



Rising to the Challenge: Regaining US Military Superiority During a Time of Uncertainty

TRANSCRIPT

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- Rep. Jim Banks, *U.S. Representative for Indiana's 3rd congressional district*
- Rep. Seth Moulton, *U.S. Representative for Massachusetts's 6th congressional district*
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A video of the event is available: <https://www.hudson.org/events/1884-video-event-rising-to-the-challenge-regaining-us-military-superiority-during-a-time-of-uncertainty102020>

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Bryan Clark:

Welcome to the Hudson Institute. I'm Bryan Clark, a senior fellow at the Institute and director of the Center for Defense Concepts and Technology at the Hudson Institute. With me today is Dr. Dan Patt, who is Adjunct Fellow at the Hudson Institute and also with the center. We're here to welcome the co-chairs of the Future Defense Taskforce from the House, Congressman Seth Moulton, from Massachusetts and Congressman Jim Banks from Indiana.

Congressman Moulton has been in Congress since 2014. He is a marine veteran that served several tours in Iraq and Afghanistan, I believe. And has been focused on defense obviously in his time in the House, also serves on the Budget and on the Seapower and Strategic Forces Subcommittees of the House.

Congressman Banks has been in Congress since 2017, represents Indiana's third district, where he is on the HASC, as well as being on the Education Labor Committees and serves on the Veterans Affairs Committee as well. He is a navy reservist, so a fellow sailor like myself, and continues to serve even today. So Congressman Banks, Congressman Moulton, thank you for being with us today.

Rep. Jim Banks:

Great to be with you.

Rep. Seth Moulton:

It's an honor to be here, thanks. And just to set the record straight, I was only in Iraq, not in Afghanistan.

Bryan Clark:

I was afraid I was going to mess that up, so thank you for correcting me on that.

So the Future of Defense Taskforce recently released a report from about a year-long study of what the defense needs of the United States are going to be going forward. It comes at a very pivotal time. We've got a very challenging strategic environment right now between the pandemic, potential fiscal constraints, a rising China, et cetera. Also the emergence of new technologies that could be potential opportunities for us to improve our ability to protect U.S. interest going forward. The report I thought, and Dan and I both found, that it did a great job of capturing that strategic environment and the opportunities that were available to us. And the recommendations we thought did a great job of capturing the need both to address new concepts, as well as new technologies, and how the Defense Department and how the military can employ those.

What do you find were the most important finds of the report that you want people to take away from it, Congressman Moulton?

Rep. Seth Moulton:

Well in many ways, the findings are not entirely revolutionary. We recognize that China presents the greatest national security challenge, looking ahead for the next 30 to 50 years. We recognize the immediate threat of Russia and we recognize the need to invest in innovative new technologies like artificial intelligence, bio-tech, other things that other people have reported are important for our national security.

What's remarkable about this report is that it is fully bipartisan. It doesn't just say that we are at the risk of losing this race to China, or that we're starting to fall behind, it says that we are behind and we will lose if we don't make dramatic changes to the Department of Defense in terms of our prioritization of resources, how we invest in new technologies and necessarily how we get rid of some of the old technologies to make room for these new investments.

Rep. Jim Banks:

Bryan, I couldn't agree more with Seth. There's nothing here that is necessarily groundbreaking, but the report serves as a wake-up call. Not just to Congress, but to the administration and to the American people, that now more than ever, we have to change the attitude, especially at the Pentagon. An attitude that is geared more to welcoming innovation and partnering better with the private sector to develop the innovation that we need to compete with our adversaries now and into the future.

There are really four key takeaways from the report that I would focus on. First, we need an artificial intelligence revolution and we unpack how we can change the mindset at the Pentagon how to do that.

Secondly, we have to do a better job of protecting our critical technologies. And again, we lay out a number of recommendations on how we do that as well.

The third key takeaway for me from the report was that we have got to do a better job of partnering both with Silicon Valley and with our university partnerships throughout the country. As part of this task force effort, we traveled to Silicon Valley and heard stories from a number of innovators, entrepreneurs, investors from the Silicon Valley Defense Working Group, about the challenges that they face in working with the Pentagon.

