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Lt. Gen. David A. Deptula (Ret.):

Well good morning, ladies and gentlemen. I'm Dave Deptula, Dean of the Mitchell Institute for Aerospace Studies, and welcome to our panel on Aerospace Warriors, Now and Tomorrow. Professional military education in the broad sense of the term is critical to ensuring that our Airmen and Guardians have the knowledge and skills necessary to stay on the leading edge of strategy and tactics, whether it be flight school, operating or advising at Red Flag or a fellowship at a place like the Mitchell Institute. These experiences shape our war fighters into the world's best.

But professional military education has to be baked into an Airman or a Guardian's career to give them the opportunity to grow as they progress. Innovative training and education's required to prepare our Airmen and Guardians for the fights of the future. Today, we have the leaders whose responsibility is just that, training the very best US Airmen and Guardians possible. Lieutenant General Brian Robinson is Commander of Air Education and Training Command. Major General Shawn Bratton is Commander of Space Training and Readiness, or Star Command, and Major General Case Cunningham is the Air Force Warfare Center Commander. So welcome gentlemen, and thanks for taking the time to be here today.

Now just a little bit about their backgrounds. Prior to command of AETC General Robinson, also known as Smokey, served as the Deputy Commander of Air Mobility Command where he was responsible for transcom's air component. He's a weapons officer and command pilot with over 4,400 hours in airlift and training aircraft. Major General Bratton, also known as Governor, was the first Air National Guardsman to attend the space weapons instructor course at Nellis. Previously, General Bratton was at Northcom director of Space Forces Commander of the American Maryland International Guard 175th Cyberspace Operations Group and Deputy director of Ops at US Space Command.

And as the commander of the US Air Force Warfare Center at Nellis, Major General Cunningham, also known as Basket, oversees Air Force Operational Testing and Tactics Development, as well as the advanced training schools exercises in venues that are all out there at Nellis. He's the former commander of the Thunderbirds and previously served as director of plans, programs and requirements at Headquarters Air Combat Command. So gentlemen, thanks for joining us again today. What I'd like to do is offer you each the opportunity to give a couple of opening remarks and we'll start with Smokey, so General Robinson.

Lt. Gen. Brian S. Robinson:

Sir, thank you very much. And I just want to start with saying thank you and acknowledge the great effort and support from yourself, the Mitchell Institute and AFA, for allowing us, the directors and the board, allowing us to have this opportunity. And then I'm absolutely honored and humbled to represent the first command here as the thousands of many tens of thousands of Airmen that serve in that capacity and do what we do. But also humbled an honor to be alongside my colleagues here on the stage to talk with you today. You asked about what is it we're getting after today. So I'd like to start with at the broad sense in work a little bit more further and down into detail. But essentially what it comes down to, and you've heard it here many times over already and you've heard it before coming here, but our Airmen are our competitive advantage, vis a vis the PRC, and or Russia, any other significant adversary there.

So it starts there. And what I'm really trying to get after with the team that I have working around with me and working with and through is how does AETC leverage every possible touchpoint it has with our Airmen from the time they enter the Air Force, come back for PME advanced skills training to make sure

that we're pushing them, developing them, recruiting them in the right direction so that they have confidence that they can go forth and help the Air Force return to the great power mindset. Can they be confident and comfortable with the mindset of multi-capable Airmen? Are they able to think critically and employ and advise on the concept known as agile common employment? Are we training them and giving them the talents that they need in that space? And then mostly returning to our roots where the Airmen are actually empowered, right?

They understand with that training and the repetitions that options they get, that they're actually empowered to go forth and do the things many examples have you heard from there. I'd like to touch on four specific things and perhaps it'll lead into some of the Q and A. Our first most strategic concern we have is recruiting, recruiting and retention but recruiting specifically. We have to figure out how to evolve our approach to recruiting in a way that gets us... That increases the Air and Space Force's value statement to the generation that we want to join our forces. And as it was said by the CEO of Google yesterday, if you saw that, they can see themselves contributing to our mission and our why.

