

9.1 – Eyck Freymann & Harry Halem (Ensuring US Military Readiness in the Indo-Pacific")

[00:00:00] Introduction and Guest Welcome

Ryan Vest: Welcome to *Horns of A Dilemma*, the podcast of the *Texas National Security Review*. I'm Ryan Vest, executive editor of *TNSR*, and I'm here with our editor in chief, Dr. Sheena Chestnut Greitens. We're pleased to have joining us today, Eyck Freymann and Harry Halem, authors of the article, the "Arsenal of Democracy: Keeping China Deterred in an Age of Hard Choices." Eyck Freymann is a Hoover Fellow at the Hoover Institution at Stanford University, and a non-resident research fellow at the US Naval War College, China Maritime Studies Institute. He's the author of several books, including *One Belt, One Road: Chinese Power Meets the World*, and he writes the *Integrated Strategy* Substack.

Harry Halem is Senior fellow at Yorktown Institute in Policy Exchange in London, and a military advisor to Green Mantle, an advisory firm based in New York City. He's a PhD candidate at London School of Economics. and is the co-author of the forthcoming book, *Breaking the New Axis: A US Grand Strategy for Eurasia*. Eyck, Harry, welcome to *Horns of a Dilemma*. It's great to have you on the show.

Eyck Freymann: Thanks so much for having us.

Harry Halem: Thanks for having us.

Sheena Chestnut Greitens: Well welcome guys.

[00:01:05] Origins of the Book and Article

Sheena Chestnut Greitens: This article is an outgrowth of the research that you conducted for the book that Dr. Vest just mentioned, *The Arsenal of Democracy*. So first congrats on the book launch, and I wondered if you might

get us started by telling us a little bit about the book, and about what this article for *TNSR* adds or extends from it.

Eyck Freymann: Thank you, Sheena. So the origins of this book are that I'm a China guy and Harry's a military analyst. And about four years ago, I approached him to ask, what am I missing here? China has more ships, it has more aircraft. It has more intermediate range missiles. It has more industrial capacity, it has more men, and it seems set to extend its quantitative advantages in all these areas.

It's also much closer to Taiwan and other places in the Western Pacific where we might be called upon to fight a war, than the United States. So what am I missing? Why is the United States still in the game? And Harry said, well, it's a bit more complicated than that. You have to think about a military system as a totality.

It's not just a question of the order of battle. It's a question of how all of these elements interact to achieve a mission. And I said, well, what book should I read to explain how all these things fit together? He says, well, no such book exists. I can send you about a thousand articles from *TNSR*, and *War on the Rocks*, and *Breaking Defense*, and other places.

And so began an interactive collaboration that has lasted us the better part of four years, where two historians of very different backgrounds, try to piece this together, and figure out how to articulate how this US deterrence system works for a general audience. Something that demystifies all the acronyms, and boils down the system to its fundamentals.

[00:02:52] Key Features of US Deterrence System

Eyck Freymann: And then along the way, we've come to understand there's some key features of this discussion, which are actually broadly known in the defense community, but aren't so well known outside it. And the net assessment is ultimately hopeful—the United States can sustain conventional deterrence against China into the 2030s, and it can do it probably at an acceptable cost, but it doesn't have much time because there are new technologies we have to assimilate, and there's new industrial capacity investments that we have to make.

Harry Halem: We set out to write this book as Eyck said, almost four years ago. There's been since then a lot of excellent literature, and analysis, and long form, and short form, about the China challenge, and American adaptations to it, and strategies to overcome it. We wrote *Arsenal* because we thought—one, no one had taken a holistic enough look at our deterrence system. Deterrence is a system, as we argue, with each of its interlocking military parts, and admittedly issues we don't cover, economic, diplomatic parts, that all come together over time. No one had seriously, and digestively, written about deterrence in the late 2020s and into the 2030s. That second part of the challenge, this slightly forward-looking emphasis over the next 5 to 15 years, we think, really differentiated how we were thinking about the problem.

