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DWG: We're honored to have with us the Chief Information Officer of the Department of Defense, Mr. Dana Deasy. Thank you for coming, sir.

Here at the Defense Writers Group the whole format is Q&A so there's no opening remarks, but I'll ask the first question and I'll throw a softball to start.

Why don't I start by asking you, sir, to basically just tell us what you do. What are the issues that you've been dealing with? What are the sort of front-burner issues for someone in this role? What are your biggest concerns? What are your projects at the moment?

Mr. Deasy: I think the way I would describe what I do is the way it was described to me when I first got the call and was asked to come in to talk to Secretary Mattis at the time, and Deputy Secretary Shanahan at the time. I don't think the National Defense Strategy had been out all that long, but the way it was described to me is look, we need to think about readiness. We need to think about lethality. And there was a growing recognition across the new leadership that had come into the Pentagon that every conversation, every agenda, every program of work they wanted to do, there was a growing and growing larger element of technology that was a part of that agenda. It was, we need someone with your background to come in to kind of look at the whole of all these various agendas, all the different ways that the services are wanting to leverage technology, whether it be from a lethality standpoint or how they're going to foster further partnerships or we're going to reform the way we work, and help us think holistically about what a connected course of action looked like for the department.

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So that led to the creation of the digital modernization strategy program which I've been speaking about for the better part of a year now. As you know, it's got four major tenets to that, which is execute at scale and move to a cloud first enterprise way. Leverage and use artificial intelligence to help us enable the warfighter in new ways. Look at how we think about not only modernizing our command, control, communications, but how do we make it more resilient? And then finally, not only think about cyber in everything we do, but how do we make the department more resilient when it comes to cyber and all the ways kind of the department grew up over many, many years?

So that's kind of the why. The approach has been the execution and bringing to life that strategy. Now that the strategy's in place we've actually, I believe this week we're going to finally get signed the digital modernization strategy document for the department, which basically takes those chapters that I just described, talks about them in detail, and talks about the interconnectivity between those two.

DWG: What keeps you up at night? If anything.

Mr. Deasy: Being a presidential appointee, I come to work every day and I use this expression in the office of, I kind of use this basketball expression called the jump clock. I think what keeps me awake at night more than anything was when you look at just the sheer, not only the scale and the complexity of that agenda, but the degrees of difficult in executing that large of scale agenda is how fast can I push the department? What's the pace that we can go? Not only within my own organization but within the combatant commands, the services, the fourth estate, et cetera. I kind of go to sleep every night and the first thing I do is assess how far did we move the agenda today and how much farther do I have to push it tomorrow? There's many nights the proverbial what I don't sleep well about is are we pushing hard enough, and are we at the pace we need to be to make this thing sustainable by the time at least my time comes to an end in the administration.

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DWG: Yasmine, National Defense Magazine.

DWG: Hi. I know that the Joint Artificial Intelligence Center is nestled under [your department]. Can you talk about U.S. dominance in AI? Would you say that we are dominant in that area globally? And then what needs to happen to maintain that? If you agree that we are.

Mr. Deasy: That's what one of probably the most asked questions is vis-à-vis adversaries, where are we as a nation? I continue to say that I think we as a nation, as a whole, if you think about the institutions we have from an academic standpoint, the private sector we created, the technology that we've availed ourselves throughout the U.S., there's no doubt in my mind that we continue to have the most exquisite capability in terms of people, academic talent, startups as a nation.

People can run stats and figures and compare the amount of money that adversarial countries might spend on AI, but if you take the know-how and the sheer talent and the capability, I would say that we still are in a clear leadership position.

With that said, there's no doubt that each day that goes by other countries become stronger, more competitive, build their own inherent capability. But I'd say right now we have the lead on that.

DWG: What do we need to do to -- what does the Defense Department need to do?

Mr. Deasy: I continue to believe that we have the best academic environment in the world. If you think about it, it all starts there. You can look at any great set of technology that's come out of the U.S. that's ended up being used, and you can find its roots first by somebody who came out of some academic environment, then went into either a startup role or some technology firm, took the opportunity to create something big and great out of that, of which the Department of Defense then leverages to our advantage.

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The reason I was such a proponent of things like the Joint Artificial Intelligence Center was, because I think AI at some point will become part of the fabric of how we build solutions from a lethality standpoint, how well think about deterrence. I think it becomes very apparent that having a Joint Artificial Intelligence Center, it's kind of a flywheel. It's supposed to be the accelerator effect. It's supposed to help us move at a much greater pace than we would if everybody did individual parts.

So I think to me, to answer your specific question, is that we're going to have to accelerate faster, and we should take advantage of our scale we have across the Department of Defense, and that's what the Joint Artificial Intelligence Center is supposed to take advantage of.

DWG: Tony?

DWG: A couple of questions on the JEDI contract. To what extent is the source selection contingent on the Oracle decision coming down in mid-July?

Mr. Deasy: Right now they are two disconnected events. We have a Federal Claims Court hearing that will take place sometime during the month of July, and we have a source selection process that will complete its natural process towards the end of August.

