Competing with Great Powers at the “Speed of Relevance”: A Conversation with Ellen Lord

TRANSCRIPT

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• Ellen Lord, Under Secretary of Defense for Acquisition and Sustainment
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Rebeccah Heinrichs:

Hello, and welcome to this virtual event with Hudson Institute. My name is Rebeccah Heinrichs, and I'm a senior fellow here at Hudson. Today we are privileged to be joined by the honorable Ellen M. Lord who currently serves as the Under Secretary of Defense for Acquisition and Sustainment, a position that she has held since her confirmation in August, 2017. In this capacity, she is responsible to the Secretary of Defense for all matters pertaining to acquisition, developmental testing, contract administration, logistics and material readiness, installations and environment, operational energy, chemical, biological and nuclear weapons, the acquisition workforce, and the defense industrial base. She also serves the critically important role of chairing the joint Defense Department and Energy Department Nuclear Weapons Council. We are so happy to have you with us today Under Secretary Lord.

And my hope for this event is to just have a conversation. So I will kick us off with the first question, and then we will take it from there. Streamlining the acquisition and sustainment process while maintaining innovation has always been a challenge, and especially now as we focus on maintaining or shoring up our technological edge over China. And we can jump into all kinds of categories as we flesh this out, but I'd like to start with the subject of our workforce because as good as our technology is, we have to have a workforce able to shepherd it through the acquisition process and on the individual and corporate levels. So how is our acquisitions workforce doing generally? And then I'm particularly interested in how it has handled the coronavirus pandemic and how it has been able to adapt.

Ellen Lord:

Well, thank you Rebeccah, and thank you to Hudson for allowing me to talk about some of my favorite subjects. The workforce is really the core of what we do with acquisition at DOD. Our talent is incredible and the resilience that has been demonstrated since the onset of COVID, I think is admirable. In fact, we went to telework pretty quickly and we found that we had a very adaptable workforce. In fact, our Defense Acquisition University all of a sudden they had an enormous uptick in terms of online course participation and actually transitioned almost 100% to online very, very quickly.

Now, what we did was we got very involved with the inter-agency because of COVID. So while we deemed our workforce essential with the defense industrial base and our team worked with them, we also stood up what we called the Joint Acquisition Task Force to help HHS and FEMA with PPE, pharmaceuticals, all types of things. So it was interesting for us. We were trying to make sure that we maintain the health of our workforce, as well as the whole defense industry while supporting HHS and FEMA as well. And I'm incredibly proud of what was done and how quickly we found that everyone adapted to being efficient. And in fact, I hope we do not backtrack in terms of efficiencies when we get to whatever our stable situation is.

Much of the workforce has done very, very well. We found that we had to do some shift work in terms of coming in to secure facilities for classified type work, but we set up multiple shifts to do that. We also found that we wanted to fast forward what we were doing with teaching our workforce new skillsets. And COVID came right in the middle of a transformation with the Defense Acquisition University moving to really giving skills at the time of need. And instead of having large tranches of courses where you were kind of locked down in a facility for two, three, four weeks, we've started with a credentialing program that's really giving capability at the time you're about to use it.
So we actually have nine different credentialing programs today, agile software, digital engineering, data analytics, foundational intellectual property, program protection, introduction to risk issue and opportunity management, services acquisition for the acquisition workforce, and then services acquisition for the non-acquisition workforce. Often people forget about half of what we procure each year are actually service contracts. So we've been able to deliver that knowledge at the time of need.

Also with the workforce, we felt we had somewhat of an aging system in terms of credentialing for career fields, and we had too many career fields. So we've necked that down to program management, contracting, business financial management and cost estimating, life cycle logistics, engineering, and test and evaluation. So we've been able to really deliver capability at the time of need to the workforce, and they've been applying that. And that's one of my key concerns. We need to make sure that we not only take all of the authorities that Congress gives us and implement them, but we need to train the workforce to make sure that they know how to apply that. And very, very pleased with all the work the service acquisition executives have done collaborating with us to make sure we are delivering those new skillsets.

