations, and Health, Education, Labor and Pensions Committees. As the ranking member of the Senate Armed Services Subcommittee on Sea Power, ensuring U.S. Maritime security is one of Senator Kaine's top legislative priorities.

Throughout his Senate career, he has regularly met with and represented leaders and staff of shipyards in the Commonwealth of Virginia, including Norfolk Naval Shipyard and Newport News Shipbuilding. He has successfully passed legislation to bolster the U.S. submarine industrial base, including expanding Virginia-class submarine production and championing the Australia, U.K., U.S., or AUKUS, Partnership. As a senator for one of the states most closely connected to the military, and the father of a Marine, he plays an important role in crafting defense strategy, providing the military with the resources it needs, and ensuring servicemembers and veterans receive the care and benefits they have earned.

Representing the state of Montana, Senator Tim Sheehy was elected to the Senate in 2024 and serves on the Armed Services, Commerce, Science, and Transportation, and Veterans Affairs Committees. A former Navy SEAL, combat veteran, aviator, and entrepreneur, Senator Sheehy graduated from the U.S. Naval Academy in 2008. He went on to lead special operations deployments to Iraq, Afghanistan, South America, and the Pacific region, before founding Bridger Aerospace in Montana. He was an active firefighting pilot, completing hundreds of firefighting missions across the American West, protecting communities from devastation.

Senator Tim
Sheehy (R-MT):

And I'm a life member of the Naval Institute as well. (Laughter.)

Adm. Spicer:

I forgot that.

Seth G. Jones:

You didn't have to say that, right? (Laughter.)

Adm: Spicer: Senator Sheehy remains a qualified FAA commercial pilot and a certified flight instructor. He's committed to strengthening American innovation, national security, and rural economic growth. I now turn it over to Dr. Seth Jones, who will engage Senator Kaine and Senator Sheehy in a moderated discussion that will include audience Q&A. Dr. Jones is president of the Defense and Security Department and Harold Brown chair at CSIS. Over to you, Seth.

Dr. Jones: Appreciate it. Thank you, Ray. And thanks to both of you for coming.

I wanted to start off with China – I think you were in the region somewhat recently in the Indo-Pacific – and then I'll go to Senator Kaine after that. So, you were out in the region recently. Can you tell us a little bit about, like, why should Americans care about the industrial base and, in particular, what are the Chinese doing right now that should cause us concern?

Sen. Sheehy: Well, I think your question is a good one of why Americans should care because I think, as Senator Kaine is very vocal right now and I certainly agree with him, you know, the authority to send Americans to war has historically rested in only one of our branches of government – the Article I branch of government – and that authority rests in the will of the people, and I'm a big proponent of the Powell Doctrine which is, you know, we don't go to war unless the American people are for it.

We've clearly defined victory and we're ready to fully commit to that victory, and the American people need to know why they care about a conflict before we decide to start sending what could potentially be in a conflict hundreds of thousands of our sons and daughters, literally his own son, to fight in a conflict. And if it is a conflict the Marines will be the first to go, as they always are.

So Americans need to understand that their 21st century way of life that we enjoy, as every election we're reminded, you know, hey, it's the economy, stupid – well, whether we like it or not, whether it's what should have happened or not, we are economically intertwined with the rest of the world and particularly the Indo-Pacific region.

We have an incredible dependence/co-dependence on one another, which I applaud President Trump and his efforts to say, hey, we've got to make sure we reshore manufacturing, bring back hard goods, bring back our resource economy.

But until we do that, Americans will have to care about what happens in the Indo-Pacific. They'll have to care that 97 percent of their rare earth refining and production happens in China because that's what's in their phones, that's what's in their iPads, that's what's in their AirPods. Every little thing

they buy and love to enjoy on Amazon.com that show up the next day, well, guess what? It's made or powered by something in China. Or microchips – basically, all of them are coming from Taiwan and the first thing to go in a conflict like this will be Taiwan.

They want cheap oil. They want cheap gas. They want a low cost of living. The reality is that is fundamentally linked to what happens in the Indo-Pacific region.

So, like most conflicts are, they generally emanate from economic interests, going all the way back to the Persians invading Greece. So, Americans will care about what their economic future looks like if we don't continue to have stability and free trade in the Pacific.

And, of course, what China is doing right now I think is a matter of record. But from literally building islands in the middle of the ocean to declare hegemony over regions to – I don't even call it bullying, actively attacking private vessels, allied vessels.

I mean, everyday millions of cyberattacks are seizing on our grid, our municipal grid, our state and federal systems, private companies. Those are all in themselves miniature little acts of war to weaken us from space through the spectrum all the way, you know, to our economy every day.

So, China's already decided that they're going to wage this conflict. I think they have less of a black and white view than Americans do of what conflict looks like. Americans are kind of like, we're either friends or we're enemies and no in between.

I think China has a much different view of the world that's a generational view. They're also more patient and they view conflict as more of a continuum that they can adjust, wind up and wind down, whereas we're more of – as Americans we're either best friends or I'm punching you in the face.

But, like, there's two conditions here, one or the other, and I think our adversaries are less binary.

Dr. Jones: Senator Kaine?

