Lessons Learned from New Innovation Initiatives

Moderator:
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Speakers:
Hon. Douglas R. Bush, U.S. Assistant Secretary of the Army for Acquisition, Logistics, and Technology
Raj Shah, Managing Partner, Shield Capital
Hon. Mac Thornberry, Former Chairman, House Armed Services Committee

Aaron Mehta:
We're going to try to make this all work with these four fantastic panelists, all of whom, as I've said to each of them, I think I've covered personally in longer speeches than we have today. So we're going to do our best to power through this and give you guys as much information as possible, because these are the guys who know what's going on and we have a unique ability here to bring a mixture of perspectives based on their experiences. So we're going to jump in with the first question, which is, essentially, when we talk with the Reagan Foundation team about this report and what they wanted us to try to focus on and tackle, they asked us to focus on two key issues that they had in the report. The first is customer clarity, in such that what the Pentagon is telling the commercial industry, the tech industry, and then how defense modernization is actually going. For the report card, for those of you who haven't actually checked it out yet, which you should, it's fantastic work, customer clarity stayed the same from last year. Defense modernization dropped a grade, not because anything traumatic happened, but because nothing happened effectively. And I guess the first question I want to start with, and maybe we can just go down the line, Mr. Bush, you can start, is, effectively, do you agree with these two assessments where we are?

Hon. Douglas Bush:
Well, I wouldn't say that nothing happened.

I mean, I know the Army signed a lot of contracts and bought a lot of stuff and fielded a lot of equipment. So I think it depends what you mean by nothing. I think the headwinds that the report correctly points out is our lack of ability to get funding to do new things. That's a fair point. It's a big team effort. DoD and legislative branch have to work together, but that's a fair point. That has slowed us overall. Defense topline pressure has slowed us a bit in places, so that's a fair point to make. Cost of personnel does continue to go up in the Department of Defense, that's just a fact of life. That's a bit of a headwind for some of the modernization accounts. But I would say that having read the report, I looked over it, it made a lot of great points. I think one thing that a bit of good news to report is that it takes time.

The loosening of the system overall for acquisition pathways and contracting methods is making a difference. So Chairman Thornberry started a lot of that, when he was Chairman, in some of the legislation he worked on. It does take time to filter through the system, but it's becoming more normal to do, for example, a properly structured OTA versus a FAR-based contract for certain activities. We're moving away from fixed price development, where unless, except in very exceptional cases, we're able to go much faster with middle tier acquisition pathways -- software pathways much faster to get programs started, respond to urgent needs, actually get stuff in the field. So I think the loosening of the reign, so to speak, is having an effect. But we're far from as far down that road as we want to be.

Aaron Mehta:
Raj?

Raj Shah:
Thanks Aaron. And it's great to be here. No one likes a D or lower on the report card. Look, I think there's a couple of trends that I'd maybe point out. So one is if I look at what's happening in the private sector, what is the engine of innovation? It's capital, it's talent, and it's technology. And I think we've never seen more of all three of those interested in national security and defense. So it's a really, really exciting time. But I would agree there's a mismatch between what we hear senior leaders say they want and need and they're focused on innovation to what actually gets executed. But I think there has been things that have happened, and there are a variety of acquisition organizations and pathways that are improved. But I think there's, if I look forward and I think about, okay, what is the next part of defense modernization?
And I think the element that I think is the most -- challenge we haven't really focused on is factoring cost, meaning the impact of low-cost systems. And that modernization is not just better technology but also a cheaper one. I had the opportunity to go to Ukraine in the fall, visit several of the drone factories. There's 600 drone factories building these $500 first person vehicle drones. They're basically replacing artillery. And I think there's some stat that says Ukraine's losing 10,000 drones a month and they're going to build a million of these. And the Pentagon and Congress is moving towards building more drones, but we're talking about numbers in the thousands, and at cost points ranging from 25 to 100,000 dollars. It's just orders of magnitude difference. And so I think the next part of defense modernization again is how is low cost and mass an impact on modernization in of itself? That's different.

Aaron Mehta:
General, love to -- the broader question, but also, if you have any thoughts to what Raj just said, because I think that falls into your purview there.