Rebeccah Heinrichs:

That's great. Thank you. And I would agree, I think the pandemic has forced a lot of us to find new ways, and some of these ways of doing work and business are more efficient. And I hope that some of them will stay even after we get out of this pandemic phase. But sticking with lessons learned during the pandemic, did the pandemic cause or expose areas where we do have weaknesses in terms of industrial base vulnerabilities or fragilities in our supply chains? And then have we been able to adjust them or begin down the path of making these adjustments?

Ellen Lord:

Yeah, absolutely. In fact, COVID was a type of silver lining for us in a way. We have worked very hard in 2017 and '18 to do a study in response to an Executive Order 13806. We had to look at the defense industrial base. We published a report in 2018, and what that really did was segment the defense industrial base and it gave us a lexicon to talk about what that industrial base consisted of. We also identified where we had vulnerabilities and fragility in the industrial base, and a lot of that was where we had 100% dependency offshore, and especially when we were relying on nations who aren't particularly our partners and allies for critical items. So when the pandemic rolled around and everyone realized how vulnerable we were as a nation without the PPE and the pharmaceuticals that we needed where we depended on offshore sources, that heightened everybody's awareness of how that spread through the defense industry as well.

We therefore were able to move out and make some investments in industrial capacity and throughput. Two of the areas that were identified in the 13806 report where I've been particularly concerned and we continue to work today, and I think we're getting some momentum both throughout the nation, but also on The Hill with Congress is rare earth minerals, as well as micro-electronics. Both of those are absolutely necessary for our DOD weapons systems, yet they also are very important for the nation at large.

So I look at moving the industrial base, the defense industrial base forward, which is really the nexus, I believe, of economic security and national security, because there's such a multiplier effect. And we're
beginning to reassure capability for our processing of rare earths, as well as working on a strategy to bridge from where we are today with our programs of records and our legacy systems in terms of microelectronics until we can get to the future, a quantifiable assurance and knowing what we have in these different chipsets we’re buying. So we have been able to really have in-depth discussions, engage industry, engage the administration, and also engage The Hill because COVID really put a spotlight on our industrial base and where there might be vulnerabilities,

Rebecca Heinrichs:

You took me right into my next question. Rare earth minerals has been something that I've been tracking as a sovereignty issue for the United States that as you rightly pointed out, that the coronavirus pandemic has brought to a greater awareness of how vulnerable we are because of how dependent we are on other nations, China in particular. But Congress, I think thankfully, there's been bipartisan support to get at this even before the pandemic. In Section 881 of the National Defense Authorization Act for fiscal year 2017 expanded the legal definition of the national technology and industrial base to include the United Kingdom and Australia. And then of course we had President Trump who issued a series of executive orders that made it a national emergency to move forward in the mining industry. Can you talk about the role our allies play in this and how important it is? And for us from an acquisition standpoint, it is to be working with them in this particular area.

Ellen Lord:

So, we enjoy very strong relationships with all of the internations that we're involved with now, Canada, Australia, UK, and what we're allowed to do is exchange more information more freely with them. With Canada, we especially can trade a little bit more easily. What we can do is create an aggregate demand signal and we can work together to get processing capability. So for instance, we are particularly closely aligned with Australia looking at rare earth minerals. And the issue is not nearly so much the mining of them because we do have capability domestically to some degree, and also in Canada, in Australia, the real issue is the processing of them. And that's where we are dependent on China to a very large degree. So we've been able to use Defense Production Act Title III funds really leverage that capability to start looking at some projects. And one project that we're working on, we're working jointly with Australia.

So I know that I have lots of conversations with my peer, Tony Fraser in Australia. One of the titles I have is our National Armaments Director, and Tony is the NAD for Australia. And we have regular bilats. And this has been near the top of our agenda because I think it's addressable and I think we're creating momentum. And frankly, we are very fortunate in the US in that we have a fairly strong inter-agency process for a variety of things. Whether it be on the offense to set up these funds to go look at establishing capacity and throughput, or whether it be the block or unwind transactions, we use the Council on Foreign Investment and the US CFIUS. DOD is very active in that.