Senator Tim Kaine (D-VA): I'll just pick up. You know, Tim's answer really focuses on the economic side. So, the question that you asked was sort of a national security question. But I think Tim's right that the economic interdependence that we have with China and the economic importance of our other allies in the region make

this such an important challenge to get right, and I'll give you something that worries me. This has worried me for a while.

I agree with what Tim said about Taiwan. If China wants to, you know, engage militarily in the region in a more overt way Taiwan's going to be first.

I think a lot of Americans would be a little bit wary about, well, what is the U.S. role – what does the U.S. role need to be in the defense of Taiwan. I'm strongly for the defense of Taiwan. We've provided a lot of resources.

But if you just did a poll of Virginians, you know, should the U.S. send our sons and daughters into a war to protect Taiwan I don't think the answer would be a real positive one unless we do a whole lot more education.

But say we didn't defend Taiwan. We would be a lot more naturally inclined to defend Korea and Japan because those relationships are so strong. But if we didn't defend Taiwan, Japan and Korea would assume that we wouldn't defend them either.

Then they would start to hedge in their behaviors and become more and more pro-China just out of necessity, and suddenly we would find this economic reality that we have where having close trade ties with Korea and Japan and other nations in the region would get harder and harder for us if we didn't demonstrate that we were committed to defending a democracy like Taiwan in the region. So, these economic and national security issues are so woven together. And seeing the U.S. as a partner that's reliable in the region is really, really important because we still have a lot of folks that would rather deal with us and be strong in their relations with us. But if they feel like we're not going to be there for them, they'll start to make different choices that will create not only challenging security but will really damage our economy.

Dr. Jones: So, I wonder if I could take it down just a little bit of a level. The U.S. Office of Naval Intelligence has assessed that China has roughly 230 times the capacity for shipbuilding, both civilian and military, as the United States. We also see a Chinese defense industrial base that I would call sort of as on a wartime footing. So, as you look out at what the Chinese are doing – and this'll serve as a segue to our discussion on the U.S. maritime industrial base – what do you see the Chinese doing really across the domains?

Sen. Sheehy: Across all domains, of which shipbuilding is an example, quantity, speed, mass. Quantity has a quality all its own. And not to go back to World War II – I can't stand false World War II comparisons because everyone always wants to shoehorn every scenario into World War II, but this one is fair, I think. You know, the Japanese and U.S. navies – in almost all respects, the Japanese and German navies, for that matter, were technically superior to us at the outset

of the role, from submarines to ships. I mean, the Japanese – most people don't know there was a second Pearl Harbor attack. Most people don't know about Pearl Harbor II. I used to live in Pearl Harbor, so I learned all about it, but – and it was launched by submarine aircraft carriers, literally submarines –

Sen. Kaine: The X-400 (sic; I-400).

Sen. Sheehy: Yeah. Exactly.

Sen. Kaine: My father-in-law had to pilot one from Japan back to Pearl Harbor after the war so we could study, how do you do a submarine aircraft carrier?

Sen. Sheehy: Exactly. It's incredible. And I mean, they literally had submarines that would service and launch planes, and they attacked Pearl Harbor a second time with that. So, they had the technical edge, like we do now. But we still won. And why? Because of quantity. We'd sink one of their carriers; they couldn't replace it. They'd sink one of ours, we'd had 11 show up in, like, a week. You know, I mean, Kaiser was building ships in three days in San Francisco. Unfortunately, that situation is flipped, and even flipped times 10. I mean, their industrial base is so much bigger than ours.

And that's not just a defense matter. And this is why when you asked the first question I went right to an economic answer, because it's not just defense; this is everything. We don't make anything here anymore, I mean, from our rare earths to our mining to our lithium to our cellphones to our – everything. I mean, so it's not just a defense issue, but that goes into the next phase of things.

And I know you're trying to take it down a level to talk to our maritime security group here, but I really think that maritime defense industrial base, when you want to talk about complexities and fixing our defense industrial base writ large, I – great example, I talked to Elon Musk about this a few months ago when he was in town, and talked about how he, you know, fixed our space travel. I mean, we were paying the Russians taxi fare to send Americans into space for a decade. What a disgrace. I mean, Reagan and Kennedy would, like, pop out of the grave and, you know, throw a water balloon at us if they heard that. It's crazy. And yet, Elon was able to turn that ship so quickly in just a few years. And I said, hey, man, we got to get you into shipbuilding. He says, I can't solve that problem; it's too hard. I mean, here's a guy who lands rockets backwards and catches them with chopsticks in midair saying fixing shipbuilding is too hard for me to do. And to hear a guy like that say that's pretty, pretty remarkable.

So, I think when you look at our defense industrial base challenges, which we're talking about constantly in every corner – I mean, Andreessen

Horowitz in, you know, Silicon Valley, their biggest, like, investment portfolio now is defense. Everyone's talking about defense.

Dr. Jones: Which didn't use to be the case.

Sen. Sheehy: Of course not. But as you look at the top of that pyramid, you know, turn defense industrial base into Maslow's hierarchy of needs, the very top cap is maritime. That's the hardest one for us to solve. So, China's ability to do it is not because they said we're going to build ships; it's because they have reoriented their economy into a resource-and-production-based economy and we voluntarily 40 years ago decided we're going to incentivize American corporations to stop doing that.

