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DWG: Welcome to this session of the Defense Writers Group. We're honored today to have as our guest General Jacqueline Van Ovost, the Commander of Air Mobility Command. Ma'am, it's great to have you with us today. Thank you for taking an hour of your time to talk with reporters.

General Van Ovost: That's, David. Thanks for your time, for inviting me, and it's always a great day to talk about [Iraq] and global mobility and talk about the speed and flexibility and range that we bring to the Joint Force every day.

DWG: Why don't I start by asking you, in your role as I understand it, one of the many balls you have to keep in the air is to balance your obligation to the Joint Forces to meet current needs with an obligation to have the air power that is going to be needed for any kind of potential fight in the future.

For example, the tankers. The Air Force wants to retire some tankers, I understand, and save the money in order to spend it on the new kinds, but U.S. TRANSCOM needs those existing tankers or feels it does.

How do you balance those kinds of priorities in the role that you play now?

General Van Ovost: Thanks for that question, now That's a really important framing question so I'm going to start from the Chief of Staff of the Air Force's Accelerate Change or Lose strategic approach, but the Chief has five core missions of the Air Force that he has to balance between sustainment and developing new capabilities and modernizing in order to fight tomorrow's fight.

Of the five core missions one of them is having global mobility. So that's my responsibility to him in thinking about how to organize and train and equip so we can stay ahead of our competitors in the future.

General Van Ovost – 2/1/2021

And naturally my other hat is I generate [credible] capacity for TRANSCOM in order to project the Joint Force. I have to make trades between the capacities of today and the capability of tomorrow.

Frankly, my core mission areas which are airlift, air refueling, aeromedical evacuation and global air mobility support which is managing the airlift nodes, the platform nodes around the world. Tankers have been in the foremost of my mind in foremost of the news so that's a great place to start.

But we're accelerating change by moving towards the KC-46. That platform when fully developed and capable is going to give us a lot of advantages over our current legacy fleet, especially with respect to its agility, the multiple missions it can do it's ability to have additional battle space awareness which we don't have right now in the cockpits of our aircraft. Its ability to support the Joint Force both within the communications node and potentially as a data node forward because we're always going to be in the area when combat operations exist.

So the airplane itself is going to be a very viable airplane but right now as we're fielding the airplanes, which we have 42 right now for a contract for 179, they're not fully operationally capable because there are some deficiencies. Some deficiencies we're getting after with Boeing.

So as we keep our eye on a fully operational and capable KC-46 we're taking the time now with our crews who are transitioning into this airplane to learn more about the airplane and to learn about the new ConOps that we're going to be executing in that airplane so that we can become more capable for the Joint Force. Things like working on Tactical Datalink and experimenting with the Advanced Battle Management System on-ramp for all the C2 nodes and Data at the Edge, forward processing at the edge where [inaudible] people may have heard about. So we're going to take every effort to wring out this airplane so that it becomes fully capable, but I've got to be careful that I keep the capacity necessary to compete in today's environment. That means we've taken some efforts with respect to fully populating the KC-46 with crews. That's giving them the full final crew complement and slowing moving them to the KC-46, essentially the slower place that we had planned, so that we can keep crews in our operationally capable legacy tankers - the 135 and the KC-10 - so that they can continue to fly missions.

The other thing we're looking at is we're looking at how to use our Guard and Reserve. The Guard and Reserve tanker capability makes up about 55 percent of our tanker capacity. So we're working with them to fund more crews, more volunteers during this time at a time where we're going to have, as we're seeing the transition to KC-46, we have less capacity with respect to the legacy aircraft.

But again, this is the way that we're accelerating change. We are getting after the capabilities we need to survive tomorrow by taking a little bit of risk in overall capacity in the near years [inaudible].

DWG: Thank you.

I'm going to now turn to our members and I'll recognize you, please unmute your mike when I do so and you can ask a question and if need be a follow-up. I'm going to basically call on people in the order in which they signed up.

Pat Host of Jane's, you were the first person to sign up so you have the first question after me if you'd like. Are you on?

DWG: I'm here, I don't have any questions.

DWG: Then let us go to Tony Capaccio of Bloomberg.

DWG: I'm on and I have a question.

This month marks the 10th anniversary of Boeing beating EADS and Northrop for what was then said to be a low-risk program.

I want a reality check from you. What's your current view of Boeing's progress in this program over the last ten years, and the last year or so as they signed up for fixes. Are you troubled, irked, angry, chagrined? What are some of the words that would describe how you feel toward their performance ten years after they won what was supposed to be a low risk program?

General Van Ovost: That's a great question. As I look over the ten years I have to say right now where we're at in the program is we're making lemonade out of lemons. I, with the capacity and the performance out of Boeing early on in this program.

But you also asked about the last year, and I know you've been following this and reporting on this very carefully. They have made a turn-around since the spring of last year when we signed the agreement that is going to get us a fully operationally capable KC-46 with the agreement that we made with Boeing.

So as I've seen the last years' words, and trust me, we've been working very closely, we've become more of a team with Boeing. And I am heartened by some of the steps that we have been taking now and getting better at within the deficiencies themselves and the attitude and the culture that turns around and says that this is important not just for the Department of Defense but it's for America. So I've been heartened by that attitude.

