

Admiral Charles Richard on "Space and Missile Defense Imperatives" at the 2022 Space & Missile Defense Symposium on August 11, 2022

Full Transcript

ADM Charles Richard:

So good morning, and thank you General Donahue for that kind and very short, thankfully, introduction. I got to tell y'all, as we just mentioned, I am from Decatur and it is always great to come back home to Alabama. And in particular, what it's fun to go do is to go to Redstone, and I recognize just about everybody here either works at Redstone or at least can get on Redstone. So it's like it's Redstone to y'all. But if you grew up here, and there's a lot of us who couldn't get on Redstone. We got to go two weeks out of the summer, but otherwise, Redstone was forbidden. You had no idea what they were doing out there. You just knew that it was really important. You knew that it was classified. You knew that it was dangerous, but it was this mystery that sat out behind those fence posts that you couldn't go to. So every time I get to come back now, it's like, "Yeah, I get to go to Redstone now". This is pretty awesome.

ADM Charles Richard:

Let me first say thank you to the Huntsville Air Defense Artillery, the Airspace and Missile Defense and National Defense Industrial Associations for sponsoring this event. Thank you General Formica and the SMDC Symposium Committee for organizing this event. As we've just heard, it is a fabulous, one of the best ones ever and could not have come in my opinion at a more opportune time. You may recall right here in Huntsville, 364 days ago, we discussed a number of potential challenges in the geopolitical environment, strategic deterrents, and space and missile defense. Everything we discussed last year, everything is coming true. Russian use of nuclear coercion. The People's Republic of China's accelerated strategic breakout and the development and employment of new weapon systems. The aggregation of those threats and those actions is altering the strategic landscape. The global security environment is now today, a three party nuclear peer reality, where the PRC and Russia are stressing and undermining the rules based international order.

ADM Charles Richard:

This is real. We are witnessing conditions that my command STRATCOM and the nation haven't experienced in over 40 years. So along with the other COCOMs and the rest of the department, we're building an operational framework for integrated deterrents. We've made some tremendous strides, but there's a lot more work we have to do. We need an integrated deterrent strategy that adapts our strategic capabilities, capacity, and posture to keep pace with the evolving global threats. So I'm going to talk today about how we're going to do that. I'm going to address Russian nuclear coercion, an updated assessment on the PRC strategic breakout, some things that I think are missile defense imperatives, and some stuff I'd like to ask y'all to do once we're finished.

ADM Charles Richard:

Start Russia for a second. Their unprovoked aggression has caused the largest war on the European continent since World War II. I will tell you, at least my command was ready for that. We've been producing recurring strategic assessments for the Chairman and the Secretary of Defense. And we submitted the first ever in my command's history, real world commander's estimate on what it was going to take to maintain strategic deterrents under these crisis conditions. So obviously I can't discuss everything that we're doing, but we're working really closely with the other COCOMs, understanding in what posture and actions we may need to take, implementing new standardized and repeatable conditions to harden the NC3 enterprise. We now have NC3 cons conditions, think force protection condition, or Def con or something like that. And our Looking Glass Airborne Command Post teams executed some extended periods of continuous airborne operations.

ADM Charles Richard:

So I'll say it another way. We have a plan. The entire world is watching this. Russia's invasion of Ukraine has to be viewed in a global context, and it has profound implications for deterrence assurance and non-proliferation. Moscow is using both implicit and explicit nuclear coercion. Russia's invasion of Ukraine and nuclear threats to NATO have fundamentally altered the security environment. We don't have the luxury, or certainly I don't have the luxury, of assuming these threats are empty. That escalating rhetoric against NATO in the US shows that they're trying to exploit a perceived deterrence gap, a threshold below which they mistakenly believe they may be able to employ nuclear weapons, specifically some of their 2000 plus non-treaty accountable weapons without fear that this would somehow escalate to a full scale exchange.