And our hope is that our book is a starting point for Congress, for individuals in the Pentagon, and across the Interagency process, for interested private citizens to think critically and coherently, not just about how to deter China tomorrow, but how we can win a long-term competition with China over years, and prime ourselves to win over decades.

Ryan Vest: In the article, you note that American strategy requires showing China that no single capability is so exquisite and dominant as to transform the military balance. I was wondering if you could expand on this key point a little bit, and why it's so important for the United States.

Eyck Freymann: Well, in China's doctrine, they talk a lot about systems warfare and systems competition. So if we want to deter China in the military space, we need to speak their language to a certain extent. But also I think it's dangerous when you're facing off against an adversary that has enormous quantitative advantages in industrial capacity, and that's a quantitative edge that's likely only to grow, to make sure they don't persuade themselves that just because they have more of Capability X, that means that they could certainly win.

Harry Halem: The PLA, as we emphasize, is built to counter American force structure quite directly. We can see their combination of long range missiles, of surface combatants, submarines, strike aircraft, counter space capabilities, things they can do in the cyber domain and against our C4ISR. All designed to push on the weak links in our deterrence system, our logistics, our relatively thin magazines, our reliance on a handful of super bases, et cetera.

By shifting our framework from this specific capability, or that specific asset, to a much broader basis, we think that the United States, by investing in the connectors, and enablers, and C4ISR, advantages in space, undersea, can

present a challenge to China, that's large enough that makes a PLA, day after day, look at US force structure, and look at US force posture and say, we are not going to win this war quickly. And we are not going to be able to neutralize any decisive element of the United States as an adversary.

This is a holistic system that we're thinking about, not an individualized one, to your question.

[00:07:04] Critical Questions for US Deterrence

Sheena Chestnut Greitens: Let me go to the framing of the article, because in the article, you talk about three key questions that the United States needs to answer, when it thinks about this deterrence system that you mentioned a moment ago, and how that deterrence system needs to evolve to meet these challenges that you're outlining.

So the first question was, if deterrence fails, like what would a US–China war look like? The second was, what capabilities does America then struggle to produce and sustain at wartime scale? And then third, how can the United States work with allies, and with industry, to secure supply chains, and bridge that gap between what the United States has and it needs for this, you know, late 2020s, 2030s timeframe that you're talking about.

I wanted to ask you a little bit, I was just curious about, you know, how did you come to those three questions, and why are those the critical three questions for the United States today?

Eyck Freymann: So, to your first question, Sheena, understanding what a war would be like. I think it's important to emphasize the United States hasn't fought a high intensity air and naval war in 80 years, and it hasn't made preparing for one, the primary focus of its planning in even longer.

And in the meantime, we have fought a number of land wars. Most recently we're watching one unfold in Ukraine. And there are real lessons from Ukraine for a potential fight with China in the Western Pacific. But something that was not obvious to me, that Harry had to explain to me when we came to this project, is that land war and air and naval war differ fundamentally.

They have a different relationship with geography. They have a different relationship with reserves. Naval wars tend to be decided by very intense

engagements that happen quickly. And the question of when and how that engagement takes place is really critical. And when that engagement takes place, it's actually not really in either side's incentives to hold anything back. They want to surge all of their capabilities right up front.

And therefore, the question of who would win round one and round two, in a potential US China fight, means that any conflict wouldn't necessarily be decided in the opening weeks, but it would be profoundly shaped by what happened in the opening weeks.

And that means if the United States can build a posture that is resilient to China's opening punch, and can deliver a powerful first punch of its own, then it can stay in the game, even if it has all kinds of quantitative disadvantages. That wasn't obvious to me. As a novice coming to this problem, and I think it's a reason for Americans who don't follow this closely, to understand why there's still actually hope to sustain deterrence.