And then lastly, we have to do a better job of developing our workforce by developing the stem skills within the workforce. We have unique ideas that are in this report on ways that we can do that.

So the report as Seth said, what we're most proud of is this is an entirely bipartisan effort. Many people are surprised when we say that there were few contentious issues as we dug into this report. It's because as we met on a weekly on basis, as we traveled the world, all eight of us, four Republicans and four Democrats, recognized the severity of the situation where we stand today, how far we lag behind, that we have to do something about it. And the report serves as a wake-up call to do that.

Bryan Clark:

That's a great point. Both Congressmen, you both identified China as the peer competitors, the major power that we need to be contending with. In harnessing new technologies, protecting our critical technology, developing new workforces, is going to be potentially a challenging effort in a budget environment that's going to be more constrained. Do you think this effort could be affordable, or do we need to allocate more resources towards national security? Or is there a reallocation that's necessary?

Rep. Seth Moulton:

It has to be affordable, because the future of our country depends upon it. The reality of the budgetary environment is that there isn't going to be as much money to spend on defense, no matter how you look at it, especially coming out of this pandemic. But the beauty of our recommendations is that if done correctly, a lot of these new technologies are actually less expensive than the big old legacy systems that we need to get rid of to make room for them. The challenge, of course, is the last part of that statement. Getting rid of the big old legacy systems.

President Eisenhower and Senator McCain said it best, when they talked about the military-industrial complex and then in McCain's words, "The military-industrial-congressional complex that likes to keep these job producing systems around." But what everybody needs to recognize, every American, every member of Congress, is that our national security is on the line if we don't make some dramatic changes. That means divesting of the old so that we can make room for the new.

Rep. Jim Banks:

Yeah, I really believe what we learned from this task force effort, is that the efficiencies and cost savings of emerging technologies can allow us to do more with less at the Pentagon. Next year there's no secret, no matter who wins the election on Tuesday, who is in control, we will have a debate over defense spending top lines. But really with our task force report, paves the way for either administration, for either party, to find ways to change the mindset at the Pentagon. We found that many of the authorizations already exist that Congress has granted the Pentagon that aren't being taken advantage of to spur innovation and take advantage of innovation that's already occurring in places like Silicon Valley, Boston and elsewhere.

But secondly, these emerging technologies are going to pave the way for us to replace those antiquated systems that Seth talked about too.

Bryan Clark:

That brings up a great point. Dan, do you want to address that. This is something that Dan and I have done some research on in terms of redistributing the force from large monolithic platforms towards more distributed smaller platforms, getting away from [crosstalk 00:08:15].

Rep. Jim Banks:

Yes, absolutely. Yes, as we think about retiring legacy platforms and we think about these nimble information age technologies and AI, and we think about more smaller systems, unmanned systems, how do you think we have to grapple with the mindset in the department from thinking about capability in terms of big platforms to thinking about the operational concepts that you talk about in your report?

Rep. Seth Moulton:

Well, one of the things we stress is that the Pentagon has not been forward thinking enough and aggressive enough at implementing new operational concepts. Ultimately you should be choosing technologies that fit these new operational concepts. That's what we should be doing. Sometimes we seem to be working backwards. We have these big legacy systems and we try to figure out way to use them in this new environment. That's the wrong way to think about this. We need to much more aggressively develop operational concepts for 21st century warfare and then test new technologies against those operational concepts and that's what should ultimately guide our decision making in terms of investments.

Rep. Jim Banks:

If every member of Congress took advantage of the briefings that we've received as part of this task force effort, this would be easy. Seth, wouldn't you say that if all of our colleagues saw many of the... Some classified briefings of what the future of war looks like, especially vis-a-vis a China threat, they would get onboard with the findings of this report very quickly and support more autonomy. More autonomy in the air, more autonomy at sea, more autonomy under sea. This would be a very easy endeavor.