But Tony, I am still not taking my eye off the ball. I still get updates and we must go faster. As you accurately reported, RVS, Remove Visual System 2.0, we expect to have a working copy up and flying in late 2023, but we're doing everything we can to accelerate that. We've done some down selects on the design. We're very happy between our engineers and Boeing on the design and the fact that that design meets all of our requirements.

DWG: I've got to ask you, for the first nine years, though, how would you describe their progress for this low risk program?

General Van Ovost: I wasn't here at the beginning of the program, but Tony you and I both lived through the C-17 program. Now that was a developmental aircraft and you may know that the first six airplanes off the line, and you were with us when there were some discussions about leaving the airplane at 40. That would have been a disaster for America. So I look at what the C-17 promised and now I'm looking at what the KC-46 has promised. I can't help the last nine years. I wish we were in a position where we could have fielded this airplane on time to meet our requirements. But we have the requirements. Boeing is going to field this airplane with RVS 2.0 at their cost, and we're doing everything we can to wring out the airplane right now with any deficiencies that they have to essentially fix underneath this firm fixed price contract.

DWG: Thank you, ma'am.

DWG: Brian Everstine of Air Force Magazine, are you on?

DWG: I'm on. I was hoping to follow up on those. Can you give

us an update on where things stand on the category one deficiencies for the KC-46?

General Van Ovost: Thanks, Brian. Good to see you again. Thanks for your support of Rapid Global Mobility. I appreciate you making yourself available through our different phases.

The category one deficiencies are the most severe deficiencies on the program. We just released as of Friday 9th, we went from six Cat 1 deficiencies down to four category one deficiencies. We eliminated the Auxiliary Power Unit deficiencies.

Now those two deficiencies that we eliminated were really associated with the maintenance of the APU, Auxiliary Power Unit, and some component pieces there. So we have a fix in place and we're confident that we're moving forward.

That does not change the operational concerns which are really relevant in the first three category one deficiencies that have followed very closely too associated with the Remote Visual System and one associated with the Telescoping Boom. Those are the ones that really stop us from full operational capability and that will be fixed with the release of RVS 2.0 and the new Boom Telescope Actuator Device.

DWG: If I can follow up on another KC-46 question, you mentioned working on different ConOps, Tactical Datalink, et cetera. You have a pretty full schedule this year. You have I think a couple of [inaudible] in Cope North. Can you talk a little bit about what sort of lessons you'd like to see out of that, out of Mobility Guardian, ABMS on-ramp, et cetera?

General Van Ovost: That gets after how we're accelerating change and our priorities of developing the force and advancing our warfighting capability in key areas that matter for the Joint Force.

With respect to the Advanced Battle Management System which is the Air Force component to Joint All Domain Command and Control, we've been accelerating change by making our KC-46s, our KC-135s, and our C-32s and C-130s available to experimentation. This is about innovate, experiment and learn.

What we're learning is that we can move to more non-traditional Mobility Air Forces support to the Combat Air Forces by becoming

a robust node in the network.

And with respect to Cope North, we have a couple of things going on. With the C-17 we're beginning our first look at processing data at the edge. We're going to use that antenna on the C-17 to gather information across the network, to crunch data forward at the edge so the [inaudible] doesn't have to absorb the bandwidth that goes all the way back to a command and control center. So we're actually crunching it on the airplane and then providing it back to our 5th gen and 4th gen aircraft as well as providing packets back to the C-2 node. That is not limited to the C-17, it just happens to be we're going to do it on that. But that's the kind of thing we're thinking about, again, for the KC-46. It has some of the plugs necessary to make that real as soon as we start fielding this airplane when it's brought on. So we're very excited about that.

Also in Cope North we're doing agile combat employment. We're going to go to the Northwest portion of the island in Guam, an austere location with these folks and to integrated combat turn with our fighter airplanes. In other words landing a fighter airplane, giving it fuel, giving it munitions, turning it around, and taking off within a relevant threat timeline because we know that we're a target and the entire agile combat employment is about getting ahead of it. Getting ahead of the threat and using tailored teams to turn these airplanes forward. That means that we're doing things that we hadn't really done before which is deploy to employ. We haven't done that in a long time. Hot pit refueling. Refueling out of our C-130s using our fuel distribution system directly into an F-22. And using small teams of people which is our multi-capable airmen, and we're developing these TTPs. Again, we're experimenting, we're learning what we can and can't do in this controlled environment.

We're not only going just to the Northwest in Guam, we're hitting in different experimentations many islands in the Pacific, as you probably heard, from the Pacific Air Forces Commander. We're doing this in Europe. And frankly, we're doing it in Central Command. All because we know that our concept of operations has to change given the competition and the threat that we face from the near peers.

That leads us right to Mobility Guardian. Anything that we're proving out in these different exercises we're going to take it into Mobility Guardian which is a power mobility high end

exercise occurring in May, and we'll continue to exercise multiple platforms. And we're going to bring in both Red Air and Blue Air combat air forces in our exercises to try to assist them and to try to bring the threats in and have additional situational awareness.

