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Fireside Chat with Under Secretary of Defense for Acquisition and Sustainment Ellen Lord

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Roger Zakheim: Secretary Lord from the Department of Defense. Welcome to the podcast. We're really excited to have you here on Reaganism.

Ellen Lord: Great, thank you so much Roger. Great to be talking to you and always a fan of the Ronald Reagan Institute.

Roger Zakheim: Well, that's great to hear and we do appreciate your participation in the Reagan National Defense Forum and we're excited to have this one-on-one conversation. Just for our viewers and listeners- Ellen Lord is a name now known to be the Under Secretary for Acquisitions and Sustainment in the Department Defense. How did you get to this role? What's your background in the world of the military and Aerospace and defense industry?

Ellen Lord: All right, so I began life as a chemist actually a little bit of a nerd in the lab and worked in the automotive industry for about 11 years for a multi-industry corporation that gave me the opportunity to move segments into aerospace and defense where I was for about 22 years. So I worked my way through general management and then to run a segment of the corporation and had a lot of interaction with DC, with DOD, back and forth, and one day, was incredibly surprised to get a phone call asking me to be a political and I had no idea what that meant. I said, thank you very much. That's flattering. But no, thank you. I'd love to be on a board and reflected on that for about a week and thought about what it meant and decided that it was time to give back. So, I entered the world of DOD via a lovely hearing on the hill, had no idea what that was all about. So here I am so very very pleased to be here.

Roger Zakheim: And of course, you were a CEO of an important defense company coming into the, you know, hearing and the Pentagon. How important is it to you on a day-to-day basis having that industry background to carry out your work as the Under Secretary for Acquisition Sustainment?

Ellen Lord: It's very important from my point of view because I think I bring a different perspective than those who have been in government their entire careers. They obviously bring a very very incredibly important perspective as well. But I have experience with what it's like trying to do business with the government and perhaps understand some of the challenges particularly with communications and understanding what is going on. So, I really try to be the voice of industry inside the government and also try to explain how we do the things we do and why we do them.

Roger Zakheim: Well, you know, let's jump to current events and your role has really been pivotal for the Department of Defense in navigating the COVID-19 crisis. Explain to everybody why the Undersecretary for Acquisition and Sustainment really finds herself in this kind of the ground zero for the Department of Defense and its response to COVID-19.

Ellen Lord: Well, frankly, I look at the defense industrial base as the nexus of economic security and national security and the defense industrial base is one of my primary responsibilities. So I thought it was really incumbent on my team to get out and start communicating very very quickly and I'm incredibly fortunate to have very very talented individuals with a variety of backgrounds who rallied and we decided that we would work through our industrial organizations that we typically use to sort of amplify and echo what we have to say and we use them as convening forums to be able to start transmitting to industry what was going on and frankly more importantly to listen to what was happening on their side because our job number one was to get everybody back to work. Again, to maintain readiness but also for economic security for the country.

Roger Zakheim: So economic security and national security when your industrial base, those are hand in hand and it's over what 10,000 companies that you're keeping an eye on and give us the latest numbers.

Ellen Lord: Well, I'll tell you what we do is we track two different groups of companies. One through the defense contract management agency, which tend to be a little bit larger companies a little bit over 10,000 there and then through the Defense Logistics Agency for more of the vendors -we track about 11,000. So, I actually have a few numbers here because what we did was we convene three times a week meetings with industry associations and then I started holding an every morning tag up meeting at 7 a.m. with our extended team and I got numbers every day so from DCMA we started tracking closures as well as DLA so we've had 279 closures of companies that DCMA tracks and 273 of those have reopened which I am very very pleased about and I'd like to think that we helped in that a bit. From DLA, they track a little over 11,000. They had 692 two closures cumulatively and 664 have reopened. Now what we knew was that the landscape was pretty complex initially because local and state governments were putting out shelter in place orders and so forth. So, one of the first things I did was to follow very quickly behind the Department of Homeland Security and put out a memo stating that the defense industrial base was critical infrastructure and that they were authorized to work. And in fact that particular document was actually used by employees as they were being pulled over by local law enforcement telling them they had to go back home and shelter in place but along with that we had to make sure everyone was safe. So, we were really channeling a lot of the CDC guidelines on social distancing and so forth.