And I think, you know, whatever side of the aisle you're on right now, what our president's currently doing in any way he can is to encourage that industrial base to come back. And it's not going to be easy. It's not going to be comfortable. Any change is challenging to everyone involved. But we have to bring that industrial base back. Otherwise, we're never going to be able to solve the underlying – the specific issue of maritime industrial base is a broader symptom of our national surrendering of industrial capacity.

Dr. Jones: Yeah. And – go ahead.

Sen. Kaine: Let me just go on the – on the 230X. That is a true number, but that's tonnage. That's not capacity. It's not quality. It's tonnage. Now, quantity does have a quality, but Tim made a point in a hearing we had earlier today that the ship numbers, U.S. v. China, the only time our numbers look a lot better is when we talk about our allies. And we have to look at it that way.

I sort of feel like my role in Armed Services really connects with my other three committees. What are my interests? I'm on the HELP Committee. I'm really interested in the workforce part of Armed Services, including the industrial base. I'm on Foreign Relations Committee. I'm really interested in the alliances that we forge, which do give us a force extender as we look at an adversary like China. And I'm on the Budget Committee. The Budget Committee is kind of a dog because the real budget is the appropriations committee. But the Budget Committee and the resources, and our aspirations matched with realistic resource levels, this is a huge challenge that we have going forward.

So, one of the things that I think as we as – we move from what China is doing well and to what we can do better, Tim has been a huge proponent of focusing on the private sector and getting the private sector more involved in helping us solve this issue. And I agree with that. And I'm a huge proponent on leveraging the strength of allies and partners. I have a lot of Virginia shipbuilders who believe every ship that's repaired should be repaired in

Norfolk. But the fact that, you know, the shipbuilders that built the Nina, Pinta, and Santa Maria do a pretty good job near Rota, Spain still. And not only are they doing a pretty good job, but when we do some of that work in allied nations, it also makes them more excited about being partners in NATO and other alliances.

So, we are not – we can race ahead, and we have to, within the traditional shipbuilding ecosystem. But we've got to get more private sector involvement. You know, I'm a critic of President Trump a lot, but I don't mind saying some things he's doing well. He's putting folks in the Pentagon who I think have a real good private sector background. When you put people in from companies that have made huge private sector investments in shipyards, and in ports, and in other, you know, assets that would have heretofore been probably not what they would be investing in, let's bring some of those folks in to help us solve this quantity problem and this speed problem.

Sen. Sheehy: Yeah, and I think – to what Tim is saying there – we're both Tims, so we're kind of coming back. (Laughter.)

Dr. Jones: Yeah, if I say "Tim" – if I say "Tim" you can both answer the question. (Laughter.)

Sen. Sheehy: Yes. But, I mean, he's absolutely right. And he's been a great proponent on the committee. What's inspiring about this is, coming to Washington – I've been here a few months – but it's obviously a highly polarized time. And it's not a whole lot that both parties are agreeing on right now. I'm a firm believer that America, we still agree on more than we disagree. And I think we'll rediscover that soon enough. But we have to get through some of these tumultuous times. But one issue I don't hear anybody arguing about is what we're talking about now. I feel like both sides are completely in agreement that, you know, our Navy has been our founding force, as much as – my wife's a Marine, so I got to respect that, you know. But the Navy has been in the Constitution. It's the only branch that's outlined in the Constitution, you know, to build and maintain a navy, to have a navy standing at all times. We need to have it as a nation. But I think we're aligned on that right now.

But what Tim brought up, again, about private sector involvement is absolutely critical. It's table stakes. The last 30 years have been an aberration in the American industrial base for defense. It has not – it's not the norm. So, I think, you know, we have to take a longer view of history. When I hear a lot of folks, we got to get out of the norm. Like, well, no, what we're doing now is actually not the norm. The last 30 years have been the aberration in a lot of ways. And the 50 years before that were a real aberration, because we didn't have any industrial base before World War II. So, prior to World War II, our Navy was private ships, essentially, we would flag as, boom, hey, you're a

Navy ship now. Get over here. You were a freight carrier a week ago, now you're a U.S. Navy frigate. Like, our first six frigates. Great book, if you ever read it, "Six Frigates" by Ian Toll talks about those early struggles we had as a nation to justify and create a navy.

And our private sector partners are going to – are the only way we're going to get there. The Navy has taken over shipbuilding, I believe, to their detriment. The Navy – an average naval officer is not a shipbuilding expert. They're just not. They go through their career of driving a ship for two years, driving a sub for two years, and bouncing around. It takes decades to build that institutional knowledge of not just naval architecture, but also knowledge of the industrial base, to effectively build a ship – and build it fast and build it right. And the Navy lost that institutional knowledge decades ago. And I think what we have to do is stop trying to control every step of the process, as the Navy, and stabilize specifications. Which I know we're working on that. Stop the change orders. Stabilize specs. Lock in engineering requirements. And then, push it out to industry to bid and manage the build of those vessels as fast and cheaply as possible.

And we're going to see quantity go up, price go down. And we're going to see suppliers coming to the table. We're going to see a broader supplier base. And, you know, I'm not criticizing our current providers at all, but they're responding to the incentives the Pentagon has created. So, for all the bashing of the big defense primes – you always hear, oh, they're all the big five, they're bad. No, they're not. They've just responded to the reality. The Pentagon's built a landscape and asked them to play by a set of rules. They've played by those rules. And those rules have encouraged mass consolidation, very long, drawn-out processes, where the process is the point, not the outcome.

