

Center for Strategic and International Studies

TRANSCRIPT

## CSIS International Security Program

### **“Army Modernization: Priorities to get to the Army of 2028**

EVENT DATE

**Thursday, March 21, 2019**

TIME

**8:00 a.m. EDT**

LOCATION

**CSIS Headquarters, Washington, D.C.**

FEATURING

**Ryan D. McCarthy,**  
*Under Secretary of the Army*

**Representative Anthony Brown (D-MD),**  
*Member, House Committee on Armed Services*

MODERATOR

**Mark F. Cancian,**  
*Senior Adviser, International Security Program, CSIS*

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- Mark F. Cancian: (In progress) – cold and rainy morning. We’re very privileged to have distinguished public servants joining us and Army veterans. We’ll pass over the fact that the panel is being moderated by a former Marine. (Laughter.)
- Mark F. Cancian: Undersecretary McCarthy joined the administration after a distinguished career in government.
- Mark F. Cancian: I have to turn my mic on. (Comes on mic.) All right. Ah, now you can all hear me. I apologize.
- Mark F. Cancian: So Undersecretary McCarthy joined the administration after a distinguished career in industry and in government. He’s become famous or infamous for being a participant in “night court,” where the Army moved billions of dollars among accounts to align with the new National Defense Strategy. And I’m sure he’ll be talking about that. He served five years in the Army, including a tour in Afghanistan with the 75<sup>th</sup> Ranger Regiment.
- Mark F. Cancian: Congressman Brown represents Maryland’s Fourth District and serves on the Armed Services Committee. A former lieutenant governor and member of the House of Delegates, he was involved with bringing health care to veterans and in coordinating the transfer of 60,000 jobs to Maryland as part of the BRAC round. And he retired as a colonel in the Army Reserve and – including a tour in Iraq.
- Mark F. Cancian: Our format today is that our speakers will each speak for maybe 10 minutes or so. As the moderator, then I’ll ask some questions to look at some particular issues, then we’ll open it up for Q&A. And then at the – afterwards we’ll have a press gaggle here off to the side.
- Mark F. Cancian: And before continuing, I have to make a routine safety announcement. In the unlikely event of an emergency, I will give you instructions about what to do. We’ll either exit the building from the front or to the rear.
- Mark F. Cancian: And with that, let me turn the floor over to Secretary McCarthy.
- Ryan D. Mccarthy: Mark, thank you. It’s great to be at CSIS, even though yesterday afternoon I was on my way back from Hawaii, about 75 degrees. So welcome back to Washington with cold rain.
- Ryan D. Mccarthy: But, Congressman, this is what it feels like sitting across from you all with the lights in our face, so I’m right at home sitting up front here. (Laughter.) But great to see Congressman Brown, who is truly a champion and no finer friend to the U.S. Army up on Capitol Hill, and someone we turn to repeatedly for help, for authorities, and the funding to support the Army at every turn. So good to see you, sir. And I know you got through the traffic coming from your home district here on recess, but thanks for coming, sir.
- Ryan D. Mccarthy: So we have our FY ’20 submittal got up to the Hill. We’re about pushing two weeks into this process. But this has really been a journey for the Army for the last two years. We were very blessed with the FY ’18-’19 budget deal, which

had strong – excuse me – bipartisan support from the Hill, Congressman Brown in particular.

- Ryan D. Mccarthy: So what we've done with that increase in funding, largely a focus first and foremost with readiness. It helped us restore readiness levels where we have almost half of our brigade combat teams at the highest level of readiness, where we're at about just under two – around two or three before that two years ago. So funding is a big part of the support of getting readiness levels to be restored.
- Ryan D. Mccarthy: But coupled with that, I believe, as General Milley and then former Commander of FORSCOM General Abrams, laser focus on all of the metrics that are necessary to get units trained and ready to go. If you were to go anywhere in the Army and talk to battalion commanders, they sound like the chief. They know exactly what they got to do with every hour of each day and that laser focus of getting units as prepared as they can do for deploying to combat operations, just minus the Boston accent. So it really is remarkable the leadership and focus from Army leadership to getting those readiness levels back to be about almost half of our brigade combat teams at this juncture.
- Ryan D. Mccarthy: And why that's important is 60 percent of requirements worldwide for combatant commanders are met by U.S. Army. So demand remains very high in this environment, so we have to make readiness our number one. And it will be till at least, you know, '20, '22, '23 timeframe where we can get in the upwards of two-thirds of our brigade combat teams at the highest level of readiness. So with that strong support that we've received from Congress, we've increased home station training as well as maxing out combat training center rotations.
- Ryan D. Mccarthy: So readiness gets roughly half to almost 60 percent of the funding in the Army budget. But one of the things in particular that we've tried to put a particular emphasis and focus on over the last two years has been modernization. If you look at the focus within the National Defense Strategy, there were four pillars that were in this effort: nuclear posture, great-power competition, irregular warfare, and partnership capacity.
- Ryan D. Mccarthy: Great-power competition is really the central challenge that we face in particular in the U.S. Army. We look at where our standing is in the world, we're still number one but in many cases the technological margin that we've enjoyed – the overmatch of our weapons systems – is being reduced. It's being challenged by near-peer competitors. The big five weapons systems in our formation – the Chinook and Black Hawk helicopters, the Bradley Fighting Vehicle, the M1 Abrams, the Patriot air missile defense – they're all over 40 years old. And we've done a remarkable job with incremental upgrades to these weapons systems, but you're getting towards the end and you can't engineer another ounce.
- Ryan D. Mccarthy: So we're – in this FY '20 budget effort what you're going to see is really this pivot or departure from the big five. These things take time, but in the moves we made in FY '18 from a modernization standpoint we primed the pump. We moved 80 percent of our S&T budgets against six modernization priorities: long-

