Secretary of the Air Force Frank Kendall

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Secretary Kendall: -- the criminal prosecution obviously, and there's also my IG and others are looking into the situation. And the whole department is taking -- the whole Department of Defense, not just Department of the Air Force, I hate to call this an opportunity, but we're using this vehicle, the fact of this case as a way to stimulate a lot of activity.

The Secretary of Defense, the Deputy Secretary, myself, will all put out guidance to our people to reassess their security postures to make sure they're doing everything they should be doing. And also under the leadership of Ron Moultrie from the Office of the Secretary of Defense to take a hard look at our policies and practices to see if we need to modify them.

One of the underlying things that has perhaps affected our posture is the desire to have greater communications between different parts of the government about classified material. So there's been an effort to share information more effectively. I don't know if that's a root cause here, but it's one of the things we're taking a look at to see if we want to [indistinct] with that and we should be a little more careful about what we're doing.

In every case my view in part is that we should be enforcing need to know effectively. That just because you happen to have a certain level of clearance doesn't mean you get access to all the material at that level. So we're taking a hard look at our practices around that. It's a longstanding tenet that you don't get to look at something classified unless there's a legitimate reason for you to look at it. But I don't think our enforcement mechanisms may have been strong enough on that.

With regard to how we process and how we in general react when we see somebody breaking a regulation or doing something that would suggest they're doing something wrong, that is getting a hard look. One of the things I've done in the Department of the Air Force is direct all of our [indistinct] to have a standdown, I gave them 30 days to do that, where they would reassess

their own practices. Look at how are we doing relative to what we should be doing, and have we let some priorities kind of get ahead of some others. In this case the priority to effectively support operations, to share information with people who might need it versus being more careful about who gets access to things. So we're taking a look at all of that across the whole Department of Defense and Department of the Air Force.

I could go on, but I don't want to get into any specifics yet. We're tracking very closely, and I'm in communication with the IG and others. My A2 and others are also very involved in looking at the unit. We want to make sure the unit's squared away. We want to make sure it's back online when that's the right thing to do. But those two have got to come together. I'm hopeful that the [indistinct] will be doing its operational role again fairly soon. I can't give you a specific date on that. I'm starting to get preliminary indications that they're making progress at checking everything and getting back up to speed.

It's too early to talk about the actions by specific people who might have known or might not have known or should have known more about this individual. We're working that as well.

DWG: The need to know, that seems like a really difficult thing to enforce, though. Do you think we could ultimately see more personnel being assigned to specifically have like enforcement of the need to know?

Moderator: I think we need to look at -- one aspect of that is that generally speaking the people who put out, who create classified information generally put access controls on it.

In a case like this where you have digital information it goes up on our system called JWICS, Joint Warfighter Information Intelligence Communication System, I think. JWICS. Anyway, once it gets up there the people who have access to that system are not significantly impeded in getting at it. There's sort of a self-enforcement requirement there.

We can do some things that will not make that automatic. Make it more constrained than it is. That's one of the things that we're looking at. So there are things we can with IT basically that they can still take advantage of the efficiency of modern IT but at the same time put some constraints in.

The other thing is for supervisors in general. I don't see us having need-to-know police going around, but I do see us emphasizing the role of supervisors at all levels in ensuring that people who work for them don't look at things that they're not supposed to be fooling with.

Moderator: I want to open it up. A bunch of people have emailed me asking for a question. If you have a question and didn't email me, just raise your hand, get my attention, and Venmo me some money. When that comes up you'll go to the top of the list. [Laughter]. There's always an option up there.

Julian, you were the very first one. Julian from the New York Times.

DWG: Thank you.

I wanted to talk a little bit about China and your view in general of their intelligence gathering capability in terms of space, I terms of air, in terms of spy balloons coming over the United States. Where do you think China is in terms of their ability to watch a lot of military operations and gather other intelligence?

Secretary Kendall: They have a very aggressive intelligence collection program. The balloons to me are a relatively small part of that and not highly consequential. The space part of it is very significant and very consequential. I get on the edge of classified, I don't want to get into this too far. But China's been fielding an operational capability in space for some time. But a big part of that operational capability is surveillance and reconnaissance targeting, particularly targeting.

One of the reasons we're very worried about space, and the reason that we changed our strategy for space during the Obama administration and we created the Space Force during the Trump administration is because of the growing threat from space. A big part of that threat is counter-space, their ability to attack our satellites that we depend upon for a lot of things, but also their militarization of space and their use of space to do things like try to target aircraft carriers, try to target mobile units of various types, ground units. But also because of the threats they've created in the Pacific in particular to

our air bases, we've gone to a doctrine called Agile Combat Employment which means we don't stay on one airbase. We move to multiple airbases. We try to make their targeting problem difficult. Space is one of the places from which they can figure out where we are and then target those locations. It's a huge efficiency for them potentially and we'll to some degree negate that strategy. So we're very concerned about their space-based capabilities which they've been building for quite some time.

They're linking their space-based capabilities to their operational forces. Now we have a tradition in the US of having the intelligence community provide space-based sensors and then provide the data from those sensors to military forces. But they're built for intelligence reasons generally. And over the decades I've been doing this, we've worked hard to try to make the intelligence community sensors in space more operationally responsive. That's going to be even more important in the future. I'm working very closely with the National Reconnaissance Office on some of our initiatives in space. The Deputy Secretary of Defense has initiated some work with the Director of National Intelligence trying to sort out these relationships which is coming to a close. And we're essentially trying to ensure that we have seamless movement of data that's collected in space.