And frankly, we have worked with partner nations to educate them about the systems we have that they might want to adopt because what we are seeing is unfortunately, nations such as China have taken advantage of the pandemic and they've come in with what we call adversarial capital and they have bought critical national assets, whether that be in terms of intellectual property or whether that be technology development or manufacturing. And we have the ability, we have the authority to intervene, but we need to come together and do that. When we work with our partners and allies, that's an even
stronger position because our adversaries are pretty smart, and they can often go to another country and have shell organizations and so forth. So when we can partner with other nations to get at that, it's a powerful thing.

Rebeccah Heinrichs:

That's great. And I think that you're exactly right. It's encouraging to see the silver lining that the pandemic has actually brought for us and really lit a fire under us and our allies to work together to get out these problems that we've known have been there for many years and pursuing them with a sense of urgency. Now, we all know about how robust the private sector has been in developing technology that can directly contribute to US national security and private sector, and it is clearly one of our strongest points of competitive advantage against authoritarian countries, China in particular. How do you think DOD is doing when it comes to quickly integrating private sector innovation?

Ellen Lord:

So we have challenges on the technology side and on the business side. I believe that we are much better within DOD at technology innovation than we are at business innovation. So we have worked hard to come up with contracting capabilities to allow groups to contract with commercial companies that don't meet all of the very complex, bureaucratic sometimes, DOD regulations. So we have used other transaction authorities to a large degree to do that. We have educated the workforce on how to use this. We have a handbook. Groups like the Defense Innovation Unit on the West Coast and a few other places, but predominantly in Silicon Valley, they use OTAs to great effect to get companies to come in and work with us. I think we have been most successful in the areas of AI with quickly bringing on capability. Space Force is doing some great things using AI in their command centers.

There is more we can do with space launch. We've done some pretty innovative things. We continue to try to take our more agile groups and take a little bit of DOD money and more private sector money and move projects forward. Our latest effort we have out of acquisition and sustainment is to partner with the military services on something we call Trusted Capital. And we are rolling out an electronic marketplace later this month, where we're bringing capital providers together with capability providers to provide a clearing house to bring that trusted capital to innovative companies that need capital infusion. We'd like to think that capital markets are very, very efficient, but if they were totally efficient, we wouldn't have to use CFIUS to undo transactions and block them. So our concept is that in order to overcome that activation energy of getting companies to work with DOD and to develop systems that work for our capability needs or adapt systems they already have, we have to get more capital flowing.

So what we're doing is we're partnering with the services where they might have SBIR grants, or they might just endorse a company saying this is interesting. Therefore, these companies will be in the marketplace, they will be branded as of DOD interest, then we allow capital providers where we look at what the source of that capital is. And by the way, on those companies, we look at the beneficial ownership as well. We scrub those. And that's another interesting point of COVID. COVID pushed us to do far more supply chain illumination because of what we found in the medical supply chain and it made us worry about our defense supply chain. So we as a department have invested much more money in supply chain illumination tools. We have some pretty good capability now.
So what we'll do is we will bring those groups together. And we have been beta testing this almost all year, and what we will do is say, here are companies that DOD is interested in. Not always privacy contract, some of them do, some of them don't. Here are a couple of providers that have clean money. Why don't you guys get together? And there's a huge demand on either side. So I'm really excited about this coming, because what I'm finding is not too surprisingly, we often have a long contracting cycle, and it's hard to come up with the business case analysis, particularly for small companies where most of the innovation is to have them make the investment, if you will, in long-term getting to know DOD. We hope that this trusted marketplace will be an illumination tool all on its own where we know that we're secure with these companies, we can trust them, and we will get more interaction, more quick development, more quick fielding.

