Event: Managing portfolios to bridge DoD's valley of death

James Ruocco, Katie Wheelbarger, and Elaine McCusker

[00:00:36] **Jerry McGinn:** Good afternoon everyone. My name is Jerry McGinn. I'm the executive director of the Baroni Center for Government Contracting here at George Mason University. And we're excited to have a webinar for you today on. Bridging the Valley of Death in defense acquisition.

[00:00:50] And we have a tremendous panel that will be speaking to you shortly. But first, I just wanted to you know, encourage you to participate in future center events. We actually have a webinar on Wednesday focusing on defense mergers and acquisitions and the implications for government industry in that.

[00:01:07] And then just sign up for our events. So you can hear about our events and our publications that will come out very regularly. But what I wanna do now is turn over to my colleague the senior fellow. Eric Lofgren, he was the lead on the project, the report that we did on bridging the Valley of Death.

[00:01:24] He and I and our colleague, Lloyd Everhart, were, wrote it and we had a very strong response from government industry to the development of this. But we wanna talk about the report as well as the topics the broad topic in hand. So Eric, over to you and Owen. One quick change.

[00:01:38] Mr. Chris O'Donnell unfortunately got a notification from the Secretary of Defense, bill of plant that he had a one o'clock meeting about 10 30 this morning. , he unfortunately couldn't join us, but we're very fortunate to have one of his deputies, the director of Air and weapons platforms in offices citizen Secretary of Defense for acquisition, who's been intimately involved in the issues of capability development and pilots having to do that are relevant for this topic.

[00:02:02] So I think we've got a great set of panelists. And Eric,

[00:02:05] **Eric Lofgren:** over to you. Thanks so much. I want to get to some introductions. And so first we'll go with Jim Barocco. And Jim Barocco is a

member of the senior executive service and director for air platforms and weapons with responsibility for portfolio and acquisition management in the office of the Assistant Secretary of Defense acquisition.

[00:02:24] And he is also had tons of technical and management experience, including assistant p e o for engineering at the F 35 Joint Program office. And so now I'll let Jim make some opening

[00:02:35] **James Ruocco:** remarks. Okay, thanks. And thanks Jerry. I appreciate that. There's a little bit of a pickup game for me. As you heard, I had about two hours heads up that I was gonna be doing this, so I didn't really prepare anything.

[00:02:45] But I am gonna talk about this topic, which fortunately, I've had a lot of background around this topic of not just theran the broad transition topic, but around this idea of portfolio management, which I'm gonna talk about a little bit and other things we've been doing inside the building here to try to transform not just the way we do acquisition, but really connect the pieces of what I'll call big A acquisition.

[00:03:06] So that involves requirements. The defense acquisition system, which is what most people, I think about when they hear acquisition. And then the P B B E process the programming, planning, budgeting, execution process that then drives how we invest. . The resources to do the execution of what we wanna do, requirements as well as the acquisition strategies and planning that we lay out.

[00:03:26] I spent most of my career with Navy as you can see in the bi. I think they're gonna send my bio out. Lot of different assignments including broad assignments and program office and pos like F 35. I joined O S D about two and a half years ago. I'm enthused about what I'm doing coming here because it was an opportunity to take some of the things I was doing with Navy, where we were looking at more portfolio assessments of things and how we use things across portfolios and capabilities and systems to make the right traits, make the right investment, and then scaling that up to the department level.

[00:03:55] So the job I'm in now as the director for air platforms and weapons, so that, that oversees that, that involves overseeing or influencing all the d od aircraft and air launch weapons in the portfolio as well as related systems and capabilities. And so my primary job is for my boss, the undersecretary for acquisition as a statement, factual plan, as well as provide the sport and

guidance for the military departments, their staffs, the pos PMs and really I see my job as enabling their acquisition success.

[00:04:21] This organization has been on a bit of a journey since AT&L was dissolved in 2017. Moving from more of a focus on oversight and executing a serious acquisition program, reviews and defense acquisition boards or dabs to one that's trying to look across portfolios to assess the health of things and whether we're we're assessing risks that then drive what the investments or divestments should be when we look across those portfolios.

[00:04:43] And to that end, we've got a bunch of things going on to include basic stuff that we do here, like publishing directive to try to connect all of these various parts of the system around this concept we call capability portfolio management, as well as doing some pathfinders and other things on behalf of the defense Department leadership.

[00:05:01] Looking at how we can do business differently leveraging the mechanisms we already have and then exploring some flexibility I think that we already have from the Congress as well as flexibility we have within our own systems. To get after delivering solutions faster as well as changing the way we're doing business.

[00:05:16] And I'll I'll talk about that a little bit as we go through this. So I'll stop there with the intro. Looking forward to the discussion.

[00:05:22] **Eric Lofgren:** Thanks so much, Jim. Next we have Katie Wilbarger, and she's the Vice President of Global Affairs at Lockheed Martin. And before that, she was Assistant Secretary of Defense for International Security Affairs. She's also had a ton of experience on the Hill, including policy director and council for the Senate Armed Services Committee.

[00:05:39] Katie, I'll hand it over to you.

[00:05:40] **Katie Wheelbarger:** Hi. Thank you Eric, and thank you Jerry for hosting us today and for producing some pretty solid reports recently. Really enjoyed being on this panel with both Jim and Elaine, and good to see Elaine again after serving together in the Department of Defense. Good to be back on the team here with you.

[00:05:54] Explaining a little bit the team that I run here at Lockheed Martin, it provides the context that I'm bringing to this, which is I have a team that's

responsible for sort of the O S D relationship as well as monitoring the development of the budget on the executive branch side.

[00:06:06] But I also have a team that's responsible for doing the domestic support to international sales. So that means we're making sure all u Lockheed Martin's international activities are aligned with US government policy or that we get the appropriate approvals for all our activities with our partners and allies overseas.