And we have to change those incentives to where the outcome is the point, not the process. And I think by doing that, we'll welcome more competitors to the space. There's some amazing startups now that are approaching ship manufacturing from kind of the rapid, agile, iterative, additive manufacturing mindset that we've seen in other manufacturing industries. So, I'm excited about what the future holds. Well, we have to welcome the private sector in. We have to open up the aperture of who's allowed to compete.

Dr. Jones: Does that include, from your perspective, acquisition and contracting reforms too?

Sen. Sheehy: That's implicit in that. There's no question. I mean, it's got to be – the tree – the acquisition tree has to be – I'm not going to say refreshed. I'm going to say it has to be lit on fire and destroyed and rebuilt from the ground up. I mean, when John Lehman was secretary of the Navy and built, you know, a 600-ship Navy under Reagan, you know, he had, like, 30 acquisition

professionals in the Secretary of the Navy's Office. Do you know how many there are now? It's like 3,000. And yet, the Navy's, like, a third the size, and we build ships about 1 percent as fast.

So clearly the number of people working in the acquisition processes does not equate acquisition output. So, again, that's not an attack on the people there, but if you ask people there, you say, hey, how's our shipbuilding process going, they'll be the first to tell you, hey, we're not where we need to be. So, it's more than a radical rethink. We need a revolutionary point of view on this. And if we can fix shipbuilding, I believe that will trickle down to the rest of the defense acquisition.

Sen. Kaine: Yeah. And the radical rethink piece. This is not we got to be 10 percent better, or 25 percent. We have to be, like, 100 percent better. And that is not incremental. That is, again, expanding your capacity through creative work with allies, and bringing the private sector – and the innovative part of the private sector not just the incumbent part of the private sector – bringing them in a much more robust way.

Dr. Jones: So, SHIPS Act. SHIPS Act has tried to do a number of things. What's your general sense of how much that has achieved or can achieve?

Se. Kaine: It is – the SHIPS Act, I think, is a real positive. You know, we have our jurisdictional issues in the Senate. That's going through the Commerce Committee, because that's primarily on the private shipbuilding side, not public. You know, this would be the kind of thing we have the NDAA on the floor right now. If it had – if it had gone all the way through, we would be talking about how much of it we could get connected into an NDAA amendment process. Instead, I think the Commerce Committee still has more work to do on it. But directionally, and on our committee, I think, Senator Kelly has been a huge promoter of building up the commercial maritime industry in the U.S., both for its own sake but also to give us more of a surge capacity.

Dr. Jones: I wonder if I could ask you, Senator, on workforce. That's an issue you mentioned earlier. You've also talked about real estate, for that matter, too. But on the workforce, I mean, it is an issue in areas where we're building ships. The expensiveness, for example, of real estate, if you go to a range of places from Pascagoula up to Maine, to Bath. It's expensive. There are also some – we've also had challenges both in recruitment and retention. How big of a challenge, from your perspective, are workforce and related issues? And how do we make progress along those lines?

Sen. Sheehy: They're fundamental. Yeah, it's a fundamental issue. And I was down at the largest data center in the world, the Stargate Project, in Abilene, Texas a couple of weeks ago. And 16 months ago, it was a hay field. And now it's the

largest data center in the world. Built from nothing, 6,500 Americans. And it's Oracle. It's OpenAI. It's everyone going out just building the largest data center in the world, sitting right there to power OpenAI's, you know, language models. And it's pretty incredible.

But you know what is the biggest constrictor for them to grow that project faster, what's slowing them down the most?

Dr. Jones: Let me guess. (Laughter.) Welders.

Sen. Sheehy: Workforce, yes. You know, most buildings it's the microchips, or they're not enough power. Everyone's talking about the energy grid, which is important. Yes, microchips is important. Processing chips, important. But the actual governing factor, you know, if you're a pilot in the cockpit, the gage they're looking at the most is how can we get more welders to weld all of the interlocking systems that literally make the – make the data facility work? So that carries over into so many industries, but precisely shipbuilding. And, of course, the type of welding you need for ships – and especially for submarines – that's a very, very specialized skill set.

And again, once again, we are now grappling with decades of incentives. I'm all about incentives. I'm a private-sector guy. We have not incentivized young Americans to pursue careers in the trades. We've told them if you don't get a four-year college degree, you're a failure and, therefore, you must go to Wesleyan and get a degree in gender studies. No matter how much it costs you that's the right path. Well, I could become a welder. No, don't do that.

Dr. Jones: What about vocational schools or trade schools?

Sen. Sheehy: And on the VA committee one thing that I'm really dedicated on pursuing is transforming our GI Bill eligibility benefits so that veterans' education benefits are more broadly applied to certificate training, vocational training, not having that entire program so focused on four-year education.

We've been hearing about the pilot shortage for years. It's actually really hard to get the VA to pay for pilot training. Why not? Pilot's a great job. That's implicit in many people getting out of the military. Even if they weren't a military pilot, they have skills like radio, phonetic alphabet.

You know, they've probably driven something complicated in the military. They'd be a natural fit to go to flight training and become a pilot to solve the pilot shortage. But to get the VA to pay for pilot training is actually pretty hard.