Roger Zakheim: That's pretty impressive numbers. You know we're looking at what some are characterizing of the second wave certainly numbers of infections are going up. Do you see that impacting these companies, the over 20,000 if you combine the DCMA numbers and DLA numbers or do you feel, are you getting worried that enough process is in place that you know the PPE, the mask, what have you, that they can continue operating in this environment?

Ellen Lord: I think there will continue to be challenges. However, everyone is much much better educated now and are proactively taking measures. I've been really really impressed with the CEOs of small, mid, large companies and what they are doing. We're trying to help them. So for instance, PPE for a while was a little bit difficult to obtain. It's gotten much easier. But again to sort of have the easy button to hit, we have opened up what we call Fed Mall, which is an electronic marketplace at the Defense Logistics Agency to small companies, as well as state and local governments so they can come in and buy PPE in our Electronic Marketplace. We continue to reach out as needed early on - we had some governor's where we were concerned that certain critical facilities in their states were closed. They were very helpful. So now they know how to reach out to us as well. We were even reaching out frankly to our Embassy in Mexico to open up facilities there as well.

Roger Zakheim: So once you have all the safety requirements met and the things that make people confident comfortable they can work, you know the other piece of this which I think is particularly difficult for the defense industrial base is people are teleworking, right, and if they don't have to be in the facility, we're all working from home whether it's Microsoft teams, or Zoom, or something else. How is the Department and the defense industrial base responded to that? If you're doing classified work, obviously, you can't do that from home. But for those who can carry out the work, I mean can the department support all the Broadband demand? What do you think?

Ellen Lord: Yeah. So, the demand signal was pretty intense obviously initially and bandwidth was somewhat limited on a number of fronts. I will tell you here at DOD that Dana Deasy, the CIO, and his team really stepped up to outfit everyone. They had incredible processes with people driving up in the Pentagon parking lot and handing them all kinds of equipment and then they expanded our capability. So, from an unclassified point of view, things got going pretty quickly and everyone started becoming very proficient in how to telework and how to have, you know, a hundred people on a Zoom call or Microsoft teams begin to really connect. The classified part was a little trickier, but we actually have a lot of support capability out with senior people as well. And then we've been rotating people into SCIFs to keep things going and I will tell you readiness has not dropped it all during this time. So really a shout out to everyone's huge huge efforts. I think on the industrial base side exactly the same thing - everyone adjusted and learned, and I'll tell you I have calls with CEOs. We've had Secretary Esper on three or four different calls now and you know people are in their dining rooms, and living rooms, and home offices, and we all just kind of go with the flow.

Roger Zakheim: Yeah you watch CNBC and you basically get inside to every CEOs living room or home office. Probably not the same for the Secretary of Defense or the Under Secretary of Acquisition, you know. Just a couple more questions on the impact industrial base- earlier in the crisis you discussed a three months slow down. How would you characterize the slow down today in terms of the ability for the industrial base to produce? Do you know the defense production is required?

Ellen Lord: We have made amazing inroads and coming back up to close to the prior productivity levels. Two segments particularly impacted that still are showing a bit more of an impact are shipbuilding and aircraft production. And on the aircraft side of things obviously, we have a lot of suppliers on prime contractors who are not pure play defense contractors …

Roger Zakheim: Pure play mean people who have you know, commercial and other dual use; exactly, businesses

Ellen Lord: exactly. So we have some aircraft suppliers who are defense only or pure play. Then we have other aircraft suppliers who are dual use, so they are both supporting the commercial industry as well as defense. Those dual-use providers have been particularly hard hit and sometimes that's helpful to us because they've been able to shift critical resources over to our programs. We do have to make sure that they are right sizing because obviously we can't absorb all the overhead costs that would go with a full deal-use operation, so a lot of work going on, tough decisions being made, but we are pushing through it.

Roger Zakheim: You know, you mentioned dual-use companies. A lot of companies that aren't pure play defense companies, you know, they're doing business internationally, and their supply chains are international as well. You know, we've seen this throughout the COVID crisis almost. COVID has done more to teach America about the vulnerability of our supply chain than any other matter. How do you see reliance on International Supply chains and particularly China impacting defense industrial base through this crisis.

Ellen Lord: This, in a way, has been the silver lining for us because issues that we identified about two years ago in our 13-806 Report on the defense industrial base.

Roger Zakheim: This is the Executive Order right?