[00:06:22] And what that's really meant for, particularly since February 24th of this year is really as the f m s demand signals were rapidly increasing post the invasion of Ukraine. And the questions about. US defense industrial based capacity started to drive conversations within the US government on whether we should be doing things differently or how we can surge capacity quickly to backfill the stocks that we were providing to the Ukrainians.

[00:06:46] We really started to work even more closely with folks like Jim on, on what we should be doing or what can we be doing differently in this particular geopolitical moment, and that aligns interestingly enough to this particular, to topic with with respect. The Valley of death or crossing the valley of death is cuz what I really think we're seeing is the need to change rapidly in sort of two different ways.

[00:07:04] Meaning not only how can we as a defense enterprise adapt and adopt advanced technologies in a more, a rapid sort of cyclical scale. So whether you're talking about, jto like activities, interconnectedness and networking capabilities, how that can be infused into the system at scale more rapidly.

[00:07:21] But then also just how do we do the typical build stuff more rapidly that we need the key core capabilities whether they be platforms or munitions build more redundancy and resiliency into the system so we're less susceptible sort of shocks in the system that leaves us reali realizing, as, I think under Secretary Laplant says all the time, whether it's our just in time delivery mechanism or our lack of advanced procurement of long lead parts, et cetera, leaves us really vulnerable to a lack of surge capacity. So from my perspective, we need to be able to do these two transformational efforts at the same time. And I think if we can infuse, and this is something Lockheed Martin is thinking about doing and doing a lot of digital modernization and digital processes into both, both how not only the technologies that we can offer to the Amer us and our partner ally war fighters, but also what, how we can actually do our

processes on the inside that maybe allow us to solve these two need, these two transformational needs at the same time.

[00:08:14] I, we just wanna, at the highlight, highlight again, I think the great and commend the great work the government and in partnership with industry has been doing over the, especially over the course of the last year, to tackle some of these challenges and really encourage activities like multi-year procurement and long lead part funding that will, can really address this capacity challenge.

[00:08:32] But at the same point, again, as Jim said, connect all the technological sort of advancements and demonstrations and prototyping that we are able to do in industry and figure out w ways h how can we more quickly get those into the requirements and contracting processes so we they can actually result in programs or record that can be fielded at scale.

[00:08:49] So those are the mini, the mul, multi, very pro challenges that we look at from our perspective. And I'll just, I'll end it there for opening

[00:08:55] **Eric Lofgren:** remarks. Great. Thanks so much. We'll dive a little bit more into that as well in terms of irad to programs . But next we have Elaine McCusker and.

[00:09:03] Elaine is the resident scholar at the American Enterprise Institute, has been a real thought leader in this space for some time. She was also the acting under Secretary of Defense, comptroller and director of Resources and Analysis for US Central Command on the top of a lot of other experience where she's been at the hill and received several civilian.

[00:09:21] Service award to swell. So Elaine, please take it.

[00:09:25] **Elaine McCusker:** Hey, thank you. And it's good to see my fellow panelist this morning. Really appreciate you guys holding this form and for the work done to capture and generate ideas on this decades long problem. I think we've been admiring this problem from different directions at least from when I was on the hill and probably longer than that.

[00:09:41] And so the problem statement is pretty well understood, but I'd like to characterize it in terms of outcomes, which underpins my thoughts on this and also leads to the solutions I think we should pursue and in some cases just continue to pursue. So first, I think our goal should not be to buy platforms.

[00:09:59] It should be to buy outcomes or capability. And I think this is different from how we approach things now, which is focused on two specific requirements, generation platforms, spend plans and acquisition strategies, and. Sticking to those plans and strategies. Second, since the future force will be defined more by its software than its hardware, in some ways the old value of death problem still exists, but has also evolved so too, I think must our solutions to try to solve it.

[00:10:30] And a final point on the problem that I think is important in discussing potential solutions is, The defense program and much of its cost is carried over from year to year. So future, your money has already been obligated by past decisions. Once that happens, it's very difficult to change. And part of what creates this value of death, and I know that most of you all know this, but I think that the key reason, this is the key reason why the department's, programmers and program managers are so central to any successful solution and why I think we need to alter the expectation that they can predict the future and instead allow them to adapt and to take advantage of that future.

[00:11:11] And so with these. Problem characterization points in mind. I'd like to briefly just mention four of the many potential solutions I know we'll probably discuss. First, I think we should use the existing structure to do something incremental. Now, service program managers and the already in place flexible six four accounts are the center of gravity for this.

[00:11:33] When we look at who really should hold that catcher's mid in the in bridge valley of death, I can't help but think that technology integration, funding lines in the hands of program managers is a viable incremental solution. So I think we should consider what is currently wrong with these accounts and efforts, including better or different approaches to budget justification and reporting on their use, and then fix those problems.

[00:11:55] This, to me seems like something that could be expanded and used quickly to target one of the key places where I think the Valley of death happens. . Second, I think we should combine this immediate incremental change with change change to portfolio management. And I won't talk too much about this. I know Jim already mentioned it.

[00:12:12] We'll probably get to that a lot in the q and a, but I do want to just convey what I think it means, which is rethinking defense programs, again, in terms of outcomes and capabilities, and then managing and funding them that way. So portfolios would be named for capabilities and outcomes, not platforms that achieve them.

[00:12:32] And they would include all the research, development, testing, procurement, and sustainment necessary for that capability. And then third, and I think related to portfolio management, I think we need to change the defense budget structure to f reflect the way we need to build and manage capability today to pull in experimentation and the COCOMs in a real way and answer the really important questions managers and overseers have.

[00:12:56] Now, this would not be a direct value of death solution, but it would, I think, solve that problem along with many others over the longer term. . And then finally I think we need to capture expiring and canceling funds. And I don't wanna get too geeky on the comptroller side here, but this is many that is already authorized and appropriation appropriated for defense.

[00:13:16] And so I think we need to use these funds for defense, including for value of death requirements. And finally, and I know you, any of you who know me, will expect me to mention this. I'd like to point out that none of this will mean much in terms of outcomes if we can't get some predictability in budgets and appropriations enacted on time.