And I think one of the other things that we're trying to do with our acquisition system is to do more rapid fielding, and that's our middle tier of acquisition. So I guess I can't go any further without talking about our adaptive acquisition framework, which I'm incredibly excited about. I think the most significant thing we've done in ANS over the last three and a half years is to totally rewrite the acquisition policy. And that sounds kind of boring. However, it's not. It's really exciting because what we used to have with these tomes that you had to go through and figure out what you could tailor out in a system, and frankly, it was very difficult for contracting professionals. Now what we've done is say, wait a second, there are different ways to procure the different things.

So for instance, we have a software pathway. Software is very, very different than hardware. And if you're truly going to do Agile and DevOps, you are basically developing, producing and sustaining hardware in a continuum. In the DOD acquisition system, those are different colors of money. And it is more than a process foul to use the wrong color of money. Very significant event. So we've said, what do we need to do differently with software development to be able to really capture those best commercial practices? And we knew we weren't smart enough to do this on our own. So we went out to our Defense Innovation Board, our Defense Science Board, where we are incredibly lucky at DOD to have these great Americans that donate their time coming in from industry and giving us all kinds of ideas. We had two big software studies that were published by each of those groups, the DIB and the Defense Science Board, and we use those to go and talk to The Hill about getting a pilot program for a software color of money.

So right now we're about to start a number of pilots with each of the services where we have software money that doesn't have to be bucketed into development production and sustaining. We think this is going to speed up acquisition, and that's all about what the six pathways in the AAF are all about. So we hope to be doing more with commercial industry. We can innovate, but it's getting through that valley of death from one prototype, one concept, to something that no kidding, you're producing and you're fielding.

**Rebeccah Heinrichs:**

Now, is this related? Are all of these changes related to the 5,000 series policy that you updated?

**Ellen Lord:**

Absolutely. There's a total rewrite of the 5,000 series, and we've come up with these six different pathways. So it's the urgent capability acquisition. That's what we do very quickly to be responsive to
the war fighters down range. So we have something called the Joint Rapid Acquisition Cell. I chair meetings every couple of weeks with DOD, everybody down range in either Iraq, Syria, wherever. That's one theater. And then also Afghanistan. And we talk about what do you need that you're not getting? And we have mechanisms to go back through the joint staff and speed up that acquisition. We actually took what we did with our Joint Acquisition Task Force that we stood up to support HHS and FEMA after working through a lot, I mean billions and billions and billions of dollars of assisted acquisition for HHS and FEMA. What we decided we would do is really take all of those learnings, codified it into a playbook that we could apply to any national emergency in the future because most government organizations don't have about $350 billion a year in acquisition like DOD does. So we have the scope, the scale, the manpower to do that.

So we codified all of this into a playbook that we put in our Joint Rapid Acquisition Cell, and we call it, of course we have to have one more acronym because we are DOD. So it's called DA2, Defense Assisted Acquisition. So that lives there. So we have those urgent capability acquisition pathways. We have middle tier of acquisition which allows us to do rapid prototyping and rapid fielding. So the idea is instead of going multiple years to be able to field something, we can get in the field within six months and we get actual systems in war fighters hands. So that's the second pathway.

Then we have the Major Capability Acquisition, which is like our major defense acquisition programs, the typical 5,000. We have a software acquisition pathway that I mentioned before, we have defense business systems, and then we have acquisitions of services. But what we've done is we've created a framework where the military services can use a middle tier acquisition to rapidly prove a number of things out in the field, and then go right into a Milestone C, for instance, in a major program. So this is I think incredibly significant, and it's going to make a difference to be able to do acquisition at the speed of relevance.

Rebeccah Heinrichs:

And that's why I think it's not a boring subject. Somebody like me who's tracking from an international relations perspective, we want to be successful in this competition with China, which means we have to go faster. And right in the beginning, when the Trump administration rolled out National Defense Strategy, some of the questions that members of Congress were asking is, is being a liberal democratic republic going to be an Achilles heel for us to be able to move faster? We might be good at the innovation part, but can we get things through the acquisition process at the speed of relevance, as you say? And I think you've just laid out that we are able to do that. And again, the pandemic proved to us that if we really needed to do something, we can go very fast [crosstalk 00:25:27].