After that, just speaking of the brand, the other piece of that is we have to change the narrative or evolve the narrative where we come back to talking about the strengths of the brand, the brand of the Air Force and the Space Force and what it is that we're about, what it is that we're going to do, and how they can contribute to the advancing air power, space power in the United States of America in this great competition.

Below that, the second concern I have is optimizing the efficiencies and the ways that we train and develop learning and training for our Airmen, particularly UPT 2.5. That'll be fully operational capable here the first quarter of '23. But then I want to take all that we've learned in that space with the greatness of debt 24 under 19th Air Force and start looking at how we apply that to tech training transformation. You may not know this, I'm sure most of you in this crowd do, but many outside the Air Force especially don't know. But pilot training is like 12% of what we do in terms of what we train and provide. The other 88% is all the other enabling functions, civil engineers, finance, weather, et cetera, et cetera. So we want to figure out how we can take what we learn there.

Third point, the inflection points that I see that provide the greatest opportunity for us to transform and help the Air Force achieve its objectives is through Air University, the PME schools, both the officer and enlisted, how we get after that and start getting our folks calibrated in the ways that they can get after understanding the joint war funding concept and apply that in their daily goings on and the staffs that they serve on.

Second, I think, is our intel school. We've got to get away from sensor to shooter and to get to sensor to decision maker and that information rides along our war fighting functions. And we need the joint task force commanders, the leaders at every level, to understand all those elements as best they can to make the best decisions in the battle, in the fight. Underpinning all of that, so I use this last, but is not by any way, means or shape the least important. It's the data and the systems approach. We have to be able to access the data, push the data, understand the data with how we train our folks, develop them, deliver learning, understand the competencies that they've gained, how that works in partnership with half A1 and staff MR and the development side and talent management and putting people in the right places that they contribute the most.

We're in a digital age. Conflict is already occurring in the digital age environment. If we get to that point, warfare will occur in a digital age and we have a very foundational piece as AR education training command and making sure the force is ready for that. So I look forward to the conversation and thank you for the opportunity.

Lt. Gen. David A. Deptula (Ret.):

Very good. General Bratton?

Maj. Gen. Shawn N. Bratton:

Good afternoon or late morning. Day three of AFA. You guys look good out there. Need some energy, so stay alive with us. There's probably a lot of instructors out there, ATC and STARCOM instructors, maybe some recruiters in the room. Thanks to you guys, first and foremost. None of this business goes anywhere without that frontline of instructor duty and we value it in both services and the secretary values it. It was clear in his guidance to the promotion board. So shout out to the instructors and the recruiters in the room. Really, we go nowhere without you, so thanks. I'll tell you, it's been a busy year in STARCOM. We're the newest thing in the newest service. One year old, we just turned one year old. And we have been working hard. Mainly the first year was about accession into the force.

What does that first 12 months of service look like? And we made really, in partnership with the ATC, some leaps and bounds and basic training and how we onboard people into the service. Great partnerships throughout the enterprise there. Year two, we're really now looking at that second tranche. How do we get into advanced training? And this is driven just, as General Robinson pointed out, by the threat. They are coming to get us in space, right? Russia and China's capabilities are legitimate threats on orbit and they're coming to get us in space not just to deny space but to defeat the Air Force in air superiority. They think there's a weak link there that they can defeat land forces, air forces, naval forces, if they beat us in space. They've seen the advantage that it provides to the joint force and they're coming after us.

And STARCOM's job with a bunch of teammates is prepare the force. How do we get ready for that fight. If the operators succeed or fail, we carry that burden to prepare them properly, to engage the threat. And so we're really focused on readiness in this second year and how do we tie our training events to the readiness of the operational force and how can I prove that in metrics? What's the range activity we need to build? We're teaming with the Warfare Center on a lot of advanced training activities to make sure that we're not just doing space operations to protect and defend on orbit, but we know that we are protecting and defending on orbit to ensure air, land, sea superiority as well for the joint force. So a lot of focus year two in advanced training activities, and I think we'll talk a little bit about that.