Unfortunately, most of our colleagues will never see those reports, or never receive those briefings. Many of our colleagues on the Armed Services Committee have not received those briefings. So this is about a new attitude, that's why I talk about this report as a wake-up call. This is a new attitude that needs to afflict Congress, but it's also a wake-up call for the highest levels of leadership in the Pentagon. I'm a conservative Republican, who supports this current president tremendously, but it's been since Ash Carter, that we've had someone at the highest levels in the Pentagon, who's been shaking it up and developing programs like DIU and AFWERX. Seth and I had the pleasure of visiting Kessel Run, an Air

Force unit that's involved in coding, in his hometown and his home state Massachusetts. It's that type of mindset that we have to have in place at each of the branches, the Pentagon, and in Congress to work together to spur the innovation that we need.

Rep. Seth Moulton:

Jim just hit on one of the challenges, of course, which is that not every member of Congress, let alone every American is privy to the information that we were able to see. And certainly not the travel that we were able to do to allies around the globe. We can't discuss classified information, of course, but just in general, when you go into these highly classified briefings, one of two things happens. Either you come out newly confident that hey, this is a problem, we've read about it in the public news, but we've really got a handle on it.

Sometimes you come out thinking, oh, wow, this is more urgent or more dire situation than people realize. I don't know about you, Jim, but I certainly felt that the majority of briefings we received, maybe come out and say, "Wow, this is this is incredibly important that we're doing this work, because this situation is urgent, and we need to make some rapid changes."

Rep. Jim Banks:

Agreed.

Bryan Clark:

So you raise the idea of technology and bringing technology more quickly into the Defense Department. Some of the technologies the report talks about are artificial intelligence, autonomous systems, directed energy, hypersonic weapons, and bioengineering. In that technology portfolio, which ones did you think were the most important ones that we need to start harvesting for defense purposes? And which ones did you find in your work with commercial industry might be the best opportunities for us to partner with industry. Because some of these technologies, obviously, like hypersonic weapons may not be available, but bioengineering may be something that's being pursued in the commercial world to the degree we need it. So what did you find in terms of priority and then opportunity with commercial innovation?

Rep. Seth Moulton:

Well, our number one recommendation is a Manhattan Project effort to make sure we win the race on AI. I think that's probably pretty obvious to many people in the defense world. But again, not so obvious to everybody in the American public, or even all of our colleagues in Congress.

One area that certainly surprised me about its impact on national security in the future is biotech. And it's not where you think I'm going to go, given that we're in the midst of a pandemic, it's not traditional bioweapons or whatnot. It's the ability of biotechnology to eventually manufacture things, including nano sized weapon systems. And it's predicted to be a very binary result, either we will win the biotech race or China will. We're not going to be even competitors. It's essential for the future of our national security as well as our economic security that we win this race. And we're not devoting the resources to it that China is right now.

Rep. Seth Moulton:

But I don't know what what did you think, Jim, what were some of your surprises?

Rep. Jim Banks:

Yeah, I think, as Seth already said, the race to AI is a race that we're losing. And to win on that front is why the very first recommendation of our report I'll read it, "is to require every major Defense Acquisition Program to evaluate at least one AI or autonomous alternative, prior to funding," it might be the most significant recommendation of making the entire report. And the reason that we focused on the acquisitions process is because it's the only place in the structure of our national security apparatus, where we can actually force this revolution to occur coming from our end of the government, in Congress to force a new mindset in the acquisition process. Especially keeping in mind what I said a little bit ago, we already provide a number of authorizations for the Pentagon to do this that are largely ignored. If they're going to ignore it, then we need to force the acquisition process to work differently to spur it.

As far as other technologies go in Silicon Valley, we were exposed to new innovations and cloud computing which is critical to our ability to speed up the race toward advancing ourselves within the AI arena as well. So I think that's an area where we can do a better job of leveraging and partnering with the commercial sector too.

Bryan Clark:

It's interesting you brought up the Manhattan Project. And I thought that that was interesting. Is that you talk about incorporating AI into a lot more acquisition programs via the acquisition process. So basically making EMDEP's major Defense Acquisition programs incorporate AI or have an autonomous alternative. So that kind of argues for the fact that the technology is mature enough that we can start driving it into acquisition programs. And I think that's what we have found as well, is that AI is with us. It's not something in the future on the horizon. It is already here. And the question is, how do we adapt it into defense applications?

