

# 10.25.22 Gen Thompson Space Day

Tue, Nov 01, 2022 4:29PM 47:17

## SUMMARY KEYWORDS

space, isr, capabilities, commercial, command, understand, architecture, extinction level event, approach, general, force, organizations, nro, dinosaurs, united states, satellites, leadership, services, years, defense

## SPEAKERS

Gen David "DT" Thompson, Speaker 3, Speaker 1, Speaker 6, Speaker 7, Speaker 8, Speaker 9

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### G Gen David "DT" Thompson 00:06

Okay. All right. General Chilton, thanks so much for that kind introduction. I will tell you in the audience that one of the reasons, one of the big reasons I stand here today is the leadership, the mentorship, the support, and the opportunity presented by General Chilton and many others. And so later today, you can decide whether he should have the credit or the blame. And you could talk to him about that. But I'll tell you, General Chilton, thanks for the introduction, but more importantly, your leadership over the years, personally, but certainly what you have done to help us get to this point today. And General Deptula. Dave, to you, and the Mitchell Institute, thanks for this inaugural forum. I certainly, as I prepared, as I saw who was going to be here, as I saw the agenda. I think it's going to be powerful, not just today, but I hope for the future. And I think it's going to be an opportunity that we should leverage. I also want to thank you and the Mitchell Institute for your support, and your advocacy, and the way you, like many others, have embraced the United States Space Force, and the need for the nation to be a space power in the true sense of the word. So I think, today is a perfect opportunity to really stop for a minute and think and say, and understand where we are, as a nation, as a community of nations, and as a globe when it comes to space power and space security. Obviously, there's a couple of things going on in the next few days in the United States Space Force. You could say we're writing the end of the closing chapter of the creation of this, with the change out of responsibility a week from today, from General Jay Raymond, our first and always our first Chief of Space Operations, to General Chance Saltzman. So in a sense, it is very much the end of the beginning. And so today, I want to use this opportunity to pause and reflect and think about that a little bit, think about what we and where we are currently, and where we're going into the future. And in order to do that, I want to go back a little bit into the past, about 66 million years in the past. So 66 million years ago, I'm sure you know, Dave Deptula was not around. But 66 million years ago, an object the size of a mountain struck the earth, entered the Earth's atmosphere and struck it off the Yucatan Peninsula. I say object because apparently there's a pretty vicious debate going on right now in some circles of the scientific community as to whether or not it was a comet or an asteroid. And you know, I'm sure you all have an opinion on that. But I'm not going to wade into that one. But it was anywhere from four and a half to six and a half miles wide. It was the size of a mountain, and it created a crater off the Yucatan Peninsula, 90 miles wide and 12 miles deep. What ensued was a global

set of tsunamis that devastated the coastlines of the planet, triggered firestorms from the sheer energy that was transmitted in that collision. It completely vaporized that object, and excavated all of the dust and dirt and rock and debris out of that crater 90 miles wide by 12 miles deep. That created a cloud over the planet that blocked the sun and its life giving energy for some say weeks, some say months, some say years, but in many cases totally blocked the sun. That object was also largely made up of sulfur. And as a result, the atmosphere was filled with sulfuric acid, and a global acid rain occurred all over the planet. That series of cataclysmic events wiped out three quarters of all species on the planet. It was a extinction level event. And most famously, it ended the reign of the dinosaurs. Although I'm told that the avian dinosaurs survived, a statement 66 million years ago the importance and value of air power. So, right extinction level event. Oh, by the way, not the extinction level event, one of six, apparently, extinction level events that have occurred over the life of our planet. So let's fast forward now. Back to the future, about 66 million years minus about 15 years. And look at the national security space ecosystem and environment as it has existed over the last couple of decades, right. Twenty years ago, 30 years ago, space power and the national security space environment was really limited to nations with resources, science and technical acumen, and the willingness and determination to operate in space. That was only a few handful of nations. We obviously were one of those nations and led the way. We developed several constellations of very capable, very exquisite satellites that provided ISR, that provided communications, that provided missile warning, that provided space domain awareness, and we lead the world in that area, and were probably by that point, with the fall of Soviet Union, the world's only true spacefaring and space power in the greatest sense. What has happened in the last couple of decades is a series of events that have threatened our status, and our ability to deliver spacepower. The most obvious start was in 2007, when the Chinese tested an anti-satellite weapon, and demonstrated to us for the first time that they intended to hold our space capabilities and our ability to employ spacepower at risk. It didn't end there. Other nations pursued those same sorts of weapons. They're fielding, they're building and fielding them today, as well as with on orbit systems and laser systems and jammers. The Chinese and others have demonstrated very clearly, they intend to threaten our ability to use space in every orbital regime, by every means at their disposal. In addition to that, they have gone to school on what we have done for the last 20 or 25 years. And where we have evolved our space capabilities and our space architecture, to understand how to integrate it into tactical forces, to push it, disperse those base capabilities and effects and products as far down as we could, to individual soldiers, sailors, airmen, and Marines, in some cases, we adapted a national security space enterprise that was not built for that purpose. And so it is not exactly perfectly suited for that sort of use. But we did a tremendous job of innovating and adapting. What the Chinese have done is they have started with a clean sheet, and they have built a military space reconnaissance/strike enterprise that starts in space with the ability to collect intelligence. Now, by the most recent count more than 260 ISR satellites, they have connected them through space-based data relays, they have created their own global precision positioning navigation and timing system, Beidou, to the tune of 49 satellites today. And they have demonstrated that they learned the importance and value of spacepower. And they intend to use those capabilities against us, should it come to that. So that's the second event that's occurred in this ecosystem in the last couple of decades. The third is a tremendous explosion in investment, and provisioning of commercial space. Right, traditionally, for many years, commercial space has been what I'll call traditional commercial satellite communications. There's been a growth of an ISR capability over the years, generally still focused mostly on supporting our intelligence community and our national security needs. That was what I would call a traditional commercial space sector back then. But in the recent days, and months and years, we have seen an explosion of the ability to pass data, to connect people, to provide people with command and control, commercial ISR from space, a proliferation of commercial