Just a quick update on what happened in year one, where we are right now. We're still in a build phase. We have basing activities going on for STARCOM headquarters and as Deltas, we're still onboarding civilians. So civilians, we're hiring. Come talk to us. And building out the force and that'll go for the next two or three years. We're still in very much a build phase and there's still this incredible dependence, I think always will be, on big Air Force. The Space Force is such a small service. We assess about 500 enlisted members per year, about 300 officers a year, just tiny numbers compared to the bigger enterprises in the other services. It lets us do some things in different ways, maybe be more agile, but it also creates an incredible dependency on ATC and Air Force recruiting and all the Air Force services that help us out.

And so we're trying to understand that, where does it make sense to separate and go do our own thing to ensure space superiority for the joint force. But there's other places where it absolutely makes sense to stay tied together. And I think we're working with our teammates to work through some of that and I think we'll probably talk a little bit more about that. I got to finally give a shout out to STARCOM Squad in the air, three taz is here in the house. I saw we're real proud of them. They just got that award at our first birthday, first ever squad in the air. So Sumo, good job with the team over there.

Lt. Gen. David A. Deptula (Ret.):

General Cunningham?

Maj. Gen. Case Cunningham:

Thanks sir. Echo the thanks to AFA for this awesome forum and awesome opportunity and the honor to be up here on this stage with these leaders. What I thought I'd do this morning is just give you, in this time, just give you a quick run through of what the Warfare Center is, because sometimes that's not a commonly understood fact, and then talk to you a little bit about our three priority efforts in the Warfare Center. So first, we're about 13,000 folks, not only at Nellis in Nevada, but across 20 other states and about 53 other locations. There's only about 55 folks in the headquarters. So by definition, everything that happens in the Warfare Center is really through the wings that make up the Warfare Center. So briefly, the 57th Wing is our advanced training organization headquartered at Nellis, Red Flag and Weapon School are some of the events that many of you would know best there.

The 53rd Wing, our operational test and tactics development organization, doing that not only for ACC but also a global strike headquartered at Eglin. And then also in the panhandle, the 505th command and control wing. If you take everything the 57th does and the 53rd does put it together and then focus on C2, that is what the 505th command and control wing does. So JTAC to JFAC as it'll often say there. And then our newest organization, also in the panhandle, is the 350th spectrum warfare wing focused exclusively on dominance in the electrode magnetic spectrum, been up for about a year there. Blitzing back to Nellis, we've got the 99th air base wing who does a fantastic job maintaining the installation that makes all the magic possible at Nellis. And then our two named organizations, the NTTR, which is a place and also an organization, the Nevada Tests and Training Range, responsible for that national asset that exists there in Nevada.

And they are also responsible for the virtual test and training center, which I think we'll get a little bit of a chance to talk to today. And then last but not least, the Air Force Joint Test Program office, one of our lesser known organizations in the Warfare Center, but does amazing work across the joint community with Air Force sponsored joint tests that are nonmaterial in nature. So across those organizations, we've got three priorities. And when I say we've got three priorities in the warfare center, it requires the synergistic and integrated effects across those wings in order to make them real. So the first is we have a pacing challenge campaign plan. And really what that is, is all about the operations activities and investments that we do within the warfare center, making sure that they're laser focused of the pacing challenge that is China. That is fundamental and underlies everything else that we do within the warfare center.

The second is the virtual test and training center, and more specifically, turn the virtual test and training center from what it is today into the synthetic range that we need for the pacing challenge. Like I said, we'll get a little bit of a chance to touch on that a little bit more here later. And then the third is revamping our advanced training enterprise in line with the things that you heard the chief talk about in his talk on Monday. Those five key factors for culture change in our Air Force, reflecting all of those in our advanced training enterprise. So it's an honor be here with you. Look forward to the conversation. Thanks, sir.