[00:13:33] D o D is currently operating under a c r again, while a time and money is wasting. And so these are just some of, many ideas. There's many more big and some bigs. I'm small and I really look forward to the discussion and thanks again for having me to join in with it.

[00:13:46] **Eric Lofgren:** Thanks so much, Elaine. A lot of thought provoking things that I think we're gonna double tap on throughout here.

[00:13:51] But a little bit sad that haven't seen some Q and A function used from the audience. So feel free everybody to come in cuz there's a lot of stimulus stimulating ideas here. But Jim, I want to circle back to you on something Elaine said, she said, by outcomes, not platforms. Can you dive into this a little bit in terms of your idea and what you guys are working on portfolio management?

[00:14:14] How does that differ if at all, from this kind of program centric management and how does that solve some of this tech transition issue?

[00:14:22] **James Ruocco:** Yeah, sure. I, I agree with the Elaine by the way and how she framed that. Where it gets a little more complicated is in how to go make it happen. We organize around things around products.

[00:14:33] And around the programs that deliver those products, primarily because we de end up delivering things. It's easier to manage, the development production, delivery sustainment of things rather than capabilities. If you try to do it on a capability organization it causes a lot of seams and gaps.

[00:14:48] And we've been at this several times. We've had programs and I can think of some that we had at Nav Air that and at Nav C that were trying to connect things in new ways to get to integrated capabilities system and systems capabilities, how to manage across those gaps. When you had all these individual programs, we tried to create a program that did that mixed success there.

[00:15:08] But let me take it up to a higher level. So that's practically mechanically some of the challenges. But I would say back to capability portfolio management, we really are doing our best to shift from a more of a stove pipe or soda straw. Look at each program and what it brings to the fight, and then trying to figure out how to connect those.

[00:15:24] More looking at it through a different lens. This capability portfolio management idea starts with, and doesn't end here, but starts with really an analytical basis, a mission engineering basis that starts with warfare analysis, the mission engineering threads, think front end of the system engineering process that take those gaps that were identified and figure out how to go satisfy those.

[00:15:45] What we do is we look at the assessment of the programs within all the various portfolios, cost, schedule, performance. How do those things line up with those capability gaps? Looking for opportunities to use existing capabilities in different ways. , and we have some success doing that using things that we didn't intend to use for that purpose.

[00:16:04] So those are the types of portfolio management things that immediately come to mind as the near term opportunities to satisfy gaps. And then beyond that, if we have gaps that can't be satisfied using what's in those portfolios now we will look for ENT needs and those tech transition opportunities from things that are already there maybe or things that need to be there in making those investments so that there's not only a requirement but validated capability need and an owner to catch that thing.

[00:16:31] And then we can take that through the PBE e process for prioritizing those investments or making smart dive investments. If there's things we shouldn't be doing in favor of things we should. And then set up those priorities

so that we're, we make sure we're investing in the right things. We already have mechanisms to do that.

[00:16:47] Now, within the defense system of systems however, the process I just described doesn't work exactly like I just described it, at least that cleanly. There's, I would say there's aspects of it there. We just need to connect those a little bit better so that we're not looking at it from a, Hey, this program's late.

[00:17:04] What are we doing about that? It should be, Hey, this program is supposed to deliver these capabilities to the joint fight because it's late. Here's what it means in the context of those capability gaps. And then the next set of questions are, what should we do about that? It may not affect that program.

[00:17:19] It may be affecting other programs. So that's the portfolio management idea that gets this idea of managing outcomes and capabilities rather than program by program cost, schedule, performance, and a set of requirements that they're trying to meet. So hopefully that made sense. Happy to talk about that a little bit more.

[00:17:36] **Eric Lofgren:** I want to get maybe a little bit more tactical here cuz we have a question from Kirk by portfolios and capabilities, what do we mean? Do we mean like missions kill chains? Effect chains? Yeah. What is your definition of a portfolio? Are there multiple types of portfolios? ? Um, Let's just start with Jim and then go Katie, Elaine on some quick thoughts here.

[00:17:53] I, I

[00:17:54] **James Ruocco:** uh, thanks. I'm laughing a little bit because I've been leading a team across a department to revise the D O D directive 7045.20, which is a directive that says we're gonna do capability portfolio management. and this flows from a lot of congressional direction and past Pentagon leadership direction of, Hey, we're gonna do business this way.

[00:18:12] The problem is that directive wasn't really teeing up exactly what we wanted to do. So we've rebuilt it. We're in the process of staffing that now to, to publish it. And the reason I'm laughing is because , a lot of the discussion, the churn around how we get this right actually involved, how do we define a portfolio?

[00:18:27] And I think what I've reconciled myself to is each organization that has a role in this can define a portfolio differently. The trick is to make sure that we can interrelate those portfolios. And I'll give you an example. The way the

acquisition community and say, Cape, we organize around, I would say liken similar things, right?

[00:18:46] The joint staff and the operational community do not do it that way. That they're more about capability and the war fighting effect they're looking to deliver. And then still other organizations like r and e would actually ha define the portfolios around a set of technologies that they're pursuing, for instance.

[00:19:01] So they are very different. But I think in the end, when we take those portfolios this is an important point and we look at what the things are in there and how we connect those across portfolios, what emerges and we've already done work on progressing, this is a set of roadmaps. So I can have acquisition roadmaps the interrelate requirements or capability needs, gaps I'm trying to fill with the things I'm trying to fill them with.

[00:19:26] and then overlay that with s and t investment roadmaps for how we're gonna go get after those things that then roll up to other larger sets of s and t efforts and sets of roadmaps. And in this way we start to connect across the various stakeholders play in these processes and then can interrelate the investments and why they're important so that you don't get the criticism.

[00:19:46] And I'm, this isn't meant to call r any out, but I'll just use this as an example of, Hey, this looks like a lab project really cool. Quantum watches great. How is that helping me kill things in these kill chains? So the mission engineering context I talked about, , you should be hearing kill chains, mission threads, et cetera, that are then rolled up to and assessed at the joint staff level, all the service analysis rolling up to, Hey, what are the top priorities when they do their gap analysis?