First of all, let's collect the right data and meet our operational requirements as well as our intelligence requirements. Then let's get that data to the people who need it for battle management and for control fires and so on as efficiently as we possibly can. We're working together to try to sort all that out. It's an artifact of how we're organized basically to do things in the United States.

China doesn't have that issue. They're going directly from space to operators.

DWG: Is the most important concern from your perspective getting the information where it needs to go? Or are we collecting that as a nation on time?

Secretary Kendall: It's both. It's let's collect what we need, and then let's get it to the people who need it in a timing that allows them to use it. If it's too late -- I started all my hearings this year and last year with a quote from Douglas

MacArthur that, "Failure in warfare can almost always be summed up in two word -- too late."

If the data gets to the people who are going to target something too late and that target has moved, it's not of any value at all. So you've got to get it there.

You've also got to get it there at scale. One of the things that we're emphasizing is that I don't just need information on "a" target. I need information on a thousand targets in a timely way. That's a much harder thing to do.

It also means that you have to put that into a system that will process that information and give it to an operational user in a way that they can effectively use it. It gets a lot harder when you start doing a thousand targets or even a few hundred targets all at the same time.

For the last 20-odd years we've been doing counterinsurgency and counterterrorism campaigns where we were prosecuting individual targets and we got pretty good at that. But that's not the problem we would have in a large-scale operation whether it was a land operation in Europe or anywhere else, or a more maritime air operation in the Pacific.

Moderator: Audrey, Defense One.

DWG: A question on force structure going forward. Do you think the Air Force will stay at 72 fighters a year? Some lawmakers are concerned about force structure going forward, but then also [inaudible] will be able to take on some missions. So I was wondering if you could talk about that.

Secretary Kendall: I'm going to be doing an effort this year to kind of look at longer term the future of the Air Force I think.

In the near term I'm not terribly concerned about force structure I'm more concerned about modernization and getting the new things we need into production as quickly as possible. We just, I've been out to the [RP] for NGAD for example. We want to move that forward. We're starting the Collaborative Combat Aircraft program. There are a number of new starts basically that we need to get on with and get those in the inventory as quickly as we can.

I was thinking about analogies this morning. One of them is to the transition from, this is not quite app, but close. The transition from wooden ships to ironclads, basically. Keeping the wooden ships indefinitely was not a smart strategy once people were ready to start fielding ships that were impervious to the types of weapons that existed and could easily defeat wooden ships.

We're not quite there. The older aircraft we have in general still have a lot of utility, but we need to get to the next generation. That's my priority. And trading off small amounts of force structure in the short term to get there, it's really about total capability. It's not just about capacity. So counting the numbers to me is secondary right now to moving forward as quickly as we can to the next generation capability.

That said, we have a lot of jobs around the world that we need to do and we have a need for a certain type of force structure to do those. So if I look at it, I'm willing to take a little bit of risk in current force structure to help get to the force we're going to need in the future In fact that need isn't future, it's here.

China's been working on we call it anti-access area denial for a couple of decades now. The threat to our airbases, the threat to our carriers, their air superiority drive to be more competitive in the air for air superiority has been going on for quite some time and we've not responded I think as quickly as we should have but we're doing that now. So that's the priority.

Future force structure. I don't know. I think it will change over time. But by getting the new equipment into production we're creating options for future force structure. I get asked about the B-21, for example, how many do we have? I have no idea. But we sure need to get the first one as quickly as we can and then we need to get some of them into the field. The same is true of NGAD and the CCAs.

I could go on and on about this. I think we're reasonably sized right now for the missions that we have. I would prefer not to take out force structure but I'm willing to do it to get to the future if that's what we have to do to get there.

The analogy to wooden ships is not quite app because it's not quite as dramatic a change as that, but it's still a significant

change with what we're going to field next. And we do have lots of obligations.

I guess one program that comes up a lot is the A-10 which I was for decades a huge proponent of the A-10. I was a big advocate for it in the Pentagon. Argued with the Air Force several years ago when they wanted to take it out of the force. I'm there now. Given the threats that we have, we have got to get onto the next generation and as great an aircraft as the A-10 was in its day, it's not what we need going forward.

Moderator: Just to be clear, when you say you're willing to take risk, you mean retiring older platforms like the A-10 and then putting that money towards the next generation, right? So even if it means a smaller force?

Secretary Kendall: We're net coming down I want to say 350 fighters over the FYDP, over the five year plan. We're coming down a smaller number this year. I'm prepared to take that risk. That's a smaller force, but we can do all the things we need to do in the world and those older, early generation aircraft are increasingly not going to be effective against the new threats that we're seeing. The tradeoff to me, it's more important to get to the new capabilities we need.

One of my guidances I guess to people is if it doesn't scare China, why are we doing it? Keeping A-10s does not scare China.

Moderator: Shawn Carberry? Okay.

Michael Marrow?

DWG: Michael Marrow, Inside Defense.

On the NGAD solicitation, I wanted to ask you about the acquisition strategy for it. How are you going to ensure that this program employes high profile acquisition malpractice that --

Secretary Kendall: I've heard that phrase before. [Laughter].

DWG: And in addition to that, are you working to ensure the government can get as much sustainment data up front as possible? This is something that seems to have been FU across a number of programs.