So given that, it seems like a Manhattan Project where we're trying to generate something new, is maybe not the right model. Is the model, maybe something more like, just a broader effort to ensure that you get AI incorporated into more programs? Do you think the emphasis should be about R&D or on adaptation, in the AI-

Rep. Seth Moulton:

No, I think it's a great analogy, actually. Because look, nuclear technology wasn't new, it was just new to most people. The physicists knew all about it, they just knew that they needed to figure out a way to beat the Germans to using it operationally. I think that's very much where we're at. We also recognize that like the Manhattan Project, a lot of this research and development is not just going to be an existing DOD programs. Remember the first piles were... I think one of the first ones at the University of Chicago. It emphasized the importance of academic research and a real whole of nation approach to our national security.

But again, if we were just to simply take existing AI technology, which right, there is a lot of that out there already, and adapt it to current defense uses. That would be going backwards. What we really need to do is develop the operational concepts that will employ AI, and then make sure that we have the technology or we're developing the technology to meet the needs of those operational concepts.

It's also important to think about the legacy of the Manhattan Project. And this is a point that Ash Carter often makes, which is that all those scientists who worked on this incredible, but also incredibly awful technology, then devoted their lives to ensuring it wouldn't be used, to ensuring the peaceful use of nuclear technology. We have to lead the world on developing the protocols and treaties governing the use of AI. We haven't barely even scratched the surface of that. But let me tell you, we do not want the authoritarian regime of China, setting the rules of the road for the use of AI. And I think that's a very

important conclusion of this report, too. And it does bring up some analogies with the development of another game changing technology, namely nuclear weapons.

Bryan Clark:

I like that you brought the idea of operational concepts and how they need to tie together with these new technologies. Because the use case is really going to be what drives innovation. The technology is not necessarily innovative on its own. It's how do we employ it operationally that's going to be where the value comes in.

So how do you think DOD is doing at that effort of merging new operational concepts with new technologies like AI? Because it seems like we've got a lot of offices working technologies over the Pentagon, but a lot fewer, like Kessel Run that are actually looking at the use case alongside the technology.

Rep. Jim Banks:

I think that the bottom line of the report is Pentagon is doing very poorly at making this a top priority. In fact, again, it's been years, sadly that we've heard the very top leadership of the Pentagon identify AI as a priority, as a focus of any of their efforts. That's the type of that's the type of leadership that we're begging for, that the report calls for a new attitude focused on that, that so far we haven't seen in many years.

Rep. Seth Moulton:

Jim brought up Kessel Run. It's a great example here. Because we went and saw this office where they're attracting top talent, which is another thing that the DOD needs to do better. They're putting these young, smart kids to work, solving a lot of IT problems and other high-tech issues for the Air Force.

One of the projects we saw them working on was the supply system, which of course has been very problematic for people who know for the F-35. And what they've developed is brilliant. It's simple, it's inexpensive, and they've developed it much more quickly than the big prime defense contractor that continually fails to improve the system. So our first question was, how are you going to make sure the other services beyond the Air Force that also have F-35 get this system. And hey, I'm a marine veteran, why does the Marine Corps not yet have its own version of Kessel Run? Then we hear from the Pentagon that they're thinking about canceling Kessel Run. Right. So there's just a long way to go here. And Jim's right. A lot of it is, it's not just a few new technologies here, there. It's a fundamental change of mindset, a different attitude that we need at the Pentagon.

Bryan Clark:

So Dan, you want to weigh in on this. Is something that you and I have talked about before?

Dan Patt:

Yeah, absolutely. When we talk about one of your recommendations that you mentioned, to talk about AI alternatives in major Defense Acquisition programs. I struggle with how we inject new concepts there. Very often, our major Defense Acquisition programs start with the old concept, and we improve the performance parameters.

What can the government, the department do better to develop new concepts. If we budget by weapon systems, if we budget by these major weapon programs, that's not exploratory. And yet the development of new concepts, that is really exploratory. What's the right mechanism to think about

that, to think about budgeting for that, capturing the learning, being more adaptable? How do we think about those things? Which, it's an exploration, it's not a specific requirement.

Rep. Jim Banks:

It's a really good point. As far as the first recommendation that I read a little bit ago requiring an AI alternative to every program. That's just the start. If the Pentagon is not already doing that, which they have authorization to do so, then we have to force them to do it.