range precision fires, next-generation combat vehicle, future vertical lift, network, integrated air and missile defense, and soldier lethality. And this move of the funding helped really prime the pump in our modernization efforts. But as it takes time as you move across a FYDP, a five-year horizon – Future Years Defense Plan – what you’ll see is the pipes really start to open and we start to finance our efforts with much greater scale because we’ll be buying tranches of capability, and ultimately full unit fielding by the ’22, ’23, ’24 timeframe.

Ryan D. Mccarthy: We had to be very open and get a lot of support from Congress because you were moving billions of dollars in ’18 and ’19. And now in fiscal ’20, which we unveiled just a – you know, almost two weeks ago, we found over \$30 billion over this five-year horizon where we realigned the funding against our priorities. Some of these were substantial cuts, north of 90 programs across the entire defense program – Army defense program, but there were also terminations. This may cause economic dislocation or challenges. We’re trying to be very transparent with industry, but we know that it’s necessary so we can finance the Army that we need. We’re looking at challenges in the future with declining or – potentially declining, but flat budgets in the out years. One hundred and eighty-two point three billion dollars is a lot of money. We have to be as best stewards as we can with the funding that we’ve been afforded, and we’re trying to do that.

Ryan D. Mccarthy: So these choices that were made – which has been affectionately referred to as “night court” because the Army staff has a sense of humor – but that process was where Secretary Esper and General Milley – General McConville and I kind of sat at the end of the table; it was almost like a – that show “Shark Tank” – and we made all the leaders in the Army come in and present every line item in the budget all spring and summer. And what that was – the whole point of that was is having the leadership own the budget. And so everybody had alignment of what we were trying to achieve. And if it didn’t fall within the six priorities – if we didn’t fund the six priorities first, we knew we weren’t really putting our money where our mouth was.

Ryan D. Mccarthy: We’re trying to change the Army, to transform it to maintain that technological edge in the future. It’s very difficult on the front end. We’ve been blessed with a lot of support, but it will take a lot of communication and a lot of effort going across the river to meet with Congress, but also with the defense industry. And something that we – you know, we’re very proud of – Secretary Esper started this series – we meet with a CEO every Monday night and we try to have very transparent discussions with industry to explain to them where we’re trying to go. We published a modernization strategy that we sent to Congress. And this started over a year and a half ago where we said these are our six priorities and we probably need north of \$20 billion across the five-year program to get it going. We’ve tried to telegraph this as much as possible so that we can get everybody to come with us, to be a part of the process. We’ve had a lot of advice along the way and we probably will continue, but we’ll adjust accordingly, because in order for us to proceed and be able to have the capabilities necessary will become very hard choices.

Ryan D. Mccarthy: We're excited about this opportunity. We look forward to explaining it in more detail. But great opportunity for us today to have a conversation with you all.

Ryan D. Mccarthy: Thanks, Mark.

Mark F. Cancian: Well, thank you very much.

Mark F. Cancian: Congressman?

Rep Anthony Brown: Well, Mark, first of all, thanks to you and your colleagues at CSIS for inviting me to participate on this panel this morning to talk about Army modernization. My first time here, and it's a wonderful opportunity to spend time with my good friend Ryan McCarthy. We had an opportunity to work together on a number of issues in different venues or up at Aberdeen Proving Ground looking at upgrades to Army and on the – on the Stryker. We were together in Baltimore City looking at how we can enhance recruitment in our cities and as we diversify and create a more inclusive fighting force. So it's a real pleasure to be able to work with you, and I truly appreciate the leadership that you and Secretary Esper bring, your openness, your transparency, and the level of collaboration with Congress. So it's greatly appreciated both in the House and in the Senate.

Rep Anthony Brown: Let me say that I'm pretty confident that there will be bipartisan support to adequately fund an Army modernization program and the strategy that, as the undersecretary mentioned, was in the making long before Congress in the Defense Authorization Act of 2018 requested or directed that a – the Army submit a modernization strategy. But I'm confident that we are going to fund it at appropriate levels.

Rep Anthony Brown: But let me just sort of kind of pull back a little bit. The willingness to fund Army modernization is a recognition and acknowledgement that that is a strategy that supports the National Defense Strategy, and particularly that line of effort that focuses on building a more lethal force. And as we are pivoting towards great-power competition – and Russia, which is probably the pacing threat for the Army, has undergone significant modernization when you look at, you know, their operations in Georgia in 2008, you compare that to their operations in the Ukraine in 2014. Tremendous advancements in cyber, electronic warfare, precision fires, ground combat vehicles. They have invested a great deal in modernization, and it's really a wakeup call that we need to do the same so that near-peers don't become peers, and that the overmatch that they have in some areas doesn't become an overmatch across the board. So, you know, I'm confident we'll have bipartisan support for this modernization program as we build a more lethal force, which is, you know, one of the lines of effort in the National Defense Strategy.