General James Slife:
Well, I think to the initial question, I would say yes, Yeah, so I don't disagree with the findings in the report. I think one of the things that strikes me is we don't have a lack of imagination about how to innovate and what the future could look like. I don't think that's the problem. I think the challenge we run up against is how to get from “as is” to “to be,” right? So if you envision a very different future than the present that you're in, that's not actually the hard part. The hard part is figuring out how to get from where we are to where we want to go. And in a flat, or in some cases declining, budget environment where we have present real commitments around the world in the Red Sea, supporting Israel, supporting Ukraine, maintaining a presence west of the International Date Line. I mean we have global commitments, and the force structure that it takes to fulfill all those commitments is the same force structure that is tying down most of our ability to invest in that very different future. And so this is the heart of the issue from my perspective. It is not a lack of imagination about what we need to do. It is perhaps a lack of imagination about how we're willing to accept risk in order to get there.

Aaron Mehta:
Mr. Chairman?

Hon. Mac Thornberry:
All of us have heard a lot of talk and churn about innovation related things, different offices, different programs, different funding. But I think what the report card emphasizes is there’s really only one thing that matters, and that’s the capability that’s in the hands of the warfighter. And all this churn doesn't really matter much if we don’t have the capability they need available to them at scale. And so differentiating outputs and inputs I think is a really good thing that -- I think a lot of us too much focus on inputs and not on outputs. And the crucial factor to me is time. I mean, you heard from the first presentation this morning about urgency. We can be better than we were last year, but if we’re not good enough to keep up with the change of technological innovation, if we’re not good enough to keep up with the change of threats from adversaries, then again we’re falling further behind.

And I think that’s what you see reflected in that modernization report on customer clarity. It shows it's a little better. And I think that's largely because of Replicator. The Deputy Secretary will be here this afternoon. There is a brilliant Defense Innovation Board report I'm sure you've all read that -- I'm saying tongue in cheek -- that talks about the importance of culture and leadership and affecting the culture. And to me, the most amazing thing about Replicator is the Deputy Secretary put it on her shoulders to say, I'm responsible for this, and we're going to deliver thousands of things relevant in the China fight in 18 months. So it's like a pass-fail on herself. And that sort of accountability is exactly the sort of thing we need, to change the culture, to take more risk, and so forth. So to me, customer clarity may be a little generous, but it's that changing culture as much as the substance of Replicator that is remarkable.

Aaron Mehta:
Since you brought up Replicator and Raj as well, I guess I'd be a little remiss not asking Mr. Bush and General Slife: from where you guys sit, how do you feel about Replicator? Do you feel communication has been clear about what it's going to be? Do you feel you have clear guidance on what your portions of this is going to be? Because certainly when we talk to industry, there's a little bit of sense of confusion on some people about, okay, is there money? There isn't money? What is and isn't Replicator, as much as you can speak to that.

Hon. Douglas Bush:
Sure. So first of all, the Army’s – I think actually we’re the biggest participant if you look at what’s actually going to come out of round one in terms of quantity. We are limited in what we can talk about. That's a choice the Department's made to keep it rather buttoned up. So those in industry who we're working with of course know, but there's going to be
a bit of a gap on those who aren’t involved directly just because of the classification structure they put around it. But I think it’s a good goal. It’s the funding for the first year. We’re taking a reprogramming approach and we need Congress’s support to get through that. Hopefully we’ll get it going forward as long as it’s done the right way. When you’re handing out hundreds of millions of dollars of the American people’s money, there has got to still be some process involved to make sure that’s done fairly and appropriately.

Now that’s the case so far. We’ve just got to keep at it. But I think the urgency the DepSecDef has added to the system is welcome. In the Army’s case, we had something we were already working on that was similar, so we nominated that and luckily that made the cut. And so that was a win-win for the Army. So those are your ideal situations. I think when it’s something the service needs to do, can’t quite get through its own system, OSD doing its kind of cross-look oversight and accelerating where they believe is necessary for the entire enterprise, I think that’s the best use of a OSD led system approach like Replicator. So the Army, that’s what we got on round one. We’re hoping to do it again on round two.