[00:20:16] Using , those products to then inform how we assess acquisition health in those portfolios. How we assess, are we investing in the right things and the science of technology investments we're making, and then ultimately, are we making the right decisions in the P p B process for what we're putting the money against?

[00:20:32] So hopefully that helped.

[00:20:33] **Eric Lofgren:** Katie, did you have any ideas on what is a portfolio? Yeah, no, I've been

[00:20:36] **Katie Wheelbarger:** Jim laid it out well in the sense of the different stakeholders and communities of interest that are looking at this. And I would

say from an industry perspective, especially when it comes to making investments in mission capability technologies we start, our goal is to stay as closely aligned with the U s g customer as we can.

[00:20:53] When he, when Jim was talking about technology roadmap mapping mission technology, roadmapping, you know, we have our own efforts here to do so and develop those technologies. And, we try to align, of the baskets of missions as closely aligned to the U S G as possible.

[00:21:05] Of course. As those perspectives change as you get, let. from the lab to the war fighter. It, it takes some adjusting on our part as well to make sure we're all speaking the same language. When it comes down to it, I think if we were to ask our c e o who talks about this quite a bit, it would be, defining what the, the actual operator needs to effectuate, a certain capability.

[00:21:23] And we do talk about kill webs quite a bit cuz that involves so much networking technology that I'll just add in this context that from our perspective, one of the challenges we're, we are trying to work through with our government partners is the technology in many ways exists.

[00:21:36] It, it's demonstrated it's been experimented, it's try and somewhat level in particular, and I'm interested in, Elaine may be expanding on a little bit when you talk about greater cocom involvement in, in, in solving this problem, because it does feel like there's an. Of a joint acquirer that can see that the technologies is exist now that has both the acquisition authority and the budget authority to just go and buy it as a, again, whether it's by as a service or just as a whole.

[00:22:01] I think there are, particularly when you look at the C2 mission set, there are solutions that exist already that can really expand the decision making ability of our commanders. It's just, there's not an, a really effective way to to get that into that in the right hands at the right time.

[00:22:15] **Eric Lofgren:** Yeah. Lane, I'd like you to come in here, you said some interesting things about, 6.4, a lot of this stuff as Katie was talking about, it's not like we need a big technology maturation, risk reduction. Like a lot of that technology has already been risk reduced. It's just putting it into the force.

[00:22:30] And so I'd like you to talk a little bit about the portfolios, but we also have a question here from Brianna Riley over at Inside Defense and she's asking about you talked about the need to pull in COCOMs into experimentation in a

meaningful way. Do the panelists think Raider as it was originally pitched, can do that?

[00:22:46] Cuz it seems like there's some skepticism please jump in. .

[00:22:48] **Elaine McCusker:** Yeah. So first I'm glad about the question on portfolio management because as Jim said, it's not as easy to define as you might think, and everybody of has their own way of defining it and describing it. And that was one of the things that I was really thinking about what do I mean by this?

[00:23:05] Which is why I of said that up front. I was like, here's what I think it means. And I think, you can group your capabilities. or your portfolios in a number of ways. You could gro 'em by platform, which is how we do it now. And as Jim mentioned, there's pros to that. We deliver ships and planes and vehicles and we kind of plan on delivering how many by what time and here's what it costs.

[00:23:23] And managing that kind of makes sense cuz we understand it and we can count it. But it doesn't really, I think, get to that final outcome. Another way I think we look at capabilities is by domain, right? So you've got your ground, your air, your c your space, your cyber, and you're okay, what am I doing in each one of these areas?

[00:23:39] And even when I rolled out the budget is confer, I explained it in that way, right? This is what we're focusing on by domain. And I think the last way and the harder way, but the most important way is by kill chain. So what do I need to accomplish? Seeing and understanding, making decisions and killing stuff and, I think we would ultimately want to get to measuring that type of outcome, not measuring what our inputs are, how we're budgeting and that kind of thing.

[00:24:05] But I think any of those ways that we do it now any changes we make to consolidate and group these things is gonna be an improvement because it's gonna give us more agility and more ability to respond quicker than we're doing now. And regardless of which one of those three ways you define it, and maybe it's like a step process to get where we al ultimately want to go, it's gonna be an improvement in reducing the Sort of fences that we have that, dictate how we control things now.

[00:24:32] And I think to your point about the COCOMs and their participation, I think we have seen, at least my perception is we're seeing more of a focus on

experimentation within the joint staff, within announced state, O s D, within r and e, and really rapidly taking what we learned from experimentation, including the COCOMs and pushing that back out to the people who own the requirements.

[00:24:53] I don't see Rader as the solution right now, but I guess we also have to look at, Back in time, centralized, relatively modest accounts are good and sometimes useful, but they don't solve the problem. They're a, another sort of similar approach that we've used in the past to try to solve the problem.

[00:25:12] And there's goodness to that. Anything we can get out of something like greater to, advance something that otherwise would've fallen into the valley of death is good. I don't see that as like a macro level strategic solution to the overall problem, though over.

[00:25:23] **Eric Lofgren:** We have another question here that also makes me think sometimes.

[00:25:27] How do you handle portfolio capability management? When you have these multi-mission platforms that integrate a lot of things. They can do multiple things in multiple domains. How do you

[00:25:37] **James Ruocco:** handle.

[00:25:37] I'll jump on that. If that wasn't directed to anyone in particular, Eric . Cuz it ties into some things I was gonna follow up from what Elaine said too. So the way we're doing it right now and this is a work in progress, but I think it's going in the right direction. We look at in a mission context, okay the capabilities that we need to accomplish that mission using kill chains, et cetera.

[00:25:57] Usually starting at the services level and then rolling up into a joint staff. Look at that. And they have a process called Capability Portfolio Management Review, which effectively rolls up and wraps at a bubble around the mission area that was. It's usually a missionary. It doesn't always have to be a missionary, but that's how they're looking at it.