DWG: So the JEDI award will be, the earliest will be September at some point.

Mr. Deasy: I think right now the JEDI award will probably be sometime towards the end of August.

DWG: And there are two different paths. The court, you're now waiting for a decision.

Mr. Deasy: Well, we're not waiting for a decision that it doesn't impact the source selection process.

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DWG: Gotcha. I'm going to key off your May 20th memo to the fourth estate clarifying guidance. Can you give some examples, like one or two from each service, of the top programs that would migrate to the JEDI once it's up and running?

Mr. Deasy: I'm probably not in a position to do that right now. What we are doing right now, to clarify what the purpose of that memo was, is that now that we're getting closer, it's the logical time to sit down with the various services, start to describe what we believe a general purpose cloud environment will start to look like, and more importantly, for them to start thinking about what activity set will they have coming up this fall and going into next year that might be a good candidate.

Part of the problem here, it's not really a problem, it's just the way it has to work is, until we complete the selection of who that partner will be, that then leads to starting to understand what that general purpose cloud will start to look like. And not only start to understand what the general purpose cloud starts to look like, but then how do we start to train people to how to leverage and take advantage of that.

So right now we're more in a mission of going out, educating people on the construct, but then we have to basically wait until the contract's done so they understand technically what they're getting and what the contract from a sourcing standpoint that allows them to start to build --

DWG: So you have to wait for the winner before you can winnow down on projects that would be first candidates.

Mr. Deasy: Right. What we're doing right now though is we're starting a very strong awareness campaign that says okay, folks, this is coming. And it's now time that as you start to think about those activities you think are well suited for the cloud, to start to think about the fact that we're going to have this cloud coming on-line.

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DWG: Is this getting down to the CINC level, the commanders in chiefs, the regional commanders level like at CENTCOM or PACOM?

Mr. Deasy: Yeah. We've actually in the last six months have had a series of what I'll call cloud awareness sessions with several of the combatant commands as well as various subcomponents of various services to create awareness in education. I will tell you, there is a significant amount of pent-up demand just waiting to use the capability once it comes on-line.

DWG: Thank you.

DWG: Matt, Defense Daily.

DWG: Just a follow-up on JEDI. Over the course of the program it's kind of been, the [inaudible]'s kind of been pushed back and there's a formal RFP review. Was there ever a moment where there was a consideration of possibly moving this from a single vendor to a multi-vendor? Just based on congressional feedback and overall industry kind of comments on the nature of the program?

Mr. Deasy: Not this particular contract, and the reason why is somehow lost in this whole discussion, is that we are already today a multi-cloud, multi-vendor environment. And if one really takes the time to understand what we've constructed here; we've constructed a ten-year program that is actually broken down into components. It's actually broken down into phases of points where we can renew or we can choose to do something else. That was done by design. A lot of people aren't really honing in on that.

But we believe that if you look at the maturity of cloud and big changes that occur, it's about every two to three years that that happens.

So if you look at our terms, it's a 2-3-3 sort of construct that allows us to step back, stop, reevaluate, and decide at what point in the future do we want to then start to introduce other new players into the solution. But we will do that over the natural course of time.

But when you think about what it takes to stand up an enterprise cloud, for those who have actually built them in their career, these are no easy tasks. Especially inside a government where you think about the security requirements we have to go through,

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the fed ramps, the accreditation, the penetration testing, the red teaming, the provisioning tools that have to be set up. This is a very large, heavy lift, and we've never done this at the scale we're proposing to do it and that's why we've said we've got to start with somebody to learn how we're going to do this at the scale we need to do it at, knowing that as we mature this we're going to naturally need to introduce more players into the mix.

DWG: So when the announcement that the IG report had come out, it was concurrent with the announcement that two companies had been selected, saying these are the only two that meet the current requirements, what was that kind of, that base line level that only those two, either in broad terms or, what was it that kind of set them apart saying okay, these are the two that are kind of moving forward as source selection is around the corner.

Mr. Deasy: As you would suspect me to say at some point today, we are still in a very active competition. But more importantly, we obviously have an active federal claims process we're going through. Therefore, it would be really inappropriate at this time for me to get into any specifics on the gated requirements to go to the down select, and then obviously to go from the down select to the individual award.

All I can say is that there was a lot of expertise that we drew upon both inside of government and outside of government, to look at the criteria, the requirements, the security to arrive at what was the eventual RFP that we put on the street.

So different than the narrative that sometimes gets discussed out there. This was a very broad-based set of expertise that was pulled together to create the construct for this and the gated requirements for this.

DWG: Justin, Inside Defense.

DWG: I wanted to ask about electromagnetic spectrum requirements and 5G. Back in April the Defense Innovation Board came out with a report on 5G, and one of the findings was that DoD could perhaps free up some of its sub [inaudible] spectrum to help the United States compete in 5G [inaudible]. Another finding was DoD should prepare to operate in a post-Western [inaudible] system.

I was just wondering, are you taking any action based on those

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findings? You probably have an idea of what's going on. So are you looking at any of those recommendations and implementing them?