All that requires airmen that are fully developed and we're putting them in simulators, doing high end threat training with them and frankly, doing C2 and Tactical Datalink training which is all pretty new. So it's a culture that I'm changing as well when I think about developing our airmen to go do that. So between the airmen who are thinking about innovative things [in waves] and then tying them into new technologies so that we can accelerate into the future.

DWG: [Inaudible] of Signal Magazine.

DWG: Thanks General Van Ovost for your time today. I appreciate it.

I just wanted to follow up about what you were speaking about. You mentioned kind of the more of the non-traditional roles. Can you comment or walk through how you'll balance in the future these new sort of roles for the aircraft, especially for the KC-46 when it's fielded. Its role may be becoming a flying communications node versus its air refueling role. Can you kind of walk through I guess how you'll balance that as you provide those roles for rapid global mobility. Thank you.

General Van Ovost: That's a great question. We think about where our air refueling assets, and frankly, our airlift assets are going to be at any one time in a competition and in full out conflict. Our airplanes are going to be in the area all the time and we'll be there to support. We've done this work by simply a flip of a switch on the airplane where we can be a relay node, where we can do this edge processing for 4th and 5th gen. And frankly we've done even recently with the KC-46, we have been, if you will, a translator to move data between the F-22 and the F-35 and the X-58 Valkyrie, the unmanned vehicle. That is simply being within range and having line of sight and beyond line of sight capability to do that translator work out there in the field.

So I don't see it as an either one. I see it as both when it comes to non-traditional mission sets for the [math]. I think we

need to be out there and I think that if the airplanes have the backbone and infrastructure to do that we absolutely can slap on pods that we're working on that can do that. And not every airplane has to have a pod. Perhaps during a conflict or a competition we selectively place these on the airplanes depending on where they're going to be in the battlespace.

I appreciate your question because this is about how the Joint Force gets better because we are increasing our capabilities and we're leaning into it.

Another experiment we've been doing from a non-traditional standpoint is dropping palletized munitions. We've been through phase one of this dropping pelletized munitions. And we think about, instead of dropping off some munitions on a ramp somewhere and put it on a B-52, we drop it off into a point in space in the air where then the Combat Air Forces then take over the targeting and movement of those munitions. Now that's pretty revolutionary. It's a way to get more mass airborne in a quicker, in a more rapid fashion to react to scenarios out there. Again, just another way that Mobility Air Forces are trying to get after ow we make the Joint Force more lethal.

DWG: Defense News, Valerie Insinna. Are you on and do you have a question?

DWG: I am on and I do have a question.

If I could, I would like to go back to the question about on the two deficiencies that were downgraded. Can you give us a little bit more background on those? I actually was completely unaware that they existed. So can you talk a little bit about the nature of those problems, why they were considered Cat 1 to begin with? And the fixes that have been put into place, why did that make you feel comfortable enough to downgrade them to Cat 2?

General Van Ovost: The two Auxiliary Power Unit category one deficiencies were a duct clamp and a fuel mast drain. Now category one deficiencies run into, this is kind of a safety of flight or safety of mission. These are the critical deficiencies that would stop us from executing the mission itself in robust form.

The APU duct claim is a clamp inside the tail of the airplane where the APU is and it was moving. It was causing some

problems. So what we did was we worked with Boeing. They had the engineering fix, and they not only found the fix, tested it, but about 70 percent of the fielded fleet have already been retrofit and the rest will be done very shortly. And we're confident that the clamp fix is the final fix based on their experience with the commercial aircraft and how they did the redesign on that.

For the fuel mast, it's a small metal piece that's outside of the back of the airplane. There were some quality issues with a spot weld, again, that would cause a piece to potentially break loose off of the aircraft. So what they did was they redesigned it into a single [pass] and they're working through the retrofit option right now. All of the airplanes that are flying right now and doing our testing, they all have that modification and everything seems to be going well. So we have authorized to take that one through the SPO, our engineering team has authorized to take that one off the list.

It doesn't mean that we're not tracking it. If something happens, we're going to watch as it ages out, but those were moved down. We still have category one and category two deficiencies that Boeing is getting after, closing out all the time. But if we find another deficiency where we're having an issue with safety of flight, we absolutely will flag that up into the category one status.

This is pretty normal in the development of airplanes and capabilities that are going on, that we have different deficiencies that get elevated and then get fixed.

So while I'm happy that these two category one [DRs] come off – again, these are really associated with maintenance and the ability to make the aircraft available, in other words it mission capability rate which is important. But my focus remains with engineers at Boeing and our engineers in the Air Force, to get after the key operational deficiencies on the airplane which is the Remote Visual System 2.0 and our actuator for the boom.

DWG: If I can just ask a separate question on something a little bit different, can you just give us an update on the [Sinker] leasing proposal and where that is, if that's something you guys are still interested in.

General Van Ovost: As you remember, the idea of contract air

refueling was not about flying operationally to meet our contingency requirements. The idea of contract air refueling was to enhance the readiness of the force by offloading the standard administrative refueling that we do here in the CONUS to prepare our Combat Air Forces, our Joint Forces for the joint fight. So that is why we ventured into the discussion about contract air refueling.