ADM Charles Richard:

That's a very flawed idea, and that's a very dangerous idea. Think back, we should all recognize the vast majority of that guided ordinance that you have seen fired into Ukraine is dual capable. It could be nuclear. The deterrence gap that I'm referring to could drive a wedge between us and one of our most important strategic assets and vice versa, our allies, by exploiting a perceived assurance gap. The assumption that the US may lack the capability, capacity, or most importantly the will to fulfill our extended deterrence commitments. Russia. Now fields a lot of hypersonic systems. Avangard hypersonic glide vehicle, Kinzhal air-launched ballistic missile, and the Skiron land attack cruise missile, and their use of dual capable and hypersonic weapons in the invasion of Ukraine highlights their novel, their new stuff that they're developing and is a signal to us, our allies and our partners. Our observations of Russian action over the last five months have allowed us to better posture forces for the future.

ADM Charles Richard:

Remember, I'm skipping the fact that they're about 86% complete on modernizing their treaty accountable systems. We remain at zero. We're getting there, maybe by the end of the decade. Make no mistake, today we're ready. And as our president said, any use of nuclear weapons in this conflict at any scale would be completely unacceptable to us as well as the rest of the world and would entail severe consequences. And every day at STRATCOM, our forces in the field remain ready to do whatever the president orders us to do while continuously reassessing the situation, adjusting as necessary.

ADM Charles Richard:

China. People's Republic of China. While Russia remains the acute threat, the near term threat, the PRC remains our greatest long term strategic competitor. They're continuing, they're working this pretty hard. Pursuit of a world class military by 2030 and the military capabilities to seize Taiwan by force if they choose to by 2027, five years from now. Since we last spoke, PRC has accelerated that breathtaking expansion of their strategic and nuclear forces that I've referred to previously. And just as I spoke last year about the PRC strategic breakout, since we've done that, some of this y'all I'm sure have seen, commercial satellite imagery discovered a third Intercontinental ballistic missile field, probably 120 silos. Now that's enough now total for 360 new missiles. And remember, they're not treaty constrained. So each of those could have up to 10 more heads on top of it. And that's just one piece.

ADM Charles Richard:

Every other thing they're doing is expanding at a similar pace. But don't just look at the numbers. Investing heavily in hypersonic weapons of their own, their next generation of land and road mobile, Intercontinental ballistic missiles, new ballistic missile submarine with missiles to go on it, directed energy weapons, anti-satellite, anti-missile and anti-unmanned aircraft, system capabilities. Now add that to their investments in nuclear command and control. They're getting a purpose built one that previously only us and Russia had. Much improved readiness. Nascent launch under warning launch under attack capabilities.

ADM Charles Richard:

Hey, it is clear to me. At least they have moved a long way off their historic minimum deterrence posture. And as a result of all of this, it was a coincident when I was down here last year, I formally declared the PRC strategic breakout in a fully informed memo to the Secretary of Defense. It's not just a talking point that I make in speeches. It is something that we documented and informed my secretary. Now let's be clear. I'm only talking about the things in my areas of responsibility. Everything I just talked about is additive to everything else that they're doing in conventional modernization and expansion efforts.

ADM Charles Richard:

They have the world's largest Navy right now. World leaders by far in construction of new warships by tonnage. Air force of over 2,800 aircraft. An army of approximately one million. And they're massive innovation apparatus coupled to private sector companies, academia, and the People's Liberation Army have enabled them to leap forward in space and cyber. With those growing capabilities they're acting with growing assertiveness. Since we last spoke, they have made a record number of intrusions into Taiwan's air defense zone. Same period of time, their media mouth pieces have made nuclear threats to our Japanese and our Australian allies. And as we speak, I think we've all been tracking their destabilizing and irresponsible use of wildfire drills and ballistic missiles near Taiwan and Japan. That gives you a hint, I think, of how they intend to employ their military might. So step back, look at this as a whole.