Ellen Lord:

Yeah, I'll give you a great example. The Army with the IVAS program where it's augmented reality glasses, they were able to get a major commercial company to work with them because they were using acquisition practices that let them move fast, do multiple design iterations. They're going to field within about 36 months, which is unbelievable. It's usually eight to 10 years. So we're able to get going here. We have the user define the requirements, and that's something, frankly, that has been one of the challenges in the system. If you're going through a traditional major procurement, we go through the joint staff and the JROC process. Now General Hyten, Vice Chairman Joint Chiefs of Staff has looked at
what we've done in acquisition, and they are trying not to mirror that in requirements, but be very, very complimentary.

So again, we can move quickly, and instead of coming out very specific requirements, KPPs, and all these types of things, instead of saying exactly what to do, it's what is the capability we need so that we can move quickly from that? And because it really is a multi-domain inner operable battle here, it's not as if the Army is here and the Navy's here and the Marine Corps is here and the Air Force is over here, they're all talking together. So when you talk about command and communications and so forth, this has to be interoperable. That's why we're working on things like JADC2 and so forth.

Rebeccah Heinrichs:

That's great. If I can, I want to move into talking about some of our work for our nuclear deterrent, what I consider and what every senior defense official I think considers the backbone of our national defense. And it has to be in tip top shape, especially as we move into great power competition, it still has salience. And Congress established the Joint Defense Department Energy Department Nuclear Weapons Council in 1986, of which you chair. And I would love for you to explain this. You have so many times before, but I think now that we're going to be in this, we're always in a budget constrained environment, but now we're in a pandemic, post-pandemic world, hopefully post-pandemic world at some point, and we're even in a more strict, I think, resource constrained environment. But can you explain to us why if you delay one component or element, especially some of the major components of the nuclear deterrent, why you can't do that without negatively impacting the entire nuclear deterrent as a whole?

Ellen Lord:

Absolutely. So the nuclear deterrent, the nuclear triad is the most important part of our national defense. And it's a torrent not only for nuclear attack, but for conventional attack as well. And most of our systems are about 60 years old. There's a triad for a reason. There are three key parts to it. So you have the bombers, who are the most flexible, that can drop gravity bombs or air to air missiles, you have the ballistic missiles on submarines, which are the most stealthy, so they're the most survivable, and then you have our intercontinental ballistic missiles, which are the most responsive. Those silos in the ground spread around and because they are spread in different areas.

So you have all these different things that work together that create different dilemmas for our adversaries. So we talk about bombers being flexible. You can deploy those, but then you can turn them around. Then you have that threat the bombers. The ICBMs, they are ready to launch whenever. I was down in a missile silo in Minot in the beautiful snow in October, and a very incredibly impressive facility it is. And then you have the subs where nobody actually knows exactly where they are. All of these things work in conjunction with one another and they create a strategic dilemma and they give the military operational flexibility.

What we never want to do is have a situation where we have programmatic risk where we cannot execute and deliver both in terms of readiness and modernization, where we translate that to operational risk. So right now, unfortunately, because we have not invested in any of these legs of the triad, we have zero margin in terms of time. And, oh, by the way, it's not just DOD with those systems, we are very tightly partnered with the Department of Energy with NNSA there, for the nuclear materials. And there are a whole variety of nuclear materials we are using here that takes a very specialized
workforce, not only in terms of training, but clearances, and that's something you do not reestablish overnight.

So we have to continue to invest so that we have the readiness to fight tonight, but also to make sure that we have facilities where we don't have to put wire mesh up in uranium processing facilities so that concrete doesn't fall down from the overhead and hit the workers or damage the equipment. We need to make sure that we keep moving forward. We do not have any margin here in terms of time whatsoever.

Rebeccah Heinrichs:

And that includes... I mean, obviously you mentioned all three legs of the triad, but the Air Force just picked a contractor for GBSD which replaced the Minuteman III. And there's some, again, some just rumors, some top talking and thinking. People are thinking out loud about things that might be worth saving some money on, but further delaying GBSD and doing another round of trying to recapitalize Minuteman III. That would be something that you would say would translate into operational risk.