Ryan Vest: You know, that reminds me of something as you say that Ecyk, I'm glad you brought that up. This is one of the things that caught my attention in your article, is your claim that the United States would probably win a large-scale war with China, but at significant cost, as you start talking about these first rounds of combat, and what is that cost going to be?

I apologize, I'm going to wander a little bit here, but for folks that have listened to our podcast, or long time listeners—earlier this year, we did a podcast with John Caverley at the US Naval War College—and he made a similar assertion, when talking about Taiwan, but he concluded that if we won a war with China, and lost a significant portion of the Pacific fleet, that could be a strategic defeat for the United States, as we would no longer be able to project power into the Western Pacific.

Is this something that you considered as you were going through your article, and thinking about not just the—can we win now—but what is the long-term implication of this? I was wondering if either of you had any thoughts on that?

Harry Halem: We did consider this particularly in the book, thinking about what long-term war might look like, the kind of damage it might cause. That's why we emphasize so intensely the idea of hedging. We talk about this quite explicitly, both in the article and our book on the surface fleet.

The way that military technology develops is never explicitly foreseeable. We might look backwards at certain technological bundles that come together and

appear to transform the way we fight wars, but the reality is, at any given time, military technological development is a leap into the dark, facing backwards. We don't know how technologies are going to synthesize.

This is particularly true when we talk about innovation in the late 19th and early 20th century in naval combat, and the development of the dreadnought battleship, what we call a dreadnought type revolution, where the entirety of, at the time British, and German force structure, was essentially reset.

On the other side, there's instances of more adaptive and integrative innovation. That's how we see the torpedo being deployed into modern naval force structures, where it's initially expected to wipe out and make modern capital ships obsolete, but in reality is integrated into, and attached to, totally new platforms, so that over the next 50 years, it becomes an amplifier to how force structure is actually generated and sustained for large, high end, navies.

What does this mean for long-term combat and for damage? It means that we need to have platforms that are flexible, particularly surface platforms that are flexible, so that over time we can take the fleet we have today. We can take so-called legacy forces, our aircraft carriers, our destroyers, and other large surface combatants—and we can combine them with new technologies, unmanned systems, integrate them with space-based assets, and other cutting edge capabilities that the United States is developing today. And that we see being fielded day after day, and iterated in the war in Ukraine, and in the Middle East, to ensure that we can, despite the damage of an initial phase of war, project power.

It's about creating a force that can absorb damage and thereby innovate.

Eyck Freymann: And logistics is really important here, in any long-term confrontation. One point we find in the book is, the US Logistics Network would be worn dangerously thin very quickly. The United States has absolutely amazing global airlift capability, but when it comes to sea lift, our posture is overextended, to say the least.

We're short on ships. The ships are old. We're short on mariners, and we're short on the facilities to build and maintain these ships. These are by and large ships that are designed to operate in peaceful seas, not in contested environments. And if God forbid, a substantial fraction of our sea lift finds itself at the bottom of the Pacific, we would have a significant problem sustaining our forces in the field and supporting our allies.

So this is a joint allied problem. And it is both a civilian and a military problem. We can think about scenarios where there's a blockade of Taiwan, where civilians have to be resupplied. We can think of a world where there's no form of blockade of Taiwan, but tensions have risen to the point where maritime insurance markets get screwed up, and it's actually hard to deliver civilian cargoes to countries like South Korea, and Japan, Southwest Islands.

So the United States, in this situation, has to grapple with decades of underinvestment in its merchant marine. This is a problem we need to work on together with our regional allies. They have the geography, they have the shipbuilding capacity, and workforce. This is the sort of thing that we have to think about.

The United States is always going to have interest in the Western Pacific region, and if we have some kind of confrontation with China, then our allies will need us more than ever, and we will need to maintain our position in that region more than ever. But the essential connective tissue for us to stay involved in the region, logistics, that could be our Achilles heel.

And that's where I think Caverley is right.

Sheena Chestnut Greitens: I found that a really sobering part of the analysis in your article.