ADM Charles Richard:

This is a military that is designed for coercion and the PRCS leaders are watching and learning lessons from Russia's invasion of Ukraine, particularly the power of an ambiguous nuclear threat. They realized you need capability, capacity and will, and they have recognized you can't coerce from minimum deterrent posture. This required us to make immediate and significant planning and capability shifts. And some of those are done. Others are underway, but again, there's still a lot more that has to be done. Now while nuclear weapons remain indispensable, they are just part of a larger whole. That's why applaud Secretary Austin's vision for integrated deterrence. We need to think about the problem holistically and then integrate across functions, theaters, domains in the spectrum of conflict. It's long overdue. I'm the third STRATCOM commander in a row that's been calling for that. And as our secretary said, integrated deterrence is backstop by a safe, secure and effective nuclear deterrent.

ADM Charles Richard:

So light nuclear missile defense is part of a larger whole. We need new missile defenses, starting with missile warning. That's the number one thing I need is missile warning so I know what to do on how to posture and dispose my forces. And it's due to these rapidly expanding and evolving threats. Hypersonic weapons, cruise missiles potentially are with Intercontinental range, unmanned aerial system, proliferation of shorter range, ballistic missiles, and several novel weapon systems. So, as I mentioned in my congressional testimony, the PRC successful test of a fractional orbit bombardment, hypersonic capability, never before seen in the world. I am not convinced at all we fully thought through the implications of what that weapon system means, our prime examples of this emerging capability. You're going to get decreased warning timelines, difficulties in attribution, and an increased threat to our traditional space and missile defenses and forces.

ADM Charles Richard:

And the increasing use of missiles in conflict, my opinion highlights the need for defense against proliferation of ordinary weapons. "So Richard, what do you mean by ordinary weapons"? I mean we focus a lot of attention on the novel weapon systems, but a garden variety cruised missile on a quiet submarine is actually a very underappreciated threat. So all of these put together simply could have serious implications for strategic deterrents. So to deal with this challenge, I think we got to do three things for missile defense as part of our overall integrated deterrent strategy. First, we have to reevaluate and readjust our missile defense posture. So we got to look harder at dispersal, hardening, redundancy, mobility, complicate opponent attack plans, reduce the confidence of attack success, raise the threshold for potential conflict and give our senior leaders more decision space by limiting damage from attacks. Second, and this is not new, but we really need to get after it.

ADM Charles Richard:

Its new capabilities left of launch. We must be able to detect and track cruise missiles and hypersonic attacks on the Homeland, launch onward attribute, defend, respond appropriately, early warning is essential or conclude we're not going to get early warning and re posture to

account for that. We got to remember our history. There was a point in this nation, we had no warning at all and we compensated by posture. There's your trade space. We got to remember what we did in the past. We absolutely have to have responsive, persistent, resilient, and cost effective joint integrated missile defense sensor capabilities, integrated command and control, new sensor architecture, launched impact tracking on these threats. And we got to come up with active and passive defenses against regional hypersonics.

ADM Charles Richard:

Third, finally, we have to integrate, should be threat focused on missile defeat, not just active missile defense and based on a top down architecture that synchronizes US, allied and partner contributions and capabilities. Get beyond platform centric defenses to a more comprehensive approach where we can bring to bear all our capabilities, passive, defense, offense, kinetic, non-kinetic and mold it together into a joint and combined force. So we got to stop stove piping things, and service specific capabilities, data networks, things like that. And the acquisition community got to ask all, we've got to exploit some adaptive approaches to ensure timely and cost effective development. We got to keep the pace up here. Integrate doctrinal, technical, programmatic, all across the department. We should make it clear that Homeland defense, regional defense and strategic deterrents are all part of an integrated strategy and we're thinking about them together.