Lt. Gen. David A. Deptula (Ret.):

Well great. Thank you all for those introductory and background remarks. Let's dig into a little bit more detail with some questions. Now, the title of this panel's, Air and Space Warriors, Today and Tomorrow. And today the vast majority of what the Guardians provide is critical to enabling the success of US war fighters inside the atmosphere. Tomorrow, there's going to be more fighting external to the atmosphere and the actual space domain. So Governor first, but all of you, feel free to chime in. How are you

managing the evolution about the way Guardians are viewed not simply as critical enablers, but as war fighters in and of themselves?

Maj. Gen. Shawn N. Bratton:

Yeah, sir. Thanks. There's a couple pieces there. One, we're working hard on the war fighting doctrine. We don't have the history of war fighting in space. We've never had a single battle in space. And so you think about how air power evolved and we learned and we developed doctrine. We fought World War II, we learned and developed Vietnam, Korea. I mean, long history there of lessons learned, applied, and applied, and applied. We're writing that 3.0 doctrine right now that we need to teach our war fighting. But how do we think about terrain in space? What are our centers of gravity? What are the most valued targets? How do we do intelligence collection? How do we disseminate command and control? All the things that the Air Force has a history on and proves dominant in since Desert Storm on, for sure. We're back in the early days of the air corps tactical school and we're right there.

And so as we onboard Guardians and General Thomas is here, as his team brings them into the service for us, early in their training, we want to incorporate those lessons. But first we got to write the war fighting doctrine. And so there's a big effort going on right now for 3.0. We're developing exercises and war games to try out the things we think are true and prove them as concepts and eventually write them in. And so to develop that war fighter, we got to understand command and control. We got to understand what it means for space superiority in the domain, but also what's the most important thing for success in air, land and sea? And so that certainly influences how we think about targets, how we think about high value assets and things that we have to defend and then train and exercise to prepare the force.

Lt. Gen. David A. Deptula (Ret.):

Very good. Either your other two like to comment on that or are we going to leave it to the space guy?

Lt. Gen. Brian S. Robinson:

I would say we're all in on the partnership and you said air corps tactical school, so we'll gladly give you some space at where air corps tactical school started, which is at Randolph. But all I would add really for everyone out here, and this is what I talk to folks about, right now I think is an incredibly exciting time to be in the Air and the Space Forces. We are no longer getting after the same old problems looked at slightly different ways that are very, I think, have become rudimentary over time. We've got some wicked hard problems to solve. We got to solve them fast and we're coming to America's best and brightest and our very intelligent Airmen that are on the line who oftentimes have the ideas and the solutions or key components of those. So I've not been this excited about being part of the Air Force since I joined many, many years ago, a couple minutes ago, but I just think it's exciting.

Lt. Gen. David A. Deptula (Ret.):

That's a great segue to our next question. Professional military education is, as you alluded to, the bedrock for developing future leaders to be as lethal as possible in a fight. There's been some feedback from recent attendees that indicates that PME content may not be as focused on war fighting as it could be. Could you all talk about if there's an effort to increase and improve, refine our PME content to address this concern?

Lt. Gen. Brian S. Robinson:

Yes, sir. I'll take that. Great questions, thank you for that. So all credit to General Hecker, but under his tutelage and command of Air University, that feedback was heard. They took a pretty formal look at that and in the last year or so, redesigned the Air Commander staff college syllabus and the Air War College syllabus to focus more on joint war fighting. So 60% of the syllabus now is aligned with joint war fighting with the particular adversaries in the NDS in mind, the bulk of that, again, being with the PRC. This academic year it's under full execution. We've got it dialed in, General Tullos now has it dialed in for a quick assessment and stride assessment and adjustments to that. Some key components of that are the ability to, basically, there's a series of war gaming events that go on.