[00:15:21] Lessons from Historical Models

Sheena Chestnut Greitens: I wanted to go back to something that you mentioned Harry, a few minutes ago, and that's, you know, these two offset strategies historically, that you talk about in the article.

So one of the big pushes, or recommendations in the article, is this call for a techno-industrial transformation to offset China's strategy. And you then go into these two historical models. One is the dreadnought model, where you bet big on a new innovation, a new high tech bundle that's gonna outclass, and make all previous systems obsolete. Or then the torpedo boat model, which you mentioned a few minutes ago, that integrates new tech into these legacy platforms. You talked a little bit about how the second offset kind of incorporated elements of both.

But I wanted to ask you a little bit, you've touched on some of the implications for the surface fleet. You've touched on some of the implications for logistics, which I may come back to in a second. But in the article then you write about

how industrial capacity, technological R&D, and doctrine, must be aligned over time and across institutions.

And so I wonder if you could talk about that alignment. Where do you see the biggest issues with that alignment, and what lessons should the United States learn from that kind of macro picture takeaway, in terms of shaping its strategy toward China, for the 2020s and the 2030s?

Harry Halem: We begin and we end our book with quotes from President Roosevelt. I mean, the title itself, "Arsenal of Democracy," comes directly from his speech. Naturally, we treat that as a warning in a fundamental sense. When Roosevelt publicly charges the United States to prepare for Eurasian wide war, it's already too late, and we get dragged into Pearl Harbor.

But what we can see from these historical contexts is a much freer flow of information between the military, the military industrial complex, those who are designing, building, testing, and trying to sell weapons, and back around to the Congress, and other interested civilians, and those who work, in what we can call, our broader strategic deterrence system.

We are convinced that we need a political mandate to deter China over time, and to win this long range competition. This mandate also involves internal alignment. We see an enormous de-linkage between the Congress, particularly members of Congress who don't necessarily work on defense issues that closely, and the Pentagon. The Pentagon, and services that partly have operational concepts they develop, but as Ecyk mentioned before, don't connect to the logistical underpinnings we have, or at times don't have operational concepts they have fully fleshed out. We also see that de-linkage between our defense contractors, both traditional primes, and exciting new vendors, that are developing weapons that could be extraordinarily promising on the one side, and the Pentagon and defense budgets, which don't quite understand how those might fit into operational concepts.

In any successful offset, whether it follows the dreadnought model, or the torpedo model, you see this alignment doctrinally, operationally, organizationally over time, to ensure that we can actually deliver these maturing capabilities. If we don't embrace that mentality, and if instead we rely purely on what is sometimes called disruptive innovation. If we don't engage our bureaucracies in this process, and we're not doing that effectively now, our bureaucracy strategically and on the Hill, it's going to be very difficult for us to match Chinese scale and innovation capacity, by virtue of their financial capacity.

Ryan Vest: So I want to pull on that just a little bit ,Harry. I study Russia for a living. That's kind of my happy place. And so this is where my mind always goes back to, but for many years, Russia has been on the junior side of the competition with the United States, and with NATO. And so they have to come up with asymmetric ways to try and compete.

About, it's been 12 or 13 years ago, the Chief of the general staff of Leader Gerasimov, gave a speech and wrote a very influential article in VPK, where he went to the Russian industrial base and said, look, we can't compete one-on-one with the United States. Instead, what we've got to do is we've got to forecast out, and predict what a future war is going to look like, in order that we can only invest, or we can focus our investments, in just those things that we think are going to win the next war.

As I've been listening to you talk a little bit about the competition between the United States and China, where China has started to develop this juggernaut of an industry. Do we need to start thinking about those same kinds of asymmetric ways to compete? And if so, is that something that you wrote about in your book, or have talked about in this article of, how do we choose the right things to invest in?

Or do we stick with kind of the post Cold War, or really the Cold War version of, hey, we're just going to invest in everything, and see what sticks?