ADM Charles Richard:

So, as I mentioned before, we need to take a hard look at posturing for the future. Review and assess the threat. Rapidly adjust capability, capacity, and posture for the future. I'm doing that for the strategic forces right now. We are never going back to the way we started earlier in my tour, in terms of what day to day looks like for strategic forces. I need your help. We're in a decisive decade, 10 year window that is our opportunity and necessity to tackle this era's defining challenges. Look, we have government here, civilian and military. We have think tanks, we have academia, we have business, we have industry. So here's what I respectfully ask you to help us go do. First, revise the theory of strategic deterrents. This is a long term effort that is going to take the best minds across government, academia and private industry. We have to grow the next generation of strategic deterrents thinkers to think about these problems. As Herman Kahn wrote 60 years ago, we have a moral imperative to think about the unthinkable. You just can't dismiss nuclear as, yeah, that will never happen.

ADM Charles Richard:

And look at STRATCOM, we think of ourselves as the keepers of the flame of the ability to do that, but I got to confess to you and be candid, even our operational deterrence expertise is just not what it was at the end of the Cold War. So we have to reinvigorate this intellectual effort and we can start by rewriting deterrence theory. I'll tell you, we're furiously doing that out at STRATCOM. We've got some better two party stuff that's actually working quite well in the current crisis that is radically different. Non-linearity, linkages, chaotic behavior, inability to predict, all attributes that just don't show up in classic deterrence theory. Non-linearity is one of the biggest ones. I can't think of anything more linear than a ladder. And that certainly does not describe the real world in terms of the behavior that we can expect.

ADM Charles Richard:

But that's a two party version. We have to account for three party. That is unprecedented in this nation's history. We have never faced two peer nuclear capable opponents at the same time who have to be deterred differently. And the theory just doesn't account for that very well. We've at least gotten to the point where I can tell you what it's not. A three party problem does not devolve into two simultaneous two party problems. That is the first step, and that doesn't work. So maintaining stability particularly in crisis will be much more challenging than in a bipolar world. I like saying this, particularly in this space heavy crowd, I'm not sure what strategic stability looks like in a three party world. And a lot of terms that get kicked around. That's stabilizing, that's not stabilizing, that's destabilizing. That's based on the Cold War and a two party problem.

ADM Charles Richard:

And kind of reminder, remember, I'm an engineer. When I talk about dynamics, I'm talking about that statics and dynamics class that are probably half the room had back when they were a freshman in college. And I do know that there are many passively stable, two body, orbital regimes that you can stick stuff in, but there are exactly zero stable, passively stable, three body, orbital regimes. They all require active stabilization. And I don't even know what that means when the forces can't be described by physics, but are political. So we have got to think through this much harder than we have in the past. When I say deterrence is dynamic, there's another aspect to that. It's not stagnant. It doesn't sit still. It is actively executed on a daily basis throughout a continuum of operational environments. Deterrence in campaign and day to day is different from deterrence in crisis, is different from deterrence in conflict, is different from deterrence after first nuclear use, when you're attempting to restore deterrence. We don't really get those differences very well. We need to get after that.

ADM Charles Richard:

We have to continuously seek a position of continuing deterrence. Again, not linear, not binary, and there's no finite instate in space or time. We got to remember that precedents you set in the short term in a crisis also impact long term risk calculations going into the future. And we're not very good about looking across different time dimensions when we think through things. So if we think the Department of Defense alone can affect our adversaries decision calculus, well, we would be wrong. We need integration across multiple departments, allies, partners, and institutions. Alliances and partnerships remain our greatest assets, but they're only as strong as the guarantee of extended deterrence and assurance backed by credible US Forces. We are going to better integrate our allies. We are all going to bring everything we have together to better deterrent defend in our collective self-interest.

ADM Charles Richard:

But we have to ask ourselves, what are the things that the US uniquely provides to an Alliance that is necessary for the Alliance to function? And one of those is our extended deterrence and assurance guarantees. Only we can provide those. Remember, nuclear is not off on a box off to

the side. It doesn't get its own separate rheostat over here of risks we can take that is somehow independent of everything else we're doing. You can't do it in pieces. And we can't set nuclear aside from our other capabilities. In the end, it comes back to your opponents perceptions and what you're doing to influence those so that they conclude restraint is their best option. How we communicate stake and risk is vital. We also have to start thinking globally again. And I know a lot of people come up here and say that, but we're moving very slowly in that direction.