We submitted a proposal to the Air Staff, to the Secretary, on how we wanted to go about to do an analysis on the feasibility, the advisability and affordability of using contract air refueling for these, if you will, administrative and training requirements.

The staff came back and asked us to do a full business case analysis that took into account the future operating environment, the future concepts and what air [inaudible] would be required for the future concepts, and I'm talking about the Joint Warfighting Concept and the Joint Concept for [Inaudible] Logistics, and finalize the actual requirement for both the Air Force and the Joint Force in what refueling would actually be needed and what could they do in these various options as we look at government owned, lease back to a contractor or contractor owned, and working with the FAA on the certification of oversight requirement for either, all of these options, for which there are several.

So this full business case analysis is going to take some time, so we are back in the throes of framing the study and awarding that study so that we can move forward on this larger analysis.

And for expectation's sake, it does take a while. These kind of business case analyses we have seen can take 18 months. So we're going to put pen to paper and take a very close look at it, but we are required to do a full business case analysis for the Secretary at this time.

DWG: Leigh Hudson, are you on and do you have a question?

DWG: I wanted to follow up on Val's question. Having started that [inaudible]? And separately, since there are a backlog of the [inaudible] KC-46 aircraft in Washington State, why haven't you increased the delivery pace? Is that because you're waiting for the RVS 2.0 fix?

General Van Ovost: That's a fair question. With respect to where we are, we have the Secretary directives back and the parameters and we're working with Headquarters Air Force to finalize the parameters for the study and then likely we'll be contracting out that study. So that's where we are, in the throes of that piece. We end up with analysis [inaudible] to come up with that.

With respect to delivery of the KC-46s, as I mentioned because the KC-46s, we're unable to use them in a fully operationally capable area we are slowing down the movement of crews to the airplane, so it's not just about iron. To get full operational capacity it is about air crew training, it's about maintenance crew training. Our logistics support training and equipment. It's about our global supply chain around the world where we're going to be supporting these airplanes as they land and it's about our facilities and our [jet] [inaudible] maintenance. Those are things off the top of my head of things that have to come together to be able to use the airplane in the fashion that we're going to use it with.

So we've accepted 42 airplanes. We expect to accept two more this month and roughly expect to have them deliver about two a month is what we had been planning. So as we take them, in some cases we're not flying the operationally because we don't have the tempo necessary because we're not operationally tasking them. So as we bring them on we're going to do our due diligence at the different bases, but for right now I'm not, I don't need to be in a hurry to take them at a faster rate than about two a month.

DWG: David Rose of Task and Purpose?

DWG: Thank you all for putting this on. It's really helpful.

A quick question just about getting the parts out to all the different bases around the world. I never considered that as a challenge that's going to happen as you bring a new aircraft online. How long does that generally take? Especially for something like the KC-46. Thank you.

General Van Ovost: There's a long supply chain around the world and we're part of that supply chain as we run the distribution piece of it. With any new airplane we need to make sure that we have the basics available at all the different locations, from the support equipment to what's the parts lineup.

Fortunately, there's a lot of commonality between a Boeing 767 and this airplane, but for the unique pieces with respect to the boom and different parts that we have, we need to make sure we have kit available at the locations we're going to be going to throughout the nodes around the world.

So frankly, we have been planning this global supply system ever since we stood up, we started our order on tankers. We had plans when we were going to have the parts in place to what location, and frankly, we have been flying the KC-46. We've been flying in Japan. We actually did an operational drag of F-18s from Japan here to the United States. We get on the ground. We train the locals and our airmen on the ground how to do things like emergency egress, fire suppression for the airplane. How to park them, making sure the lines are painted correctly on the airfield. And what sort of parts we expect based on the reliability rates that they would have to be able to do.

So it is a system. The system also includes certifying our airplanes through the FAA so they can use, for example Euro Control requires all of our aircraft to register. So when the airplanes are ready to go we actually have to go through that Office of Registry in that particular tail number all the way around the globe.

So these pieces of planning have all been in effect and we're getting after it. But as the program's been a little bit delayed we didn't need to have the expense of putting up too much around as I said crews and the infrastructure, but everything else is going forward through this rebaselined plan. So far, no hiccups. We've been able to fly around the world. We've gone into Europe and we've gone into the Pacific and we'll venture down into the Middle East at some point as well. Again, just to exercise.

DWG: Dmitry Kirsanov of TASS. Are you on and do you have a question?

DWG: I'm on but I don't have a question today. Thank you very much for doing this, General.

DWG: Marcus Weisgerber of Defense One. Are you on and do you have a question?

DWG: I am and I do.

Ma'am, thanks for doing this. I was just wondering in light of, we've had the KC-46 discussion this morning, and Boeing's other problems with 787, 777X, 747 production ending. What's your assessment of the mobility industrial base right now? And if you needed planes I imagine 10-15 years out, where would you get them considering the KC-46 alone, a derivative aircraft, has taken 10-plus years.