Ellen Lord: Exactly. It's Executive Order 13-806 where we were tasked by the President to look at the defense industrial base, and we did that. One of the most useful things that came out of that was we segmented the base. We all have the same lexicon, then we could identify fragilities and we identified a lot of single source offshore supply chain critical items. So we have used that as a platform over the last couple of years to try to make sure that we strengthen that industrial base. COVID-19 brought all of that home and it has allowed us in sort of a twisted way, to accelerate those efforts and not only for the rare earth elements or the microelectronics that we all know so well, but also for the advanced pharmaceutical ingredients that go into are drugs that obviously are important for the nation and also very important for

DOD. So, we've been able to really get that message out and frankly get a little bit more support from Congress and the administration to strengthen our domestic industrial base.

Roger Zakheim: So you mentioned microelectronics. You also mentioned pharmaceuticals. Yeah. I was one of the eye-popping statistics that I think the whole country learned during COVID is that I think when it comes to generic drugs, you know, the ingredients over 80-plus percent come from China. How is the Pentagon getting ahead of the curve? And is that particular data point - generics and reliance on China - something that impacts the force or is that a bigger problem for the civilian population?

Ellen Lord: It impacts both the force and the larger civilian population and we, because of that, have been able to get a whole of government response. So, from a DOD point of view, we are very fortunate to have the Defense Production Act, particularly Title Three, which allows us to take appropriated funds and make investments in the industrial base to increase both capacity and throughput, but it's also allowed us to shine a light on the fact that it's not only having the infrastructure to produce all of these items, but having a regulatory environment that enables us to move through the safety and certification processes at a reasonable speed. That was as part of why so many things moved offshore. We became onerous in terms of our regulations, and now we're coming back to I think really trying to adjudicate that and coming up with a reasonable set of standards

Roger Zakheim: Great. So you mentioned the Defense Production Act. It got a lot of play in the press earlier in the crisis when there was a shortage of masks and ventilators. The Defense Production Act seemed to be the vehicle the President of the United States would use to make sure that these companies are producing, to help them produce, and in case they're not, to require them to produce, and the like. How do you see the DPA being used for the rest of this crisis and then in the future? Is the Defense Production Act a tool that now, perhaps some thought was secondary, now is some kind of primary in the mind of an Under Secretary for Acquisition or Department Defense or you know, the President of the United States going forward?

Ellen Lord: It is one very very important tool in our tool kit I would say. We have used it both for medical resources - whether that be N95 masks or whether it be swabs for testing. We have also used it for our own defense industrial base. So it's a very very important tool but it's only one. We worked for about five weeks with our legal staffs to find a way to reach in to HHS's, Health and Human Services, 17 billion dollars that they received through the Cares Act to be able to transfer money to DOD to enable us to do contracting on their behalf as well as to do investment in industrial capacity and throughput. So we have taken the billion dollars that we received for DPA Title 3 funding through the Cares Act and we've used a portion of that for medical resources and then we've used another portion of that for our defense industrial base.

Roger Zakheim: So you mentioned before semiconductors as a key vulnerability that's been known and in defense circles for some time. It was a key area of focus and the previous administration this Administration with enough security strategy. To what extent is the Defense Production Act a vehicle and authority you would use to help in the case, let's say Intel's looking at building a fab in Arizona. Also recently we had the announcement with Taiwan Semiconductor Company coming to Arizona as well. There needs to be a variety of incentives for a company to do that. It's important you would think for now security to have a domestic kind of fabrication capacity for semiconductors, microelectronics, but is DPA a part of that or is that authority too small not funded enough to really impact that kind of problem that you have with micro-electronics?

Ellen Lord: So DPA may be part of the solution. We have basically obligated about two-thirds of the money, the billion dollars we got through the Cares Act, and we have plans to get on contract the balance of that. We are hopeful there will be a tranche four coming along and a follow-on to the Cares Act. We have at OMB right now, a request for more DPA Title 3 money, but the microelectronics challenge is even larger than that, and in fact, about five months ago, my team started a study to really characterize the microelectronics industrial base because it's a little bit difficult to understand from foundries to packaging to logic to memory. Who are the players? Who are domestic? Who are offshore? And we have just finished a piece of work internally that we are now beginning to socialize in the interagency throughout the government saying we have a challenge in that the majority of the intellectual property associated with microelectronics, is generated in the US, but the majority of the fabrication and packaging is done offshore, and that introduces risk to our supply chains and takes away from our Economic Security. So we are thinking about a whole number of private-public partnerships to bring more of that back here. One of the creative ways that we are looking at using DPA Title 3 is following up on an executive order that was signed out just about a month ago... a little over a month ago by the President that basically gives the Development Finance Corporation authority to use DPA Title 3 as collateral money to grant loans to reshore critical capability to the US. So we again are working through all the legalities of that but I'm partnering very tightly with Adam Boehler over at DFC and we are looking at what are those critical capabilities that we should reshore both in the medical resources side of things as well as the industrial base writ large but where defense really has a critical need that then could help industry in general and microelectronics is one of those.