But additionally, we need to your point... I recall, the very first hearing that we had related this taskforce, Sen. Jim Talent and Michèle Flournoy both testified about creating a environment at the Pentagon that is far less risk averse than what they are today. Why is the Pentagon risk averse? Why do they take far too few risks in their investments in new technologies, emerging technologies and innovation? It's because Congress beats up on them every time they do, and they fail. It's our job on our end of the Capital, to prop them up to fail more, to fail fast, as Sen. Talent put it, as others have put it as well. And create that type of environment, granting them more authorizations so they can invest more, take those risks. In our report, after the first recommendation makes other recommendations, I think that helps us get there.

Rep. Seth Moulton:

I would point to the example of what the Commandant of the Marine Corps is doing right now. He's going back to square one and fundamentally questioning the operational concepts that have driven Marine Corps acquisitions for the last couple decades. And as I've said to him personally, I'm not yet convinced that all of his theories are correct. But he's doing exactly what we need to do in terms of questioning these assumptions. And the way he's approaching it, is he's developing the operational concepts first for his vision of how the Marine Corps should be employed, will be employed in the 21st century, making sure it's integrated with the other services, of course. But then saying, "Okay, what acquisitions do we need to make to support this?" And by the way, also what investments do we have to make to support this as well.

Now, I know from my marine friends, that the Commandant is encountering some resistance. There are a lot of us who are praising what he's doing, even though we're not quite sure the end result yet. But there are also a lot of people both inside the Marine Corps and inside the Pentagon, and I'm sure outside as well, who are questioning some of these changes. Changes hurt, but we need to change and that's exactly how we should be doing it.

Bryan Clark:

I'm glad you brought that up, that we're we've been involved in that as well, having worked on the Future Naval Force Structure Study with the DepSecDef and working with Marine Corps on the force design.

And so you brought this challenge up before in terms of diversity of legacy systems. One way to make those determinations is by building new operational concepts that would move you away from them. What are some of the criteria that maybe we should be establishing to evaluate legacy systems and platforms to see if we should keep them around? So aside from maybe the utility and a new operational concept, are there factors that we should be considering as indicative of something that really needs to be left by the wayside? As we think about how to... I'm trying to think about how to articulate arguments for investing in systems that are clearly outlived their usefulness or have cost structures that are just unsustainable.

Rep. Jim Banks:

Well, let me begin by saying, if you leave this decision up to Congress, it will never happen. This is what Seth said before that from Eisenhower talking about the defense, industrial complex, to the defense industrial, congressional complex. So the parochial interests that we deal with... So section four in the report where we make recommendations, would empower GAO, others to stand in the gap and provide us with recommendations on what legacy systems have outlived their usefulness, and where we can cut to make the investments in emerging technologies that we need.

Rep. Seth Moulton:

And part of the criteria is going to have to be cost. That's just the budgetary environment that we're facing. It's very easy to sit in Congress and say, "I'm always going to spend more on national security, I'm always going to couch it in terms of supporting our troops or whatever. But the reality is, we, like every country in the world have finite resources. And what's most important is that we make the tough decisions to spend those resources as wisely as we can to support our troops and to support our national security, that's going to be tough.

And it's exactly why we recommended the Congress not do it ourselves. I'm sorry that we don't have more confidence in ourselves as a congressional body. But we're going to have to take a really hard look at this and ask some really tough questions. And not everybody is going to like the answers. But let's not forget that as we cut legacy systems, and with it go jobs, maybe installations, even certain companies or whatever, we're also going to be investing a lot more in new technology that just as in the past will move our country forward, and will have impacts well beyond just our national security. And this should be exciting for every American too.

Rep. Jim Banks:

This is where the bipartisan nature of the task force comes into play. This is arguably the most controversial part of the report. But you had four Republicans and four Democrats readily agree without any debate about this section four of the taskforce report recommendations. I said GAO earlier, but we also call on The RAND Corporation to be involved in this process. And we lay out the parameters of what these reports might dig into to evaluate legacy systems to call for the elimination of programs that are outdated.