General James Slife:
I think, so the Air Force has got several compelling programs in the pipeline that will be considered. They’re not quite as technologically mature as some of the Army programs that are going to be kind of in the round one on this. But we’re excited, frankly, about the prospects of Replicator. I mean, I have the opportunity, and I charitably describe it as an opportunity, to sit in the meetings where we’re talking about all things budgeting on a weekly basis. And the person that sits at the head of the table is the Deputy Secretary of Defense. And so to Chairman Thornberry’s point, when she takes it on herself and says, “this is what we’re doing,” there’s no question from anybody in the room that we are going to do this. And so the question is how quickly can we go, and not whether we’re going to do this or not. So we’re excited about it.

Aaron Mehta:
Great. I wanted to ask about budget actually, and following up on what the previous panel talked about a little bit, the impact of Congress, and kind of the broader attempts to move some of this stuff forward. One of the things the report called out, specifically on defense modernization, was that there are a lot of great ideas, a lot of contracts have been – things have happened, but without real regular budgeting, it’s kind of hard to move some of this stuff forward. I thought it was interesting because we have this unique panel where we have Mr. Bush, obviously experienced on the Hill, but also now as the buyer; Raj, who has been in the building but also now represents the commercial,
the customer in this context; General Slife, the end user; and of course, the Chairman, who helped guide a lot of the language that's now being used in this world. And I wanted to ask -- and maybe we can start with, Chairman Thornberry, with you and kind of go in reverse -- what your view is in terms of how what let's charitably call the congressional deadlock right now over budget issues is having in your mind on this kind of specifically the new tech, bringing in commercial ideas, trying new things, modernization efforts.

Hon. Mac Thornberry:
Oh.

Aaron Mehta:
I'll give you a nice softball you can just --

Hon. Mac Thornberry:
Yeah, right. I don't think you need me to go through the litany of how we are hurting ourselves and making it harder for us to defend the country, making it harder for the General and Doug to do their job as well as everybody else. I mean, it's kind of unbelievable. I'll spare you my talk about incentives for Congress and our political dysfunction because that's really at the heart of this. There's a lot to -- but in the meantime, I'm not sure it's going to change in a timeframe that is going to solve our problem competing against China and so forth. So I guess the one thing I would say is we're going to have some degree of budget dysfunction for a while. It is essential, in my opinion, that there be greater flexibility for the money that is given to the Pentagon, partly because of the change that we were talking about a while ago, but partly as a result -- because of this dysfunction just makes it even more imperative, whether it's under a CR or whether it's an appropriation bill. And you can talk about portfolio or funding or various labels that would get put on it, but it is damaging us to an incredible degree. And to me, it doesn't fix everything, but a Band-Aid to help mitigate the damage is greater flexibility in how the funds can be used.

General James Slife:
What a cliche to ask a General about the impact of delayed appropriations and the budget.

Aaron Mehta:
It's good, right? Everything's fine.

General James Slife:
Yeah. I'm not sure I'm going to add anything to the public record on how damaging this is. To Chairman Thornberry's point, I think he's got it exactly right. So at the risk of eating up too much time, just a little bit of story time with Uncle Jim here. So I started my career as a helicopter pilot. I went through training at Fort Novosel, Alabama, and my instructor was about a 10,000-hour former warrant officer from the Army that had multiple tours in Vietnam. And I mean, the guy had more flying hours than I had been alive. And so, a low-level navigation flight flying around South Alabama, I'm completely lost. We're at 50 feet over the tops of the pine trees. The map is upside down. I'm looking at it, staring outside, trying to find something outside that looks like something on the map so I can figure out where I am.

And this guy in the other seat finally can't stand it anymore. And he looks over at me and he says, “Lieutenant, you're going to have to navigate from where you're at, not where you wish you was at.” And I have found timeless wisdom in the words of this instructor pilot that I had when I was a lieutenant. And I think, to Chairman Thornberry's point, this is where we are. And so the question is not is this helpful to the United States? Is this helpful to the Department of Defense or not? Of course it's not, but we have to navigate from where we are and not where we wish we were. So that said, what can we do to mitigate the impacts of what, as the chairman describes, is persistent dysfunction in our appropriations process. And I think there are a number of things that are reasonable. They will require some discomfort in both the executive branch and also the legislative branch because they will involve change. And anytime there's change, there's a potential to lose influence or power or however you want to characterize it. But certainly, some of the highlights in the Reagan Institute's report, the PPBE Commission has recently made some recommendations that I think are useful. The Atlantic Council produced some recommendations. So I mean, none of these things are particularly mysterious to us, but there are things that we can do to mitigate the impact for the world that we live in. And I think that's really where our focus ought to be.