Roger Zakheim: That's fascinating and reshoring, you know, it seems to be the priority, but let's go back to basics on that. You mentioned that in the case of micro-electronics, but I think is true for other sectors well, the United States holds the IP but manufacturing for a variety of reasons resides offshore. Why is it that that is a danger? If we can keep the IP, what's the vulnerability of it being offshore? Is it somehow that eventually the IP migrates? Or even if you owned them IP, you know the manufacturing is at risk for certain items if it is not within the United States?

Ellen Lord: There are multiple issues there. One is security of supply. We saw when COVID hit, all the flights stopped and we actually had what was called an air bridge. A group from the Pentagon went over to HHS and FEMA and were still supporting them in sort of an emergency short-term way and what do we do? We set up flights to bring back all kinds of medical equipment and PPE that was produced offshore that we owned, but we couldn't get back here. And this is all of the medical distributors throughout the country. So one is not being able to get the supply, that's one risk. Another, more nefarious kind of issue we have, is that we could have implants in those electronics. So all of a sudden as we've seen in DJI drones, for instance, we have US systems calling home to China. We also have the theft of intellectual property. That is very well documented where what we think we license for a specific use is all of a sudden repurposed into capability organic to China. Another risk is the fact that although we have the intellectual property surrounding design quite often just as important is the manufacturing know-how and you accumulate that know-how over time through all the cycles of practicing and producing.

Roger Zakheim: I mean we saw that in your business. You did a lot of international prior to coming to the Pentagon. I imagine that something you always kept an eye on when you did International [unintelligible], right?

Ellen Lord: Absolutely, absolutely, and finally, we lose those good jobs that we really need here in the US, so all kinds of risks associated with that that we're concerned about and frankly, it's not only what is done offshore. We are growing more and more concerned about what I call adversarial capital coming in and taking advantage of these uncertain times when their liquidity issues with critical technological kinds of systems. So, you have small companies, high-tech companies that all of a sudden have a liquidity crisis. They cannot get a line of credit. They cannot get a loan. So all of a sudden adversarial capital comes in and acquires them and then we lose our critical intellectual property. So we are very very vigilant about that and trying to defend against that and in fact proactively looking at sources of trusted capital for those very same companies.

Roger Zakheim: I want to get back to the adversarial capital versus trusted capital in a minute, but you did mention China a couple times and in the response. There's been a lot of talk about decoupling the United States economically from China. The context is competition. You've spoken about certainly for the defense industrial base and perhaps more broadly our national security innovation base. That would be the primary area I would think decoupling would need to be the area of focus. Those types of technologies and capabilities that are critical to National Security; we can't be reliant on a competitor, in this case in this case China. Do you find that you're getting support? Not just from the defense industrial base, which would be unable, pure play defense, to do business with China, but talk to us about the feedback you're getting now, since you really are the key interlocutor for the Department of Defense with Chief Executive Officers, with CEOs from those companies that perhaps view themselves as commercial, but still are critical to Department of Defense. What is their attitude and thinking with respect to China and the Department of Defense coming in and saying ‘hey we need you to bring that back to the United States, we can't have you selling these key capabilities, or China you can’t do this joint venture’. Talk to us about the commercial environment and the responsiveness to the Department of Defense concerns?