So the report does put a lot of thought into this conversation. At the outset, I remember Seth when we started this endeavor, this was what many of our friends in industry were most worried about this task force sort of naming names or calling out programs specifically. And from the very beginning, we knew that that wasn't our job, but our job is to create a framework of how we can do this in the most substantive and productive way.

Rep. Seth Moulton:

Yeah, not just friends in industry, but friends on the committee, another subcommittee, who didn't want their programs, their systems to be taken away.

It's a small but significant point, which is that the most controversial recommendation, the one that's going to give the most consternation to Congress itself is also one where there was no debate. As Jim said, four Democrats, four Republicans, absolutely recognized without question, we need to do this, we need to make some really tough choices. And you know what, Jim, and I both represent defense interest in our districts. So do all the other six members of the committee. So some of this might be painful to us personally, but it's the right thing to do for our country.

Bryan Clark:

Well, that's encouraging. I really commend you both and the committee and the task force for having done that. And it does fall in on an effort by all the services right now to try to rebalance their forces towards the types of capabilities they need for the future. Every service is going through this, with the Marine Corps, we talked about the Air Force, Chief of Staff just mentioned the need to move away from legacy platforms. The Navy is doing a similar thing, and you've got the Army now reconciling themselves to funding the modernization priorities they put so much effort into over the last five years.

So let's pivot a little bit now and talk about supply chains. We mentioned that, it's a highlight in the report. I think supply chains and critical infrastructure are two elements of the report that really were I thought very important, and you had a series of recommendations on. And they get to this potential intersection between how these investments for national security can pay off dividends in the civilian and commercial worlds in a way that maybe we haven't seen since the Cold War.

So most recently, a lot of commercial innovation has been driving innovation more broadly. But maybe innovation and security and supply chains that the government makes might be able to pay off in terms of commercial applications. But what were some of your main concerns when it comes to supply chains in the United States? What are some of the supply chains you're most worried about?

Rep. Jim Banks:

This is the part of the task force effort where I had the most concerns, as you put it. In seeing how our biggest adversaries are exploiting our technologies, exploiting our intellectual property. We try to dive into some specific recommendations of how we can empower both FIRRMA and CFIUS, employ them more as a tool to protect our critical technologies and return our supply chain back to the US rather than see seeing it stolen from us. I recall our trip to Silicon Valley and meeting with everyone there from the FBI to key industry leaders talking about how they endure these threats on a daily basis, how they fight against foreign influence and corruption. And not just stealing their intellectual property, but oftentimes stealing their entire business and taking it back to their country to use it against us.

So the report specifically in section three of the report recommendations, dives into how we can employ and strengthen both FIRRMA and CFIUS as tools that we can use to combat those influences.

Rep. Seth Moulton:

Let me just be blunt. A lot of China's innovation strategy, especially when it comes to these new advanced technologies, is to steal them from us. And it's not just stealing technology, it's stealing American jobs. It's hurting our economic security, as well as our national security. What China is doing is illegal, it's immoral and it's kind of smart. So you got to realize that we're not just going to convince them with a handshake to stop doing it. We've got to protect our technology, we've got to protect our workforce, our supply chains. And it's got to be a national defense priority. That's definitely one of the conclusions of the report that I think is probably highlighted by the experience of so many Americans. We suddenly recognize that we were dependent on China for all sorts of medical supplies, just to make it through this pandemic.

Bryan Clark:

And that's a good point. One thing I wanted to ask about is which... So micro-electronic supply chains, obviously a concern that's something we've talked about before. What are some other supply chains that you found in the research where vulnerabilities or which ones were maybe most surprising where we had a vulnerability that was not widely discussed?

Rep. Jim Banks:

I don't have a simple answer to that. I would say those vulnerabilities exist across the board. Seth, does anything specific on the mind?

Rep. Seth Moulton:

No. I don't know that the specific examples help in the sense that you have to really look comprehensively at this and recognize that it's not just any one category of things. There are a lot of things that are important for our national security, a lot of ways that our national security could be put at risk if an adversary were to cut off supply. So I'm not saying that we're never going to buy anything from China again, that we're never going to participate in the benefits of free trade, and the economies of the fact that it's sometimes cheaper to produce things overseas, and that economic efficiency ultimately benefits the American consumer. But we got to be very conscious of being so dependent on especially countries like China or perhaps Russia or some other adversary that can just cut off those supplies.