ADM Charles Richard:

Look, for the past 30 years, we've had a regional approach, which I would simplify to say, look, wherever your problem is, we put it in a region, we put a JOA around it, a Joint Operating Area, we put a commander in charge of that and we shovel resources into it. And everybody else is supporting that commander. And that solves our problem. That doesn't work anymore. That worked fine for 30 years. It doesn't work anymore. That it's insufficient to deal with the problems we now face. Russia and the PRC have the ability to unilaterally, this is whenever they decide, they can escalate to any level of violence in any domain. They can do it worldwide and they can do it with any instrument of national power. We're just not used to dealing with competitions and confrontations like that. And you can't do that from a regional point alone.

ADM Charles Richard:

And remember absence of provocation is not deterrence and restraint alone in regional operations will not maintain strategic deterrence. You got to deter the possibility of vertical escalation. Stated simply there has to be an or else involved here when you're talking about people with these types of capabilities and their judgment of stake and their judgment of will. Think about it this way. Again, all of this is great theory. In the end, you have to get it to which commander is responsible for what. Who's going to get ordered to do what? This is a very practical thing. Theory is nice. We got to have it. You got to be able to execute it. So in any future confrontation, you will have at least three simultaneous supported commanders. First NORAD NORTHCOM is always the supported commander for Homeland defense. STRATCOM is always the supported commander for strategic deterrents and the Geographic Combatant Commander is always the supported commander for national objectives against that opponent.

ADM Charles Richard:

You have to do all three of those things concurrently. Don't give me the who's going to prioritize. Look, it doesn't count if you only get two of the three done. We have to get them all done. And we have to have a military capability, capacity, command, and control able to do that. We also need to go faster. Our acquisition programs, candidly, they just moved too slowly. More than half of DODs major defense programs are delayed. And some of these are stunning, five to 10 years. And unless we get after that, it ain't going to matter how good a commander I, or anybody behind me is, we're not going to have the stuff to do it with. So let's go back. We again have historic examples that I think are very telling here. Here's one of my favorites. In the fifties rapid... By the way, I think part of this was actually done here in Huntsville, but in the fifties, rapid development of air defenses was threatening our ability to get the bomber in, to go accomplish the mission. Made him pretty vulnerable. Tactical problem, but it had strategic implications.

ADM Charles Richard:

So in 1956, the US Air Force issues, a requirement for a supersonic air to surface cruise missile with a nuclear payload and was going to be carried on the B52. 17 months later, the Air Force evaluated the proposals and awarded a contract and 14 months after that, strategic air command... So what are we talking about here? We're talking 32 months, 31 months SAC took possession of the first production AGM28 Hound Dog cruise missile, one of the first cruise missiles in the world. A little bit of trivia for you, by the way. The Hound dog is actually named after the hit Elvis song that some of you may remember. And I think it is telling when that missile got named the Hound Dog, Elvis was actually serving in a tank battalion across the fill a gap is showing you everybody did their part.

ADM Charles Richard:

Now that Hound Dog, I'd almost like to have the Hound Dog today. It is Mach two capable, 800 mile range, one megaton nuclear war head and accuracy was really good for the day. You could even with your cruise missile on your B52, you could turn its engines on to help you with takeoff and then refuel the cruise missile from the B52, to make sure you didn't compromise its range. The warhead on that went from designed to production in four years. We had that thing for 33 years. It took 31 months to get it. We had it for 33 years. We did stuff like that in the Cold War, and we can do stuff like that again. And so finally we got to work together. PRC actually does this a lot better than we do. They integrate government, military, academia, and industry in a way that we just don't anymore.