Ellen Lord: So prior to Covid most CEOs were very very savvy about the challenges of doing business in China in terms of not being able to really hold on to any trade secrets or intellectual property and they very much were trying to only have more commercial or less cutting edge technology in China. That being said there wasn't really a compelling reason to reshore some of that capability or to do investments domestically. One of the, I think, beneficial outcomes of COVID is that the general public now understands the threat that China poses, and not suggesting that we become total isolationists, however, critical technology should not reside in China, and we cannot be a hundred percent dependent on China for things like pharmaceuticals. So I have seen a number of CEOs reach out and have conversations with me about the fact that they're more willing now to talk about a consortium going together for trusted microelectronics for instance. They are also being very very generous with their time explaining to a variety of government officials how their business works, what they need, what they don't need, and I will say right now we are in the midst of really some dynamic discussions that I think are very very exciting because we are on the cusp of needing some kind of national policy to make sure we are supportive on the government side of bringing these critical capabilities back and again, that ranges all the way from capital that make the investments, to local and state and federal tax incentives, to regulatory easing of burdens. So, we really have to look at the entire scope of that kind of supply chain, the whole thread, and understand what makes sense. And frankly, as DOD, we have a compelling, urgent and semi-large, you know a large need here and we can be the leaders and I think have a lot of fast followers.

Roger Zakheim: Yeah, as you know, the Reagan Institute published a report by our task force co-chaired by former Senator Jim Talent and former Deputy Secretary Bob Work where they hit on this exact issue set, where in these key nodes, government really needs to organize in a fashion that can bring in the commercial sector because so much of the technologies, Ellen, that you're describing really are resident outside the Department of Defense and live in markets that are far larger than the defense industrial base. Wasn't always the case in the 20th century, but it is the case today. 5G is one of those that seems to be critical. National security relies on the semiconductors and microelectronics that you've described, but it's kind of interesting as we think about China. On the one hand, we want to bring the capability, the IP, and the manufacturing back to the United States, but on the other hand, we want to sell our technology into those very markets, right? We need, US businesses need, to sell into China. How do we weigh and balance that? If we've closed off the China market entirely, saying the 5G sector then- those companies, US companies really have difficulty meeting their bottom line succeeding.

Ellen Lord: You've nailed the issue right there and that's again part of an ongoing discussion amongst Treasury, Commerce, State, and DOD. And so where are the red lines, if you will, in terms of what can be exported and imported and we're sorting our way through that. As you well know, we've had legislation the last couple years banning certain companies like Huawei, ZTE, and so forth from supplying first DOD and then the government. We have to figure it out. I think eventually what we need and what we are trying to do within DOD is come up with a way that we can get microelectronics with zero trust. So, in other words we can understand whether or not the original design had the integrity is still there, whether they are counterfeit parts, whether they have been manipulated in any way. We still are a ways away from that. Although we have some pretty exciting work going on. So until we get to that point, we need the trusted sources, but I think, and we've got to figure out what we can sell what we can import and what we can't and that's a whole of government effort. However, that's not a long-term solution. We have to get to zero trust just like getting into networks and so forth and it's not going to be a digital event from 0 to 1. We're going to have to crawl, walk, run. And that's frankly where we can learn from commercial industry.

Roger Zakheim: Absolutely. I mean, they need to have, you know, technology they can rely on, that they can put into different markets and at the same time, not lose their IP. Not lose their advantages of business. So it is similar on the other hand the tools our government uses today our kind of 20th century tools in the form of export controls and the like, really kind of difficult to apply to the 21st century technology, you know, it's putting an export control, you know, on a munition... doing this mission is one thing but putting on a piece of technology that billions of people around the world rely on these every day is more difficult.

Ellen Lord: Right, right, right. Now that brings up a critical point here. I've made a lot of comments about industry and what's going on. We in the government cannot let a good crisis go unused here and we need to really build on how we've learned to do things quickly with less red tape if you will during this crisis and not backslide and also use this, I think, as a wake-up call to do things a little bit differently as you're suggesting. We are a bit caught up in the past. So that's sort of my personal challenge. How do you not lose the sort of energy to keep pushing that every hour, every day, every week, every month?

Roger Zakheim: Yeah that makes a lot of sense. I want to dive in a little bit into something you reference a couple of times already, which is this trusted capital versus adversarial capital. What I think you're getting at a little bit, but I'll ask you to take a minute to unpack it is as we've looked at competition in China in particular. Not only have they stolen intellectual property, exploited joint ventures, and taking manufacturing in the United States from the United States to China, but they've also sought to take their capital, make investments at the Venture state, and then to own and take US know-how and then migrate it into China, which of course is autocratic and you have this fusion between the civ-mill. How does adversarial capital challenge us and what does trusted Capital seek to do to address that challenge?