Harry Halem: It's an excellent question. The difficulty that we see, and this is partly illustrated by the Russian model, is forecasting the future of combat. How do we know exactly what's going to work, and exactly what's going to not work? How do we know whether we want to, in the Russian case, focus on precision guided munitions, and not necessarily focus on small, cheap, attritable, large volumes of drones? Of course, you don't know before the war starts.

Our model is focusing on these underlying advantages that the United States has, and fundamental capabilities that we know are going to matter in any context, in a high-end air, naval war. Those are our advantages in C4ISR, and counter C4ISR, our advantages in space-based capabilities, and our advantages undersea. However military technology develops, we know that these are going to provide us decisive advantages, over a much larger Chinese force.

[00:21:36] Defense Industrial Base and Procurement Challenges

Sheena Chestnut Greitens: So I want to ask you about, a little bit more about, the question of how the US military industrial base, or defense industrial base, fits into the future of war. And in particular, with the consolidation of defense manufacturers, you mentioned a minute ago, the relationship between some of the primes, and these newer emerging companies, some of which frankly have a presence here in Austin.

You know, with the consolidation of defense manufacturers in the 1990s, and some of the emerging tech that we see in the defense tech space now, how do you assess the current state of the defense industrial base? And is it strong enough to sustain the American way of war, or what the American way of war maybe is going to need to be, in the timeframe that you outlined, into the 2030s?

Eyck Freymann: I think the headline is that we have the right technologies, but we don't have enough capacity, and we need to be all hands on deck in building that capacity. Everyone has a role to play. Congress needs to provide clearer forward guidance about what it's going to buy. That kind of demand signal, or giving the Pentagon the authority to issue that demand signal, is going to be essential to scaling up supply chains.

You know, one of our key advisors on this book, retired Stratcom Commander Admiral Jim Ellis, he likes to say, you know, for defense producers, defense is a business, it's not a religion. And if you want to incentivize these companies to keep their production lines warm, particularly the subcontractors, you need to reassure them that there will be demand for what they make into the future.

And allied coordination, and allied defense industrial integration plays a role here too. Because in some cases there's bits and pieces of the system that allies make really well, including the components where they can unclog some of our bottlenecks. And also, if we make it easier to buy one another's defense articles, then our contractors will have more potential customers. There's stuff that the primes can do, however, and there's stuff that emerging defense tech companies can do.

For the primes, this is an ongoing tension of how you adapt to emerging technology while continuing to do your traditional stuff well. I think for smaller defense tech companies that are trying to cross the valley of death, the situation is improving in that the Pentagon leadership clearly understands this is a problem that has to be solved.

If we want to keep all of this talent and capital on [our] team, we need to provide these companies with a pathway to profitability. However, living out in

the Bay Area, as I do at Stanford, I meet all kinds of exciting new defense tech companies and founders, who are building amazing widgets, and the widgets themselves sound awesome.

What's not clear is how they plug in to a very complex existing system with all of the requirements, with all of the integration that they will need to have. So we need more connective tissue between the different companies that are competing in this space. We need more connective tissue between these companies and the Pentagon, through institutions like DIU.

Ryan Vest: So I think this is really fascinating because I do know a few people that work in these small, you know, startups that are coming up with great ideas, but really struggling in how to connect those ideas to the larger contractors, or how to actually get a contract with the DOD, with these great ideas.

So I think this is really fascinating, but I do have to ask, you know, you talk about in the article a lot, that it's unlikely there's going to be any kind of one time, big, large-scale transformation inside of the defense industrial base. But in your assessment, what do we need to do to get the defense industrial base where it needs to be, in order to compete with China long term?

Eyck Freymann: Well, I would say we've already achieved something extraordinary, which is that Silicon Valley has decided that defense tech can be a good business. So, out at the Stanford Business School, I meet not one or two, but dozens of talented young people, who could do anything. They could go to Goldman, or McKinsey, or a hedge fund. They could work in biotech, or they could work at OpenAI. And instead they're talking about building a space tech company, or they're talking about building resilient communications for the Air Force.