General Van Ovost: That's a great question. I'm going to start with today and then I'll move to tomorrow. We are in discussions routinely with our Civil Reserve Air Fleet partners that provide our commercial augmentation every day. About 90 percent of our passengers and a significant 30-40 percent of our cargo is flown commercially. So we're pretty much in tune with our commercial carriers, both our charters and the domestics. So try to understand the health of their programs to ensure that they can meet our wartime requirements. And Marcus, they can. We are watching this, again, very closely and they've all committed the system they're flying and they have the crews necessary to meet our demands should we have a contingency and have to use them.

To your discussion about the future, that is a really good discussion about our defense industrial base. I'll leave the key pieces of that to the Secretary of the Air Force for our acquisition needs. They've been very focused on areas of the industrial base. But we have been, as a matter of fact I'm going to be talking to Boeing about their commercial aircraft and how do we ensure that in the future we remain compatible with their commercial airplane development, especially with respect to cargo. Obviously we would want a healthy economy and a healthy industrial base and Boeing is one of the big ones there.

So I am not worried yet. We have the engineering expertise. Today we have the capabilities we need. But I think looking into the future we should all be concerned about the defense industrial base and how do we assist them in developing for tomorrow? How do I entice them to look at the requirements that we have tomorrow with respect to rapid global mobility and frankly, all of our Joint Force requirements.

So I look to the Joint Warfighting Concept and I think about what kinds of capabilities we need. We talked about Advanced Battle Management Systems, C2, cyber, data crunching at the end for decision superiority. But we also do need some conventional

platforms both manned and unmanned, and how is it that Boeing amongst all the defense - how is it that they can participate and keep us moving forward with respect to our enemies? We've got to retain our comparative advantage that is both talent and technology together on the thought that we're continuing to innovate and getting after new ideas to ensure the strength of this nation,.

National security is the bedrock of our economy and so it is in our best interest to ensure the defense industrial base remains healthy.

DWG: Can you elaborate at all on those discussions you're going to have with Boeing? Should we read into that that you're looking at the 777 as a potential military platform down the road to carry cargo?

General Van Ovost: I wouldn't infer anything into that. This is normal engagement with our providers. Like I said, I deal with the contract carriers and our larger normal domestic and international carriers with respect to their participation in our commercial augmentation. We often talk about capabilities of airframes and what we need and it comes down to how we ensure that in the future that we keep the door open, if we go into an emergency situation and we need capacity right away, how do we keep the door open to ensure that we're interoperable from a passenger, from a freighter, from aeromedical evacuation? And frankly all of our partners and allies and their systems - we think about their global supply chain and how we can work together in an emergency to ensure national security. So it is just part and parcel of the maintenance that I do all the time with respect to ensuring that we can meet or we can generate credible capacity to move the joint warfighter.

DWG: Courtney Albon of Inside Defense. Are you on and do you have a question?

DWG: Yes. My question is kind of back to your earlier discussion about accelerate, change or lose. I understand that some of the initiatives within AMC kind of were already probably aligned with the concept and the vision that General Brown laid out, but I'm curious if you can point to some specific examples of maybe organizational shifts or force structure changes that we're going to be seeing in the near term that are a direct result of the directive from Chief Brown. Can you give us any

kind of detail of what's being discussed, what's going to be implemented in the near term?

General Van Ovost: I think you see in our budget submissions and in the discussions, you see that we're retiring our older C-130H's and recapitalizing with C-130J's. They're a more capable airplane when you think about intratheater distribution, I think about the workforce that those airplanes are and how we're moving forward with this concept called agile combat employment which is going to leverage a lot of what the C-130s do on these small fields around the Pacific and around Europe.

The other thing, of course, is the Advanced Battle Management System, and how we're trying to connect the Joint Force, we're trying to become a node out there to become more useful in making the entire Joint Force more capable. That's exactly what General Brown is getting after. We don't fight alone, we fight as a team. And whatever se bring to the table - in this case the Advanced Battle Management System - it has to make the joint team better. That's why I think about palletizing munitions, command and control, secure links, secure installations, and crunching data at the edge to get the information into the cockpits faster. Our ability to translate between 5th gen and 4th gen. Our ability to connect a 5th gen airplane to the Valkyrie so it can direct what that Valkyrie needs to do. That's what we talk about when we talk about accelerating change.

With respect to the tankers, in order to accelerate change we need to retire some of the legacy tankers because of the availability rate on the airplane and the cost it is to keep a 60 year old airplane around, and the tyranny of numbers with respect to small fleet dynamics, with respect to the KC-10.

So what he's asked me to do and what we're moving forward with is how we maintain that capacity. How can we ensure that we can get ready today with the capacity we have yet take a little risk so that tomorrow, in 2030, we actually have what we need for the Joint Force.

So as we look at mitigating the capacity requirements, we are looking at exploring our opportunities to use the KC-46 in select scenarios to be able to offload the KC-135 and KC-10 workloads so they can go out and work operationally around the world.

Those are some of the things that we're getting after when we

talk about accelerate change or lose.

DWG: I understand that those efforts align with that, but I guess I'm curious about a lot of those things are things that were somewhat in motion prior to Chief Brown taking over and I'm just curious. Are we going to see a shift in the next budget relief? Are we going to see reorganization to align with that that's directly tied to this new direction?