Rep Anthony Brown: But, you know, Congress is looking not only at the National Defense Strategy, but at the National Security Strategy. And the National Defense Strategy supports that pillar, which is peace through strength. But as the undersecretary mentioned, there are a number of pillars – four pillars in the National Security Strategy: you know, homeland defense, but also, you know, American prosperity

and American values. And the National Security Strategy speaks not only to a lethal, capable, modern, ready, you know, well-equipped, well-manned force – military force – but it speaks in specificity, if not necessarily in great detail, to the need to invest in infrastructure, in vocational colleges and training, in apprenticeships, investments to diversify our energy portfolio to achieve even greater energy security, and although not necessarily going into the causes of climate change, it makes – it references climate change. The Department of Defense has been probably, you know, on the leading edge at looking at climate change and what we need to do for infrastructure resiliency, the things that we can do for greater operational effectiveness and security by incorporating renewable energy into equipping both the Army, the Navy, the force.

Rep Anthony Brown: So there are – there are a variety of action items that are outlined in the National Security Strategy. Many of them are related directly to defense spending and a number of them to nondefense spending. There is – there is – there is ample discussion about, you know, projecting our diplomatic corps forward, you know, investing in development activities around the world. So what I'm saying or suggesting is that we need to fund in Congress a national security budget that includes robust investments in defense spending to support not only Army modernization but the other service components, combatant commands, operations around the world. But we also have to invest in nondefense spending, many of which are related directly to national security: the State Department, homeland security, development aid around the world. And some of those investments are related to national security but perhaps not as directly, like investments in education and investments in addressing things like climate change and energy security.

Rep Anthony Brown: So we asked in the Defense Authorization Act of 2018 for the Army to develop a modernization strategy. You came back with what appears to be a really good strategy outlining a structure, the Army Futures Command – in fact, I was supposed to be there this week but I – my plans got derailed; I'm looking to go down and visit in August perhaps. But, you know, a structure to provide a unity of command, a unity of effort, bringing together requirements writers and the warfighters, you know, the procurement side, the acquisition, and training and doctrine so that we can deliver the capabilities to meet the requirements to address the threat. So I'm excited about the Army Futures Command.

Rep Anthony Brown: The only – the only downside to the Army Futures Command is that it's not located in Maryland, but in Texas. (Laughter.) But that's OK. It's a – it's a good location.

Rep Anthony Brown: You know, you've laid out an approach, you know, where, you know, we're going to leverage science and technology, make the investments. The collaborative effort between the department and academia and the industrial base, the commitment that you're making to evaluating the near-term investments in upgrading and recapitalizing those capabilities that help us meet these, you know, great-power adversaries or competitors. And certainly appreciate the fact through "night court," which is recognized as a – as a best practice, focusing in on those platforms, those systems that are, you know, either obsolete,

unnecessary, or excessive, and that the sustainment costs just don't justify continuing to keep them on the shelf and the willingness to take them off the shelf.

Rep Anthony Brown: So the approach is there. The six modernization priorities, very clearly articulated, focusing on capabilities and not necessarily platforms. So you've laid out a really solid strategy. And as we go forward and Army is focusing on the planning and the execution, Congress needs to ensure that we've got robust oversight and accountability so we're getting not only the greatest value for the American taxpayer, but the most lethal force on behalf of the American warfighter.

Rep Anthony Brown: So, again, it's great to be here. Looking forward to the – to the discussion for the next few minutes that we're together.

Mark F. Cancian: Well, thank you very much.

Mark F. Cancian: Let me start off with a couple of questions. And the first one is something that we discussed a bit back when we were waiting to come forward, and this is that – the tension between modernization and force structure. Sometimes the department talks about that in terms of capacity versus capability. When you read the National Defense Strategy, it clearly comes down on the side of capability. But all of the services feel the tension that day-to-day operations drive; that is, that they are asked to go many places around the world to do a wide variety of activities in the real world day to day, from deployments to combat zones like Afghanistan and Iraq to exercises in the Pacific to crisis response. And I wanted to get a sense about how the Army's handling that tension, particularly in light of the difficulties it's had in recruiting, which has lowered the targets that it has had for end strength.

Ryan D. Mccarthy: Great question. It's an internal debate that we're burning a lot of calories on. And it's very similar because we've been here before. When we put the big five out back in the – you know, we started development in the '70s, fielded in the '80s, the big five was really the big 64. And that when you had these five weapons systems you had to create HETS and HEMITs and all the capability that enabled those weapons systems in combat. And so you learn along the way, if you will. And that affects the force structure.

Ryan D. Mccarthy: So as we bring these new weapons systems into the fold and you get more capable, more reach, more range and lethality, we're going to learn. So we're trying to be flexible in the models. For example, multidomain taskforces, that has really been a thing that General Milley has really pushed really hard. And it's a capability that all the combatant commanders want, because within this little taskforce you've got electronic warfare, long-range precision fires, attack lift capability – attacking lift capability, where it will be a different structure than a brigade combat team. But how will you change that within the existing profile?

Ryan D. Mccarthy: So we know we're making adjustments. We're looking at potential way to get there. The multidomain taskforces will be the pathfinder to help us understand

and make adjustments. And this is where we'll get user feedback immediately from combatant commanders. I was with Admiral Davidson yesterday – or, day before. And that was just the point that he was making. You know, it's a very distributed combatant command in the Indo-Pacific versus what we would face, say in Europe. So we're going to learn along the way. We're being very flexible. But I would pay very close attention to the multidomain taskforces.