Yes, they say they do it but when you actually look at the regs and how you actually connect the dots it's a challenging thing to do. So, I think reforming –

again, incentives. Reforming the VA and saying, hey, those of you getting out of the military are perfect for a lot of these trades whether it's agriculture, whether it's welding, whether it's electricians, pipefitters –

Dr. Jones: Pipefitters or –

Sen. Sheehy: Exactly.

Sen. Kaine: And here's an example. I voted against the reconciliation bill. I didn't like the Medicaid and the SNAP cuts and things. But there was a piece that I got in because when you see that a train's leaving the station, like, well, I may not like all of it but I'm going to get my caboose attached to it if I can.

I have had a bill for – since 2014 Pell grants should be able to be used for a high-quality career and technical education, and we've had as many as 65 of a hundred senators as co-sponsors of that bill. But it was added to the reconciliation bill, which was so great.

So, I mean, just imagine we've had this – essentially, an entitlement that a family could count on. If I qualify income wise, I know that my child, if the child goes to college, can count on a Pell grant of this amount to help bring down the cost of a semester.

But we had a limit that it had to be the length of a college semester. It has to be, like, a 15-week long course. Most high-quality career and tech courses – I'm the son of a welder, an iron worker – most high-quality career and tech courses are not 15-week. They tend to be eight week but five days a week, eight hours a day. Forty hours, eight, 320 classroom hours compared to a college course three times a week, an hour and a half each. OK. Four and a half times 15 you get the picture.

An eight-week welding class is about five times more classroom hours than the average college semester and, yet, we wouldn't allow families to say, wow, you know, my kid would rather be an EMT, would rather be an HVAC, would rather be a welder. I ought to be able to count on that to bring down the cost of these courses as well.

It reflected a second-class status mentality about careers. When my son had command of a platoon he could approve a military tuition assistance benefit. This is not a VA benefit for a veteran; this is a benefit for somebody in active duty for somebody in his platoon, but it had to be at a college. It could be up to \$4,000 a year. It had to be at a college.

If you had an ordnance officer who said, hey, for 300 bucks I can pass the American Welding Society certification exam, which is going to be good for the work I'm doing in the platoon, but it also is going to set me up for a job,

well, I'm sorry, it's not college. Can't give you 300 bucks to pass the AWS certification.

It makes no sense, and so we kind of are almost having to go through – like, with the VA or military tuition assistance or Pell Grant we kind of have to go root and branch through all of these programs and make sure that we are not subtly sending, and not so subtly, sending the message that it's got to be college and a high-quality career in tech is of lesser value. They all should be encouraged.

Dr. Jones: You know, it is interesting during the period – and you mentioned this earlier in World War II – during the Kaiser period of shipbuilding in the United States all of that industrial capacity, whether there were airplanes being built like B-29 or whether there were ships that Kaiser was building, they were all being done. I mean, there was a patriotic element that went to that.

So, we seem to be missing that element of encouraging people to do things like this that serve the nation, something bigger than just themselves.

Sen. Sheehy: Well, in fairness to ourselves right now, I mean, on December 6th, 1941, there was no patriotic desire to be a welder or a sheet metal worker, and as Senator Kaine mentioned, you know, there was – very few people on December 6th cared what happened in Hawaii or Midway Island or Guam either.

But by December 8th everybody was ready to go to war. So, I think we don't know when that event will happen like 9/11, and I'm sure you all remember exactly where you were that day as I remember in English class in 10th grade.

Hopefully, that moment doesn't come but when it does, I think we'll see a very quick shift in opinion both around our willingness to defend our allies as well as our willingness to commit to industries like this.

Now, what I'm focused on, though, is the speed at which the conflicts will move now is going to be much faster than they moved before with autonomy, with cyberattacks, with the ability for mass autonomous vehicles attacking our mainland and our facilities.

I don't know if you guys saw the video just a few days ago in this forum, "Maritime Security." Perfect forum for this, but yet another USV attack from Ukraine on Russian vessels, broad daylight. You know, a USV the size of, you know, two of these coffee tables probably cost 500 bucks to put together, and you see the guy on the bridge of the ship on a smartphone videoing this remote-control bathtub driving to destroy a hundred-million-dollar Russian

ship at dock, maybe more than that. And that can happen en masse at all of our ports at once.

We saw what Ukraine did inland in Russia with a Conex box full of 10,000 small drones. Top of the thing opens up. I mean, we could have 50 of those sitting around the country right now dormant waiting to be activated.

So, I think the connectivity of the 21st century and the autonomous weapons capability now is just so much more scalable, so much faster than before. So I view my mandate – and I think the other Tim here agrees his mandate – is we're not going to have that national patriotic Rosie the Riveter attitude until, unfortunately, conflict begins but we're going to do everything we can to close that gap so that when that energy happens – because energy without – you know, as they say, tactics without strategy fails.

So, if we don't even have the building blocks to create that industrial revolution when we need it then we're in big trouble, because last time we had it – the last time America's superpower was we were a manufacturing powerhouse and we could convert car factories to plane factories.

We could take coal mines and send the trains in the other direction to go to one coast from the other. We were building ships already. So, to build – you know, to go from building oil tenders to destroyers wasn't that big of a deal.

Now, you know, how do you take a bunch of Google software coders and say, hey, now you need to go build ships? (Laughs.) It's –

Sen. Kaine: Although we do have a recent example. I mean, in COVID, you know, my distilleries switched to making hand sanitizer and some of the textile plants –

Dr. Jones: Did it go back to doing it after? (Laughter.)