General Van Ovost: General Brown talked about empowering our commanders, that's even more so now as we look at the complex environment they're going to be in. So he talks about how we can flatten the decision cycle. We are working on command and control and alternates if we get cut off from a primary or alternate communication cycle, how do we train? So what you're seeing is a lot of training for the high end fight. How do we train them to make decisions when they're cut off? Because we are going to fight to get to the fight. We have forces here in America that are frankly being impacted right now in the cyber realm. We expect GPS to be denied. We expect cyber attacks. How do we general force here to get it overseas and ensure that we can get the mission done? So we're doing a lot of training and developing our airmen to think about these scenarios and giving them challenges in our simulators and in our exercises, much like what we were talking about in Cope North in agile combat employment.

So you'll see training and focusing on empowering our airmen, and you'll also see a focus on accelerating some of the technology that's here today, that we can leverage today. Some of this is not rocket science. So what we need to do is make room for targeted modernization investment that's going to accelerate us in the capability that we need. That's why I'm talking about, and I have KC-135s that are out there doing experimentation too. She may be 62 years old but in the end we're going to have a fleet of KC-46s and 135s when we complete the 179 buy, and the 135s need to be targeted, they need to be a little more survivable, they need to have battlespace awareness, and be able to augment and make the Joint Force more lethal with these [inaudible] events and different things that we're trying.

So you'll see that we are doing, you know, how to keep the fleet moving forward with targeted investment, nothing exquisite, but also trying to make room for funds to accelerate some of the capabilities on board that airplane, that KC-135 airplane. I

harken to the B-52 where we're keeping her into her late ages and we're accelerating the capabilities on board that airplane by divesting in some other bombers and focusing on the B-52 which is a capable national [inaudible] platform.

DWG: 35 experimentation, is that informing the bridge tanker requirement process?

General Van Ovost: The KC-135 experimentation is just so that we can get to the future faster. We have the platforms available and we're leveraging our great folks in the Guard to be able to test some new things on board the airplane, but so maybe not for the KC-135 writ large it, but we are absolutely looking at those capabilities as we think about bridge tanker and frankly the advanced air refueling we're going to need into the future. So we are looking at what kinds of capabilities the advanced air refueling capability which would be a new developmental project, would be in the areas of survivability, C2 nodes, agility, the types of missions it needs to do, offload, where it's going to be in the battle space. So as we do these tests even with our old KC-135s, we're learning about what we need into the future. And as we work through the acquisition process for a non-developmental tanker, this will also inform the types of capabilities that are actually available today to be part of that non-developmental tanker.

DWG: Frank Wolf of Defense Daily. Are you on and do you have question?

General Van Ovost: Yes, I do, thanks. I appreciate it.

I just wondered in terms of the 179 number by 2029 and you'll have obviously I guess 300 135s remaining, from your perspective we're still on track? That timeline still meets your, how you're expecting it right now. Is that right? Or --

General Van Ovost: That is the timeline, our last buy from the KC-46 on this contract is in FY27 with FY29 final delivery of that airplane. So what we're trying to do is the Secretary of the Air Force stated that we're going be in a continuous recapitalization mode so we're looking at right now finalizing what numbers or airplanes we intend to purchase on a non-developmental category for full and open competition until such time as we have the advanced AR capability out there and fielded.

DWG: And the other thing, you talked to some I guess of the boom operators out there on the 135s and they expressed some reluctance about the Remote Vision System. I would say they've been used to doing it how they've done it for years.

What's your sense, why is the Remove Vision System really needed? Obviously there's an industrial base question, et cetera, but from an operator's perspective, why is this really, from your perspective, needed?

General Van Ovost: The KC-135 and the KC-10 boom operators sit in a pod in the very back of the airplane. When they open up that window and drop the boom they have a pretty good 143, 153-ish window where they can see the environment behind them and they see the planes coming up for air refueling servicing.

The KC-46 has no such boom pod on the back of the airplane. The KC-46, the boom operator station is immediately behind the pilot so what we're doing is we're using cameras to display where the airplanes are that are coming up behind them. And what we're working through right now is a virtual display that is going to have the functionality of almost, just like you were looking at it outside of the window.

So it is different. And certainly that's the challenges we've been having right now with the current Remote Visual System has caused the angst within the fleet partners, within the KC-135 and the KC-10 fleet boom operators.

I'll tell you, our crews, our pilots and our boom operators as we're lowing, that we have these KC-46s at four bases right now, and as they're out there flying more and more they're getting more confident in their skills and in the ability of what they could be doing if they had a Remote Vision System that is going to meet all the requirements.

So I'm heartened by the boom operators that are actually flying the KC-46 at the boom operator station, and I think that this is just a transition to a new way of doing things, looking to a screen versus looking through a window at the airplanes. But frankly, no matter how we did it, it was very uncomfortable in the back of the airplane and this is a much more capable airplane for both agility, because we can do drogue and probe, two different types of refueling, but also for the comfort of the boom operator once we get the issues fixed with the Remote Video

System.

DWG: Theresa Hitchens of Breaking Defense. Are you on and do you have a question?