Ellen Lord:

Absolutely, because we look at service life extension of Minuteman III all the time, and we are extending all of these systems beyond what their useful life should be, and it's a whole variety of things. You have micro-electronics that begin to decay. You have all kinds of things going on. So beginning right now, if we are on schedule, in 2029, we are going to start swapping out each of those 440 silos, and it's rebuilding the plane while you're flying here, because we will have a mix of the two systems in there. But again non-trivial in terms of the scope and scale of what has to be done.

Rebeccah Heinrichs:

Great. And if I can, in terms of just the organizational structure of the Nuclear Weapons Council, in September, you testified before this task about how changing the structure could present inefficiencies where already it's working very efficiently. And you also mentioned, I think it was the chairman, Inhofe, that there was a broad schedule for a plan to update budget guidance that you plan to work through it through the end of the year. Is there anything you wanted to add to that or speak to that about just how efficiently the council is working and [crosstalk 00:33:36]?

Ellen Lord:

Well, I'll tell you, the Nuclear Weapons Council is a high performance council. We tackle critical issues, not only domestically, but with our partners and allies. We work very closely with the Brits, for instance, on capability for their submarines and for their nuclear material. We have two meetings next week, actually, of the Nuclear Weapons Council. We usually meet at least once a month. But for the individuals at the table, we have to be aware of the nuances of these programs, not only from a technology point of view, but a program execution point of view, and look at the interrelated dependencies between DOD and NNSA because we can have a weapon carrying system, but if we don't have the warhead, there's nothing useful about that. And right now we have leadership around the table that can make decisions and direct the activities to take place, but also have a good understanding of what that body of work is.
And then there’s an organization right below the Nuclear Weapons Council that does 99% of the work to get ready for it. If we, for instance, say some advocated elevated that council to the SecDef and the Secretary of Energy, I just have very little confidence that just even from a scheduling point of view, those meetings could happen with their attendance on a monthly basis. And then you would add a whole nother layer of getting people spun up for something that’s only a small part of what they do. We have access obviously to the Secretary of Energy and the Secretary of Defense. When we need to have decisions made, they are kept apprised. I think we’re at the right level now, and we have a pretty good battle rhythm. And as we are in the middle of this entire recapitalization both on the DOD and the NNSA side of the nuclear triad, I don’t think we have time to reorganize from a bureaucratic point of view.

**Rebeccah Heinrichs:**

Not whenever you've got a good stride. I think breaking that stride would not be a prudent decision at this point as well. If I could, we’re talking about the nuclear deterrent, and in the Trump administration's Nuclear Posture Review, they also talked about how we can strengthen deterrence through missile defense, and that missile defense and also conventional offensive weapons all play complimentary roles in a modern deterrent, strategic deterrent. Could you speak a little bit about the... It’s always an issue that pops up, the transition and the transfer of missile defense programs into the services and maybe some hurdles and ensuring that MDA can focus on research and development just kind of shepherding these programs through an entire life cycle where they’re procured by the services?

**Ellen Lord:**

Yeah, this has been a challenge. And MDA has undergone a few organizational restructures in terms of reporting. At this point, they are back with ANS as the milestone decision authority. And I think that works out well because we have the technological understanding yet the programmatic focus and the execution focus, and we have the ability to bring in the services early on the issues. I think if that is all over on the research and engineering side, then you can tend to get focused on all of the technology. And having spent 11 years at a technology development center earlier in my career in industry, I totally understand how you get very, very involved in the technology. What we need is a robust conversation about what our war fighting needs are, what the timeframe is, what the art of the possible is, and how, again, we execute so that we minimize program risk to absolutely have zero operational risk and give the flexibility there.