Ellen Lord: So right now we use CFIUS countering foreign investment in the US that authority to be able as the government to intervene in transactions and even unwind transactions where we believe critical technology, critical manufacturing capability has been procured by adversaries of the US. That's necessary. It's difficult. It's time-consuming, but it's not sufficient. So what we believe is we need to get on the other side of this not only play defense but play offense. So we'd like to think that capital markets are very very efficient and that capital finds companies in need of investment and then there's a virtuous cycle where everything goes along . For the largest part that is true. However, we wouldn't have this adversarial Capital coming in and investing in companies if that was a totally totally efficient market. So what we have been doing really prototyping for the last year is coming up with a rule set by which we can look at companies and understand the beneficial ownership, who actually owns the company. Also look at capital providers, whether it's a venture capitalist, or even a family fund to understand the true source of their funds, go through this rule set, basically proclaim them clean on either side, and then put them into an electronic marketplace that's kind of like a dating service where one can look at the other. And then we come in as DOD branding, saying ‘here are segments of the marketplace that we believe are important for our future and hey, by the way, here's a company that's gotten a small business innovative research loan and here's a company that has this and that’ so that they're somewhat branded by DOD. We have had some live events and some virtual events, but we are on the cusp of actually putting this into an electronic marketplace because we know that there are sources of capital out there looking for investments that not only have a good return, but contribute to our national security. I think there's a huge unmet need for that. It's not simple to do. That's why we've been talking about it for a year and very quietly working in the background. But I have great expectations that in a few months you're going to see this roll out in a very very significant way.

Roger Zakheim: That's fascinating. I think it's if I understand you it's going to have a twin benefits and on the one hand, it would counter the adversarial capital which is objective number one, and perhaps why you focused on this year, but second it would give an opportunity for new and different types of capital venture capital, for example, to start looking at the defence sector the needs the Department of Defense where in the past perhaps they haven't focused on it because it was too much of a risk, perhaps they didn't know if the Department of Defense would really come through on funding the areas where you know some startups and hey, there's a need for this environment offense if it gets the thumbs up from the Department of Defense. There's a little more confidence that the investment would see a return

Ellen Lord: Absolutely and hopefully these could be pathfinders so that you do something for the Department of Defense and then there's other applications with just general security and then perhaps just general commercial applications as well. So again, we're looking at a virtuous cycle here so that we can be the catalyst to get things started.

Roger Zakheim: So a virtuous cycle, that means that ‘hey, we're not going to ask you to invest in something and then we're going to classify it all and restrict you to a classified DOD Market’ - did I understand you correctly there?

Ellen Lord: Correct, correct? And in fact, you know, that's something that frankly during my time here, I feel that in the sort of super-classified, the SAT world, If you will. Special access programs that we have held those too tightly and they're only a few in the defense industrial base. Typically larger companies that really benefit from that. So we have a concerted effort, nothing to do with COVID here, but trying to reach out a little bit more broadly because there are many many mid-tier companies out there that have the wherewithal to be a very significant supplier to DOD, but they just can't get an invitation into the club. So we're trying to get them in.

Roger Zakheim: A few more areas of focus and then we'll have to wrap up and let you get back to the demands of the Pentagon, but on this point, you know, there hasn't really been many new entrants into the defense industrial base. Certainly, you know one that would have a market cap. Let's say of a billion dollars more you can look at Palantir, SpaceX, a couple examples, but there has been an increase of late VC money behind companies that are seeking to support national defense, and national security perhaps not limited exclusively, not necessarily pure play, although there are some- give me a little bit of your perspective as to the change in the time. You've been in office more tech companies entering this space, companies that are trying to recruit out of let's say traditional Silicon Valley kind of areas. There's obviously ,we have , Defense Innovation Unit, which of course you oversee. Tell me about that evolution and to extend that’s really been impacting the defense industrial base and some of the challenges you see going forward to increase their participation.