DWG: I'm on but I don't have a question. Thank you anyway.

DWG: Dan Sagalyn of PBS News Hour. I see you're on, do you have a question?

DWG: Sure, thanks.

I missed your opening remarks, but can you tell me if COVID-19 has had a big impact on your operations?

General Van Ovost: Air Mobility Command, we are around the globe 24x7, and while we've had to place new procedures into effect and it's changed a few things, we absolutely still, it didn't slow us down, we are still out there, but what we've done is we're protecting our crews as they are carrying passengers and cargo around the world.

The other thing we had to do is we started with what's called the Transportation Isolation System because we had Americans abroad that had COVID or were suspected to have COVID and we needed to move them back to medical care in a rapid manner, and these systems that we had that we used during the Ebola timeframe only carried about two passengers, two patients per airplane and that was just not enough.

So in 90 days we went from developing a negatively pressurized container from the back of a [inaudible] to an actual flown prototype that we are now flying. We've flown over 300 patients around the world with COVID, keeping the crew and the air medical team safe by using these containers that really ten-fold can move our COVID patients.

That's not just for COVID, this is an environmental containment unit, a negatively pressurized containment unit that we will be able to use potentially with other pandemics and other concerns in the chem/bio area around the world.

DWG: So it hasn't had a big impact on flight crews, pilots getting COVID or important people who fly the planes are not getting it, you don't have to take them out of service because

they got sick?

General Van Ovost: Right. I didn't say it was not, a little [inaudible] attaching on the crews, but what we've done, especially for things like our nuclear mission, flying the President of the United States and our senior diplomats around. What we started off doing was placing the teams in what we call hard crews and sequestering them so that they would maintain their health and be a team. And if a team member were to go down, we had to have backup people who also had to be in crew rest, ready to go.

So it cost us in terms of having to have more people on standby, which they would be doing other things, so it cost us in that way. And we have had a few crews around the world, one or two had issues and had to be taken down, so we just had to place crews in different places so that we could keep the mission moving because Joint Force requires us to do so. So whether that's retrieving patients out of CENTCOM to doing normal rotations in the Pacific, we've had to make allocations for it.

One of the bigger allocations is as the different nations have new standards that they would publish on okay, this kind of test within 48 hours or 72 hours or you could only stay on the base, you only can wear this kind of mask, as they change we have a team that watches all that around the world all the time, and through our command center we try to mitigate those issues both for our gray tail, our [inaudible] airplanes and for our commercial augmentation around the world. So both commercially and organically we've had issue, but I'll tell you, we have really leaned on our commercial partners because they have vendors, they have supply chains, they have gates and contacts around the world that we use to ensure that we can get through and get the very latest, and frankly, they leaned on us in a few cases as they were moving military stuff around the world to get them clearances into different countries.

So frankly, we've grown a lot closer to our commercial partners throughout this entire COVID experience.

DWG: Oriana Pawlyk of Military.Com, you're next, then John Harper.

DWG: Thanks for doing this, ma'am.

I know you recently talked about the flying car initiative in AF.mil release, and I know this is the brainchild of Dr. Roper. So I'm curious how you intend to push the effort forward with Dr. Roper not really being around to push that or [inaudible] so much anymore. I'm curious, who do you envision flying these flying cars from the pilot inventory in AMC?

General Van Ovost: Oriana, I'd love to fly the flying car. You probably know, in the flying car we were doing autonomous as well as semi-autonomous pilot on the loop or pilot in the loop. So that's a great question. We're going to [inaudible] what Agility Prime was all about. Agility Prime was to stimulate the defense industrial base. As you know, 80 percent of the research and development that's going on in America right now is occurring in the commercial industry and not in the military. Many years ago it used to be the military was driving R&D. Well commercial is driving R&D. And the thought is that we would stimulate using a small amount of money, stimulate investment in key technologies and capabilities that we could be using in the future.

With respect to the flying car, we are looking at obviously - first of all I, AMC, we're not investing directly into Agility Prime. I am watching very closely things like the electronic vertical takeoff and landing capabilities. That's about storage of energy. Quiet transportation. Ability to get to the last tactical mile. And in thinking about how to use it for airfield assessments or potentially even going in and finding a downed pilot or picking up somebody that needs aerovac'd at the last minute and not having an asset around. I'm thinking about using it as a sensor.

What we're doing is we're doing some experimentation within our exercises using our contingency response wing, our Devil Raiders out there, because the Devil Raiders, what they do is they're part of the GAMSS, the Global Air Mobility Support System where they go forward to an obscure base with a small team. They secure the base, airplanes come in, they drop off cargo or they do integrated combat turns where they again turn the airplane, fuel it, put weapons on it and get it out of there in a short period of time. And how we could use that kind of capability to do airfield assessment. We've done these robotic dogs, how do we keep sensors. So I'm allowing them to play with Agility Prime as we think about what kind of requirements or what kind of capabilities are out there that we could leverage into the future.

So it's sort of a seed corn discussion for us, Oriana, but it does look pretty cool.

DWG: John Harper?

DWG: Thanks for doing this call, General.