Ryan D. Mccarthy: With respect to your question about recruiting, we missed last year. We missed by 6,500 people in the active force. And there's a variety of factors associated with that. You can hang your hat on the fact that there's 3.9 percent unemployment. The economy is strong. There's jobs that are available. But it's truly more than that. That we took a very hard look at ourselves and how we're communicating to 17-to-24-year-olds in the country, how we're – we need to be much more comprehensive in where we went to find young men and women to join the force.

Ryan D. Mccarthy: So we looked at ourselves and we said we were kind of getting fixed to certain areas of the country. And with that, we said we need to get back to the cities. We're going to go back and look at what are the largest population centers in the country, how are we performing there in particular. So we locked in on 22 cities around the country. We hired an outside firm to help us with microtargeting so that we can go look at a geographic zip code, understand the demographics, how to communicate with them, and if necessary find the specific things about us as an institution, how to articulate that to a 17- and 24-year-old able-bodied American that could join the Army.

Ryan D. Mccarthy: So we did a couple pilots. We're doing them in – we did one in Chicago, because it's – if you look at it from an ethnic standpoint, it's the pacing item for us of how we would do across the country. The propensity to serve in the United States is about 11 percent. We're at 4 percent in Chicago. We brought the firm in and did about a hundred-day study. And they helped us improve leads by 10 percent within the first hundred days. So much more sophistication of how we're going to neighborhoods in the country and trying to look at our messaging of how we communicate with them.

Ryan D. Mccarthy: One thing in particular, we – it's just the entrepreneurial nature of our noncommissioned officers. We had a couple noncommissioned officers in the recruiting command that developed their own videos. Two of them did a rap video and they had 5 million people get a hit on it in less than a week. On his iPhone he just did a video. So giving the mission command out to the field and letting them have the latitude of how to communicate who we are, and our values are touching millions of people. So you can never – it never ceases to amaze me, the entrepreneurial nature, the strength and leadership of our noncommissioned officer corps. But we're doing things very differently. And we're touching more folks. And we're getting back to the fundamentals.

Ryan D. Mccarthy: So it's exciting. And the results are starting to trickle in. We're ahead of where we've been in Portland, Los Angeles, New York City – in cities where we have not performed well in the last several years. So a lot to be said about our

adjustments. We've reduced our end strength goal effective immediately in FY '19 and across the FYDP to 2,000 year over year, because we want to maintain quality and still be able to grow because, as I mentioned earlier about demand, it's not going to go away anytime soon.

Mark F. Cancian: And, Congressman, you've done some work on Army recruiting, I think you mentioned Baltimore. What advice would you give the Army?

Rep Anthony Brown: Right. So let me say a few things in response to your question – the first question, then the more specific, refined question.

Rep Anthony Brown: First of all, let me say that I – while the Army has not met its recruitment goals, and you've made adjustments, I want to commend the Army for not lowering its standards in order to meet the number. You know, our – I think our superiority is in the – is in the quality soldier that we recruit, we train, and we retain. And that's our real competitive advantage on the modern battlefield. So I commend the Army for doing that, recognizing that.

Rep Anthony Brown: You know, when you look at recruiting, enlistment, commissions in the Army, and perhaps the same can be said in the other service components, you know, you see multigenerational enlistments, right? Just often like you see the same thing in firefighters, right? I'm a firefighter. My father was one. My grandmother was one. You know, et cetera. And in law enforcement and sort of military, paramilitary, these sort of, you know, rigorous public service sectors. Particularly you see generational commitments and participation. And that's no less true in the Army.

Rep Anthony Brown: But we can't rely on that anymore. That pool is shrinking. So we do need to make a more robust effort, which is what is happening, looking at our cities, our urban populations. Getting innovative and creative. Going into high schools and where appropriate – and I recognize the limitations on JROTC. It's a civics program. It's not a recruitment program. But finding opportunities to expose young people to what, you know, life in the military and that type of service might mean for them.

Rep Anthony Brown: And I think polling shows today that the more appealing approach – and it's hard for me to accept this – it's less about patriotism and the nobility of the service, which is why I entered, and it really is more about opportunities. You've got to – you need to talk to young people about what this means in terms of a job, and a career, and professional reward and satisfaction, developing a skill and, you know, whether it's a technical skill or leadership, and what that means for you, whether you decide that you're only doing one enlistment, four years, whatever the minimum enlistment is these days, or whether you're going to make a career. I think polling shows that you really need to appeal to the opportunities, the economic opportunities of service.

Rep Anthony Brown: And that's OK. That's a shift from where I was 30 years ago when I raised my right hand, but – so the Army is doing that. But as – you know, you're – the first part of your question was: How do you balance sort of readiness and full-

spectrum operations with, you know, preparing for a high-end conflict, which means more investments in modernization. You know, it's not just about money. And we talked about that a little bit in, you know, the first question. But it is manning. And it is force structure.

Rep Anthony Brown: And we've got a number of challenges. I like the fact that we're developing these security force assistance brigades, so that we're not – we're not drawing on conventional forces or SOF to develop those – you know, the capacity with our allies and partners. But we're developing these brigades. We're having difficulty filling those brigades, I understand. So we've got to step up that effort. But we're having difficulties in filling the additional cyber units that we're fielding, and electronic warfare units. We're having difficulty with our THAAD ballistic defense missile units, Patriot units, where you need a higher caliber soldier with higher aptitude for learning.