Secretary Kendall: We try hard not to repeat the past mistakes, at least for one cycle.

The NGAD program is being I think, it's been well structured and well led. The seeds of NGAD or the origin of NGAD go back well into the Obama administration. It starts with a study I asked DARPA to lead on air dominance. That was a fairly lengthy study that produced an answer that said what we needed for future air dominance was a family of systems. It's not just the platform, it's the things around it and the things that support it. It's the weapons. We talked about space. It's connections to space potentially. It's a number of things including the possibility of introducing uncrewed aircraft.

That was done in the middle of the Obama administration. Near the end of the Obama administration I started a program called the Aerospace Innovation Initiative which was to get to the 6th generation set of technologies we would need for future air dominance, and to build flying prototypes X-planes, if you will, to bring those technologies forward. So we ordered that contract I think in 2015 and that's produced experimental prototypes that have verified, validated, proved out the technologies that we set out to acquire. So those are the bases for the NGAD program going forward.

But one of the things that had happened during that period of time is that what's called model-based system engineering and digitizations kind of moved forward a significant amount so that we could integrate our design teams between the government and contractors much more effectively and efficiently. Everybody lives basically in the same design laboratory, if you will, or design environment. So we have intimate knowledge of what the competitors are doing in their design. We're very involved with them. We have separate teams working with each of them. To preserve their intellectual property. We're going to have that going forward.

I think we're going to have as integrated and as fully transparent a design process and contracting process as possible. And we're not going to repeat what I think quite frankly was a serious mistake that was made on the F-35 program of doing something which came from an era in which we had something called Total System Performance. The theory then was when a contractor won a program, it owned the program. It was

going to do the whole life cycle of the program. It was get government out of that and give that all to the contractor. They know how to do it and so on.

What that basically does is create a perpetual monopoly and I spent years struggling to overcome acquisition malpractice. And we're still struggling with that to some degree. So we're not going to do that with NGAD. We're going to make sure that the government has ownership of the intellectual property it needs. We're also making sure we have modular designs and open systems so that going forward we can bring new suppliers in, whoever we choose as the platform integrator. And we'll have a much tighter degree of government control over the future of that program than we have had. It's been a real struggle for the F-35, quite honestly. And it's not just about the prime. It's about the subs too, who are just as interested in maintaining their business position as anyone else is. So we hope we've learned that lesson and are applying it effectively in NGAD. That's where we are.

Moderator: Josh Keating? Josh newly of The Messenger. Congratulations on the new gig.

DWG: Thank you.

I wanted to ask about [inaudible] given the views coming out of that [inaudible]. What are you seeing as the main [inaudible] advantages of that system? What [inaudible] drawbacks people have expressed from [inaudible] defense officials?

Secretary Kendall: I guess they agreed to more than had already been communicated by the President and others. General Brown and I spoke at Aspen last summer sometime and we both made comments about how at some point Ukraine would need to move away from basically Russian equipment for fighters to a Western design of some kind. So it's been in the works. There's obviously been interest in Ukraine in getting that kind of capability.

The F-16 is a reasonable option for them for a whole bunch of reasons. We will work with them and with our other partners as the President indicated to figure out a path forward. It will take several months at best for them to have that capability, and there are a lot of details that are going to have to be sorted out to get us between here and there.

It will give the Ukrainians an incremental capability that they don't have right now but it's not going to be a dramatic game-changer as far as I'm concerned for their total military capabilities.

The things we have given them so far have been incredibly useful to them and very effective at defeating the initial invasion and then pushing the Russians out of most of the territory that they acquired, a large fraction of the territory they required anyway, and getting us to the situation now where there's a lot of conversation going on about an offensive operation.

Air power has not been a decisive factor so far in the war other than in a negative sense in that neither side was able to control the air. If either side had really taken serious control of the air it could have made a big difference either way.

F-16s are going to help the Ukrainians but it's not going to fundamentally change that equation. I think the people have been advocating for them may have the impression that it will. I talked to General Brown about this this morning. Neither one of us believe that it's going to make a fundamental change. It's something they need to do. It's something that makes sense for them. It's going to help them. But it's not a gamechanger.

DWG: [Inaudible] of the air defense system or --

Secretary Kendall: Both sides have tended to use their aircraft for fairly limited operations. Part of that has been the efficacy of ground-based air defenses. On both sides. With small numbers of aircraft and with not a full suite of capabilities, of more modern capabilities, it's hard to overcome those systems. That's one of the fundamental limitations here.

Moderator: Is there any chance they'll be US F-16s do you think? Or do you think it's going to come from an ally? I know it's hard to say.

Secretary Kendall: I don't know. I think there are a number of possibilities there and we haven't sorted all that out yet.

Moderator: Brianna Riley?

DWG: Good morning. Thanks so much for doing this.

I have a quick follow-up to something you said to Audrie and then I have a separate question.

My follow-up is on your force structure comment. You teased a little bit of a long-term force structure report. Can you say when that will get underway, the time period you're looking at, what that is?

Secretary Kendall: Probably sometime within the next year is my guess. We're just starting to talk about it and think about what kind of methodology we might use for that. So it's something we haven't done for several years and I think it's worthwhile.

I want to take a look out into the time frame that's a little bit over the horizon so that we can sort of step back and take kind of a clean look while we have -- if we did it too short term a look you're too constrained by what you have right now. There's only so much you can do. But I'm interested in thinking more clearly about both the Space Force and the Air Force and what they might look like 20 or 30 years down the road.