Mr. Deasy: All the reports that come out from, whether it's the Science Board, the Innovation Board, Business Board, Policy Board, I'm always keenly interested. You just can't help but highly respect the seniority and the experience that comes off of the teams.

I remember when I joined the Department of Defense I was truly impressed with the resumes. We have created quite outstanding these independent boards.

When you get into a 5G conversation, and I've been involved now with this conversation for quite a while. It's very interesting because you have to first say what conversation are you in. Spectrum in itself is a conversation. Then there is the whole conversation that says what's the future of spectrum look like? If you look at the amount of spectrum that we as a nation have released already for 5G, it's greater than the combination of all those spectrum on the planet.

So for me this is not an issue anymore of is there enough available spectrum. There is a lot of available spectrum. I believe personally we have to start to look at a conversation called what's the future spectrum need to look like in terms of can we dynamically share it? I think that's a really important conversation, not only for the government, for the nation as a whole.

Then you have a whole conversation around supply chain. Where is the build-out of all that it takes to actually bring 5G to life going to come from? Then you think about the build-out of national infrastructure. The entire set of tower networks and what you have to do to build out to support this.

So you've got a supply chain conversation. You have a national infrastructure conversation. You have a spectrum conversation. And all these are important. I think one of the things that I've seen coming out of the 5G reports from the various committees has been this understanding you need to think about the individual parts, but then you need to holistically think how this all connects back together.

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DWG: To that point, do you think it's a given that a lot of this infrastructure that you talked about will be built abroad? You also have risk on your supply chain. If so, how do you mitigate that?

Mr. Deasy: That's back to the whole supply chain conversation. I'm probably not in a position right now to forecast what I think the future of that will look like. I think as a nation we do need to step up and look very strongly at how do we create more domestic capability. Not only for 5G but I'll call it XG. Five today, it's going to be six tomorrow. I think that the conversations we find ourselves in today with dependency on capability that may exist outside the U.S. just highlights to me the more macro conversation of we need to build out more of a domestic capability. Chip level, application level, integration level, infrastructure level, et cetera.

DWG: Rachel, Air Force Magazine.

DWG: How is big DoD working with the services to roll out 5G? The Air Force is starting to sort of pile in in its region, rolling that out to bases. Is DoD driving that at all? Are you partnering with them? Or is it just the services going on their own?

Mr. Deasy: Absolutely the DoD is taking a holistic approach to this. This is actually being led out of R&E, Dr. Griffin's organization under Lisa Porter. I think they have a really well thought out approach to doing this.

The first thing we have to do is we actually have to start building use cases and we're doing that with the Air Force, we're doing it actually with all the services. So right now what does that mean?

If you think about 5G, you have to do some use cases to prove out various spectrum uses. You think about it's the idea of low latency, high broadband and internet of things. So we're saying okay, what bases throughout the U.S. can we establish a 5G presence in and test these different concepts in? Right now that list is being assembled. There will be bases from all the various services, and we'll test out a bunch of different capability.

So that's where we're at. We've actually moved now from the

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conversation of what's the use case for 5G to actually now identifying the actual bases well build it out in.

One of the things we want to do is not just go in and do experimentation and then we kind of pull it out, but to actually leave a capability behind that the bases can continue to use from a 5G standpoint.

DWG: A similar question, different topic. Going back to the JAIC. The Air Force at least, maybe the other services, have AI cross-functional teams, so I'm curious what the JAIC is doing to work with those, and if you can just give us an update on the JAIC side of the program.

Mr. Deasy: The concept of JAIC from the beginning, it was never intended to be all things across the Department of Defense. We created this concept which I've shared before called NMIs, National Mission Initiatives. JAIC really has three or four big tenets it has to be successful on. One is it needs to be able to demonstrate that it can take an idea, a problem set that exists across all the services, integrate that into a common AI solution, and that's exactly what we're doing with the first one on preventive maintenance.

One of the things I've always shared with people you have to be very good at when you do AI, there's two big problem sets you've got to solve for very smartly. One is access to the right data. That itself is quite a daunting task when you think about the scale and the amount of data that DoD has. And then getting your problem set defined right.

Just saying that we want to solve for readiness doesn't do you a whole lot. Saying we want to solve for some of our weapon systems still doesn't help you. So we've got it all the way down to the H-60 Black Hawk, and then we got it all the way down to problems that dealt with ingestion of sand that caused problems to the engine. But that's what I mean by you have to work very hard to get down to define the specific problem.

What was interesting about that one, remember I said a National Mission Initiative is something that you have to solve for across all the services. Well, Black Hawk happened to be an asset used across all the services that had this common problem.

So we released version 1.0 of that algorithm for use within

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SOCOM. We're now working with Army. As you can imagine as we go from one service to the next, one of the things that we continue to learn, this doesn't surprise us is data, how data's been collected for years off of assets isn't always the same.

So the other thing that the JAIC is supposed to solve for is how do we create common tools? If you build an application what you're really doing is you're looking at how do you ingest data, how do you tag that data, clean up that data, make that data usable to be trained, how do you then write the appropriate algorithm, how do you then test against it?