Rep Anthony Brown: So we have – we have recruitments in terms of a numbers challenge, but also in terms of quality. And that's because, as the undersecretary mentioned, I mean, we're competing in a strong economy where the private sector right now is just, you know, absorbing and sucking up, if you will, a lot of talent out there, with unemployment at low levels that it is. But we fund – we fund modernization. We continue to make the investments in readiness, along with the effort to identify programs that might be obsolete and unnecessary. I think another request that Congress has been making – and I think we're going to be making with more force – is, you know, why are we in 80 countries in every region around the world?

Rep Anthony Brown: You know, I know it was probably a misstatement a year or two ago when unfortunately soldiers were killed in Niger and Africa and sort of, you know, America asked the question: Wow, 7,000, 9,000 soldiers in Africa? And some members of Congress said, I didn't know we were there. Well, that's not particularly accurate. We know they're there, and we certainly have constructive knowledge because, you know, the department reports to us, you know, every month where we are and what we're doing. But it did highlight the fact that we're all over the place. And do we really need to have such a strong military presence around the world, or should we be investing more in our diplomatic efforts? You've seen cuts to the State Department. Should we have greater investments in development activity. We haven't had a single announcement from this administration about a major either public health or economic development initiative in Africa. We've got strong relationships, military-to-military relationship in Africa, but on the diplomatic side, not so strong. On the development side, not so strong.

Rep Anthony Brown: And so as we're wrestling with this readiness versus modernization, yeah, we got to focus on the funding side, the money, we got to focus on manning. But we also have to look at the nondefense aspects of promoting peace around the world and addressing the threats, or the potential threats, that may be out there.

Ryan D. Mccarthy: Mark, could I just add one thing that I would be remiss not to mention about the recruiting aspect? Congressman Brown got us a venue with Mayor Pugh and her

entire Cabinet in the city of Baltimore – commissioner of police department, superintendent of schools, director of parks and recreation – and try to – and I brought in the recruiting brigade commander, the battalion commander, the command sergeant major. And we talked about recruiting challenges and how do we connect with the community. And Mayor Pugh’s leadership and Congressman Brown’s leadership say: What do you need from us? And they signed up to help us with various initiatives throughout the course of the fiscal year.

Ryan D. Mccarthy: We got the same level of support from Mayor Turner and Congressman Jackson-Lee down in Houston. Senator Durbin and Mayor Emmanuel in Chicago. So it’s a team sport for us, with recruiting. And we’re getting a lot of help from Congress and local leaders. So I forgot to mention that and brag a little bit about the Congressman. And that really matters at the local level, because the points of getting access to schools and other places just to afford us the opportunity for those recruiters to tell their stories, and that helps a lot. So I forgot to mention that. So thanks.

Rep Anthony Brown: And then we had a great visit out in Morgan State University, the ROTC program. They’re doing great things out there.

Mark F. Cancian: Let me ask one last question, and that gets at the cultural aspect of modernization and what’s behind it. The thrust of the modernization effort is great power competition, as you noted. A very different demand on the armed forces than what they’ve experienced for the last 25 years, since the end of the Cold War. And many people have pointed out that we developed some bad habits over the course of that 25 years when we had military dominance, when we had secure rear areas, where we have sanctuary at sea and in the air. And we are now moving into a new environment where that’s no longer true, where all of those domains are going to be contested. General Milley, of course, talks a lot about that. All the service chiefs have talked a lot about this new environment that we’re moving into.

Mark F. Cancian: But that has to move down into the organization and, frankly, change a lot of bad habits that we have grown into as a result of our experiences in the last 25 years. So was wondering if both of you could talk a little bit about that cultural change, and how long that’s going to take, and what you’re doing to bring it about.

Rep Anthony Brown: I’ll lead on this one. You know, we’ve been there before. I raised my right hand and received a commission in 1984. I graduated from the first class in the aviation branch in 1984. And when I was in flight school, the instructor pilots were Vietnam War pilots. My classroom instructors were teaching air/land battle, which had just been rolled out a year or two earlier. They had never gone to war with that doctrine but, you know, training, training, training and understanding the doctrine. And we were making a shift from at least a decade of counterinsurgency in Southeast Asia. And we were now pivoting back to the Cold War threat of the Soviet Union.

Rep Anthony Brown: And, you know, I can't count the number of hours studying, you know, our air/land battle on the principles of agility, initiative, depth and synchronization to defend Europe against the tank columns coming through the Fulda Gap. And we developed capabilities around requirements – and that's what, you know, you saw the Blackhawk, the Apache, Bradley fighting vehicle, the M-1, which today is still the, you know, most effective tank on the battlefield. And we trained for it. And we adapted the culture at that time.

Rep Anthony Brown: So I think the same thing will happen now. We're going from a, you know, counterterrorism, counterinsurgency fight in Iraq and Afghanistan. We're still in Syria. And our National Defense Strategy say, you know, let's focus more now on great power competition, direct action in a contested environment. And through the Army Futures Command and the modernization program, the close relationship between the Futures Command and TRADOC, and going from full spectrum operations doctrine to multidomain operations – we'll do the same thing.

Rep Anthony Brown: We've demonstrated the ability to adapt to change – the change in threat, the change in technology, the change in requirements and capabilities. And I'm confident that we'll be able to do that again.