Sen. Kaine: No, it's gone back to – it tastes halfway between –. (Laughter.) But, you know, some of the textile firms in Virginia that were making clothes switched over to gowns and PPE immediately.

So, when there's a crisis we still have the ability to push forward. But you're right, it's got to be a crisis that kind of calls us forward and you have to have the foundation there to do it.

Dr. Jones: So, you mentioned autonomy. I want to come back – you also mentioned undersea. I mean, that, clearly, is an area right now, just having gone out to the region, where the Chinese have problems is undersea. They have a hard time detecting our submarines.

If they were – we hope they don't but if they were to move PLA soldiers across the Taiwan Strait, they would generally have to do it – there are a couple of ways they could do it but one of them is going to be on surface vessels.

You know, that raises a lot of questions. We've got Virginia-class submarines that are built partly in your state but there's a whole suite of undersea capabilities that we are just starting to make progress on.

What is your sense about where we are on the unmanned side? It can be undersea. It can be surface. And how do we get quicker and produce at mass and scale the way we probably need to in the Indo-Pacific?

Sen. Sheehy: Well, again, bringing in those private sector partners is key because our current – until we really revise, destroy, and rebuild our acquisition process – the PEOs, the PMOs, that whole, you know, mind-boggling org chart of how a project is managed and funded and overseen – the private sector is already doing things faster and better than – if the Navy specified, hey, I want to build an autonomous boat, how that process – how that pinball would work its way through the machine is just not going to meet the speed of threat.

And as a warfighter who was on the battlefield during the IED era, when we'd see an IED on the side of the road we'd disable it. I personally was – you know, just one of my several deployments were basically in an EOD team. It was just – it was all IEDs all the time and so got pretty comfortable with pressure plate IEDs and disabling myself.

But, you know, they'd sit there and watch us, you know, from two ridgelines away, and say, how are they doing it? They'd watch how the Americans are disabling this IED. And then they'd go back to their shop and change it, and the next day they'd change how they did it to –

Dr. Jones: Command the –

Sen. Sheehy: Yes, to make it impossible for us to disarm it the way we did the day prior. And their ability to iterate and change and have the agility to change the design at the speed of war was at odds with, yes, our individual warfighter-Navy SEAL-EOD mindset could change with it, but our program system – we'd send slides back to the U.S., to JIEDDO, to whoever. They'd look at them, they'd discuss them, and you know, our response to that programmatically was months later. So private sector's ability to iterate and ingest feedback, close the feedback loop from the combat lessons learned to the provider, and get it back to the warfighter quickly will always be faster than the government can do it.

So, I think when you talk about unmanned bringing the private-sector innovation in is going to be key. And if some of the folks that are involved in the defense innovation kind of ecosystem now, it's really inspiring to see some of the best minds in Silicon Valley, instead of making dating pants and – dating apps and yoga pants and bicycles, you know, with a screen on it, they're like, hey, I'm going to make the best weapons to protect our way of life. That's pretty cool to see.

I was just out in the valley a few weeks ago and felt obligated to go visit with some of these companies and say, what are you up to? I want to bring – I want to give you our vision and bring your vision back to us. And it was great to see folks who were like, yeah, I've been DoorDash and Uber, and I felt empty because there was no purpose in my work. And then they're like, I want to defend our country. And whether it's Ukraine or Hamas-Israel or something else, they kind of felt the pang we discussed where, like, hey, there's no meaning in what I'm doing, and I want to contribute to the national defense.

And I think undersea is the current area where – that's the only space right now, the only domain that I personally feel we have an edge on China unquestionably.

Sen. Kaine: Mmm hmm, I agree. Yeah.

Sen. Sheehy: I think they're closing the gap if not already closed it in space.

The spectrum battle – we don't talk a whole lot about spectrum, but spectrum is going to be the no man's land of the next war where we're going to be fighting over spectrum tooth and nail for every bit of that spectrum and dominance of that spectrum.

I think on a land war it's going to be tough when you got a country with a billion-and-a-half people. They're going to have a lot of troops.

And on surface ship to ship, they're going to just have quantity over us.

In air to air, the recent engagement between India and Pakistan a few months ago where we saw the first active Chinese air-to-air engagement. It appeared as if their air superiority capability against Western systems – yes, they're – it appears as if the Indian pilots weren't as well trained and they had a federated family of systems whereas China had an all-Chinese AWAC, J-20s, but they won. Bottom line, they came out on top. I think India will dispute that, but I think the numbers say that in an air-to-air engagement it looks like the Chinese equipment will go toe-to-toe with ours.

So, the only area left where we still unquestionably have the lead is undersea. And I think we need to lean into that hard. Doesn't mean we give up the

others, but we cannot cede undersea the way we have ceded to every other realm.

Sen. Kaine: And I think that's one of the reasons why during the time I've been on the committee just watching Chinese reaction to things we've done, one of the things that they have been most angered by is AUKUS because the Pillar I of AUKUS was taking our superiority in this platform and equipping another nation to have a similar similarity, and then learning from each other and going strong. What Australia's doing in the – in the unmanned sub – Caitlin, what's – what do they call it?

Audience member: Ghost Shark.