ADM Charles Richard:

STRATCOM has published our commands top 10 S and T objectives to show where we think we need to go. We've got some really cool stuff going on with AI in our intelligence planning and operational communities. And we have an Academic Alliance program. I think it's 74 universities and colleges that we're partnered with to try to harness this second to none relationship with the national labs. We got a lot more to go. Think about it this way. This nation invented the entire Rand Corporation to do nothing, but think about strategic deterrents back in the Cold War. We're going to need an equivalent national level of effort to get after the challenges we have today. So let me wrap this up. Thank you for what you do in the defense of our country and the rules based international order. The thing that we created after all the sacrifices in World War II and an effort to make sure we would never have great power war again, the free world is getting tested in ways right now, in ways we haven't seen in decades.

ADM Charles Richard:

And that three party nuclear peer world is just unprecedented. Now in both the second World War and Cold War, be honest with you, sometimes we doubted ourselves. And so at the beginning of the Cold War in 1947, one of our wise men, George Kennan sought to explain the challenge and encourage the American people to meet it. So to prevail in this contest of wills, and this is always comes down to who judges greater stake, who has greater will. He said the United States only needed to measure up to its own best traditions and prove itself worthy of preservation. In the Second World War and Cold War, we were worried that we could not



compete against authoritarian regimes that seemed invincible and implacable. But in both contests, we prevailed. We are the ones that have the true alliances in partnerships. We used a free society to innovate. We used our business leaders to create the arsenal of democracy. And most importantly, we have the moral high ground. We always rise to the challenge. We've done it before. We have to do it again. Thank y'all. All ahead, Flank. Roll tide.

Speaker 3:

Admiral Richard, we do have a few questions that have come in. First of all, thank you so much for your comments this morning. The US canceled two ICBM test in the past few months, citing the desire not to appear to Russia and China, that the US is not taking escalatory actions. Has this cancellation of these ICBM tests had the desired effect on Russia and China? How do we assess? And I'm going to combine that with another question. Would you please speak to the delays in the Minuteman III, three program testing and the potential impacts to our national security?

ADM Charles Richard:

Well, first let's be accurate. We've only canceled one Minuteman III test. The other one has been delayed and should be delayed only for a short period of time. And remember a Minuteman III test, just like other tests of our strategic systems, those are service weapons tests. That's an Air Force test, but I do want to stress as the Commander of our Strategic Forces, those tests are really important. We do them all the time. We do three to five per year. We do it across all legs of the triad. We've been doing them for a long time. And we've done like 300 in just the last couple of decades on Minuteman III, three alone. And we have done them routinely. We did one in the middle of the Cuban missile crisis. Those tests are really important to make sure that you understand the reliability of your weapon systems. Strategic deterrence hinges on credibility and you have to understand your reliability in order to be credible. And we're not the only nation that does that. Again, I can't get into details, but Russia and China both have done over a dozen of them this year.

ADM Charles Richard:

So far we even talked about when they did their most recent [inaudible 00:31:36], their new heavy ICBM test, and then properly notified, not threatening. You'll see another couple of them coming up here in the weeks ahead. So expect this most recent postponement to be short. And as long as we go get that test off, I don't expect it to have any impact to Sentinel. Sentinel is proceeding along quite nicely although I could use that weapon system yesterday and it is important to us to remember why we do service weapons tests, how important they are, and the fact that it is routine, normal, everybody understands them. And that is stabilizing when it comes to strategic deterrence.

Speaker 3:

Thank you, sir. Please amplify on the aggregation of a PRC, Russia, North Korea, Iran in a coordinated or coincidental or cooperated scenarios of threat or attack. What steps can be taken to ensure that we can deter and if necessary and called upon to defeat not one, but all.

ADM Charles Richard:

Hey, so I'm fond of saying when you're the commander of STRATCOM, you don't have the luxury of deterring folks one at a time. You have to love all the children. And so you have to pay attention to them all, all of the time. And what I would say the step one in that process, Joe, is we have to quit doing one V1 comparisons. To be honest with you, I bristle sometimes when I say, "Well, China has this, you have that. You have a lot more. You're good". That would be fine if China was the only folks that we had to be deterring. You have to look at them all together. You have to consider what could happen opportunistically. You have to consider what could happen cooperatively. And that's what I mean when I say we have got to go look at our capability, capacity and posture.