[00:26:15] So think integrated Air Missile Defense as an example. Boom. I'm gonna look at that. It's an integrated set of capabilities. And there's different ways to sat satisfy that with different platforms. There's lots of things that play in that. Lots of different systems, lots of different platforms all bringing capabilities of the fight, but they were putting in a context of a mission so that it is outcome focused.

[00:26:33] I'm trying to do these, this mission or these missions with these sets of capabilities. Here's all the things at play, portfolio programs within all these portfolios. So you're not looking at just one thing. Multiple portfolios play multiple programs within those portfolios play, and it's really more of a capability definition.

[00:26:49] We take the outcome from that, which is typically a gap analysis and then a prioritization of what's needed. And this is one of the areas where we can use some improvement. Cuz what usually comes out of that joint staff analysis is, Hey, go get me those things. And that's not what we want to hear. What we wanna hear is going these capabilities, here's the gaps I'm trying to satisfy.

[00:27:08] The idea would be then to pick it up with a new process we've instituted here within the last year or so called integrated acquisition portfolio reviews, which then takes that product, that CP m r product that came out of the joint staff, and then reps in acquisition layer around it to look at the health of those portfolios, the programs within those portfolios, cost, schedule, performance wise, where the risk exists, how things line up or don't line up in time and capability, and then assess, okay, what now what do we have to do based on the results of that?

[00:27:39] the idea would then be to take those things and inform the program budget review process that we do every year in this building. So that the issue, the issues that are teed up, that go through the issue team process, that then eventually form what comes out as a set of pits and PVDs through the that build the president's budget will be informed by all of that.

[00:27:57] Now, somewhat argue we're already doing that and I, I would agree that we're doing parts of that, but it's not as stitched together as what I just described euphemistically as it all connects and all the gaps are covered. But that does get to how we look at multiple capabilities for multiple programs in a context that we can then wrap our heads around and say, these mission contexts or these missions are the key ones that we're going after.

[00:28:22] How are we doing with those things? And the things that don't play in those would be the things that would get deprioritized. , I think we're on that journey and toward that angle. And would say that all of those improvements to be made, we're going in the right direction.

[00:28:34] Katie,

[00:28:35] **Eric Lofgren:** did you wanna jump in?

[00:28:36] **Katie Wheelbarger:** Yeah, I just wanted to add a congressional angle to this a little bit because I, Elaine and I both know coming from Capitol Hill that I think those who oversee programs are somewhat very comfortable with their knowledge base at this time and how they can appropriately, in their mind evaluate whether or not there's cost overruns or there's delays or whether the program is performing as expected and whether or not there should be money taken from it.

[00:28:57] I think there's a lot of work we collectively, the defense industrial base and I include thought leaders like Elaine in that as well. We still need to do with our Capital Hill colleagues to make whatever mission portfolio process and outcome we feel comfortable with work for them and their oversight needs.

[00:29:12] It we have to get through the congressional widgets in order to make that happen. And I, wanna give one more Some somewhat concrete example that I sometimes use in the challenge that we see in industry, and especially when it comes to how we provide that connectivity that we're talking about to to our government colleagues, whether that be us or partners.

[00:29:29] When we coming outta Ukraine, one of the things we that Ukraine crisis, one of the things we heard a lot was, we from our European friends is okay, we like this concept of join all domain operations. Whether that be defined as a mission capability, a roadmap, or what have you.

[00:29:41] Let's just simplify this. I would just really like my F 35 s to talk to my high Mars. Can we just start with that? Sing singular capability. And I, based on what I know, I think that technology exists. It's just who would be the acquirer for it is. The service that owns the F 35 is at the army that owns the high Mars.

[00:29:57] And then you get into the operational question of who controls it. And so from my perspective, this ultimately gets somewhat wrapped up into the oper operational design questions as well as how all these technologies actually get used and command and controlled. So why, that's why I often take it back to the C2 question of how can we better get these C2 technologies into the hands of those who would be using them quick in a more rapid

[00:30:19] **Eric Lofgren:** way.

[00:30:19] Yeah. This seems like a really important question. It goes with our multi-mission, but Right. Jad, c2, crosscuts, like all of the fit up cube, ? Like it goes across programs that goes across services, it goes across a lot of the the

appropriation titles as well. So does Elaine or Jim who wants to jump in on that one?

[00:30:37] Because I think, Jim, you were talking about there's gonna be these capability gap assessments and then eventually it has to be Targeted to someone go execute. Who is that flexibility already delegated down to a p e o or does it go up the system back down? How do you imagine that working?

[00:30:54] I guess start with Jim and then Elaine jumped in. Okay.

[00:30:56] **James Ruocco:** Yeah. I'll tell you how I see it working now and maybe how it could work. Right now, the way those analytical products flow up they usually start actually at multiple places. But I would say the detail work is actually happening within the the system demand and centers of the services that are doing a lot of the analytical work based on what they see the war fighting needs to be based on the intel that's reported, et cetera.

[00:31:21] That they also are of course leveraging both in the building and those centers and Ciscos are leveraging a lot of UR and f i party c a talent to do a lot of that analytical work. So it's usually happening at that level. I would say one of the unfortunate things is each service is looking at it through their lens.

[00:31:37] They want to have a one-stop shop for everything within that service. And we know that it can't work like that going forward. It's gotta be connected across. This brings in the Jet C two and other related challenges for how we get to that, that integrated joint set of capabilities that we're looking for.

[00:31:52] But those sets of ana analytical products roll up and it's not a there will be a gap analysis. They're doing a gap analysis now the question is, are we applying the right analytical talent at the right levels to roll up an answer that is as fully informed as possible? And and remember it comes from multiple places, service staffs joint staff.

[00:32:11] R e others all play in this domain to try to put these things into a mission context or a kill chain context. It's integrating all of those, they don't always all agree. They need to be adjudicated somehow. They're usually adjudicated through the budgetary process, believe it or not, at a very high level though.

[00:32:26] And I think this is one of the weaknesses with how we're doing it now. Not that you could ever make this analytically perfect, but how to better connect and roll up those analytical products across all of these organizations.