Ryan D. Mccarthy: I'd add a couple things from my vantage point, Mark. That we have to make a cultural shift to just how we do modernization. There's three fundamentals you got to get right. You have to understand the threat. You have to apply that to an operating model that will be effective, and then pick the right technologies that are mature enough to fold into the weapons system. Where we've had challenges over the last 25 years, I would say a lack of focus on the threat. You know, what is it that you're bringing this capability into the system to do? And then applying it to an operating mode.

Ryan D. Mccarthy: We are changing our operating model to multidomain operations, which is basically air-land-sea battle, but you have to apply cyberspace and the space dimensions. It takes – it took us about 14 years to really embed that the last time. We got to do it a lot faster. There's a conversation internal to the Army as well as externally to not only Congress but combatant commanders and elsewhere of how we're going to do business differently. So the modernization strategy we delivered over a year ago this time will have a lot about this operating model and how we intend to do business. And the push-pull between a weapons system and this operating model is going to help us make those adjustments to force structure and others as we progress.

Ryan D. Mccarthy: But in order to do that, it's bringing the requirements community and that acquisitions community much closer together. We believe we're doing that with Army Futures Command. We've taken all the stakeholders in the process and brought them together under one roof. It's – you know, it was initially a forced collaboration, but it's remarkably the change and how much better it's getting because it's making life easier for those folks. It's not an email to somebody. It's a conversation amongst teammates. They are task organized against a problem set. They're empowered. They're getting the resources.

Ryan D. Mccarthy: So we're improving much faster. We've reduced that span time very quickly, where I think you'll see with General Mike Murray's team a lot of the discussion has been on materiel, he's going to talk a lot about the operating concept and how that will work to deal with potential threats in the future. But it's taking – it just takes a lot of leadership and a lot of communication. So we're going to have those folks up here a lot over the course of this year – the rest of this year.

Mark F. Cancian: Great. Well, thank you. OK, the gentleman in the back there, who seemed to have his hand up pretty quickly.

Q: Hi, there. Sam Baynes from WithYouWithMe.

Q: Undersecretary McCarthy, you mentioned the cyber. I've noticed that Army cyber seems to have become almost the vanguard of the DOD's efforts to move into cyber, and I was wondering where that fits into the force modernization plan as well as how the Army is going about planning to recruit for that department and identify who should be recruited into that effort.

Ryan D. Mccarthy: Army cyber, it really has – it's remarkable. When I left the department the last time, in 2011, the Air Force was really – it was remarkable how much focus, emphasis, and resources. And then I came back six years later and the Army was either at par or exceeding them. Tremendous investment by the Army not only in just funding, but just the focus and management, and putting the most talented people we could get our hands on on the process. But we developed that branch and the singular focus. So it was – it was a lot of moves made over the last six years.

Ryan D. Mccarthy: With that, it's really a national effort more so than just above the Army, and how the leadership of the department looking at a lot of it – the authorities, the policies associated with that. And a lot of that came because of the interference with elections and how, you know, other nations were – the constant attacks that we endure every day from cyber bad actors, if you will. So that has, you know, really forced the energy and attention against that. So we've worked on authorities.

Ryan D. Mccarthy: But one of the places in particular is recruitment. These people are in high demand and they get paid really well in the private sector. So this is where the total force concept with the National Guard and Reserves is critical. We've found a lot of success there. And then going in to recruit in the cities. We're going to the finest universities in the country to try to get men and women to join the force. And in a lot of ways it's being creative and using National Guard and Reserve units.

Rep Anthony Brown: If I may add to that, you know, Congress gave the – all the components and Cyber Command, you know, greater flexibility through I think we call it the cyber exempt service –

Ryan D. Mccarthy: Yes, sir.

Rep Anthony Brown: – category, greater flexibility so that we can be more competitive in recruiting in a – in a very high-demand skillset: computer science engineers, cyber warriors. So we've gained greater flexibility.

Rep Anthony Brown: We've asked the department to study and come back with recommendations about incorporating more cyber units in Reserve units because, you know, you've got that – you know, that cyber-type person who's working at one of these high-tech companies that may very well want to be part of this noble effort in defending our nation in either the National Guard or the Army Reserve. So how can we leverage you know, that expertise, that experience, and without being able to wholesale take them from the private sector at least get them on a part-time basis? So we're looking, as the undersecretary mentioned, at greater use of, you know, Reserve and National Guard units, and how we can recruit into those units to support the effort.

Mark F. Cancian: The gentleman in the back there on the end.

Q: Hi. Good morning. Alex Sanchez (sp).

Q: One question. In your opinion, what should the rifle squad of the future look like? The U.S. Marines, for example, have been experimenting with having a rifle squad that has 12 members and 14 members. There's a growing body of literature about adding a drone operator to a U.S. infantry Army squad. So what do you think should – in your opinion, what will the – especially with your background, what do you think the future of the rifle squad is, especially given emerging technologies? Thank you.

Ryan D. Mccarthy: Yeah. As a former infantryman, I'll try not to get emotional or parochial here. A lot of it'll come down to the capabilities we bring to the unit. We have made a vast investment with the Integrated Visual Augmentation System, which is – we started out where we were looking at how could we enhance our night-vision goggles. And what we found in the process was is within the – this system – and I always use my prop here – if we had goggles that we had – you could put an interface in there, you could do day or night sight. And so – and you could put thermal, so if you were going to operate underground, in a cave system or something like that. But also what we're finding here is this – it brings – this heads-up display will actually be able to give you the opportunity to train with it in a synthetic training environment. So the same system that you would go to war with you can practice at home station, and we could be in this room and it could feed in scenarios where you're going to do room clearing against potential threats, and it'll see furniture and everything else as you were going to be coming in this room. And it would feed into the four-man stack that would clear a room together, and you could get thousands of repetitions.