And again, I think that we probably weren't thinking about medical supplies as a national security priority. But if China really wanted to go to war with us, and just cut off our supplies for basic medical gear to take care of the coronavirus, we'd be in tough race.

Bryan Clark:

Right. Right. Well, and that raises the point... I think the recommendation that the report has about establishing a supply chain intelligence effort is a terrific way of addressing that. As we don't know what we don't know. So how can we go in and establish a concerted effort to monitor our supply chains on an ongoing basis. So that was I thought a great way to handle that challenge.

You raise and the report raises the idea of the Silicon Valley Defense Group. We have a series of efforts right now to reach out to commercial industry. You mentioned AFWERX, we've got NavalX, we've got DIU, all participating in an effort to get commercial technology brought into DOD. What did you find in terms of the success of these groups, I guess that they've been successful to a degree, but how do we harness that and make it more broadly applied throughout DOD? Or is there a limit to how much commercial technology we can really digest and incorporate into our defense systems?

Rep. Jim Banks:

I don't think there's a limit at all from my experience through this effort, and working closely and being introduced and exposed to the Silicon Valley defense working group. This is a energetic organization that already exists, that finds themselves on the outside looking in. And we have to find a way to formalize that relationship. When we get back to work, in January, on the next NDAA, I want to work with Seth and others on the committee to find ways to force the secretary and the service branch heads to work directly with this working group, because they have so much to offer. There should be simple ways that we can do that.

Rep. Seth Moulton:

The report makes two fundamental recommendations in this round. One is that we've got to be better at working with private industry and integrating their technology. And Jim's right, there shouldn't be any limit. There may be a limit today, and that's the problem.

But the other thing we need to recognize is that it's government investment in early stage R&D, the really risky research and development that sometimes private industry cannot economically justify, that ultimately drives a lot of the technological developments in the private sector. That's something that we

understood in the 1950s and 60s, when the DOD R&D budget, the government's R&D budget was much bigger percentage of our overall budget than it is today. Both have to go hand in hand. And that's something that we heard consistently from industry, that they're relying on government funded R&D. But we also need to figure out how to make the road [so] that we can use their technology.

Rep. Jim Banks:

Let me add as well. When it comes to DIU and many of the other service-related programs, NavalX, AFWERX, even Kessel Run. I began this endeavor as a skeptic, who was quickly won over as a fan of these programs. We visited DIU both in Boston and in Silicon Valley, understanding how they work so effectively and so well, and how DARPA is incorporated into all of this as well, a greater investment on these programs and spreading them out throughout the country, I say that selfishly so, as someone who comes from the Midwest, where we have innovation that occurs in places like Indiana too, how can DIU have tentacles throughout the country in different places? A greater investment in those programs would be a good first step.

But secondly, I also found that when it comes to the service related, innovation hubs like NavalX, I found they're often disjointed with DIU. So how can we create within the Pentagon structure, creating DIU as more of an umbrella that works more closely with the service-related innovation hubs as well. Something that I hope that we can fix and work on improve in the next NDAA too.

Bryan Clark:

Yeah, it seems like that [inaudible 00:38:34], similar approaches to what you discuss for AI. We're going to make some mandates for acquisition programs to try to incorporate AI, there could be a way to try to drive acquisition programs to be more aggressive or more proactive in incorporating commercial technologies. Because I do see a lot of your program managers back here in DC, who they're going to deal with the primes, they're going to deal with their normal suppliers. They're not going to reach out to commercial industry because it's hard or it's a risky or they perceive it to be a hassle that they don't want to deal with. So if we're kind of force in that relationship to be forged is going to be probably an important element of this.

So one last question I want to make sure that we address before we head out. Early on, we talked about the need to put policies in place to enable the application of some of these technologies like AI, and relationships with allies are probably a part of that as well. The task force had some ideas with regard to how we need to address the policy implications of new technologies being incorporated into defense. And that's probably an opportunity to work with allies. What were some of the higher priorities there that we probably need to take forward into a new administration that might have a different willingness to pursue some of those agreements?