Ellen Lord: I think that there are lots of tentacles out there reaching to what I call non-traditional is each of the services, whether it be futures command, or whether it be AFWERX, or whether it be SOCOM SOFWERX. There are a lot of good efforts reaching out. We haven't done anything at scale yet and one of the things we're trying to do with our trusted capital is to leverage all of those very innovative groups. Also Defense Digital Services. Brett Goldstein does a great job with them now and kind of leverage all of that for the greater good. We found, as I mentioned earlier, that just getting into DOD is a bit of a conundrum if you don't know how to, so we actually earlier this year came up with what we call a ‘welcome mat’ to DOD, which is basically a place mat with a whole bunch. It's electronic but we have printouts of it as well, of hyperlinks for where you go in DOD to get certain information or get your company registered, all those kinds of things. I think the more we communicate that the better and I go back again to the industrial associations. You know during this whole COVID crisis one of again, the silver linings, is that for three times a week? Week for a long time now a little bit less we've had telecoms, we've had webinars. So we have reached out regularly to about 15 industrial associations and some that we never dealt with before to push all this information and pull them in as well. So I hope we can keep that going. I'm hoping as well that the trusted Capital will give away for some of these companies to come in, but it really all comes down to communications and I'm always hoping that industry thinks of our industrial policy team underneath A&S as sort of the help desk for DOD and that they'll come in.

Roger Zakheim: So one last question on this category and we'll jump to a brief comment on allies and end on budgets. But you mentioned kind of need to do it at scale. One metric for whether or not you truly realizing these new technologies, bringing a new entrance at scale would be programs of record. To the extent programs of record bring in and are awarded to those companies. Let's just say that aren’t quote unquote the traditionals or they're done differently, which is maybe one in the same, where it's not a five to seven or plus your window, but actually you're doing turning things out more at a commercial pace. Do you see, let's focus on the program of record for example, a change in the way programs of record are awarded and organized in the future and light of software, being far more of a focus and relevant than let's just say it happened in the past.

Ellen Lord: Absolutely. One of the largest policy efforts we've had in A&S over. The last few years is totally rewriting the 5000 series, all the policy around acquisition, and what we've evolved to is what I call an adaptive acquisition framework. So there are multiple pathways. One of the key new pathways is a software path. Because frankly, most of our significant systems are hardware defined but software enabled and you can do many many turns on that software. So we were very very fortunate to work with the Defense Innovation Board, Eric Schmidt, and the whole team to help us on a software acquisition and practices study that we published. We've just finished the first year's implementation. In fact on my desk right now I have that report that's to go to Congress that I have to look at and we are working with the Hill on some pilot projects where we have what we call a software color of money. So it's not the one-year two-year money because you don't do software that way and if we're going to do agile and devops I can talk about this all day. You just need to do it differently. So I'm excited. We have a different way to do software. Secondly, the other thing I'll point out in the adaptive acquisition framework is we have taken an authority that we were given about three or four years ago, called middle-tier acquisition, so it's not a rapid urgent need and it's not a big 5,000 project. It's somewhere in the middle. You don't have to go through the joint staff for the requirements process. You can just get going and prototype or produce something, get it in the field within six months. So you get that experiential learning. That is changing how we're getting into programs of record because we are coming in with much much more mature technology and we can transfer in at a milestone B or C. So I'm excited. I think there's much much more capability to acquire differently to get to programs of record eventually, but there's a lot we can do without a program of record very significant money

Roger Zakheim: Software color of money, very exciting. The Congressional staff will have a field day with that with that color of money. That's it. Alright, let's wrap up here Under Secretary Lord, hitting on two subjects and then we'll let you get back to your duties. The first is we talked a lot about reshoring the need, how we deal with kind of critical requirements. The defense industrial base and fundamentally has to be CONUS, you know within with the United States, but obviously between competitors and the United States our comparative advantage is our allies. What's happening on the front with allies, the extent that we can bring them in as trusted partners to deal with the innovation and other items for the supply chain that are critical to national defense that kind of with those vulnerabilities have been exposed during COVID.

Ellen Lord: Absolutely. We obviously have as our second line of effort in our national defense strategy, you know supporting and growing alliances and partnerships. So the US has differentiated from the rest of the world when we go to war we do not go alone and our allies and partners are critical. I actually have an international cooperation group that has responsibility for over 30 bilateral agreements. I spend a significant amount of my time with our key allies and partners, a very significant portion of that is Canada, the UK, and Australia. Part of our national technological innovation base, where they have special consideration if you will, for sharing intellectual property, for getting perhaps a little bit more sophisticated technology than others. We have really amped up our cooperative research agreements with those countries in the last few years and we are jointly working on developments that will be mutually beneficial. So as we go through all of these challenges with not wanting to be solely dependent on offshore capability, we have made very very clear to our allies and partners how very very important they are to us. And in fact, every so often when a pronouncement comes out of the White House, I'm on speed dial to some of my fellow national armaments directors and they're calling me and you know, even when we get a little sideways politically the mil-to-mil bonds are very very strong. In fact, tt was somewhat flattering that when we put out the memo of the US defense industrial base being critical infrastructure allowing us to get back to work. My UK NED, my Canadian NED, my Australian NED all called me and said 'do you mind if I just cut and paste names and addresses and use that document' and we're like, 'hey, please go ahead and replicate it'. So we have a pretty tight bond.