DWG: Great. My second question is, how have defense appropriators in particular been to your proposal to exempt new starts from CRs? And also is there any hope that maybe your PPB and your Reform Commission, when they put out their interim report in August could foot-stomp that proposal and help elevate it?

Secretary Kendall: The proposal is not to exempt -- it has nothing to do with CRs. The proposal is to allow us in a normal budget process to do some early phase work before we get the appropriators [giving] authorizations.

So there's no correlation to CRs, other than some people have raised the fear that if we did this it would be harder to get rid of CRs. That's about as back-handed a way to look at a proposal as I can imagine.

There are bad things happening and it makes it harder for me to prevent the bad thing from happening if you do this good thing so you can't do the good thing. That's the logic basically.

We never get anomalies on CRs. Never. I've done about a dozen of these now so it doesn't happen. So the alternative anomalies is unrealistic. And it doesn't get at the basic problem I'm trying to address. The basic problem is that our normal budgeting process takes too long.

We did work for several months on operational imperatives. They were the high priority pressing operational problems we needed to solve to be successful operationally. That's why they were called operational imperatives. They were imperative. And we needed to get on with the things to address those problems as quickly as we can.

I finished that work a year ago. I've been waiting for a year already, okay? And I could wait for over another year if there's a year-long CR. But I will wait at least a few more months under a normal budgeting process before I can start.

So the problem is time. It's not CRs. It's the normal process, not the CR process. We're giving away over a year -- I'm sorry, I get passionate about this. We are giving away over a year to China to China for no good reason. In our normal process. If you add CRs to that, you're giving away maybe two years. Why are we doing that? Because the Congress won't let up a little bit of authority to us to just do the early phases of work to get started. We just want to get -- the early phases of any program are relatively inexpensive. You're doing system engineering, you're doing requirements analysis, you're doing early design phase tradeoffs. And you're getting industry engaged in getting a relationship with industry. That doesn't cost very much money but it's valuable time.

What we would do, what the proposal does is it says okay we will go, we will only -- what I intend to do is keep us competitive. That's not in the proposal as it's written right now, but it could be. But in any event, what this would do is allow us to get people on contract, get them working on a new design, doing tradeoffs with us, and reducing risk and lead time to getting something into the inventory. By a significant amount of time.

And without a CR. I mean without an appropriation and authorization, we would have to stop. So it's a more powerful tool for somebody who wants to do a CR. Under a CR whatever work we had already started would come to a screeching halt,

without an anomaly. And you never get anomalies. So it's going to come to a screeching halt. So that's a more powerful weapon than we currently have to get rid of CRs.

But really, that's not what it was done for. It was done to get us back that period of time, that year, year and a half that we lose in the normal process.

Thank you for the question.

Moderator: You don't have to apologize for being excited about the budget process in this room.

Lara Seligman from Politico.

 ${f DWG:}$ Thanks for being here. I wanted to follow up on the F-16 question.

I'm wondering if you think that they [initially] decided to provide the F-16s to create a [inaudible], and can you tell us a little bit about how the thinking evolved from when they first asked and we said no, to now they're asking and we finally said yes.

Secretary Kendall: First of all, the Ukrainians have been very understandably unrestrained in their request for things and we've provided an awful lot to Ukraine.

The priority has been the things that are going to make the most difference on the battlefield and that's what we've done. I think the results speak to the effectiveness of that.

We could certainly have started earlier, but there are much higher priorities. It's seen by some as an escalatory act on our part, and we are not under any circumstances going to get F-16s or another Western fighter in significant numbers into the hands of the Ukrainian Air Force in something less than at least several months. So it was always a long lead time kind of thing.

I think as General Brown and I have said, awareness that they needed to go there at some point, but we didn't have a sense of urgency about F-16s. I think we're at a reasonable point to make that decision now and the President's done that.

DWG: What changed? Why now? Why is now the right time?

Secretary Kendall: I think we're actually thinking about -- I don't want to speculate. I'll just give you my personal point of view on this.

I think we have to start thinking forward to the longer term. Ukraine is going to remain an independent nation. It's going to need a full suite of military capabilities for its requirements. So it's time to start thinking longer term about what that military might look like and what it might include.

DWG: On Space Command. Have you made a decision yet on where the headquarters are going to be and if not --

Secretary Kendall: I have nothing to tell you about Space Command.

Moderator: Stephen Losey?

Secretary Kendall: I do have something to say about Space Command. The decision criteria for Space Command has fundamentally not changed. There is nothing in that decision criteria about state laws that might be -- I'll use the word, that might be about abortion or [inaudible] like that. That is not part of the decision criteria.

DWG: It has nothing do with [inaudible]?

Secretary Kendall: It has to do with what's the right place to put the headquarters for the Space Command, for the US government. Period.

Moderator: Can I ask how far along you are in your review of that or assessment or whatever it is called?

Secretary Kendall: I can't say much more about that right now.

Moderator: Stephen?

DWG: Thank you again for doing this.

I wanted to follow up on the Ukraine question. For training the pilots on the F-16 is the 162^{nd} Wing making preparations to accommodate them? Or could the training take place at other Air

Force installations? There's a lot of other international partners that are training at the $162^{\rm nd}$. Is there any consideration of moving Ukrainians up to the front of the line to get them training earlier?