Rep. Seth Moulton:

We certainly recognize in a bipartisan way the importance of our alliances. And that's something that we need to strengthen. But we also need to modernize them. We can't just say, "Okay, the new president likes NATO and the previous president hated it. So we're going to go back into NATO just the way it was." NATO's 1949 charter had no way to deal with Russian cyberattacks, which we now understand is China's primary way of infiltrating Western Europe and ourselves.

So we've got to modernize these alliances. I think NATO absolutely still has a role. But what about the Pacific? What does an alliance look like in the Pacific? There's an article coming out in foreign affairs that talks about a tech alliance, essentially an alliance based not on geography, but on where countries are

with technology, and ensuring that the countries that are democratic are the ones setting the rules of the road for how technology is used.

But again, one of the critical conclusions here is that in this race, ultimately, with China, we have very different worldviews. And if China wins this race, a lot of the values and human freedoms that we take for granted in America are not going to be standard in the world anymore.

So the implication of doing this go well beyond our defense, and we have a good line at the end of the report where we say, "Ensuring the future of defense is critical to ensuring the future of peace."

Also, what kind of peace are going to have? What system of government is going to be the norm in the world for the next 50 years? That's an open question right now. And it just highlights how high the stake are.

Rep. Jim Banks:

I have little to add to that other than, as NATO as always existed to support our allies and address an aggressive Russian threat, when it comes to the China threat, we've done such a power job of leveraging our relationships with allies like those in South East Asia that Seth and I traveled to visit, with Cambodia, Thailand, Vietnam and others. By powering a relationship there, alliance through organizations like [Axion 00:42:16] and others that already exist. We need to reengage there in a way that we haven't been engaged over the last number of years. In fact, we found that in those countries that we visited, they're begging for America to fill the gap. Instead of us filling the gap, China has filled the gap. And China is leveraging them to choose their interests over our interests far too often. That's something that we need desperately to fix.

Rep. Seth Moulton:

It was painful to see, wasn't it Jim? It was just eye opening, but painful to the point of just being embarrassing that we weren't doing more to support these both long time and emerging allies in the face of China's aggression. It's a great opportunity, they want to be with us. They recognize that our values are better values. But in some cases we are not even giving them a choice.

Bryan Clark:

Yeah absolutely. That has been my experience with those countries as well. They want to be independent and are looking for help in remaining independent in face of China's assertiveness in the region.

Thank you very much Congressman Moulton and Congressman Banks for being with us today. Are there any further closing remarks you want to make before head out?

Rep. Seth Moulton:

I just want to encourage people to read the report and recognize that the implications of this report go beyond just DOD. This is a report that every American should familiar with, and we need to be committed to making some changes as a nation to ensure that not only the future of our security, but the future of values.

Rep. Jim Banks:

Likewise. It was, by the way, a pleasure to core-chair this task force with Seth. What we are most proud of is, this is an entirely a bipartisan effort at a time when bipartisanship is so rare on Capitol Hill. But it shows the significance of what we're trying to get to the heart of, which is spurring innovation in the

national security, national defense arena, so that we can compete with China, Russia, other adversaries now and for the generation to come.

Rep. Seth Moulton:

And a point Jim has often made is that, for us this is really just the beginning of our work. Because now that we certainly fully understand how important this is, we are going to have to get to work actually and manage these changes. So much work ahead.

Bryan Clark:

Yes, absolutely. And yeah, I commend you on the bipartisan nature of the report, and it turned out that perfect. I thought it really aligned with lot of the things that we found in our own research, which was encouraging to me.

Dan?

Dan Patt:

Yeah, congressmen I just really want personally thank you for all the effort you put into this report, I found it a real wake up call for the need to gear up for information age competition. And I encourage you to take your energy and collaboration into the next NDAA and other efforts.

Bryan Clark:

So thank you very much congressmen, and we appreciate you being here with us today at the Hudson Institute, and good luck going forward in you next year's NDAA.

Thank you.

Rep. Jim Banks:

Thank you very much.

Rep. Seth Moulton:

Thank you.