Roger Zakheim: Do you think that you mentioned those four countries, of course make a lot of sense and their part of the the NTIB that you just referenced. Do we think we need to expand that more because increasingly allies and friends are presented with a choice -5G being the most acute example, where if we don't share if we don't bring him into our side don't give our allies and friends a good option, they'll go elsewhere, often times to competitor like China, perhaps not for the most sensitive technologies, but even for technologies that less sensitive but still relevant or allies and partners and friends. Do we need to do more to expand that cooperation particularly on innovation So they're not presented with a hard choice?

Ellen Lord: Yes, absolutely. And in fact, I think we need to beef up what we're doing with the current NTIB. We're working on that but there are many others out there that we could work more closely with. One of the items that I'm dealing with with a few of my colleagues here that I am passionate about currently is the fact that we have not really revisited what technology we export I think in a significant way recently and I am concerned that sometimes we are losing international competitions because we have as we have increased our capability, we have not increased the capability that we export in a commensurate fashion and we sometimes are having some of our potential customers particularly in the Mid East turned to Russia or China. You see the same thing in India for instance. So we are having a very focused discussion on let's rethink this from a strategic point of view. We might in fact be hurting ourselves when we think we're helping ourselves and a lot of this technology, frankly the magic sauce, is in the manufacturing of it. The technical data package doesn't always give it to you. So obviously we have to make sure we're very careful not to have things that could be disassembled and understood and so forth, but in the next six months I very much hope to open the envelope particularly on some of the weapons technology that we can export.

Roger Zakheim: Well, I can't wait to have you back in the Reagan National Defense Forum so you can tell everybody about that in about six months time. Last question before we close this podcast and viewing session out the defense budget obviously is critical to accomplishing your work with COVID, the spending, the fiscal crisis this country will have to face- are you concerned that there will be an impact on defense budget. A couple words perhaps on why it's critical to maintain defense spending to accomplish much of what we've discussed here today.

Ellen Lord: We are concerned that budgets will be flat at best and flat budgets are actually declining budgets given inflation and so forth. We believe that not only do we have to maintain readiness, but we know we have to modernize after years and years of not investing. Our whole nuclear triad is in the midst of being recapitalized and we are with zero margin right now in terms of schedule to get that done to maintain capability. So we must invest, and this is why I am so concerned that we get the next version of the Cares Act and we get some money to help take care of some of the incremental costs that were brought on by COVID. There are inefficiencies there and we don't want that wave to roll on and on and on in terms of making us inefficient for a long time. We also, I think a would be really doing a disservice to the nation and to the world if we do not make programs whole and if we had to take out of hide so to speak all of these inefficiencies that were realized, and we are being very very careful to make sure we are only accepting at for government compensation very real inefficiencies, but if we have to take that cost out of programs and manufacturer fewer units, provide fewer services, not have the logistics tail. That would be a very bad outcome

Roger Zakheim: Undersecretary Lord just for a scale standpoint. How much is required to get healthy mentioned tranche 4 these looking at it give us a sense. I mean not precise dollar value, but generally how much?

Ellen Lord: I testified a few weeks ago saying it's in the low double digits of billions of dollars.

Roger Zakheim: Okay. So low double digits would be 10 or more. Undersecretary Lord, thank you so much for joining us here at the Reagan Institute. We appreciate your participation. We look forward to having you back at the Reagan National Defense Forum December 4 and 5. Really this was an excellent conversation. Thank you.

Ellen Lord: Thank you Roger really appreciate the opportunity to talk about some of the work we're doing. I'm incredibly proud of my team. They've just really been pushing especially in the last three months. So look forward to seeing you in December.

Roger Zakheim: Great. Thanks a lot.