I think that's amazing. And that means that something is getting through, some signal from Congress, from the Pentagon, from our leaders, that because there is an intention to change, and to make big investments, and to take more risk, the capital markets are responding, and the labor markets are responding.

The difficulty we have is harnessing that, so we don't puncture people's expectations, and send all those people back to Wall Street and Silicon Valley. We want to keep them invested. That means we need to continue to take actions that demonstrate seriousness about reforming the system. And this year's NDAA takes some extremely encouraging steps forward. There is more work to be done.

Reforming a procurement system that is this complicated, and this was one of the hardest parts of the book, because I have to admit, I still barely understand it. But the system is complicated for a reason, which is that our force is complicated. And the requirements that our war fighters have are very precise, and you don't want to deploy capabilities in the field that won't work if they get sand in the gears, or they won't work in some electromagnetically confused environment.

So, the procurement process is complex for a reason. All of the rules exist because they represent a failure that happened in the past, and the evolution of our system is going to be incremental. It will not be some centrally planned perfect renovation. We need to think of this as a conversation that happens, not over one or two NDAs, but over the space of about five years, and that's why we focus this book on the 2030s. This is an incremental reform process where we're changing lots of things at once, we're taking more risk, and then we're adapting as we learn.

I think that's the right approach. I think even since we've published the book, we put it out in September. What did you say, Harry? Maybe 15% of our recommendations, we maybe hit 60, 70 recommendations. Some of them lower hanging fruit than others, but you know, about 15% of them have been taken up already.

I think that's a pretty good batting average. If we can get another 10% to 15% of those in each of the next five years, we'll be in a much better place. And I think companies that don't have a clear pathway to become a program of record today, will have one.

Harry Halem: We have a very unique opportunity here to suck up all this talent that Ecyk identified, but that opportunity is not going to be around forever. This isn't to say that we need to transform our force to solely use this or that kind of new cutting edge system. It does mean that we need to demonstrate progress year on year, NDAA on NDAA, while ensuring communication outside of the Pentagon, with both primes and new defense tech startups.

It's also worth noting that the only part, and I'm personally quite proud of this, of a book that the text was locked in July. The only part of it, that is very much now out of date, is our explicit discussion of the JSATS process. The Pentagon has moved quite aggressively to really rethink and reset how we're procuring. It should be commended for that. Now it's on us to drive forward under NDAs a new real requirements process.

Eyck Freymann: You missed something, Harry. Something else has changed since we locked the text, which is they've changed the name of the Department of Defense, to the Department of War, ruining the most commonly used acronym in our book.

Sheena Chestnut Greitens: The name of the Department of Defense/War aside, you write in the article that the clock is ticking, and what you've described is a real window of opportunity here. And, you know, it's interesting to hear your reflections on the changes that the Pentagon's made to the procurement process.

But when I think about defense procurement, I think about, you know, cost overruns, delays that create issues for major programs of record, sometimes get them canceled. I do not think speed and agility. And so my question is, do you think what's happened since you locked the text in July, or since this article came out, and went to press, is that enough of a fundamental transformation in how we do defense procurement for the NDAs to carry the sense of urgency that you talk about in the book, or are more fundamental process and institutional changes to procurement required?

Eyck Freymann: I think it's not enough, but it is definitely enough to keep the momentum alive, and I'm very pleased to see that. And it seems that every week, Harry and I are sending each other headlines that show progress in some small way, in something we talked about in the book.

For example, new multi-year procurement for PAC-3 interceptors, which is huge overdue, but will deliver thousands more interceptors to the United States and our allied forces.

That's such a no-brainer. Everyone needs air defense and is going to need air defense, and Patriots are the best. But taking those steps now for a broader range of long range strike capabilities, that's the next step. I expect we will see something like that in the next NDAA.