So another thing JAIC is supposed to do is create foundational tools across that entire ecosystem that all the services can use from data ingestion, the data labeling, data cleaning, algorithm development, integration testing, production and release.

For me, if JAIC is successful at building foundational tools, stays true to its mission, the working on NMIs, that leads the services, back to your question, to focus on what we call CMIs, and these are Component Mission Initiatives. Something that's unique to a service. Something only Air Force, for example, needs to solve for. But they should be able to use those same foundational tools that we're building inside the JAIC. That is what success would look like.

DWG: Dmitry, TASS.

DWG: I wanted to ask you about AI weaponization and arms control. Just about every nation engaged in this sort of development, the United States, Russia, China, the Europeans I'm guessing, are all looking to weaponize AI some way or the other. So my question is, is the United States open to an idea of imposing some sort of limits on those developments sometime in the future? Even now maybe. I don't know.

I'm guessing your dialogue with the Russians on that is non-existent, but how about are you talking at least to your European allies about this?

Mr. Deasy: First of all, my expertise, and I'll be first to say, is in technology and how to deploy and create solutions. As far as our policy matters in terms of our interactions with Russia on that particular topic, I would not be well versed in answering that.

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I can tell you that since the moment that we conceived the Joint Artificial Intelligence Center, we knew front and center one of the most important conversations we would have ongoing would be the whole ethics issue around this.

One of the things we know that JAIC is also going to have to stand up and start to describe what does that mean, some of the questions you're asking. That's why when we created JAIC one of the things that, I think there were a couple of news articles that came out late last year, was that we actually chartered and tasked the Defense Innovation Board to go away and to think through many of the permutations, I think some of the questions you're raising, on how do we start to think about framing when we talk about the ethics of AI? What's the different conversations we're going to find ourselves in? What are some of the big decisions that we'll have to take down the road? And what's the right way that we should approach this? Is there existing doctrine and policies that we can point to that will be applicable to AI? Or will there be a need for the creation of new policy and doctrine?

We're going to get our first view of that report I believe sometime this summer, I want to say end of July/August, we'll start to get a view on that. But that was actually, interestingly enough, was one of the very first things we actually kicked off, because we knew this would become such a front and center conversation that we needed to early-on start to create a dialogue. I thought one of the best ways to create that dialogue was to get people who could have a view that not only understood the department, but had a view on the outside that could give us kind of an independent view on this. So that's why we chartered them to do that piece of work.

DWG: So do you have experts from the outside taking a look at this? Not only people in DoD?

Mr. Deasy: Yeah. So we're using what's called the Defense Innovation Board, the DIB, is the body that's been chartered to do this work.

DWG: But --

Mr. Deasy: What they can do, they are going outside and then they are drawing upon, they've actually had a series of public

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sessions over the first six months of this year where they've had meetings where other people can come in and share their views and observations and thoughts on this.

DWG: But within the DoD, or in the interagency, do you have a preliminary discussion on whether or not some sort of arms control mechanism on that will be necessary?

Mr. Deasy: I'm not in a position to share with you where we are in terms of that conversation. I'm truly focused on how do we make AI relevant? How do we bring some pace to it? How do we do it smartly? And how do we do it responsibly? The responsibility question gets into a whole bunch of different conversations. I've just said let's charter, using Defense Innovation Board, to get that conversation started. Where that will go, it could very well lead to some of the things that you're bringing up. It would be inappropriate for me to speculate where that all leads to.

DWG: Congressional Quarterly?

DWG: Thank you. Will [Inaudible] from the Congressional Quarterly.

A question on 5G. Earlier in response to a question you said that we have to look at how we share the spectrum dynamically. Is there an effort now to figure out how to do that? And who's doing it? Is it going to be a contract? There are several companies that are offering that technology to do the spectrum sharing dynamically.

Mr. Deasy: Right. As you know, if you think about how licenses have been granted firms for spectrum since the beginning of time -- I'm not sure what the beginning of time is, but it's been many, many years, it's always been this allocation where you slice and you auction off spectrum, and there's always been a need for the DoD to look at its equities inside spectrum use and ensure that that it's being deconflicted.

There reaches a point with spectrum where, and the maturity of technology's reached the point where we can now start to say can't we take a band of spectrum and start to look at technologies that allow you to dynamically share that spectrum?

Remember earlier I mentioned that there's a piece of work going

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on right now where we're looking at standing up some uses cases at some of the bases in the U.S.? Some of our use cases is going to be looking, working with some partners.

We had an industry day, I think it was fairly well publicized here, I want to say a month or two ago. And we asked industry to come and share with us white papers on what, to a bunch of various topics in 5G. One of them was dynamic sharing. So part of what we'll be testing on our bases will be dynamic sharing.

DWG: When do you think that decision on whether dynamic sharing is the way to go?

Mr. Deasy: That timing depends on, first, obviously, we're going through an appropriations process right now to get the funding identified that allows us to start to do these use cases. These use cases are going to need to run over a period of time.

So I couldn't tell you, because I can't predict how long some of those processes will take to get done, but we'll have an understanding here at some point in the future as to the viability of that.

DWG: Lauren Williams? Federal Computer Week.