When do you anticipate having these deficiencies with the KC-46 resolved and the aircraft achieving full operational capability?

And then looking ahead to the Next Gen systems, when do you think we might see an industry competition for both the KCY and then the KCZ?

General Van Ovost: Great question. For the KC-46, I expect to see a fully integrated Remote Visual System 2.0 towards the end of '23, and we will be also then at that point testing it and then cutting it into production in '24. That along with the boom system, the boom probe which has, we have what they call sit boom which for certain airplanes it's a problem staying on the boom for long periods of time. That will be fielded in FY24.

So I suspect a fully operational capable airplane, capable of all the missions which is aeromedical evacuation, airlift and air refueling – both drogue and probe – for our normal and our special missions in FY24. So I suspect to see [line] cut in and then you'll see us rapidly scaling up in our flying activities around the world in the KC-46 at that time.

Let me talk about the KCY and KCZ which sort of moved away from that discussion. The KCY is turned into what we call the bridge-taker which his going to be a full and open competition for a non-developmental tanker. In other words a commercial capability that's out there or can be developed. Right now I know of two types that are out there, both Airbus and Boeing. And that's meant to be a bridge until we can determine the final requirements of what we call Advanced Air Refueling, which you would call KCZ. We're doing that because we know that as the joint warfighting concept is changing the concept of operation of what we're doing, and we're up against now peer competition. The strategic environment has changed over the past three years, and before we use KCX, KCY and KCZ, the strategic competition atmosphere has changed. So we're thinking about the near peer of what we need for a near peer and that's why we moved to the

discussion about advanced air refueling. Is it going to be autonomous? Is it going to be pilot on the loop, pilot in the loop capability? IS it going to be small? Is it going to be large? What kind of self-protect is it going to have? What kind of electromagnetic spectrum capability is it going to have to both protect itself and enhance the lethality of the Joint Force while it's out there?

So that's a little ways away. I suspect as we move forward and we start to define closely what that looks like we will have an analysis of alternatives that I suspect you're going to see in FY22 that will take us through the kinds of capabilities we're going to need or the Advanced AR, the developmental tanker procurement.

DWG: We've just got a couple of minutes left. Why don't I throw it open? Has anybody got a burning question they'd like to ask as a final question perhaps? It sounds like we have Tony and we have Brian. How about you each ask a question.

DWG: I was wanting to follow up on a line from the beginning, General, where you had mentioned not fully populating the KC-46 crews and trying to get some more Guard and Reserve. I was just wondering if there were any numbers, any sort of idea to get the size of that.

DWG: Tony?

DWG: Can you explain how much more money the Air Force is going to have to pump into keeping KC-35s in the fleet given the delay in fielding a fully capable KC-46 until 2024. Is it about $10 million an airplane per year?

General Van Ovost: Thanks. For Brian, we have a set crew ratio that we've expected the number of crews per aircraft and the number of maintainers per aircraft as they designed the KC-46 for its operational capability.

What we've done is we are looking at how much capacity we need available today to do the day-to-day competition activities and how much we need in the KC-46 for it to do its training, the upgraded training, the maintainers, beginning to get small, limited operation capability on that airplane.

Rest assured, we didn't get additional crews to stand up the KC-

46, so to move a crew, you take down one squadron of KC-135s, those crews need to move as well as the maintainers and a little bit of logistics support to a KC-46 unit. So we watch it very carefully. We're carefully modulating. And frankly, we're going to continue to carefully modulate and look at that every year based on the capabilities of the KC-46, the amount of volunteerism we're getting in the ARC and the requirements by the Joint Force for their training and exercising.

It's a bit of a dance, so I can't give you the actual numbers, but just know that we are closely metering. So as opposed to blindly saying this year it's this many units that move from left to right, we carefully monitor how much of a unit moves over based on the capability and capacity available.

Again as I said, we are exploring limited operational capability for the KC-46. And you probably heard, we've flown it with the drogue capability for all of the F-18 variants. We are in operational test and evaluation, we have certified at some level with some restrictions ten different airplanes. We have five more airplanes in the queue for the next couple of months. So as we look to see what we can do, that's what will determine how much we can shift from 135s and KC-10s. Right now we're focused on the KC-10 because we do have a plan to, in the small fleet dynamics it's best for us to slowly move them out at the faster rate by FY24 than the 135s.

Tony, with respect to how much money we're going to spend on 135s, I don't have the cost per year on 135s. I look at it as what's the capability I have to keep in the competitive space to meet the workforce requirement and knowing that I'm not spending any more on the KC-46 because Boeing is required to make all those fixes at their cost.

The question is, when do I move flight hours from a 135 unit over to a KC-46 unit and the people I just discussed in Brian's question, how do I modulate the funds that were going to go to a 135? How do I modulate them into, and obviously I'm not modulating them as fast as I want but I still get the capability. If I keep operational 135s there I absolutely can employ them because the Joint Force needs them.

DWG: Thank you.

General Van Ovost: Thank you, Tony.

DWG: Defense Writers Group we have a busy February. There are three more events coming. General Raymond is in two days' time and there are two very senior people signed up for later in the month. So thanks everyone.

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