Sen. Sheehy: Ghost Shark, yeah. I –

Sen. Kaine: Ghost Shark. So just check it out. What they're doing in the unmanned undersea is just really –

Dr. Jones: I was just out there to see it in Sydney, actually, when they demonstrated it.

Sen. Kaine: So, I mean, and I think China, they didn't like the fact of the alliance being announced, but it was being announced with the first deliverable being an expanded capacity for the U.S. to work with an ally in the area where we do have that dominance. And we do need to maintain that.

Sen. Sheehy: And I'll – real quick on that, the – so I used to have a company in Australia. I used to live there quite a bit of time, actually, after my military days. And the Australian military, although they don't scale very well, they're very good at adopting innovation early whereas, you know, in the U.S. military we hear all about the Valley of Death and, you know, the challenges of getting an innovative piece of technology into service. The Australian military struggles on the backend. Where we don't struggle is once we've decided on something, OK, then we do generally invest a lot in it, we lock in, and we build a lot of it. Not enough of it, but the Australians aren't super adept at that following part mainly just because they're not that big, you know? They have less than the population of Florida in a country the size of the U.S.

But they are very good at adopting early, and the Ghost Shark program – there's actually another company that's run by some of my former business partners that's doing another undersea program for them. And they will – they will invest in innovation pretty early. And we have a lot of programs across the DOT, I'm not being – DOD, I'm not being too critical, but we have all these, you know, labs and AFWERX, SOFWERX, this – they all do in trying to – but really, we have such a schizophrenic view on defense innovation, all these different organizations that throw money to all these little things, and they're all pet projects. And really what they're – they're about press

releases. They're about PR. They're about optically creating the image that we're an innovative military. We don't –

Sen. Kaine: I have contractors on this point who tell me I'm tired of getting a star student award but never getting a contract.

Sen. Sheehy: (Laughs.) Exactly, yes.

Sen. Kaine: They get a little bit of money, and they get recognized for some great technology, but they can't get a contract to scale it.

Dr. Jones: So, I wanted Senator Kaine to talk about one issue which hasn't come up yet, but is – you know, there's been a lot of discussion about it, which is the defense budget. So, the defense budget now – if we look at the Cold War, it varied from 15 percent of GDP to the Reagan buildup, which was in the 6 percent category. We're barely at the 3 percent category. As we talk about the industrial base, whether it's the maritime or the broader industrial base, what is your sense about what we need to revitalize that industrial base? And where we are right now?

Sen. Kaine: That's a good question. Yeah. So, 3 percent is about where we are, maybe a little bit north of that. I mean, at a minimum we need to do what we're asking other NATO nations to do. So, President Trump and Vladimir Putin successfully have positioned NATO where it was, you know, five of 34 nations meeting the 2 percent, it's now 29 of 34. But I like the fact that President Trump has now gone beyond and saying 2 percent isn't enough. It should be 5 (percent). Now we will give you credit for some infrastructure investments. It's not just, you know, weapons platform. So, we're slightly opening up the definition of what it is that gets you to the 5 (percent).

But I think critical infrastructure is super important. I mean, if you're looking at Canada, a NATO ally, with the prime minister there saying, you know, we're going to speed up getting to where we need to be, but they have a lot of infrastructure investments that they need to make in the Arctic because that's a contested domain that it wasn't before. So, I think we ought to be on a path. We can't be, you know, browbeating everybody to get to 5 (percent) if we're not on that path. Now, how we are if we add in, you know, related infrastructure investments, are we, you know, closer to 5 (percent) or not? I don't know. We need to – we need to do that. But we can't ask others to do what we're not willing to do ourselves. And this is a tough one.

And, you know, the – there's so much we want to do. I mean, I'll give you – give you an example. Protecting commerce on the seas. OK, when the Houthis were firing into the Red Sea, I mean, the U.S. is basically paying the entire bill, even though they weren't firing at U.S. ships. The U.S. is paying the entire bill for protecting commerce through the Red Sea. Ships flagged by other nations.

And what – you know, they weren't really firing – obviously, we're going to defend U.S. military ships. But a lot of what they were firing at was commercial ships from other nations. The U.S. is paying essentially the entire bill. We have a lot of things we want to do. Are we honest about matching up those aspirations with dollars? But that is why pushing allies to do more, and getting closer together with allies, is so important.

Dr. Jones: Do you have anything particular in mind? I mean, people have often looked at the Japanese or the Koreans as countries that have significant shipbuilding capabilities.

Sen. Kaine: Yes. And they're there – I mean, Korean-based shipbuilders are building ships in the United States now.

Dr. Jones: In Philly, yeah.

Sen. Kaine: The Philly example is a great one. You know, what AUKUS does is it makes us think a little bit bigger, not just about this particular alliance but about technology sharing, about joint investments. The Trump administration, I think, is more forward-leaning on the virtues of not only U.S. private sector involvement, but on production in other nations. You know, why do we have to produce all the 155 rounds here? Wouldn't it be better to produce them nearer to where the battlefield is going to be?

We've had a – you know, kind of a, you know, jealousy I understand about we want to produce it here, but we ought to be doing joint production in other nations. And that's an opportunity for U.S. firms to be engaged. And I think the Ukrainians like that. And the Germans like that. And the Poles like that. So, I think the right strategy is looking at these allies, challenging them to do more, working more in partnership with them, because we will only get to some numerical match with China, for example, if we really do include the capacity of these allies in the Indo-Pacific.