Secretary Kendall: We're just starting our conversations about how we're going to move forward after the President's announcement. A lot of open possibilities including our partners --

DWG: Can I ask a follow-up on the NGAD question?

Using the Rapid Capabilities Office to spearhead the B-21 development seems to have worked out pretty well. Are you considering bringing RCO in for NGAD as well?

Secretary Kendall: No. It's being done out of Dale White's --General Dale White is the PEO basically. It's being done out of Wright-Pat as a program. To a certain degree it's always B-21. One of the things Bill LaPlante and I did when he was the Acquisition Executive for the Air Force and I was AT&L, was we recognized that the RCO, which is an effective organization, really didn't have all of the things needed to do a major program like the NGAD. So we brought in the corporate Air Force if you will, Air Force Systems Command --

DWG: You mean B-21?

Secretary Kendall: B-21. Sorry. For B-21. Thank you.

So for the B-21 we brought in the rest of the Air Force's systems to flesh out what the RCO could bring to the table so we'd have a full set of capabilities. Emphasis on sustainment, for example, was an important part of that program. The team that we put together -- one team, one fight is kind of the mantra. For B-21 we created a larger team around the RCO's program office so they had the full set of capabilities they need to work that program.

Moderator: John Harper?

DWG: Thanks for doing this, Mr. Secretary. John Harper with [Scoop].

Last week you announced that the RFP for NGAD had gone out.

When -- once you make an award for that are you looking to neck that down to a single vendor? Or are you looking to keep multiple vendors [inaudible]?

Secretary Kendall: The intent was to go to a single vendor and I think we're going to do that in 2024. Assuming we get appropriate bills out of Congress.

DWG: And when can we expect an RFP for the Collaborative Combat Aircraft? And when do you expect to award the contract for that?

Secretary Kendall: We're working with a number of potential suppliers now. I don't think I can say any more at this point about the [inaudible] for that. It's moving forward in parallel with the NGAD program, though.

DWG: Can you say how many vendors you want to award like any of the --

Secretary Kendall: We haven't finalized that yet. As many as possible is the answer. It will be more than one. How many I don't know. It's a question of what we can afford and for how long.

The problem with -- CCA is a major program basically. It's going into EMD for production just like NGAD is. And once you get into that mode you're committing a lot of money to that product. And as with NGAD, at some point it's not economically viable to carry more than one. It just doesn't work because of the numbers you're going to buy.

I put out a number for CCAs of a thousand as a planning factor. We don't have a firm number yet, but that gives people a sense of where we're going.

When you start talking numbers like that, carrying two suppliers longer starts to make more sense, so we'll be looking at what we can afford to carry longer term for CCAs.

It's also a fairly revolutionary capability so I think there are some pretty strong arguments for not necking down to a single one any earlier than we have to.

DWG: In terms of the quality of the air vehicles for that and

the autonomy that kind of enables that. How would you expect the performance of the CCAs to compare to a manned fighter program? Will they be able to do dogfights? Will they be similarly capable? Or will they be kind of less --

Secretary Kendall: You're pushing me into the classified out there. But essentially, I made a judgment based on inputs from various sources. DARPA had a program called ACE about Autonomous Combat in simulators. Australia did the Loyal Wingman program that produced the MQ-28, I think. And the Skyborg program that the Air Force was doing and a number of competitors. There were other things too.

I also asked my Scientific Advisory Board to take a look at how much performance could a first generation, if you will, uncrewed Collaborative Combat Aircraft, bring to the table. When you put all these things together there was a significant incremental capability that we can buy which justifies doing the program. So that's going to define our threshold requirements.

After that, we're going to try to make industry push for as much as they can get. There are great opportunities here for innovation and to push the state of the art. So we're trying to work with industry to incentivize industry to get as much capability as possible.

One of the core requirements for CCAs is that they're affordable. And we've got unit costs on the order of a fraction of F-35 for example. You're not going to put a full everything that goes into a modern fighter like an NGAD or F-35 into that platform. So with modular designs, with specific subsystems for specific missions, with some basic capability that you can complement and use in combination across different platforms, you can get some really interesting and affordable results from that.

One of the ways I've talked about this is that right now a fighter might carry a targeting pod, it might carry weapons under its wings, it might carry a self-protection jammer. Those systems are integrated into a single platform. Once we introduce CCAs, we can start to talk about effectively taking some of those things off of that fighter and putting them on the CCA. But not all of them.

So the threat -- you have to think of every CCA that you see

coming as potentially having any of those systems or some combination of them. So the very difficult problem you present to an adversary is that you have got to treat each of those aircraft as if it was a full threat. And that really gives you a lot of leverage for the adversary and it creates a lot of opportunities for --

One of the things that's interesting to me is that as this concept was introduced to the corporate Air Force, so to speak, and some of our tactics experts started looking at it, they got very excited about the possibilities that this would bring to the table, so we're still figuring all that out. But the idea is to push it as far as we think we can with reasonable risk.

Moderator: John?

DWG: Good morning, Mr. Secretary.

I wanted to ask you about the T-7 and the digital approach. When the T-7 was launched it was with a lot of fanfare that digital was going to save billions of dollars and lots of time shaved off the program. Then we find out it's two years late on IOC. That caused you to extend the T-38 and exacerbate the pilot problem.