So they're looking at how they use gamification, if you will. And each of the semesters, each semester formally ends with a war game environment with a op four Red Force versus Blue Force kind of approach to it to evaluate what we thought, what the students and the cadre thought would work or not is actually going to work in that way. They've also changed some of the staff to bring more military uniform members back onto the faculty versus relying so heavily on civilian PhDs and academia, if you will, to get to war fighting. So those in and of themselves, I think, are very exciting.

The next turn on that is at the enlisted core PME, so NCO Academy as well as the Senior NCO Academy, about helping them understand how to be critical thinkers and leaders at the NCO level and threading the needle with the why, the objectives, how to defeat the PRC and how to contribute to that. And again, back to the multi-capable Airmen and the concept. So we're going to have a good turn on the wheel of that this year coming and get that rolled out. So it's going to be crosscutting across the board for all the PME sources there.

Maj. Gen. Shawn N. Bratton:

For the Space Force, we have clear guidance from the boss from General Raymond in the planning guidance to develop independent PME for the Space Force. Vosler NCO Academy came over, so we're running senior NCO and NCO Academy within the Space Force right now and developing new curriculum taught by Guardians. But we always start with what we got from the Air Force and we're grateful for that. I think ID and SD, we're getting real close to final on some announcements and where we're going to go with ID and SD. We're working some new partnerships. We will continue to send folks to Air War College, Navy War College, Army War College. We're required to do that for both those systems. I think that where we're going, the next big challenge, is what do we do for the captain's course as we call it. And when I think about PME, it's really... There's things I learned at War College that really I wish I had learned as an oh three early in my career, especially the joint planning process and how we interact with joint forces.

I learned some of that the hard way in deployments just having to figure it out. But I think that evolution of early PME will be real important for us on what makes an operator successful as they transition from a operational unit into that next level of operational command and control, we're on a combatant command staff and how do we take a little bit more of the joint education and move that earlier in the career rather than my experience, which was later in the career. But at the same time, we'll keep strong partnerships with AU and with the Army and the Navy as well as we bring in interservice transfers. They'll start showing up as instructors and they'll bring that flavor to the Space Force, their service culture and ultimately this will come out with our own thing, I think, within a short amount of time for the Space Force.

Lt. Gen. David A. Deptula (Ret.):

I'd suggest that this is a pretty exciting time for all the things that you both said. I had the opportunity to meet with the ACSE commandant just prior to this session, Colonel Barry, and it was fascinating to hear

the change in the curriculum and turning ACSE into the air power school. So I think, like you said Smokey, lots of changes that came down the pike and they're now being realized. Basket, here's one for you. It's becoming evident that we may not be able to have a full up modern multi-domain flight replication with fifth generation aircraft space systems and so on the same way we did it Red Flags when I flew in them 40 years ago. The airspace is too constrained. Our enemies are always watching from overhead systems and achieving realistic numbers of adversaries is challenging. So what's the progress in building joint integrated training centers that will allow us to overcome these physical constraints so we can exercise in realistic fashion against peer adversaries?

Maj. Gen. Case Cunningham:

Yeah, thanks sir. Appreciate the question. I think you've characterized the challenges quite well. Hopefully we'll get a little bit of a chance to talk about what we're doing in relation to those challenges in the live fly arena, but certainly in the synthetic arena. And for those that aren't familiar, the joint integrated training centers are by name mentioned in the joint TAC air synthetic training analysis of alternatives, that was a joint requirements document that came out a couple of years ago. And specifically what they highlighted was the need for a single site location to get the kind of high-end advanced tactics test and training that we need for the pacing challenge. HEATTT is the acronym there. So at Nellis, I mentioned before, it's one of my priorities in the seed. What we're doing is transitioning the virtual test and training center that exists today, which is really a collection of proprietary platforms that are a legacy in nature and transitioning that campus of about four existing facilities into a capability that has a few key attributes.