Harry Halem: We can focus a lot on these procurement elements. There are also force structure things that matter as well. We make a very explicit point of saying, let's concentrate on specific systems to build magazine depth, so that we can launch them from the air, from VLS2s, potentially on the ground, maybe even submarines.

There are ways to improve our procurement process that don't necessarily even have to involve direct procurement reforms. Small changes go a very large way, as we've already seen over the past six months.

Ryan Vest: That procurement reform, I think is kind of interesting, and in fact, in the conclusion of your article, it says that you wrote “Procurement reform should focus on even evolving the force, not searching for disruptive killer apps.”

So with that in mind, you know, based on what we've been talking about today, what should the Pentagon be doing? What steps should they be taking right now, in order to ensure that the most important reforms get done in time, so that we can continue to deter and if necessary, defeat any potential adversaries in the future?

Eyck Freymann: There's some things that the Pentagon can take unilaterally. There's other areas where they're going to need help from Congress because there's money involved. So let's assume for a moment that we have a mind meld between Congress and the Pentagon. A dubious assumption maybe, but let's make this assumption.

First of all, we need to recapitalize our submarine industrial base. We are not producing submarines fast enough. Our fleet is aging. The workforce to produce them is aging, and we don't have enough yards to make, say, doubling our annual output—a simple and straightforward question. So we need a generational investment to recapitalize this enterprise, and set it straight for decades to come.

Second, we need to double down on long range strike. China is building enormous magazines of medium and intermediate range crews, and ballistic missiles. They threaten our bases, they threaten our ships. As the quality of these improves, as the range improves, it becomes all the more important for us and for our allies, to have magazine depth. We need to be working with allies in an all-out sprint, to produce things like LRASMs, JASSMs, and also the lower tech stuff like PJDAMS that will be essential for Air Force operations.

Third, we need to think through, and then start to apply lessons from unmanned systems in Ukraine to the Indo-Pacific. Unmanned surface vehicles are going to play a role in a potential fight with China in the 2030s. And UAS aerial drones are going to play a role as well, but so will the counter drone systems, the electronic warfare systems, and in some cases kinetic interceptors that have been so important to Ukraine. We need a channel for knowledge transfer directly from the battlefield in Ukraine, to our Asian allies and partners. And we

need to work with all of our allies to build a more integrated and adaptable drone industry.

That starts with decoupling from China in the entire drone supply chain. But doing it, not just unilaterally, doing it with our allies too. And it's only when we have those economies of scale, producing everything from the simple off the shelf copter, to the really exquisite capabilities at the top, that we will be able to compete with China on quality and price, as more and more military operations move towards unmanned.

There's a whole bunch of other things, but to me, these are the three key things. That, and I guess number four, getting out of the way, as our private sector companies that are already leading in space, continue to invest to retain their lead.

[00:35:34] Congressional Role and Strategic Choices

Sheena Chestnut Greitens: So let me relax this assumption, that you made a moment ago, about a mind meld between Congress and the Pentagon, because you hinted that it might not be perfectly realistic to assume a perfect mind meld a hundred percent of the time.

And you actually write in the article, ultimately the hardest choices about force design are going to be made by Congress, and that's not going to be limited to the people who have the expertise, and are serving on the Armed Services Committee.

So you talk about what members need to understand, I guess my question for you here is, a) what are the most important things for them to understand? And b) then, how can this broader ecosystem, including those of us who are sitting in the academic world, and writing articles like the one you wrote for *TNSR*, or your book, help Congress understand complex problem set, and get to good decisions, the right decisions about future force design. How do we get there? How do we help Congress make the decisions it needs to make?

Eyck Freymann: So it's a wonderful question Sheena, and the way I'd answer is, we need to do what Roosevelt did. Demystify this problem a little bit, and explain why all Americans should care.

Now for a long time, defense spending decisions have been reserved for a fraction of Congress, and there's a specialist community in Washington that hashes out the details every year with the NDAA, and then the broader House and Senate rubber stamp the conclusions. We've reached a point of strategic urgency, a point of industrial crisis, a point of uncertainty and tension with some of our allies, that's no longer sustainable.