So that what results is a gap analysis that has a degree of credibility that you can then use to advocate for the resources through the process.

[00:32:46] So that, that's how I see some of the struggles and some of the advantages for how we're doing it right now.

[00:32:51] **Eric Lofgren:** Elaine, did you wanna jump in it? It also feels like you talked about this. We need more tech insertion kinds of lines. Kinda reminds me of for example, there's like a submarine tech insertion line that's already pretty flexible, there's some flexibility to kind of do some of the things Katie was talking about,

[00:33:07] can you talk about, where does that flexibility and how do you see being able to quickly go after getting after some of these gaps?

[00:33:13] **Elaine McCusker:** Yeah, so I think, this is a really big topic, so I'll just make maybe two points about this. First I think that this is where the importance of Larger portfolios.

[00:33:24] And that six four lines that some of the services have experimented with, I think is really important because it's a way for the people who are closest to the program to have funds that aren't gonna break something else they're working on, to roll in these technologies and really do that tech transition.

[00:33:43] The other thing that I'll say is gonna sound like it's contradictory to what I said before, but it's not and when you're talking specific to Jassy too, I think the way that. This could work differently than what we've seen in the past on joint programs is, the services have their work that they're doing and appropriately and they're testing it and they're doing exercises that include COCOMs and partners and, all that's going great.

[00:34:07] where I think you have the potential for it to not go great is they don't talk to each other. So you've got a great army system, you've got a great Navy system, got a great Air Force system, and the j and jassy too is kinda like twisting in the wind a little bit. And so I think this is where it's useful for O S D to have money and come in and pay the services to be compliant with the joint environment and then pay to test that into exercise the use of that joint environment to make sure that the money that was paid to the, components to be joint was actually used to be joint.

[00:34:43] And when they tested it, it worked. And so I think that's where there is room for O S D level centralized funding to kinda. Have the money to make

the, these priorities happen and then to prove that they've made it happen through testing and not, do it through budget compliance.

[00:35:00] think this is where the, money is important and I'm paying you to do what we all want to do. But I'm using, my money, which basically was your money. I skimmed it off the top and I put it into a pot that I'm now calling my money. And we all know this, but it's just of like paying taxes.

[00:35:14] That's why you take it throughout the year, right? So that you don't have to pay that amount of money at one time, which would make you crazy. And so think that's where a central fund actually is useful in paying for that compliance and then paying to test it over.

[00:35:26] **Eric Lofgren:** Yeah. We have a good question here from Greg Sanders.

[00:35:30] He's saying, these portfolios aren't mutually exclusive or exhaustive. If we build some flexibility into some of these lines, You know what helps build momentum and understanding with Congress so that, th this could actually be real, right? What's your views on what would make Congress a little bit more comfortable to say, okay, if you have this line for capability gaps for JAS C two, you don't pre-specified two or three years in advance, it will be an F 35 to a high Mars, right?

[00:35:57] It might be something else. Or it might be that one, right? So what's your views on how do we get that transparency and oversight align to open up the gates a little bit?

[00:36:07] **James Ruocco:** I got a thought to offer here, Eric, and it does build on where Lane left off too. And I'm gonna use it in an example of something that I think we're trying to do to get after that imperative.

[00:36:18] I'm not gonna say it satisfies. Congress because they tend to like a lot of specificity in each PE that's tied to very specific things. But I'm gonna come back to this. again, building off what Elaine was saying, we're trying something new per the depsecdef tasking to try to do business differently in acquisition to get to the outcomes we want change the way we do business also.

[00:36:41] And we started this thing called a competitive Advantage Pathfinders. So what this is effectively trying to do is connect the three legs of that stool I was describing earlier, right? I got requirements. I got P P B B E, I

got the defense acquisition system, and making sure that the gaps that exist between those things and there are gaps.

[00:36:56] And when I say defense acquisition system, really the s and t part that we're talking about, the technology development is in there, right? But connecting these things so that we're bridging across those seams, and I'm gonna use one example from that. We did a little earlier in the year. One of the things I led.

[00:37:12] That effectively shaved two years off of delivering an advanced weapons capability simply because we were able to enable a text transition to happen faster from DARPA to the Navy, as well as do some smart things in terms of Agile acquisition planning that was able to shift acquisition planning and contracting rapidly.

[00:37:32] But the real cuda gra that whole thing was we were able to make smart portfolio trades. So effectively what we did was we looked within that portfolio for the same, the things that are doing similar things and said, I'm gonna deprioritize that one and move those resources to something else. , of course the trick is unlike the flexibility you might have in 61 23 accounts, it gets a lot harder once you lock something in on a path and tell Congress is what we're doing.

[00:38:01] So we had to actually do some extraordinary gymnastics with the hill during the 23 deliberations that were going on to get them to move things around. We were able to do some B T R stuff in 22. We were able to fix things in Palm 24 or PBR 24 and out 23 was a problem. We made it happen. The question is, how can we do that without going through those gymnastics case by case, but have more flexibility that the Congress would then buy into as well.

[00:38:30] So if we could sell them on the idea of I've got a set of portfolio PEs that allow me to make trades within the portfolio. And they buy into that way of doing it. And those, and as those portfolios defined, so in other words, you couldn't trade off F 35 tails to go buy more bombs, for instance. That probably wouldn't fly.

[00:38:48] But trading off more airto, ground munitions like bombs for other airto, ground munitions, maybe that's something they could go for. Because from a capability or outcome perspective, I'm going after the same things. I'm just gonna try to get there a different way. Will Congress allow for that? Don't know.

[00:39:03] But I will tell you, they were pretty supportive of making the changes we just made as part of this competitive advantage, Pathfinder effort. And the next tranche of those things are going through. There's been a lot of radar projects that we're bringing in specifically to try to take something that was, I would say, more amorphous in terms of how it connected to capability gaps and then transition to an owner, a service that was gonna pick it up and run with it.