Dr. Jones: We've got time for a couple of questions. You guys have been fantastic. So, one question from Emily Harding at CSIS is: The acquisition tree. I'll send it to you, Senator Sheehy. You have been given a magic wand to plant and grow the acquisition tree. Where are you willing to accept risk, and what are you not willing to accept? Quality, potential for waste, fraud, abuse, competition – what steps in the process should sort of go away?

Sen. Sheehy: Well, we got to burn down the current tree first. So, I'll light that one on fire. And then we'll plant the new one. We have to accept far more risk because we're – I hear this all – well, how much risk you willing to accept in the acquisition process? Well, certainly I'm willing to accept a lot less risk than we're currently taking when we're allowing our adversary to build ships 200 times faster. It's, like, we're so focused on tactical risk we're not even

thinking about the strategic risk, which is we've completely mortgaged the future of our naval supremacy on the fact that we don't build enough of anything fast enough.

So in truth, I'm willing to take much less risk on a strategic scale, but we have to accept more risk on a tactical scale. And that means stabilizing specifications sooner in the process, locking them in, and ensuring that after those specs are agreed to, they're put out to industry, and you can't come diving in later and keep tweaking the design – barring, of course, a massive, all right, someone put a screen door in the bottom of the ship. Yes, OK, we'll change that. But, you know, barring obvious, massive design defects, standardize and accept the fact that I would rather have 1,000 B-plus ships than 100 A-plus ships.

And I think we've become so focused in our entire defense acquisition process, from planes to satellites to ships to submarines, that we want exquisite everything. Want the best of the best of the best. That's great. I want that too. But we also need a lot of it. And we need it fast. And quantity and speed matters. So, accepting risk in that process, removing – streamlining the process. It is such a Byzantine, circular maze to get from A to Z. It should be, you know, A to B. Cut out all those middle steps. And empowering people to say yes. In the acquisition process, everybody can say no and, like, nobody can say yes. Push that risk tolerance and authority lower down the chain so that lower people can say yes, go, I make this decision, let's move out. So, I mean, I could talk about this for hours, but that's my quick summary.

Sen. Kaine: And you said earlier that incentives are really important. You just got to build the right incentives into the way we contract to reward speed, to reward innovation. So, you know, there ought to be upside for doing it right, rather than just downsides if you do it wrong. And I think an awful lot, like you say, it's easier to say no than to say yes if you're on the acquisition side. And if you're on the company side you're worried about the downsides of doing it wrong more than the upsides of getting it right.

Dr. Jones: Yeah. Well, it is a good sign – it's also a bad sign – but it's a good sign that we have far more questions than we were able to get to. I apologize to those both online and here. Thanks for a range of great questions. We got to many of them in the discussion. But before we thank our two speakers up here, I do want to thank the relationship with Ray and USNI, and with HII. And thank all of you in attendance, both online and virtually, for a fascinating discussion. If you can, join me in thanking both of the Tims, senators, for a fantastic discussion. (Applause.)

Sen. Sheehy: You got to plug your book. You got to plug your book for five seconds.

Sen. Kaine: You guys, Seth's got a book coming out. I'll plug it for him. It's coming out soon about the history of the American military industrial base. And it's there's not really a book like it, maybe back to the World War II era. But it's something that I think is really going to be valuable for us.

Sen. Sheehy: And I'll make a shameless plug for Ray and the Naval Institute. So, most people don't know what the Naval Institute is. And if they have heard of it, I think it's some part of the U.S. Navy. And I didn't know what it was. I was a plebe at the Naval Academy, because the USNI is on the yard of the Naval Academy. And they used to have an old, crappy building. They have a nice, big, new building now. But it said U.S. Naval Institute. I'm like, what is this place? I don't even know what it was, and kind of just walked in there as an 18-year-old plebe, and realized that it's really this independent organization that the Navy created, you know, about 100 and, what, 60 years ago now?

Adm. Spicer: Hundred and fifty-two.

Sen. Sheehy: Hundred and fifty-two, there you go. And if you're interested in this topic and anything related to it, the publication Proceedings, become a subscriber and read it. Again, I fell into it by accident as a plebe. I've been a life member. And even though I was a SEAL, you know, out there carrying a gun shooting bad guys, I've been reading Proceedings, every single publication, every month that comes out, because it really is an incredible – essentially, it's a thought red team for the Navy of actual naval officers can write in and criticize the Navy – and not necessarily criticize, but ask the tough questions that maybe in the halls of Congress and in the halls of the Pentagon are not being asked.

So, if this is a topic that interests you, do read Proceedings because every month you're getting great thoughts from our most junior people. It's a great way for a seaman or a lieutenant to leap ideas onto the desk of a U.S. senator to say, this is a pretty damn good idea, and then I go ask an admiral about it. And then, of course, he looks, oh, that damn lieutenant wrote another article. I'm pissed. (Laughter.) But, you know, hey, man, it's a good idea. You should be thinking about it, because sometimes our best ideas come from the guys on the gangplank, so.

Dr. Jones: Well, boy, Ray, that was pretty nice of him to do that. (Laughter.) Thank you both, again. Really appreciate you coming. Thanks. (Applause.)

(END.)