The first is that it'll be on the joint simulation environment backbone. The joint simulation environment is the synthetic environment that's being used to support F35 IOT and E. The second is single site high fidelity, low-latency physics based, and that is all resident in the government owned JSE capability. The third is integrated by design, not only across multiple domains, but also across our partners and particularly our key partners of the Australia and the UK in addition to the Navy there. So all of them have space in the design for this campus there on Nellis. And then the last is an integration and capabilities that one might expect in a multi-domain world to see on night one of a fighter all represented there so that we can get the kind of high-end training that we need to do in the synthetic environment. That's the first instantiation of a joint integrated training center concept within the Air Force. I think there's plenty of opportunity and conversation for more like that to be planned for the future. Thanks, sir.

Lt. Gen. David A. Deptula (Ret.):

Well I had a follow up for you but you answered that, so I'm not going to ask it. We'll move on to Governor. As the Space Force grows, it's got direct hiring authority to fill billets. Has this helped the Space Force recruit the talent that it needs to fully stand up the force and what other work needs to be done to ensure that the Space Force gives the talent that's required to focus on that war fighting in space that you talked about?

Maj. Gen. Shawn N. Bratton:

Yeah sir, thanks. I'll tell you the great thing about being a very small service is there's more people that want to come join us than we have positions for. And so it's really in the pool that wants to come into the Space Force, identifying the right talent. We're doing some direct commissioning pilot programs, folks coming in from industry in the first instance, cyber skills who can come in anywhere from a first lieutenant to a lieutenant colonel. And so we're experimenting with that. We're heavily civilian. 50% of

the force is civilian. And so we're using some new civilian hiring authorities to bring in talent. And then of course the recruiting team is out there finding the best folks for us every day. We'll continue... The Space Force is doing a lot of things on its own, but it's doing a lot of things with help from the Air Force, like I said.

And so Air Force Academy, ROTC, Air Force recruiting service continue to serve both the Air Force and the Space Force. And those are areas where I don't think we'll ever go our own way. It doesn't make sense to do that. We're just too small. And so I think we rely on the recruiting team out there for sure. But also academy admissions. We got the detachment up, the academy kept green woods here, working hard to explain then to cadets on here are your opportunities both within the Air Force but also within the Space Force if you're interested in space, cyber intel, acquisition and engineering, come join the team. And so far it's been a successful enterprise. We're bringing in top talent and we'll just get better at it, sir.

Lt. Gen. David A. Deptula (Ret.):

Very good. Smokey, the Air Force has faced a pilot shortage for many, many years now. Even with crewed, un-crewed teaming on the horizon, we're still going to need experienced pilots in the cockpit. What are some of the things that AETC's doing to recruit the talent that we need to fill this and resolve this pilot shortage?

Lt. Gen. Brian S. Robinson:

Great question. Thank you for that, sir. So complex answer to a simple question, but what I would say is the pilot career, just like any career track, but it's got three major segments with it, right? There's the production of pilots, then there's the absorption of pilots when they move out to their respective gaining sea match coms that they're going to fly for. And then there's the retention aspect. For the production aspect we're doing, I think, very strong work on the recruiting side. The Aim High academies for example, trying to get to young men and women in our country that have expressed interest in aviation. And you can see that as simple as air shows. And General Minihan and I think he hooked this young man, this young lad I'll say, at the Andrews Air show. Seth was his name, six years old, but clearly he wants to fly.

And so we spent time talking to him and ultimately with his mother and grandmother too. And he could see, took photos with us and things of that nature and just venues like that. The Aim High Academy is another one where we take folks that can go with mentorship from uniform wearing instructors in the summer period where they go out junior ROTC or with a civil air patrol or a contracted flight school and get some rides in some aircrafts, some academic construction to understand aviation better, but understand that they can actually do it and get exposed to it. Those are some of the examples there. Within pilot production, 19th Air Force has spent a lot of great work and effort refining UPT to 2.5, which soon will be known as just UPT once it goes fully operational and get away from the nomenclatures that we're using that we have now.