We need a much more inclusive conversation about where our defense enterprise needs to go, and members of Congress who haven't previously worked too much on these issues, need to be able to participate in the debate, not just to understand that capability X is made in their state or district, but to have at least a very high level, 35,000 foot view about how the whole system works. And that is really what our book is designed to do.

Now, yes, it is true, there are some acronyms in it. You can't talk about the military without it, but when I came to this problem as a novice, you know, lacking the resources to have an on-ramp into the conversation, I felt like anytime I'd see Harry in an interaction or a briefing, it would very quickly get to a level of detail where I couldn't keep up.

And it's easy when there's so much technical language floating around to just tune it out, and hand it over to the specialists. But if we can reframe this problem as something that's actually comprehensible to an ordinary person. Something that a member of Congress and their staff can learn, you can actually invite people into the conversation who have useful insight and expertise, and it's their support you will need to build a consensus and get stuff done.

One of the exciting things about briefing this book on the Hill is the sheer number of congressional staff, not MLA's, military legislative specialists who do this for a living, but busy hurried staff, who are juggling agriculture bills, and healthcare, are taking the time to actually understand how these systems work, and how we can fix them in an effective way. Working with industry, working with organized labor, with other stakeholders, it's an amazing thing to see.

Now that learning curve is steep. It's not going to happen in just one NDAA, and that's one reason why, when we go around the Hill, we'll talk to a dozen offices and each will have some good ideas that didn't make it in this year. Progress is happening, and the community should think about how we work with these other actors, to welcome them into the conversation.

That's what Roosevelt did with his "Arsenal of Democracy" speech. We need to be taking a page from his book.

[00:39:42] Conclusion and Final Thoughts

Harry Halem: Our fundamental conclusion, as Eyck put it at the beginning of our conversation, is our net assessment is hopeful. It's fundamentally positive. The United States still retains core advantages over China that make victory in a war, if it comes, more likely than not, and that allow us to deter China in the medium and long term.

That however, means that the choices we make today, and over the next five years, are fundamentally important. There are no trends. There are no insurmountable technological, industrial, logistical problems. There are only choices and ways that we can use our money and our capacity in the United States, to make the right investments, and to generate the right forces, so that if we must, we can fight and win, and ideally can convince Chinese leadership every day, not today. We can do that.

The choices will be hard. We'll need to trade off between older surface combatants and newer potential warships. We see the Navy Department actually making that choice now. We'll have to make trade-offs between exposure to the inside force, and lack of support they can be given, and certain kinds of offensive weapons they can use. We start to see the Marine Corps getting there now.

We'll have to make choices over time about whether or not we're going to fund large scale heavy land forces, other sorts of contingencies, or whether we're going to redirect that money elsewhere. We're going to have to make choices about specifically narrowing our financial base to support air forces, and naval forces, and space forces. We are starting to make these choices. We have to make them more aggressively and more often, but again, our assessment remains, despite the risks, fundamentally positive.

Ryan Vest: Well, Eyck, Harry, we want to thank you very much for joining us today. This has been a really fantastic discussion. Thank you very much.

Eyck Freymann: Thanks, Ryan. Thanks, Sheena. It was a great conversation.

Harry Halem: Thank you so much for having us.

Ryan Vest: Thanks for joining us on *Horns of a Dilemma* from the *Texas National Security Review*. Our guests today have been Eyck Freymann and Harry Halem authors of the article, "The Arsenal of Democracy: Keeping China Deterred in an Age of Hard Choices," which as always can be accessed for free

on our website, *TNSR.org*. If you enjoyed this episode, be sure to subscribe and leave a review wherever you listen, and you can always find more of our work at *TNSR.org*.

Today's episode is produced by TNSR Digital and Technical Manager Jordan Morning, and made possible by the University of Texas System. This is Ryan Vest and Sheena Chestnut Greitens.

Thanks for listening.