So what I have been focused on and what we are trying to do is use a very data-driven approach on these programs and report where we are on costs schedule, functionality and cybersecurity, and report that out on a regular basis to the services as well as the rest of the staff. And I think if we do that on a routine basis, then we all have an understanding of exactly where we stand. We have been rather federated in our data within the Department of Defense, and one of the things that’s happened over the last few years is we have taken many different databases, and we have funneled them into ADVANA, it’s the system we're using right now, so that we have one site picture, if you will, directly fed by the authoritative databases so we can understand where we are on these programs.

And I think when you have better understanding, when we get to the programming and budgeting time of the year, the services can better understand where we are in terms of maturity on these programs and how they want to go ahead and palm for them. And it's becoming more complicated, as you alluded
to, because we need a layered defense. And with the advent of hypersonics, which is giving us a totally new capability from an offensive point of view, we also have to have counter hypersonic defensive capability. You were talking about the intent before. We're partnered with the Australians with hypersonics in a very large way, and that's a wonderful partnership because we don't have ranges large enough for hypersonics to do all the testing we want to do, whereas the Australians have Woomera and we're working together to do that. So that's a great partnership.

Rebeccah Heinrichs:

Great. Thank you. And sticking with missile defense on, I think we've got time for this just last question, because the Missile Defense Agency, as you know, but for our viewers too, it was created to be quick and agile and to respond to the threat. And missile defense continues to play a larger more prominent role, both for homeland, and then also in the regional context and in great power competition, playing a deterrent role. We're trying to complicate the adversary's calculations, and missile defense certainly helps to do that. Are you confident... What is your sense? Do you still think that the Missile Defense Agency is still threat driven? That the threat is really driving the technology you alluded to getting infatuated with technology, technology versus actually being threat driven. Do you think that the right balance is there or that we're getting at that challenge, if that is a challenge?

Ellen Lord:

I think we're getting at that challenge through a very robust programming and budgeting process because Missile Defense Agency serves up what they think they should have for budgets, but there is a full DOD leadership group that meets and goes over what those budget requests are, what the programs are. And a few of us sit on regular program reviews. So MDA is not looked at as a silo, if you will, it's looked at in the greater context of what we're doing in terms of capability, and then what we're doing in terms of war fighting. There's been a very active effort over the last couple of years between the military and civilian side at DOD looking at the National Defense Strategy, looking at near peer competition, looking at different theaters, looking at the homeland and saying, what do we need offensively? What do we need defensively? What do we want to do in terms of modeling and simulation and war gaming? There's a lot of that that goes on.

Then we look at dynamic force employment. Where are we putting things? Where are we creating confusion by moving things around, having carriers pop up, having subs pop up, having squadrons deploy and so forth? So it's really not as much up to MDA as it is up to the leadership of the building here to really look at the threat, look at the intelligence we have, look at what we have both for hardware and software and human capital, and how do we model this to understand what the most advantageous mix of that hardware and software is? So Missile Defense Agency plays in with a lot of different areas.

Rebeccah Heinrichs:

Thank you so much for that. And they've had some recent big milestones met.

Ellen Lord:

Absolutely.
Rebeccah Heinrichs:

They just recently tested that SM32A against an ICBM threat target, which is a great achievement. And I know that the department is moving forward with the next generation interceptor concept for homeland missile defense. And then we also have, of course, the GMD system that is protecting the US homeland today from the threats from North Korea. And so I appreciate you're making that distinction that we were looking at the National Defense Strategy and as we focus on major power competition or great part competition, we still have these rogue state actors that we need to contend with and make sure that the country is thoroughly protected.

Ellen Lord:

Absolutely. And really just congratulations to Admiral Hill and his team at MDA for that great test. It was exciting.

Rebeccah Heinrichs:

Great. Well, that is a really solid bookend, I think, to a rich conversation with Under Secretary Ellen Lord. So those watching at home, thank you for tuning in. And we hope to have a transcript up on the site soon. So please do turn back in to look at that transcript. And Under Secretary Lord, thank you so much for your service, and thank you especially for taking the time today to speak with us. We appreciate it very much. Thank you.

Ellen Lord:

Thank you, Rebeccah. Bye now.

Rebeccah Heinrichs:

Bye bye.