DWG: I want to go back to the cloud. You said you're already working with the services [inaudible] to on-board onto JEDI [inaudible] awarded. Is there any concern on having an adequate number of cloud personnel? I know the Army has raised that concern. They're actively looking for more experts [inaudible] in that space.

Mr. Deasy: Here again, you have to break that conversation apart. When we say cloud expertise, obviously if we're going to use commercial partners there's a certain expertise that they need to have in standing up, providing a robust infrastructure, securing it, having a stack of software on top of it.

For us, we need to have people who know how to provide oversight, and to know how to work with the services to identify opportunities that are well suited for a general purpose cloud.

I think that expertise is coming along quite nicely. We've taken our cloud team from just a handful of people to an organization now that is getting well trained to stand up and do that sort of

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work.

Where I think, and here again I think it's missed in a lot of cloud conversation, is the real value of cloud is yes, you can provision and stand up infrastructure at a rate that we've never been able to do before, and it will have a set of security standards and integration and allow us to share data in a much more dramatic and efficient way. But the real big capability is going to be building applications on top of the cloud. And that's the area where I think we need to invest more time and effort inside the Department of Defense, is how do you train people to do that?

People have said to me, well, shouldn't you just go put in every cloud provide in the world? Let's just think about that from a practical standpoint. Let's say you decide to bring in three or four cloud companies at once. All of them have to go through certification. All of them have to go through fed ramps. All of them have to be unclassified to classified to Top Secret work, needs to be tested, set up. Data points, encryption points, training, learning the software tools, the provisioning out to individual cloud providers. I mean I could go on and on. It would take us years to get that going.

The reason you want to start with somebody is so you can start to build up a muscle of expertise and talent of how do you secure these, how do you provide oversight, how do you do provisioning, how do you data integration, how do you start to build applications? That's the area that I want us to quickly move to.

To me the exciting part of all this is the speed of which we will be able to stand up new capability for the warfighter. And sadly, what's been missing from this whole conversation is it's the warfighter that all this is for. Our ability to integrate data, our ability to put a solution out to the edge in a much more rapid fashion is really quite dramatic and very, very exciting. And my interest is to get as many people trained as quickly as possible on how to build cloud-ready applications. That's where I think we need to put a lot more attention on development of people.

DWG: Nick?

DWG: Nick [Inaudible] from CBS News Hour.

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I wanted to ask [inaudible] but moving out a little bit, thinking in the context of National Defense Strategy and China. I happen to be in the middle of a big series in China, going back and forth.

When it comes to 5G, you talk about how we in the States need to create more capacity. You talked about the idea of creating a domestic industry here. Do you fear it's too late? What I mean by that is I talk to countries in Africa who say Huawei and [DT] are already here. They're offering us entire packages. It's pennies on the dollar compared to what anyone else is offering us, and of course we're going to buy it because there's no better alternative.

So from that perspective, from the kind of global competition perspective, where are we on 5G? Is it too late? And if you don't think it's too late, what does the U.S. have to do, and when does it have to do it by?

Mr. Deasy: Obviously all forms of telecommunication are going to be a competitive global market. I've seen this as we've matured from three to four, now to five. You think about players that were substantially large back in the 3G era that today you say where are they? This is going to continue to leapfrog and evolve.

I think we're in a period of time, it's an important period of time. And yes, there are international players that we're concerned about in this space, but I don't think it's an end all game. I don't think we're ever too late to go to the party here. I think this is a case of, in the case of all competition, of all technology that's ever been involved, there will be a constant leapfrogging, and this is just another one of those technologies.

We're all fixated on this right now. Obviously for important reasons. It's going to really help nations. But we are just in the point in time where we're not at any end state in this case.

DWG: We know right now much of the administration fears that this is kind of the point of no return. That if certain countries adopt certain technologies from adversaries there will be no stopping those adversaries from [inaudible].

Mr. Deasy: Here again, remember I said what conversation are we finding ourselves in. There's a lot to create an end-to-end 5G.

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The conversation that's been in the press and talked about is one part of it. The Huawei component of that. Obviously the concern there is, is that equipment safe to use? Can the equipment be deployed with confidence? There's a lot of I'll say people who know that space well who have said they are quite concerned about conflict. Could you use that? Therefore, that has led the administration to take the decisions that they've taken.

For me, that conversation is let's get focused on okay, what is it we now need to build out? Where are the alternative sources we're going to go to?

But I think this "too late" statement always implies that that's it. There's no other choice, there's no other place in the future you're going to be able to go. I don't believe that. I've never seen a technology that we've ever created where we've said too late, that's it, there's never going to be another choice. Name me one.

DWG: Aviation Week.

DWG: I wanted to ask, there's been a fair amount of churn at the Defense Department in terms of its leadership. You've been operating without a confirmed Secretary since last December. How does that affect you? What challenges does that pose to you? What decisions might you be able to make if you had, or waiting until --

Mr. Deasy: I'll speak for the Digital Modernization Program which is what I have responsibility for. I was very fortunate that I had a chance to start this program under the tremendous leadership of Secretary Mattis and Deputy Secretary Shanahan. Deputy Secretary Shanahan becomes Acting. Complete continuation of the program. There's been no stutter, there's been no stall, there's been nothing that's been delayed.