But the ways that we can tailor the pilot training toward the skill sets and the track that they're eventually going to go on. So we have accelerated path to wings, we have the mobility fundamentals course, and we have in development now with the fighter bomber fundamentals course now that we understand how to do competencies-based syllabus development and work backwards to design the syllabus itself. Some aspects of that nature. But I think it's critical, back to my data point when my opening remarks, we have got to see all of this as a system and understand with each one of those different lines or lanes of effort in production add and then the retention. We can't push pilots out the

door to AMC, ACC, AFSOC. They can't be absorbed or experienced at the rate that we need them to be experienced. And there's lots of factors that contribute to that experiencing.

There's logistics pieces, there's sustainment from the weapon systems, sustainment portfolios, wear and tear on engines, the amount of manning that you actually have where they fly in our program is how that's resourced. So we're working to understand that as a system of systems in each of the phases and how we make that as smooth as possible so that our Airmen that are going in that track can get through in the way that they can. UPT 2.5 in and of itself will allow us to meet the Air Force's standard goal by a little bit. It doesn't allow us to account for uncontrollables in attrition, which would be weather events that are significant, hail storms, winter storms that are unexpected in some places where they don't normally occur, for example, or seldom but impactful maintenance thing that pops its ugly head from time to time with an engine or aircraft component.

So the challenge before us now we're resourced, planned to produce at the number of the Air Force would like us to achieve. We've got the things that we can control to get there. Now we're just working through how we just refine and understand what's actually happening in the system and smooth float as best we can.

Lt. Gen. David A. Deptula (Ret.):

Just to follow up a bit on the UPT 2.5, you've given us a bit of insight there. What are some of the challenges that are faced in moving from this traditional training approach into a more modern approach?

Lt. Gen. Brian S. Robinson:

That's great. So I think the biggest challenge would be cultural. It's a new way of training. I've had it... Other peers that are our age say we don't understand, it's not how we came up so they don't understand it. And frankly, if you hadn't gone through UPT in the last four years, you don't understand it because you haven't experienced it is what I would say. But really a lot of goodness has come out of it. The innovation, the use of immersive training devices and what they can contribute to advancing learning, the use of virtual reality and augmented reality. I was at Laughlin Air Force Base about a month ago and then the B flight T-6 and just by chance the student was talking about he'd gone out and done some acro in the T-6 and his comment was, "Hey, when I was upside down in the Cuban eight and looked down, looked above through the top of the canopy before the ground references, it looked just like it looked in the immersive training device."

So they're confident, more prepared and we're actually able now to work some of the agility of mind, if you will, where they no longer step out from the briefing desk with the set profile that you're going to fly because they've had the ability to do the reps and sets and get through the cognition piece, and the process and procedures rather, there's more agility and the instructor will mix up the profile or add something, subtract something if based on the student's performance and they're expected to be able to adjust to that. So those are some of the good things we've seen come out of it. Now we want to leverage that technology, those different approaches and expand it to the rest of learning and how we deliver content.

Lt. Gen. David A. Deptula (Ret.):

Very good. Thanks.

Maj. Gen. Shawn N. Bratton:

Sir, I think we can learn from you there a little bit because right now in the Space Force, you don't fly a spacecraft until you show up at your first ops unit. And we're trying to understand the value, how to place a value on virtual simulated training versus live training. Do we need to move more live training earlier in the training pipeline? Certainly the one place that happens is at the Air Force Academy where they're flying the Falcon Set Program, but we're trying to find that right balance. Sounds like the Air Force is moving more into simulation. I think we need to move a little bit more towards live training, but how you do the value proposition of which one is better at what point in a career, I think, is something we can learn from you guys.

Lt. Gen. Brian S. Robinson:

Absolutely. Happy to work with you on it.

Lt. Gen. David A. Deptula (Ret.):

Basket, many of the folks in the room today have been or will go to a Red Flag. It's been the cornerstone for our war fighters to get realistic combat training for a long time. 2021 saw space and cyberspace deliberately built into Red Flag. So moving forward, what can you say about how we better integrate space and cyberspace into Red Flag? Or would it make more sense to host an independent space Red Flag at Nellis or elsewhere?