[00:39:27] And we're trying to use this . Competitive advantage, Pathfinder effort to. Expose where that is and is not working, make corrections. And then because the deputy is overseeing this actually make some permanent changes to how we're doing things and get after what Rader was intended to do, which was a pot of money, an o s D level pot of money to bring things together.

[00:39:47] I would say it's not to where Elaine was going with it, but it's, I can see how we can get there if we connect all the other dots and have more of a, of an ability to steer these things top level again with an analytical basis and understanding of capability gaps.

[00:40:02] **Eric Lofgren:** Elaine, did you want to jump in because I know you, you helped start the ed VNA system for some of that transparency and oversight.

[00:40:09] How do we make sure that this all kind of works and there's transparency and. .

[00:40:13] **Elaine McCusker:** Yeah.

[00:40:14] So I think I'm looking at this in terms of things that department can do for itself right now. And obviously Congress is a critical partner both in anything that needs to be changed and also in being a consumer of the information that, they need to do their job, that I think we see a pretty strong level of frustration, understandably with the department's ability to provide quick responses to RFIs to provide budget justification that they think is sufficient for, for their ability to do their oversight. And so I think, you know What I would like to see is the department focused on those things that it can do to help itself in this area and addressing the value of death so that it can then show congress, Hey, here's all the ways I've used the authorities and the flexibilities that you've given me, and here's my outcomes, and then be able to answer what a question.

[00:41:04] That seems like a simple question, but is one I think the department always struggles with is what specifically can't you? And you what is the barrier that you're looking to address? And give me examples of where we're falling short. And that can't be addressed another way. And I think that is where, the conversation being the department and Congress gets difficult and Congress has said, oh, okay, so you, let's try this fund, this centralized fund, this p.

[00:41:29] The ACDs, the jcds, All the things you guys cover in your report and then, it's kinda okay. Again, it still hasn't cracked the nut to fix this problem. And so I think there's been a lot of partnership with Congress in doing this. And I'd really like to see the department look at what can I do for myself now internally in the way I'm organized, the way I make decisions what should I propose as far as consolidating things?

[00:41:48] And I think, you mentioned adva and one of the interesting things about the ADVA system, which is advancing analytics, that's what ADVA stands for. It was really developed as a key component of the, comptroller chief financial officer vision of a single source of truth. So it was originally A tool that would answer financial and budget questions, support better execution, provide warnings when funds were at risk, we were talking about canceling funds and you know, so you'd have a better sense, a better way to see yourself when things are deo obligating and that kind of thing.

[00:42:18] And it's actually turned into, and it's continuing to evolve into lines of business that are beyond just the financial and budget, which it was designed to do. So it's pulling in data on people, on procurement, on cost management, on readiness acquisition, real property, information technology. And once you do that, I think there's two ways that it's going to help the department with some of the changes that we've talked about making and being able to see itself better.

[00:42:47] And then also, report to congress better. Rather than doing non repeatable, time consuming, iffy data calls, you'd have. Timely, accurate, complete data available to answer budget questions and to answer RFIs. And also to help support your evolution of what you want your budget documentation to look like, what you want it to include, how you want it to be able to answer golden management questions.

[00:43:07] That right now, know, it's like really difficult. You have to pull data from different systems or like I said, do data calls that, you know we used to joke, although it wasn't very funny, you know, you do a data call, you get all this great information, and the next week if you sent the same data call, the likelihood of you getting that same data.

[00:43:23] it was not that high cuz it depends on who it goes to and how they pull the data and how they interpret it and what the timeline was and what was updated and how the systems were talking to each other. And so I think what the department is developing is this really powerful tool to get a lot, get at a lot of these things, which will also inevitably improve the product they dig, give to congress, or ability to be responsive which will help with the trust factor.

[00:43:47] I think that anytime you can have better transparency and be faster and more complete and more accurate in what you're sharing with, your board of directors essentially to do their job, it's gonna improve that relationship over.

[00:44:00] **Eric Lofgren:** That was wonderful. Yeah, , it'd be interesting to reimagine the budget justification docs.

[00:44:05] There are more than 30,000 pages for just R D T and E and procurement. That's a big stack, right? 30,000. But for our panelists, we have a lot more questions in the chat that, in the q and a function than we can get to. So.

[00:44:16] But Katie, I want to bring you back in here. Elaine has talked a little bit about specific kinds of examples of where this has been an issue and Congress like needing that fodder. Can you talk a little bit, cuz I think a lot of companies or a lot of, the non-traditionals would. Lockheed Martin, they would know exactly how to get an irad into a program of record.

[00:44:34] No problem. That's what they're built for. Can you talk a little bit about that, and maybe also we have a question from Rob Burise here in terms of small businesses. How do you, I've been seeing a lot from like your venture capital arm doing a lot more activity recently. How do you partner with small businesses and help them help you as well?

[00:44:52] **Katie Wheelbarger:** To answer that's in two parts as you asked it. . Yeah. I think successful irad getting into program of record is the lifeblood of what we do. Think of, if you think of skunkworks or all the really advanced technologies from stealth to sensor capacity to data processing, these are all irad projects that eventually got into programs of record and being able to be produced at scale.

[00:45:11] But we also recognize, and I think again, our c e O talks about this frequently, if not every time he does a public engagement, he recognizes the importance of bringing commercial technology and small smaller companies into the defense ecosystem at a more rapid. Pace. And see he sees he sees as one

of his big priorities to facilitate greater representation of these smaller companies.

[00:45:32] And if we can harness Lockheed Martin's sort of knowledge of the d o D processes and even, relationships with Congress to help us be a bridge for more companies like that to get their technologies, their talent their talents and their workforce capabilities into the defense of this nation, that's something that we're going to do.

[00:45:48] And so I think collectively we all face the valley of death together. I think, yes, the capabilities that you have seen fielded are those that have been able to cross it, but we're all faced with the challenge whether the irad is successfully into a program or not, of the time delay it takes of actually doing so.