Interestingly enough, this program of work has been ongoing, reviewed at all four-star levels across all the Secretaries, so now Acting Secretary Esper is completely aware of this program. Army's been highly integrating this program. Him and I have had lunch on a regular basis. We've talked about all elements of this program. So at least in my space I can tell you that there has not been any loss of continuity in terms of because there's been changes in leadership, has there been a setback that has slowed down our ability to keep this agenda going? None

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whatsoever. From the moment that David Norquist came on board as the Deputy. I have met with him almost on a weekly basis to continue the progression of this program. And the Secretary has set up these Defense Forum Initiatives to go over key programs and has declared the Defense Modernization Program to be one of those.

So this program gets a lot of what I'll say very active ongoing conversations at the highest levels, and I have no doubt that that will continue under Secretary Esper.

DWG: Federal News.

DWG: [Inaudible] with Federal News Network.

Being as you've got some sort of new responsibilities and authorities, some of those were deciding to make the sort of list of, well, let me bring it up so I don't get this incorrect, developing and adopting the publishing standards for IT and cyber capabilities. And you're also supposed to do an in-depth examination of each defense organization's five year budget. Can you just give us an update on how those things are going?

Mr. Deasy: The first part of that basically talks to historically many key decisions that we've taken on technology we've done at a service level, and you wake up one day and you find out some of the challenges we face on lack of interoperability, or many data standards. And we talk about why that's challenging when you got to the AI conversation.

I think there's been a realization that has occurred that we are in need of an architectural framework that stitches the various parts of the services together. These authorities basically are simply saying that as the services take decisions around new architecture standards, and that can be around infrastructure, can be around cloud, can be around data management, whatever it might be, that there is a thoughtful review that's occurring out of the DoD office and that the DoD office, CIO office, believes that that's not an alignment that betters the whole Department of Defense. That's what those authorities were put in place to address.

Interestingly enough, I was asked about these authorities at the end of last year, knowing they were going to be active come January. I said so far I don't think there's been one time where

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I've had to play the card called I have these new authorities; you need to do it my way. We've built such a compelling Digital Modernization program of work, that each of the mil Chiefs, the CIOs, the Secretaries of the various services, have all said these are things we naturally need to do. We need to create interoperability of our data. Cloud's the foundation of doing that. We need to use enabling new technologies such as AI. Doing that in a common way makes sense. We need to create next generation C3 to make sure we can get our data from the cloud and AI out to the warfighter. Then finally, we need to put cyber [high] in a way that wraps it altogether.

They are all completely on board. So I don't think there's been a single time in the first six months of this year where I've actually had to go in and cite those authorities and say you know, the way you're doing it is not correct. You need to do it X way. That's Part A of your question.

Part B is around the budget. So last year for the first time, which would have been for the 2020 budget year, we stepped back and looked at creating a process.

So last year we started to build out that process called how do you step back and look at the entire Department of Defense budget? How do you start to make smart assertions around is the money being spent by the services, being directed in a way that not only meets the needs of the services but meets the needs of the whole department?

One of the reasons the Digital Modernization Program and getting that thing grounded and getting that strategy developed and out there was so important, that's the basis of our review. So what we're really doing when we say we are looking at that is we're looking at the viabilities of programs that they, the services, need to do to support lethality, partnerships, whatever. But we're also looking for insight of what it is they're doing to ensure the way they're going to roll out AI, cloud, next generation C3 or adhere to our cyber standards that's being followed. That is actually how I'll call the way we're actually going about bringing that new language to life.

What's interesting here is, because now we've created this kind of joined up approach, there is a growing dependency on JAIC needs to be successful. JEDI needs to be successful. Because we have gotten alignment, we have gotten people integrated with

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these solutions. So there's a lot at stake here now in the importance of delivering on these programs on behalf of the department.

DWG: On the part of the Part A that you're talking about, how all these authorities are really coming together organically it sounds like. Is there a final product that you'll eventually sort of come out with that says this is how everything is standardized, this is how we're doing everything across the board jointly?

Mr. Deasy: Let me put it this way. In my 38 year career, I don't think there's ever been a final state when it comes to technology. I think that what we've created is hopefully a smart foundation of what matters most for the department across these four tenets. I think over time that we'll continue to evolve and look at new -- today it's all about 5G for example. I guarantee that narrative a year from now you'll all be sitting around this table and it will be something new that we'll be reporting on.

I believe we'll probably end up falling under one of those four tenets. I think those four tenets are pretty enduring unless there is something like AI that will come out in the future that we haven't conceived yet. Then whoever that leader is will have to either integrate that in, update the Digital Modernization Program. But I believe these are pretty foundational tenets that will last for --

DWG: So there's many working strategies and not just one --

Mr. Deasy: Right. Look, if you think of C3. That umbrella called command, control, communications. You have P&T underneath there, you have SATCOM underneath there, you have [CUCON] continuity underneath there, you have 5G underneath there. So any new technologies that should emerge in the marketplace will probably end up sitting under C3. I have no doubt cloud will evolve over time. There will be new capabilities. But it will probably still fit under that foundational thing we call cloud.