Maj. Gen. Case Cunningham:

Thanks, sir. I'll blitz through a long answer to a short question on that. First, I think it's good to pause just for a second. You mentioned Red Flag 1975, the first time Red Flag happened over the years, the thousands of Airmen that have been impacted by that exercise. It's really hard to measure, but that happens because of the folks that make it happen. The 414 CTS currently doing that at Red Flag and it's a great team there. Talk just briefly about the things that we're doing to adjust Red Flag that'll reflect your question. First is that out of the three Red Flags we execute every year, two of those are specifically in relation to the pacing challenge. So the folks that come to Red Flag at dash one and dash three can expect to see nothing but the pacing challenge threat as replicated by our aggressor nation forces, the best that we can get on that.

Having the 350 Spectrum Warfare Wing as a part of the Warfare Centers is incredibly huge there for the spectrum dominance piece of what that means for advanced training. Another one is the fact that we're expanding the airspace, so not just the NTTR but portions of the Utah Test and Training Range, restricted area 2508 at China Lake, which gives the geography a little bit more representative of the pacing challenge. The third aspect is pulling in, and this gets back to the five key elements that the chief talked about on Monday, elements of high tactical, low operational C2 ACE staff, ACE into our Red Flag events and integrated war fighting and the importance there. And then last, which you'll get directly at the question, is we've started... The Weapon School is leading the way on this, doing vols out over the water Whiskey 291 airspace that's off the coast of California, about 200 by 600 miles full integration with the Navy, both blue and red on the surface and the air and that, because the Weapon school is leading the way there...

Gov Squadron, the 328th Weapon Squadron, which is our Space Weapon School Squadron, fully integrated into that event as well as the 32nd Weapon Squadron, which is our cyberspace professionals in the Weapon school. So that integration templating that, bringing that over to Red Flag, what we're seeing there in over water execution is really going to be important here as we move forward. The specific answer to your question, sir, I don't think it's an or. I think it's an and. And the work that Gov is doing in his Sky Series of events, I think, is a great follow on to that.

Maj. Gen. Shawn N. Bratton:

Yeah, sir. I'd just say real quick, we are putting a couple Guardians back into the 414th. We kind of pulled a lot of folks out of Nellis and we'll always go back there. We're staying at the Weapon School, of course. We're putting a couple Guardians back into the 414th to maintain that tie, space support to enable air superiority. The Sky Series is all about space superiority. Black Skies is going on right now for the first time. It's an electronic warfare live-fire exercise. Red Sky's next year, orbital warfare, live-fire exercise. We're excited about all these things where we're going with the force.

Lt. Gen. Brian S. Robinson:

Sir, if I could piggyback on that. This work is probably underway if I were a betting person, but with regard to where we're going with the Air War College and ACSC, we've got to get the war gaming piece that incorporates these other domains, which is going to raise it to a higher classification level. The only way we're going to do it the PRC quickly and the ways we want to is either be the speed of light or the speed of sound. And these two domains are getting there first, and then after that comes the speed of sound, which is the rest of the Air Force.

Lt. Gen. David A. Deptula (Ret.):

Very good. Real quick follow up for Basket. Air Force Warfare Center's well positioned to support the development testing and training of collaborative combat aircraft or CCA that you hear the secretary talk about. Is there a plan for embedding government and industry technologists with the war fighters out at the weapon center to do this kind of work?

Maj. Gen. Case Cunningham:

Thanks, sir. We're closely following the work that's being done, the operational imperatives there in line with Frag Job, but who's at ACCA 589 and then Dale White as the PO there. So we're closely tied into that and I think there's a great future there within the Warfare Center for those efforts.

Lt. Gen. David A. Deptula (Ret.):

Okay. Well, very good. Unfortunately, we've come to the end of this session. What I'd like to do is thank each of our panelists for being here today, and for all of you in the audience, for taking the time to come and listen. And so with that, have a great aerospace power kind of day.