So has digital been over-promised? Has it lost some of its luster? Or are the problems with the T-7 more Boeing's management or deeper problems with the industrial base?

Secretary Kendall: I'm glad you asked. The short version is yes, it was over-hyped. Digital engineering is not new. What's happened is, a substantial advance in digital engineering from private generations. We've been doing digital designs and so on for decades.

But what has happened, and I've talked to engineers who kind of pioneered this within the defense world anyway. We've been able with the capacity of modern computing capabilities, data storage, and communications to handle large amounts of data. We've been able to integrate our models. So models that work independently and had to be correlated somewhat manually can now talk to each other. So you get a fully integrated digital design whereas before you would have had to do different parts of the design separately. So that's an important advance.

The transition between the design world and the manufacturing world is also much more efficient than it was. So there's some very real benefits.

I mentioned that the program office for NGAD is living in the same design space, if you will, as the NGAD bidders. They have direct access into the databases being used for the design.

I was out at Wright-Pat and I saw a government engineer who is very capable, working directly with one of the two contractors, he was on one of the teams, and interfacing with them on the design.

When I started out in this business years ago we would let a contract and we would ask for piles and piles of documents that would be delivered to the government to review, and it was very inefficient. Now you don't wait for documents. You can see the design first-hand. So that's very efficient from the point of view of government management. It's also very efficient from the design side of the house. So there's been a substantial improvement there.

I've tried to get reasonable data on how much in terms of cost and schedule. My best feel for that is it's on the order of 20 percent is a ballpark number. It's not factors but it's still, 20 percent's a lot. That's a really significant improvement.

It's not perfect, and the T-7 gives you an example of that. It doesn't help you when you're doing a design that's different than anything you have ever done before, having it digital doesn't give you better knowledge about how it's going to work. You end up having to do testing just as we always have.

Back in the F-35 days I remember industry coming in and saying we're so good in engineering now we don't need to do testing anymore. That's not true. And it's particularly not true when you push the envelope outside of things you've done before, where your models are not, you don't have as much confidence in your models.

So it is a significant improvement, but it has been over-hyped. We're still waiting for data on how much it's going to help.

One of the things that's been true in engineering forever is that if you give an engineer more time, he'll just do more

design iterations because no engineer is ever completely happy with what he's designed. So there's a risk that we'll just take advantage of the efficiency and so on to do more. Right? What we need to do is get to where we're comfortable with it and then we can go forward with the next stage of development.

So harvesting that 20 percent isn't obviously as easy as it might be.

Industry is motivated to get it into production, so hopefully it will help us get into production more efficiently, more effectively.

That's a long answer to the question. It's a very helpful development, it's a significant step forward, but it's not going to get us factors of reductions in cost and schedule and pace.

DWG: So the announcement about NGAD last week gave the distinct impression that there's heavy reliance on digital for this next stage.

Secretary Kendall: There is.

DWG: Is it mature enough to rely on it that much? And if you could also, I think it was asked before, that was a tough to parse announcement. Are you carrying lots of contractors past EMD?

Secretary Kendall: I'm not going to say anymore than was in the announcement.

DWG: Then just the --

Secretary Kendall: We're going to carry one through EMD, I can tell you that. It's too expensive an aircraft to do multiple columns for full EMD.

As I said, digital, more integrated digital design. We can doodle forever, but more integrated digital designs, better modeling, all help but they're not revolutionary. There's significant improvement, and I've got to stop there.

They don't replace testing. When you're doing something you've never done, I can think of, well, if you're doing a design which is a small incremental improvement over the one you have, then

you can have very high confidence in that design. But when you're doing something that's going to be radically different than prior programs, you've got to get it into testing to validate your design efforts.

The higher fidelity modeling of environments is helpful, but you see this all the time, and I'm trying to think of programs — hypersonics are a good example probably. If you haven't done it before you're going to have to go out and actually do it, and I'm cautious on B-21 for that reason. They haven't flown yet. The program has executed fairly well, but it isn't in flight test yet. The acquisition malpractice of the F-35 was the too early start of production and we had a lot of design changes we had to make after we started production. And we don't want to — there's a balance there. There will be some concurrency between both B-21 and NGAD, between development and production. But you want to do that in a rational way that doesn't take excessive risk.

DWG: Thank you very much.

Moderator: Dan Lamothe from the Post.

DWG: Thanks for your time this morning.

I wanted to ask about the IG investigation you directed. I realize you're not going to get into findings before the close, but can you give us a timeline for when we might see the details on the public side? And can you speak more broadly to the concern that I think a number of people have raised about the Air Guard in particular kind of meeting all the same criteria, security concerns, and kind of being up to the bar that the total force is supposed to have?

Secretary Kendall: It won't be a long time before we complete the investigation and then we'll have to assess and make decisions based on it, both for [commanders] and the Guard and myself potentially. We generally do not publish IG reports. I think they can be made available to the public through different mechanisms. I'm sure there will be a lot of congressional interest in this.

It's not a very long period away, but it's not imminent either. That's not very helpful I know, but --

DWG: Is that weeks? Months?

Secretary Kendall: It won't be months.

Moderator: Tony?

DWG: One thing on NGAD. You've watched the winner take all contest last week. That's basically [inaudible].

Secretary Kendall: We expect a down-select sometime in 2023.

DWG: To one vendor.

Secretary Kendall: Yes.

DWG: So it's a winner take all, that's what I'm trying to clarify.