Ryan D. Mccarthy: You'll also be able to capture performance data. So you could see the marksmanship, what was the blood pressure when they went through the door, what were they seeing when they went into the room. And then those after-action reviews would help you improve your performance. So that greater

situational awareness could change the rationale of why would you need 10, would you need eight, would you need less. So we're going to learn as we go through this process because that unique capability may help us – inform us to do it differently. Where we've – when we've done it well historically within the Department of Defense, the technology helps us and the operating concept helps the technology of making the tradeoffs of the choices of what ultimately will be the structure you need to go into a fight.

Ryan D. Mccarthy: We're pretty excited about that. I'm actually going down there next week to see them do some tests with this new system. We're in the prototype process so we're very excited. But I think there will be adjustments to the force structure. I just don't know which direction it's going to go at this point.

Rep Anthony Brown: As a former aviator, all I can add to that is that I'm excited about the future of vertical lift and to make sure that we've got the lift capability to get that squad and all their equipment deep into the battle space in what'll be a very contested environment, because right now we're operating at a real disadvantage. So we can modernize our squads and reform them as necessary. But if we can't get them where they need to be with what they need, then that squad is not going to be as effective as it ought to be.

Ryan D. Mccarthy: And as painful as it is for me to admit, we learned a lot from aviators how to put that – (laughter) – how to put that system in place and because they do a great job with – on our aviation platforms where they have those heads-up displays for our pilots. And so we're finally coming of age like aviators in the infantry.

Mark F. Cancian: Yeah. The lady up front here.

Q: Thank you.

Q: My question is, when I think of the National Defense Strategy, there's the land-water-air space and there's also you mentioned the near-peers and the peers. So I'm thinking beyond modernization. There are three things I'm concerned about. One is the information systems and management. I mean, when Snowden went to Russia, now he's training generations of hackers, and hacking has been very much a concern with the U.S. – within the U.S. and Europe and everywhere. Also, the Clinton emails there were probabilities of having been hacked. So at the back door there's national security with information systems.

Q: Secondly, there is the alliance management. I mean, even if the United States military is strong enough and we need the help of our allies in the Middle East or somewhere, I mean, what is the U.S. Army or the military doing to enable, to further enhance the capability of our allies so they can probably do the warfare so that we don't have to be all over the world?

Q: And then, lastly, is the space age technology. I mean, I think that's coming pretty soon because also here in the CSIS they presented the nuclear weapons being developed by Russia – I mean, the aircrafts. I mean, sooner or later I think they're planning, like, laser capabilities in the aircrafts and all that. And then I

was look(ing) into the military companies like the Raytheon and all that – Northrop Grumman.

Q: So my question is how do the U.S. Army, in terms of a National Defense Strategy – comprehensive strategy – and how would funding fit in in the strengths, weakness, opportunities, and threats assessment of the U.S. Army and the U.S. military? Thank you.

Rep Anthony Brown: Let me – if I can, let me take up – try at that second question about alliances and partners, and, I mean, that’s an important line of effort in the National Defense Strategy – strengthening our alliances and partnerships – and when you look at Europe there are a number of aspects to that. Shared – you know, we need to encourage our partners to achieve 2 percent of their GDP on defense spending.

Rep Anthony Brown: But it’s not just that level of spending. It’s what they’re spending it on and, you know, and whether it’s – you know, not every – not every European nation has to be able to, you know, field the F-35, and we’ve got to be looking at interoperability, what’s the – what’s the right mix of capabilities that each nation can bring to the fight. Also, investments in infrastructure, you know, where we sea lift and air lift U.S. forces to Europe and they’re landing at Bremen in Germany – how do you get them from there by rail or road to the – you know, Eastern Europe.

Rep Anthony Brown: And so are they making the investments in infrastructure? Is the regulatory framework in place to move from one place, one country in Europe, to another? So it’s funding. It’s interoperability. It’s matching and mixing capabilities. There is structure in place to do that as part of NATO and we are actively engaged. The United States is actively engaged in those discussions. There is an agreed to plan on how to do that.

Rep Anthony Brown: So I think that’s a big part. And we don’t berate our allies. We don’t – we don’t undercut and undermine them and publicly, you know, criticize them because they’re not at 2 percent but they are moving at 2 percent because that undermines their ability to develop their domestic politics just like the secretary has to come to Congress and sell Army modernization to Congress. There’s a domestic audience that we’ve got to convince. And the same is true for Germany and France and Italy and all of our European allies. So, you know, you’ve got to have a little bit of diplomacy here as you’re trying to help them help us and all of us together defend Europe.

Ryan D. Mccarthy: And if I could just add onto your three points. In the cyber domain, we are looking very hard at our data strategy versus – defending data versus the network. I use the analogy of, like, professional football. They don’t defend every inch of the field. They defend the football.

Ryan D. Mccarthy: So your challenge is it’s very expensive to defend networks that are very distributed in the size and scale of an institution that’s the size of a country. So how do we do it differently, more effectively, encrypting the data and protecting

it. So we're looking very hard at our data defense, which will be a shift from the way we currently do business today.