Aaron Mehta:
If only there was someone who could speak about the findings of the PPBE Commission, Mr. Shah.

Raj Shah:
Thank you Aaron. As I say, budget is strategy, right? If you look at the budget, you can really get a sense of where our priorities are. And look, I think there's been 42 blue ribbon panels on budget reform and we're probably the 43rd, but I'm actually optimistic. I think that there's a broad recognition, in the Department, in both houses of Congress,
that we need reform. So I was part of this 18-month commission on reforming the PPBE McNamara-era process, and there was five buckets of recommendations. I'll focus on the first two, which is aligning budget to strategy and encouraging innovation agility. The other three around modernizing the technology, the workforce, and most importantly, the rebuilding the relationship between Congress and the Department. But if I think about the alignment of strategy, I think what's really at the core of this conversation is I think everyone can agree on the types of things and changes we need to compete against China and to prevent authoritarianism around the world.

So how do we go from having 30,000 line items to a more compressed number? I think there was one line item in the sixties for fighter technical aviation, and now there's countless. So I think there's a set of recommendations around that as we think about innovation and agility. To the chairman's point, how do you give the department flexibility within year? How do you just change the construct of color of money, particularly when you think about software? So look, I think there's a whole host of recommendations. We made 28 of them. But I think the crux of it, and I think it was at the last panel that Representative Smith made, was I think it's possible to give the flexibility to rebuild these relationships, yet still give the appropriators the level of oversight that they need, and that their job is to protect taxpayer dollars. And I don't think the two are mutually exclusive. And so I'm encouraged that the Congress will look at this. I know that Senator Reed is, I think they're having a panel today on it. And then the final point I'll make, so a recommendation of those outside of our core scope was I think there are also tweaks within the CR construct that new starts could still occur if that were to happen, right? And again, to go with my two previous speakers, we are where we are on that and we still need to operate with that.

Aaron Mehta:
You're talking about Secretary Kendall's language or other --

Raj Shah:
Well, there's some recommendations in the report of how do we redefine what a new start is? And even if we are within a CR, do our Pentagon leaders have the ability to start new programs?

Aaron Mehta:
Mr. Bush, I guess the broad question, but then also I guess to Raj's point, is there something -- as you're looking at CRs, I guess we're in month seven now. What would be helpful for you in that regard?
Hon. Douglas Bush:
So I think I can go just kind of down a couple levels from the strategic view, outstanding strategic views, you just got, all of which I agree with. Research and development is our most restricted area of funding. It has the most funding lines. The purpose within those lines is also restricted, 6.1, 6.2, 6.3, the difference in those activities. So if you look at restrictions broadly, where's the weight of that most heavy? It's by far in research and development. So that's one thing. Now, where does that come from? It's not all Congress. Actually, the team in the Army has been looking at it since the report came out, for example, as far as I can tell, and someone here might know otherwise, those differentiations of function within R&D are self-done by the Department in our regulation for financial management. Now, they might be in the spirit of what appropriations committees wanted, but we did that.

We can change. That is my point, working with Congress. But R&D spending, and the other reason I mentioned it is where when we need to do something new, something that an opportunity comes along from an experimentation event. We have an urgent need from the theater, entirely new technologies emerge. We see something in the intel, we want to get ahead of it. That is where we are the most restricted but also need the most nimble -- we need the most flexibility to do those things quickly. Now, it's not all that -- we don't have any flexibility. So there's legislation. We used it twice. It's Rapid Acquisition Authority. It's a SecDef authority. It's a high bar to use, but we used it twice after October 7th to do two large counter-UAS procurements for CENTCOM, and that's basically extra reprogramming authority. And the Army initiated those and it's -- together they were close to $150 million, and we did those in a matter of weeks.