Secretary Kendall: We're not going to do two NGADs. We're going to do one. So in that sense. I don't think of it the way you described it but.

DWG: I'm thinking of it from a layman's side.

F-16, a quicky on that. How difficult will it be to train Ukraine pilots used to Soviet-era airplanes to use F-16s?

Secretary Kendall: They've demonstrated a lot of capability. I think it will take a matter of months, not years. And they're very motivated. Everything we've done with the Ukrainians, they've shown a capacity to learn. And certainly, I don't think I've ever seen more motivated individuals in terms of wanting to get into the fight and make a difference.

DWG: Another F-16 issue the political world is focused on is Taiwan. What capability will the Block 70 give Taiwan that it doesn't already have now?

Secretary Kendall: I'll take that and see what we can give you on that. I don't know the answer to that question off the top of my head. I'm not sure -- I know some of it but I'm not sure what we're able --

DWG: That would be helpful.

Space. We hear China can do all sorts of things. It can do this and that. You never talk about what the United States can do against their 700 satellites in orbit. What capability does the US have on counter-space? Or are we a crippled giant in that area? I never hear anything about that. It's always China can do this and that.

Secretary Kendall: I'm not going to help you today.

DWG: Why not?

Secretary Kendall: Because we have some capabilities that we're just not going to talk about.

DWG: Do we have capabilities fielded --

Secretary Kendall: We're not going to talk about that.

Moderator: This has been the administration that's sort of declassified or downgraded classification of information as a deterrent mechanism, and you could argue it's worked in us. So to Tony's point, are there things you think that could start being made public to deter China from the States? And why don't you start making them public right here? We're all here. We're taking notes.

DWG: Was it counter-space [inaudible] that the National Guard - is that one example of the reversible jamming capability the US has? And --

Secretary Kendall: I'm not going to be able to give you any more details on that. You're trying hard, but I'm not going to do it. [Laughter].

Moderator: This is why we need to do dinners, so you have a glass of wine and -- I'll make that note to Shanker.

DWG: Do you feel like the US is behind China in counter -- even if you won't give any specific details about US counter-space capabilities? Just as a comparison with China. Is the US on par, behind, ahead?

Secretary Kendall: I'm not going to be able to answer that.

Moderator: Dmitry?

DWG: Good morning, Mr. Secretary. Back to the F-16s and Ukraine.

Where will these aircraft be based? Is that an option that you're going to station them in one of the NATO countries? And if that's the case, how is it not a direct confrontation between NATO and Russia?

Secretary Kendall: We're talking about a Ukrainian capability. Not a NATO capability.

DWG: I'm talking about basing. They are not necessarily going to --

Secretary Kendall: If they're going to be part of the Ukrainian Air Force, I assume they'll be in Ukraine.

DWG: Okay.

And the training part. Where will the training take place?

Secretary Kendall: There's been no decision about that at this point.

DWG: Thanks.

Moderator: Shelley?

DWG: Hi, I'm Shelley Mesch with Inside Defense. It's good to see you.

I wanted to talk a little bit about hypersonics. So aero has had some pretty [inaudible] over the last couple of years and [inaudible] Raytheon. With aero now even more in jeopardy of discontinuing does the Air Force need to be researching more options for hypersonics? Or do you think HACM would be sufficient? What's your thought process for the future of hypersonics with the Air Force?

Secretary Kendall: I've talked about this several times. We're going to have hypersonics in our inventory for a variety of capabilities but again it's another case where I think people hyped hypersonics a little bit.

They're a novel capability. They get someplace faster and they can penetrate air defenses very effectively, but they're also very expensive. So we have to look at our target set and make judgments about what makes sense for us. So we will have some of them in the inventory. We're not doing a wholesale conversion of our munitions to hypersonics. And we're making sure that anything that we buy is cost-effective relative to all the alternatives, which is why we're assessing aero and HACM as we go forward.

As you're aware, aero's had some problems in development and right now HACM is a higher priority for us but we haven't made a final decision yet on aero.

DWG: Do you think more needs to be put into development for ultimate actions? Is that something that the Air Force is [inaudible]?

Secretary Kendall: There's tech base work going on in addition to the programs [inaudible].

DWG: And a quick follow-up. You said [inaudible] that China's targets are different than the US' targets, that's why they might be pursuing hypersonics more. How are the targets different for us maybe not need to be on par with China?

Secretary Kendall: One thing is, we have more mobile targets that we're worried about. Particularly maritime targets. We're also more interested in targets that are associated with, if you will, maritime versus ground targets. So having the capability to go after those is really a high priority for us. I'm thinking about missile launchers in the ground case, ships of various types in the maritime case.

Our mission is to deter aggression, fundamentally, for conventional warfare. So that means mobile forces attacking somewhere whether it's ground active aggression like we had in Ukraine or it's a maritime fundamentally that we might have in the Western Pacific. So that's the target set that we're going for at this time.

If you're looking at deep target sets that are static, stationary and highly protected, the hypersonics become very interesting, which is the reason I think China's invested in them so much.

DWG: Hi. Christopher [Inaudible]. I wanted to talk about [inaudible] in the context of F-35. I wanted to ask about B-2, which in hindsight [inaudible] which is a consequence of the expense of the aircraft and [inaudible]. Is there any thing you're looking to avoid or forestall in the future [inaudible] B-21 and having --

Secretary Kendall: Generally we want to make sure we keep unit costs under control. That's unit cost on a life cycle basis.