[00:46:02] And that the the. The capabilities we need today take, three, even if they do make it into the process, take 3, 5, 7 years to get there. And so that is something, we wanna consistently work with our government partners to see what we can do to help close some of those time gaps.

[00:46:18] I think sometimes on the contracting side, for example, particularly in a supply chain challenge environment or an inflationary environment, just getting the kind of data and pricing information and confidence in that pricing information from the s especially the smaller suppliers in the kind of speed that we can get under contracting less than a year.

[00:46:34] That's one, just one of the, pieces of the long process that we would like to see infused with a little bit more urgency and that would therefore help whether it be small or large, whether it's just us or us in co cooperation with smaller companies get some of these technologies into the field more quickly.

[00:46:47] **Eric Lofgren:** Right back at you, Katie. I guess in the tech sector or whatever they call like a platform, right? This multi-sided thing where you have like buyers and sellers meeting up like a, an Amazon or something. In d o d we think of platform as like a vertically integrated system.

[00:47:01] Are you of thinking about. , how does, how do we take these vertically integrated systems and open 'em up to more of that platform of this multi-sided thing? Does that make sense to you? I think

[00:47:10] **Katie Wheelbarger:** of what you're getting at is something that e again, Jim Telas talked about recently is building these larger systems with more open architecture.

[00:47:15] You can think of them as nodes in an overall network that can be updated and infused with different companies technologies as they evolve over time. Not that they're just one thing that's built today to last Exactly as it is for the generation of that platform. And we know that's really as modernization happens anyway, even in your traditional fo your traditional forces.

[00:47:34] It, that they're not about, they're not necessarily always static, but we need to again, infuse it with more capabilities. Again, this open architecture that allows more rapid adoption into technologies, even if we are thinking of things as platforms versus nodes in a network. I don't know if that got it, your question, but that's how I

[00:47:47] **Eric Lofgren:** thought of your question,

[00:47:48] No, I think that's right. Just glad to hear that. And we've had a couple questions from Steve Griggs and others on continuing resolutions, cuz we're still in one. We just heard Frank Kendall come out recently saying that there's 61 programs in 28 military construction projects or new starts that are impacting more than 6 billion that can't get started under the cr.

[00:48:07] And I guess that's just under the Air Force. So that's a lot of new starts. What are the challenges? But really what are the opportunities to do something different here? I just could you raise b c r thresholds or five new starts a month per cr. What are some ideas of how to make the CR issue a little bit less damaging.

[00:48:24] I'll let Jim go first and then Elaine and.

[00:48:27] **James Ruocco:** Okay. I'm sure Elaine in particular and Kate have have more expertise in this area in terms of what the possible, but I'll just tell you from someone that's been in the trenches, execute and acquisition programs, and then again at the headquarters level I don't know how the solution looks something different than a longer term commitment on what we're saying we wanna do with the flexibilities built in to make smart trades like I was talking about earlier.

[00:48:50] But, I think about the way the Europeans do it and others outside of the US where once they commit to doing something that put the resources

against it and then they actually follow through. They don't revisit it every year, but we literally revisit everything every year. And there is a huge amount of inefficiency with that, just doing that process, let alone.

[00:49:10] The impacts that we create when we do that. So yet new starts, some things are characterized as new starts. A lot of those are because we didn't have a PE for that before. But I'm basically doing a modernization of something that already exists. I just can't get after it because it's a new start.

[00:49:25] So what we should be doing is looking at providing the flexibilities in the system, but also having, especially if it's gonna take us two years, just to get through a budget cycle to build , to actually start spending money for the thing we decided two years. We ought to have longer term commitments so we're not constantly undoing what we spent time doing unless there's a good reason to do that.

[00:49:44] And I think the P B B system which, if I understand correctly, McNamara brought over from industry looked like a good thing in the sixties, probably time to, to revamp that based on all the decades of learning we've had. And I know that's what the pbe Commission is doing. I think there's people that are playing in that, listening to this.

[00:50:02] So I, I would love to hear more about how we get after it, but it's gotta be an all government effort. Otherwise we're just gonna get stuck into doing the same thing that we've been doing the last several decades.

[00:50:11] **Elaine McCusker:** So I'll chime in cuz I feel like I have to and I think this is a good topic to end on because without the money flowing into the programs that have been requested and without, the ability to do new things the technology value of death is not going to improve. Just right now you mentioned what Kendall said.

[00:50:28] I Across the department there's 192 new projects, 97 new construction housing, 49 proc procurement increases. I guess I am less interested in continuing to help figure out how to mitigate the impacts of the CR than in getting pe more people to understand how much time and money and capability and competitiveness and even just support of the force is being lost, under continuing re resolutions almost every year.

[00:50:57] I think rather than looking at ways that we can. Mitigate it inside the department, which by the way, a lot of ways are being used now to, try to lessen

the impacts as much as possible. We need to get it a way to fix this problem and get our representatives to care about this enough to put it as a first priority over.

[00:51:14] Thanks,

[00:51:15] **Katie Wheelbarger:** Eric. I don't really have too much to add to that. Elaine has a lot of experience in this to the extent that our d od partners are seek information and our support to, in ways to mitigate, that's how our role to play is to help our government partner with whatever information

[00:51:27] **James Ruocco:** they might need.

[00:51:28] **Eric Lofgren:** Great. We're on time here. We'll end promptly at two. Sorry we couldn't get to all of your questions, but really appreciate Jim Baro. Elaine McCusker and Katie Wilberg for joining us here today. Really appreciate everyone and any final words. Feel free to come through. Katie, Elaine, Jim, for joining us. Really

[00:51:46] **Katie Wheelbarger:** appreciate the time. Thank you, Eric.

[00:51:47] **Eric Lofgren:** Thanks

[00:51:48] so

[00:51:48] **James Ruocco:** much.

[00:51:49] Thanks, Eric. Good job.

[00:51:50] **Elaine McCusker:** Yeah. Important topic. Great job.

[00:51:52] **Eric Lofgren:** All right. Looking forward to engaging and thanks everyone for joining us.

[00:51:56]