But that shouldn't be the extreme exception. On the edge case, we should have that kind of authority and ability to do that on things that are perhaps less of an emergency and just something really good we need to get ahead of, for example. So, the good news there is there's precedent for Congress giving us that kind of authority and that kind of flexibility. We just need to make it more normal, not the exceptional edge case. So the bridge we're talking about crossing with Congress is not as big as some people say. We've got examples of that kind of flexibility in the classified program world as well. We just need to make it more normal and kind of apply it to more things. And that's not a huge bridge to cross with Congress. I think the Army, I think the Secretary and Chief are thinking about rather than asking for unlimited R&D authority, how about more flexibility for certain mission areas that are really important?
Tech is moving fast, we have to move faster. That would bound the flexibility we're asking for. And I think we were hopeful that members and staff will be open to those conversations perhaps as early as '25 if we were to work inside the Pentagon and then be able to ask them to kind of refactor what we presented. And then in '26, we're doing the '26 POM now, we're already looking at R&D specifically, perhaps paired with procurement by mission area to provide more flexibility. That was kind of what the PPBE commission report was getting at. So I think it's entirely doable. It'll just have to be a close collaboration, not just with Congress, but OSD Comptroller -- they own that regulation, it's their job. And even OMB because they also have a role in just how our defense budget's structured.

Aaron Mehta:
It's interesting because you said it's not that big a gap with Congress, and I think when you certainly listen to members of Congress, certainly ones who are going to attend an event like this, there's widespread agreement. Yes, we've got to get this issue, Chairman Thornberry. I guess I'm wondering, maybe you can speak to why it is, if everyone agrees largely we've got to get this problem, it doesn't seem like, as Doug said, there's a big gap between where the Pentagon wants to be and where Congress wants to be. What's the issue with getting over that gap?

Hon. Mac Thornberry:
I think Adam talked about it earlier. It's a tolerance of risks. Because if there's a chance that somebody would do something foolish with some of this money, not only is the Pentagon going to get blamed, but the congressional overseers are going to get blamed too. And so over the years, we have created all of these processes and offices and so forth that have to justify their own existence. And so it's easy to put this yellow card down whether you're in the Pentagon or you're on the Hill in a cautious manner to make sure that that's exactly going to turn out just right. And that's not the world we live in. It's not the world we can afford to live in. So I do think the point that was made about transparency, real-time transparency is possible now with technology more so than it has been in the past. And it's especially the appropriators, it can give them the assurance, they see where the money is going. And so I am on the hopeful side that this could be done in a relative -- easier than most people think it could be.

Aaron Mehta:
On that optimistic note, which I love, we do have a couple of minutes. I want to try to get one or two questions, I think what we're going to do is take two questions together. There's somebody with a mic supposedly, and I see one hand up. Do we have a second question from anybody? No. All right. Well, let's go with the two gentlemen in the back. I
don't know who has the mic there. There's the -- oh, here comes the mic. We have -- just coming. Want to just wait so that the people who are watching online can hear the question.

John Harper:
John Harper with Defense Scoop. My question is for Mr. Bush and General Slife: from a service perspective, how effective do you think the Defense Innovation Unit has been in helping you acquire and scale commercial technologies? Are you satisfied where things stand, or do you have some frustrations with the way that process is playing out?

Aaron Mehta:
And then just want to take the gentleman in front in the red tie.

Greg Bowman:
Thank you. This is Greg Bowman from Siemens. Just curious about how you're approaching digitalization as you look at the tech capability that is being implemented across the Department. How is digitalization playing a role in that?

Aaron Mehta:
Great. All right. Thank you. So for General Slife and Mr. Bush, the question on DIU, and then broadly the question of digitization, if you want to try to tackle both at the same time that you're welcome to.

Hon. Douglas Bush:
So DIU has been helpful over time. The relationships they've developed with the tech industry, non-traditionals has made it easier. Not always apparent at the big, big program level, but even one level down where perhaps we're pairing with new people, new entrants on software within a big program. They've been very helpful building those bridges. They've got some contracting vehicles, some consortium OTAs that we've been able to leverage to go fast with those companies with appropriate oversight, with appropriate mechanisms in place to protect the government. So broadly helpful in building those bridges. I think DIU assisting the services being better, in my view, is the best outcome because we still have the Title 10 responsibility to buy this stuff and to field it, but there are a lot of ways we could do that better. And DIU has been very helpful in building bridges. I think that could be expanded. I think there's plenty of room for them to do more to help us get where we want to go.