The reason that F-22 was curtailed, that B-2 was curtailed, is affordability. Some of that is high production cost, but ultimately a good 50 percent or more of most programs is sustainment cost. So making sure you design for, reserve competition for sustainment as much as you can, but also have a design that's sustainable and affordable to sustain too. So the modular designs, and we're talking about for both B-21 and for NGAD, allow you to keep competition, but then to insert new technology as well. So those are things that we're looking at in our programs, to try to keep the costs under control.

Moderator: [Rio]?

DWG: Thank you very much. My name is [Rio Nakamura] with Japan's Nikkei [Asia].

Two questions. First, I think --

Secretary Kendall: Was your father in the Air Force?

DWG: No.

Secretary Kendall: Okay, I had a Major Nakamura [inaudible] back in the

'80s. He was the basis for the character in Tom Clancy's books about the $[3^{rd}$ World War]. So your name appears in the book as a character. She's a woman who becomes the first ace in the war. F-15 pilot firing antisatellite missiles at Russian satellites.

Moderator: You should totally claim that. [Laughter].

Secretary Kendall: The back story of this is that Tom Clancy got all his information about the antisatellite program we had in 1985 or so from Major Nakamura who worked in my office. It

was one of my programs. And he put a character in the book named Buns Nakamura which, I won't tell you why it's Buns. You'll have to read the book. But you can guess. He named the character after the officer who helped him understand the program.

DWG: My question was, two questions [inaudible], and new defense cooperation arguments with other [inaudible] today. So I wonder how and how much you can give [inaudible] the US Air Force [inaudible] operations [inaudible].

Secretary Kendall: I haven't had a chance to explore that or have any conversations with Papua New Guinea. I have been in the Pacific recently, and one observation is that -- this trip I visited South Korea, the Philippines, India and Singapore. Previous trips I've been in Japan, Australia and others. There's growing concern out there about China and its modernization program and its military investments in general as well as its aggressive behavior in the region. I have not been part of any conversation with Papua New Guinea, but I expect I may be going forward, given the agreement that we just reached.

DWG: Could you give us an update on the US Air Force replenishment arming for the F-15 in the [inaudible]? What type of fighter jet are you looking at? And [inaudible].

Secretary Kendall: For the F-15?

DWG: The [inaudible] for F-15 [inaudible].

Secretary Kendall: Oh, Okinawa. We're going to keep our presence at Kadina. We haven't forgotten [inaudible]. We're going to be doing that. We're going to maintain our presence there. Is that what you're getting at? Yeah.

Moderator: I want to give you a moment to wrap things up. If you have any more budget thoughts this is the place to do it, or any closing remarks?

Secretary Kendall: My biggest concern right now, and we haven't really talked about it is getting appropriations and authorizations this year. I made the point to the Congress in my testimony repeatedly that we're waiting now for Congress to act so we can move forward. We've got about a dozen new starts there, significant new starts in our '24 request. We've got a

substantial increase in activity in a number of programs that are important to us. We need to move forward and there's not a moment to lose.

I'm very concerned about the polarization that exists and the ability -- first of all, we have to get past the debt ceiling. The immediate threat is the debt ceiling. But then getting on with '24 and getting it appropriated. I am more worried this cycle than I have been in any prior one about gridlock in Congress.

I was in the Pentagon for the sequestration being implemented, and we made a mistake, quite frankly, in thinking that the incentives we put in place in the Budget Act, was it 2011 or so, with motivators for people to get budgets done and get them in place. And then in 2013 we implemented sequestration with devastating results.

I'm hearing too much talk about a year-long CR being acceptable. It's not. We've got to move forward. We can't waste the time.

So as much as I'd like to have what we put in the legislative initiative, it's really critical that we bet authorization and appropriations bills passed.

There's always been a very strong motivation independent of party on the Armed Services Committees to get their bill done. It's the reliable bill. It always hits fast. I've had conversations that I think are genuine concerns that that can happen, and part of it is some of the cultural issues were wrapped up in the bill this time.

On the appropriations side, we're watching part of that debate play out right now. We'll see how it goes in the next couple of weeks on raising the debt limit and getting a deal. We have to get there.

The country is being held hostage right now and that's not any way to negotiate. I think the President has been very clear about that. I've been trying to imagine an acceptable agreement independent of the debt ceiling. Say we get that solved, then what are acceptable levels of funding for discretionary, non-discretionary and defense? And getting a solution.

I'm afraid that at the end of the day there will be people on

both sides of the aisle who will think a CR for a year is an acceptable alternative, and I don't think it is. I think it keeps us from doing too many things.

All the motivation in all the other cycles I've been through, there should not be any anomalies in the CRs. I will say, I am very worried about what's going to happen in the cycle, more so than I have been in -- I've done about 20 of these now I think in the Pentagon, and this one looks more ominous to me than any of the others have.

Moderator: Thank you so much. You've been very generous with your time.

A reminder, this is on the record but the audio, if you were recording it, is not for broadcast. It's just for your note-taking purposes.

Thom Shanker will be back for the next one. Don't worry. You're not stuck with me anymore.

Questions, go to LTC Hartnet, he's over here. Gratuities, praise for your substitute moderator go to Thom Shanker and Daria and criticism goes to me. Thank you very much for your time, especially on a Monday morning.

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