Could there be something additive? I'll never say no when it comes to technology. It's just too dynamic and it changes too fast. I suspect there will be revisions and updates to the strategy over time.

DWG: Let me open it up to others, but first, anybody who hasn't

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asked a question?

DWG: This may sound a little weird. While we've been sitting here the White House has put out a statement [inaudible] key individuals to key administrative posts, and you're on the list.

Mr. Deasy: Oh, that happened today. Okay. There you go. I'm the first to find out right now.

DWG: Is there something [inaudible] should be aware of? Is it a leadership question? Why are we getting this when you've been in the job since last May? Because the language is quite funny. You're being nominated for the job, and then the next sentence, you have the job already.

Mr. Deasy: If you go back to, Scott asked the question about new authorities. If you go back to the NDA language, and I'm not sure what year these were written. They were pre-my arrival. There was ones about new authorities around budgets, new authorities around standardization, and there was also language around the DoD CIO role becoming a presidentially appointed, Senate confirmed. But not starting until January 1, 2019.

So prior to January 1, 2019 it was not a to be Senate confirmed role. So I joined of course in May 2018. Now that the law became effective January 1st, I have been going through the delightful process over the last six months of going through all that you have to do behind the scenes to become nominated. I guess what you're telling me is that has happened now. [Laughter].

DWG: So there no significance of that today. It could have happened five months ago.

Mr. Deasy: You are absolutely right. There is absolutely nothing to read into the fact that it occurred on this day. It's just that all the paperwork -- you all know the process.

DWG: Have you already been through the Senate or will you now have to go through the Senate?

Mr. Deasy: I now will start through that process with the Senate. The confirmation hearing. So it just happened to be that they've gotten to that point.

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DWG: Kind of like reverse engineering. You're already on the job, but then you need to --

Mr. Deasy: I remember when I got the call in my home, getting ready to go for a hike in North Carolina. They said oh by the way, here's a few questions to ask you. One of them is, this job in '19, 2019 will become a presidential appointee, Senate confirmed role.

DWG: So there's no talk of --

Mr. Deasy: I was not prepared for that one. [Laughter].

DWG: There's no talk of grandfathering in, like you're the last one before this takes effect, so when '19 rolls around, you're already the CIO so you won't have to go through this process? Or --

Mr. Deasy: I've got to tell you I'm not an expert on those matters of how that got all drafted. I just have always known that come 2019 that this role moves to -- and look, if you think about the start of this conversation today that I think you first asked me is, what keeps me up at night? There's no doubt that technology -- I mean think of any conversation you would have with any Secretary; any three or four star and I guarantee you somewhere in that narrative technology's going to be front and center of what concerns them and what is going to enable them? So I think it's just reached a point where they've looked at the role of the DoD CIO and said this is significant, that we need to create this.

DWG: Just a quick follow-up to that. As far as preparing for the Senate confirmation hearing, what has been the [inaudible] from Capitol Hill? Some of the members on the committee, what have they said either informally or formally, this is what we want to know from you, how you will go forward. Is it 5G, is it AI, is it all of the above? What are some of the things [inaudible]?

Mr. Deasy: When I arrived and I started conversations with different members it was a variety of topics. It was all that you said. It was cloud, it was AI, it was various parts of C3. It was about people, it was about organizational structures, data management. I could go on and on.

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Like I found when I was in the private sector, it just screamed out to me that this was all connected. That someone just needed to step back, look at the individual pieces, be able to explain what a piece is trying to accomplish. What is cloud trying to really accomplish? What is AI trying to accomplish? And then bring it together into kind of a holistic story.

It's really interesting that people have reported on the individual parts but what I see very little reporting on is people stepping back and going you know, they've actually got a strategy that says cloud is at its foundation. It is inherently important to the future when it comes to data management, when it comes to data integration, when it comes to interoperability of data, when it comes to provisioning the warfighter faster. AI sits on top of it as an enabling tool. AI is completely dependent upon the roll-out of an enterprise cloud.

You could have a great cloud, you could have great AI, but if we cannot get it out to the warfighter on the edge, which is the whole C3 agenda, and then finally everything that we build has to be built with a cyber first mindset. But just as importantly, we need to go back and look at all the things we've built over a large number of years and how we put resiliency from a cyber standpoint into that.

That was why the strategy was created. It's highly integrated and there's a lot of interdependencies here. So I put that together because I knew the conversations with members of Congress were going to be about the point, individual pieces. But I wanted people to understand this is highly interconnected. And though we'll have an individual conversation about a piece, that piece of the conversation we're having is tied into a much bigger conversation, how it all connects together.

DWG: This may be a really dumb question. Can I just ask what's your budget? I know you cover the whole Defense Department and everything's your budget in a way, but --

Mr. Deasy: The overall, the budget is \$40 plus billion for technology across the department.

DWG: You've had several hooks put in by the Appropriations Committees over the last couple of years on funding, until you did X.