Aaron Mehta:
General Slife.

General James Slife:
Raj, do you feel like we're judging you here?

Aaron Mehta:
I was going to let Raj do the response.

General James Slife:
As a former DIU Director. So, I think DIU has been fantastic. It highlights kind of, we talk about this valley of death, and the DIU has been helpful in helping us move things kind of from a good idea and a program of record, but it's almost a Band-Aid. DIU and funds similar to this are really band-aids to a more foundational problem, which is that the budget is already accounted for in the PPBE process. There is no unspent money, from the Department's perspective, for the next five years. And so when somebody comes in and says, “Hey, I've invented a teleportation machine, we think this thing is going to be transformational for the Department of Defense,” our answer to that is, “Terrific. We'll see if we can work it into the FY '27 budget, because that's the next one that actually has any space in it.” And most small companies can't survive for three years waiting for this process to play out.

So first of all, we'll get back to you in ‘27, and then I have to find somebody between now and ‘27 that has already wedged their way into the budget that I'm now going to displace so that I can put a teleportation machine line into the budget. And bureaucracy is intended to prevent us from making bad decisions quickly. Unfortunately, it has a side effect of often preventing us from making any decisions quickly. And that's why I think things like DIU are necessary but insufficient to solve the more foundational problem of - - we are structurally unable to adapt technology as fast as the world is changing.

Aaron Mehta:
Do you want to chime in Raj?

Raj Shah:
Sure. I'll say a word and maybe tie up. Look, there's people talk about the valley of death. There's the valley of death between technology and the Pentagon. I think there's also a valley of death between the Pentagon and Congress. Look, at the end of the day, these are people-driven organizations and people-driven processes, right? It's not some arbitrary
black box. And part of I think what needs to happen is a rebuilding of trust, because with flexibility you have to have trust. And so maybe I'll share a quick story. When I, this was in the Stone Ages, eight years ago now, was doing DIU. There was a lot of mistrust in the early days. You can go back and see some of the articles, maybe even that you wrote Aaron, sorry about our time. And there's a lot of pressure about, should we even have a budget, and who are these yahoos from the Valley?

And there was so much mistrust that we had something happen to our budget, which was called -- we got zeroized, which at the time I did not know what that meant. Sounded bad. It's worse than you think. But to the leadership of the Chairman Thornberry here, we were able to rebuild that trust. He asked for a meeting with me, just one-on-one with the Chairman and the one-month-old leader of DIU, which is pretty atypical for meetings with the Pentagon. But he listened to us, heard the vision, and said, “look, I'll support you,” and restored the budget and gave us that flexibility. So I think at the end of the day, we can't forget it's a people-driven organization, and these relationships based on trust for the ultimate mission, which is to preserve democracy and our way of life, is important.

Aaron Mehta:
Real quickly, if we can have -- and maybe Chairman Thornberry, if you want to jump in on the digitalization question that was asked and kind of how the Pentagon is approaching that.

Hon. Mac Thornberry:
We always have had a challenge in getting funding for IT systems at the Pentagon where you could take advantage of all the data that the Pentagon had and has. I still think back, the General made this point earlier, the world's not going to stop while we get our act together. They've got to deal with the world as it evolves, the threats that are out there. And I do think one of the challenges for making better use of the data that's out there has been the infrastructure of the Pentagon. They're doing better, I think, but are they doing better fast enough? And just to get to Raj's point too, the Report Card makes the key point that we're having trouble with all these good things happening around the Pentagon. We're having trouble getting it to scaled up and available. I thought Calvert was right on target to give DIU a billion dollars to go help scale some of the cool things they come up with. I don't think that's the way the budget's going to work out, but we've got to figure out about this scaling thing again, the Report Card emphasizes that, and I think it's really important to take advantage of the great work the DIU it has and is doing.
Aaron Mehta:
Unfortunately, we are hitting the clock here. But thank you all for joining us today. Please join me giving a round of applause here for this fantastic panel.

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