Ryan D. Mccarthy: With respects to alliance and partners, we've developed security force assistance brigades so that we can have a conventional advise-and-assist capability that we can afford to all the combatant commanders. We're in the process of building our third. We have one – excuse me, two committed. No, we have one brigade committed per year in Afghanistan right now but it's on that cyclical rotation.

Ryan D. Mccarthy: We're building those as fast as we can. We conduct division-level exercise we call our Defender Series. We do that in Europe. Right now, we have upwards of 30,000 personnel in Europe. You know, we have 30,000-plus in the Middle East. We're looking at a similar type of profile in Asia to supporting, you know, PACOM's commanders and needs for capacity and capability. But the challenges is expensive. It costs billions of dollars all over the world, and there's just that – the touch of just how much influence do we need and how much can we afford. So we're trying to do the best we can but it's an expensive proposition.

Ryan D. Mccarthy: The third question with respect to space, looking at a lot of different options there. Investing in low Earth orbit satellite architecture as well as, you know, the NEO and GEO. That's an expensive proposition but it is a domain where the near-peers are making vast investments and we will have to make some adjustments to our architecture so that we can maintain the dominance that we've enjoyed for a very long time.

Mark F. Cancian: Sandy? OK.

Q: Wrong guy.

Mark F. Cancian: That's all right. (Laughter.) All right. We'll give you the –

Q: Sandy Apgar, CSIS.

Q: Congressman Brown, you pioneered the use of public-private partnerships in Maryland so effectively. What role do you see for them – that is, bringing business into the infrastructure and support operations to the department – in this 10-year period we're now talking about?

Rep Anthony Brown: Yeah, and I've got to be real careful there only because – and Sandy and I worked together and when we were having the plus-up in Maryland with – associated with base realignment and closure and we were looking at public-private partnerships to deliver various facilities at Fort Meade. One of the models that we looked at that was working effectively at that time was military housing. Unfortunately, today, that's not really a good news story and where the private sector has not really delivered their promises. They may have on cost but, certainly, not on quality, and when quality sinks the way it does it ends up costing you more in the long run.

Rep Anthony Brown: But, you know, I believe that where we can find opportunities for the private sector to invest in public facilities, whether it's, you know, infrastructure like the Purple Line, for those of you that live in the national capital region, you know, we're delivering that in Maryland, or whether it's, you know, redeveloping the Port of Baltimore – we've done that – or whether it's like enhanced-use lease at our military facilities so that we can free up dollars to invest in readiness and modernization, then we ought to do that.

Rep Anthony Brown: But we can't ever get too far from the lessons that we learn and we're learning a lesson about military housing – we've learned other lessons about public-private partnerships – to incorporate those in any future partnerships that we – that we participate in. I wouldn't walk away from them now but I'm a little bit more cautious.

Mark F. Cancian: And one last question. The gentleman from whom we ripped the microphone last time, and I think this will be our last question.

Q: Thank you.

Q: As a very old former naval person who has spent a lot of time being embarrassed by the recent peccadilloes of the U.S. Navy, come down to a question of being so enamored with modern technology that we forgot the basics, and I wonder if within the Army Futures Command you have an office that goes around to all of their meetings and saying, wow, that's really sexy stuff but don't forget the fundamentals.

Ryan D. Mccarthy: What I would – what I would say is the Army has done fundamentals very well because we've incrementally upgraded systems for over 40 years and they continue to increase capability. But we're getting to the end where there's just not a lot of growth margin left on the systems and in many cases we're really being – we're forced. We have to do it. We're at an inflection point. But there is – there is the danger for leap-ahead. So it's almost a tenuous balance. So the leadership has been very active in requirements definition and we've reached out a lot to people externally to the Army for advice so we can try to see ourselves. But we're going to have to grow through that. It's been a very long time since we've brought in a new signature system into the formations. So we're going to have to own it and it's going to be a challenge.

Rep Anthony Brown: Let me – let me just point out two sort of findings and recommendations that the GAO recently made that are, you know, kind of cautionary, and I am pleased to say that they've been shared with the Department of Defense, Department of the Army, and that they've been, you know, accepted and will be worked on, and one is that, you know, we have seen over the last several years a decline in the development community – the requirements-writing community in the Army – and Army Futures Command is going to have to address that – fewer people doing this important work.

Rep Anthony Brown: We're excited about emerging technologies. We want to – we want to, you know, kind of streamline and expedite the acquisition process to get these, you

know, exciting systems and equipment into the field. But, you know, we've got to temper that excitement by also recognizing and adopting a GAO recommendation that says, you know, don't go to programs of record if you're – if you're not prototyping these systems in operational environments. Don't just rely on, you know, relevant, you know, simulations, because in the long run it could cost you more, it could delay delivery, or you don't match the technology to what the real requirement or capability is.

Rep Anthony Brown: So on the one hand, you know, there's an excitement and a need for speed. But on the other hand, you know, let's not – let's make sure that we continue to be deliberate and methodical so that we are delivering what the warfighter really needs. But I'm glad that Congress and the Army are willing to work together to ensure that.

Ryan D. Mccarthy: That's a great point, Congressman. We have a very robust funding profile across the FDIP for prototyping. We intend to fly it before we buy it. So that'll be – it'll be hard to do that because prototyping always gets intense scrutiny. But we're getting a lot of support, to the congressman's point, to put those proposals forward.

Mark F. Cancian: Well, unfortunately, we've reached our time limit. Please join me in thanking our speakers for taking the time out today. (Applause.)

(END)