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Mr. Deasy: Right, sure.

DWG: Are there any funds being withheld now because you haven't done X? Or have you completed all the requirements?

Mr. Deasy: For the language that obviously was put in for NDA '19, done. Obviously as we're coming into 2020 I believe we're in good shape. There is obviously the markup process we're going through right now. Too early to comment until we kind of let that whole process play out. But whatever comes out on that we will obviously address.

DWG: In '18-'19 there were some hooks --

Mr. Deasy: Those have all been taken care of. I thought you were talking about the outbound years.

DWG: Going back to JEDI for a second, once this is all awarded, would you expect a memo or a kind of memorandum to come out to direct the branches and departments to actually use it? Or do you expect that the cost savings involved inherently will get the migrations underway?

Secondly, can you talk about [inaudible] acquisition? Can you give us a status report on where that's at?

Mr. Deasy: First of all, it's really interesting. Everybody keeps talking about a single cloud. We have two different active cloud contracts out there underway right now. That is on its own timeline. To be honest with you I believe, I don't know this to be the precise state, but I believe that award takes place sometime about a month or maybe a little longer than a month after, maybe a month to two months after the JEDI award. So that's the timing for that one.

The other part of your question was?

DWG: Once JEDI is awarded --

Mr. Deasy: Oh, yes. So you know the expression, build it and they shall come? This is not a case here. You have to remember there is a bunch of clouds already inside the Department of Defense and everybody was out standing up their own cloud.

Now think about the AI conversation. Think about the importance

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of how we're going to extract data in a common way. That's highly problematic. People are starting to see, if we're going to be able to say we can fight in a multi-domain -- air, land, sea, underwater, et cetera -- there's going to be a more and more highly dependent interoperability requirement here. The services are starting to see that there is great value in being able to use common platform solutions. Of which JEDI is just one of those solutions. It will not be the only common platform solution.

My biggest concern right now, if you said what is keeping me awake at night is, if JEDI gets delayed, who suffers in all this is the warfighter because there is active sets of programs that several of the combatant commands right now are depending on when that contract gets released, that they're going to start building out on, and if JEDI was to get further delayed, guess what happens? Now you're back to the model where people need to go build their own cloud solutions. That does not serve the department's interests well. It does not serve the warfighter well. I think that's an important message that once again has somehow gotten lost in this entire narrative here.

DWG: Can you give an example of one of those programs that [inaudible]?

Mr. Deasy: I think an example right now, without getting into the particulars, is TRANSCOM. TRANSCOM is actively developing a set of next generation applications to help them. Just really smart people doing some really big thinking over there. They have said we're going to build this next generation solutions on top of the cloud. We went in, we sat down, we talked to them, we shared with them the vision for JEDI, and they said this is the right vision.

So they, for example, are just one example of many that as soon as that contract gets awarded, they want to be able to start taking advantage of it.

TRANSCOM's ability to upgrade and move to next generation applications is absolutely imperative for the department.

DWG: I suspect everyone else here already knows this, but I don't. What's the timetable for JEDI? When's it supposed to be ready?

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Mr. Deasy: I think that was a question asked earlier. That was going to be towards the very end of August. Barring no unforeseen delays, the award is scheduled for the end of August.

DWG: Is there a contingency plan you can talk about if it's delayed more?

Mr. Deasy: Obviously one plan is people just go out and do their own solution. I think that would be really a sad outcome that if that got to that point, but it reaches a point where solving for mission needs is the single most important thing that I can do for the Department of Defense.

When I got here it was very clear my number one role is to support what the warfighter needs. I've never lost that. My passion is around everything to do with that. So if for whatever reason JEDI was delayed, obviously I'm going to spend a lot of energy and passion in figuring out how to support the warfighter. I can't tell you what that might look like right now.

DWG: Does it look like they'll make the end of August deadline?

Mr. Deasy: From a source selection standpoint at this point it does.

DWG: What happens to the ad hoc sort of service [inaudible] -- Do those get --

Mr. Deasy: If you've read the cloud strategy document that we put out earlier this year, there's quite a robust narrative around what we call fit for purpose clouds. Here again, this has gotten lost. Many of the things that we have already in place today -- for example, we have a Mil 2.0 cloud. We have an internal cloud. That's a great example fit for purpose. [DEOS] will be an example of fit for purpose.

We will look at existing clouds that are out there already. Those clouds are all under contract. They have terms and conditions. We'll look at the nature of when those clouds naturally roll off in contractual standpoints, and we'll reevaluate it. But one of the things I've made perfectly clear, there is no way the department's needs are going to be served by a single general purpose cloud. It's just not possible. Just think about the practical aspects of that. We're going to need a variety of clouds, but there's also a certain capability that

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will be inherently the same for the Department of Defense that probably a generic general purpose cloud can serve. But yes, we will evaluate all those and we'll make a decision around what does it serve? Is it a unique purpose? Or at a natural point could it move over to a JEDI? We'll take that decision as they roll.

DWG: Thank you very much. Good luck with the Senate. I hope we can see you again next year. [Laughter].

Mr. Deasy: Thank you everybody.

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