ADM Charles Richard:

We have a great strategy. The nuclear posture review, national defense strategy produce some really good strategies, but you have to have the stuff to execute the strategy. That has to be tested against what does the threat look like? Remember, we'd have no idea where China's going to wind up. Yes, Russia is treaty constrained for a little bit longer on a fraction of their capabilities, but they're unconstrained and we don't know where that's going to wind up. North Korea, add that in. Do you have enough capability, capacity, and do you have it in the right places at the right readiness? And we have to do this more than every four to eight years. That's how we've been doing it since 1992, as part of a nuclear posture review. Things are moving too fast right now. We have got to do this much more frequently and adjust in my opinion.

Speaker 3:

Thank you, sir. I'm going to combine a couple of questions here. That should be quite interesting for both you and the audience, I believe. On the subject of deterrence uncertainty, continuous deterrence that you spoke of, speak to preemption, left of launch, missile defense, its necessity and the inherent risk. And I'm going to combine that with one here that said to get really left to launch requires significant intelligence capabilities as well. What are your thoughts on the adequacy of our current capabilities there and meeting the needs of STRATCOM?

ADM Charles Richard:

Well, I would come back to it is all about influencing the opponents' perceptions in a way that is beneficial to our defense and deterrents. So our ability to do any of the things that you just talked about are known by the opponent and that changes their decision calculus. And that's the whole name of the game when it comes to strategic deterrents.

ADM Charles Richard:

And so that's where I think we have to go. I'm pretty excited about, I can't go in a lot of detail, but some of the artificial intelligence work, I and other space command is doing some really good work in this area too. That gives us a much better understanding of what the opponent is doing, which gives us a wider window to influence it, reduce confidence and show that negotiation is the least bad option and the preferred path to go.

Speaker 3:

Thank you, sir. Well, enough of the easy questions. Russia has clearly applied their deterrence theory against the US and our allies in their invasion of Ukraine. They have arguably forced significant restraint in our response. As you mentioned, China is learning and will leverage their nuclear forces to deter our response. It appears that it's going to come down to a credible, capable, strategic force and the willingness to employ it. How do we change the current trajectory that we're on for a conflict in Taiwan?

ADM Charles Richard:

Well, one, I would think is that we need to be ready to confront and have thought through ourselves, what is it that we have to do, or be able to show that we can do, that changes their calculus and shows that resolving the issue without the use of violence is the correct way to go do that? I think I just outlined a number of things in terms of moving faster, but I would start with, again, I want to foot stomp this because I think it's pretty prevalent in the department, is that restraint alone isn't going to answer the bill in terms of what we're going to have to do. You have to have thought through restraint, but simply being very careful about we're going to shoot this, but we're not going to shoot that.

ADM Charles Richard:

And if we just message a lot, everything will be good. We have to think through the or else piece to this. And if we do that correctly, we reduce the chance that it comes down to violence to begin with.

Speaker 3:

Thank you, sir. I've got a good question here for you. What books would you recommend on nuclear weapons use in theory?

ADM Charles Richard:

Oh, there are so many of those, but if you have not, it's 700 pages, but I go back to Herman Kahn On Thermonuclear War. I would plow all the way through that. You will be surprised as to how much of his theoretical work is still very valid today. It's a good starting point. There's a couple of Sherling books that I would put on that list, but I would put in there, go back to some of the very basic theory and start there. There's a number of things that you can add into that more recently, but it's 700 pages. It takes a while to get through it. You'll be surprised in some respects of things they were thinking about back then that we don't even think about at all right now. That's where I'd start.

Speaker 3:

Thank you, sir. That concludes our questions. Thank you so very much. All right.

ADM Charles Richard:

Thank y'all very much.