launch activity. This explosion of investment in space has taken spacepower from the purview of a small set of nations with tremendous resources and science and technical acumen. Spacepower is now available to any individual on the planet with a credit card, and an internet connection. So when you look at all of those things, you could say that this series of events, has presented a cataclysm for the national security space environment, in a couple of senses. The first is, it threatens our ability to use space the way we want to today. And the second is, it enables others, including others who might wish us harm, to be able to use space against us in ways that will be detrimental to our forces, to our security and to our interests. And so you have to ask yourself as you look at these cataclysmic events, is this an extinction level event, for space power in a military sense for the United States, and its freedom of action and use of space? Are we now faced with an inability to operate effectively in space, and an inability to prevent those who wish us harm to use space against us in ways they might wish to do so? Are we truly faced with an extinction level event? Well, let's think about that a little bit. Let's talk about that. In fact, my answer is, it may well be an extinction level event. For the dinosaurs and for three quarters of the species on the planet 66 million years ago, it was. But there's good news in this. And that is, unlike the dinosaurs, we do not have walnut sized brains. Although my wife occasionally accuses me of being a pea-brain. But, you know, we don't have to be dinosaurs. In fact, we will not be dinosaurs, as long as we choose not to be dinosaurs. So the question is, how do you choose not to be a dinosaur in a spacepower sense? How do you ensure that what is happening in space today, we use to our benefit and our effect, and is not an extinction level event for the United States of America, for our partners and for our allies, and our ability to use space for our purposes and our national interests, commercially, civilly, and certainly from a national security perspective. But the first thing you do is you recognize that the world has changed. And you demonstrate that you understand the world has changed, at the national level, in the White House, at the national level in Congress, at the national level, from the leadership of the Department of Defense. And I will tell you now over multiple administrations, multiple sessions of Congress, both houses of Congress, both sides of the aisle, clear statements and understanding that the world has changed, and that the United States needs to understand and adapt to this change with respect to how the national security ecosystem has changed in space. I don't think I have to explain to you, I know that you can go back, not just this administration, the one that preceded it, the one that preceded it, understood finally, at least by about 2014, perhaps sooner, that we had a challenge, we had an issue, and we needed to address it. So that first step of not being a dinosaur is to recognize there's a problem. Second thing, you have to adapt your approach. What do you do to adapt your approach? Well, a whole host of things I'll talk about. The first is, put organizations in place whose responsibility it is to ensure you have the effective use of space, today and into the future. And you address that not just our ability to use space, but how in fact to prevent an adversary from using it against you effectively. Right, there have been a whole host of changes and adds over the last several years, I've just talked about two. Two organizations, one of which just had its third birthday and the other's approaching. United States Space Command. The reconstitution of that command back in 2019, a four-star joint commander and warfighter whose job it is to operate in space every single day, to ensure the nation's military forces and its leadership have the services and the capabilities and products that it needs from space. And yes, at some point, if required in the future, conduct operations to deny an adversary a use of space that will be detrimental to us in conflict. The establishment of that organization was a huge statement and step in our approach to adapting to these cataclysmic events that have happened in the national security space environment. Second thing you do is you create a military service specifically focused on and dedicated to organizing, training, equipping and presenting the forces that that combatant command needs to execute all those missions. Now let's be very clear. Space Command is a joint command. It has components from the Army, from the Navy, from the Air Force. They provide vital capabilities, they provide vital

perspective. But when you look at the balance of forces and capabilities provided to US Space Command, the vast majority come from and are provided by the US Space Force, and it is the responsibility of that service to ensure that that combatant command has the forces it needs to conduct those operations and those missions effectively. What else do you do to adapt your approach? You bring on new products, processes and new approaches. Many of you have seen and understand the new processes that we are bringing on with the Space Warfighting Analysis Center and force design. Many of your organizations or companies are participating in those activities. If not, you're missing out, you need to call Andrew Cox and figure out how you get involved in these force design processes. They accomplished the first last year, in a new missile warning/missile tracking architecture that we have invested in in 2023, and we will beyond. They are currently engaged in doing the same thing for space control related activities, satellite command and control activities, SATCOM and data relay as it relates to Joint All Domain Command Control and Advanced Battle Management and others planned for the future. To actually, for the first time in integrated, holistic and tremendously analytic fashion, examine tens of thousands of different force and mission designs from a cost, performance and survivability perspective to see what's best in terms of how we should go forward. Everything we do to adapt our approach, and this happened about 18 months ago is, the Joint Requirements Oversight Council, chaired by the Vice Chairman, appointed the US Space Force as the DOD integrator for joint space requirements. No kidding officially, for the first time, a specific organization whose job it is is to canvass and survey the entire joint force, every service every combatant command, understand deeply and fully what their requirements from space are, document them, validate them and put the JROC stamp of approval. We were given that job about 18 months ago. We're in the middle of our first full fledged effort in that regard, focused on tactical ISR, for the joint force for a high end fight, where we have an adversary who's a near peer on land, at sea, in the air and in space. The other thing you do is you pivot your approach and your architectures to field those systems. I already talked a little bit about what we're doing in missile warning and missile design. Many of you know about Space Development Agency and what it's doing to field a proliferated data relay and transport architecture. We're already doing a missile warning/missile tracking, where the nation and its organizations are going to proliferate ISR. These new, resilient approaches in many ways, demonstrated to great effect today by the commercial sector, are where we need to go to face those challenges and threats, and to ensure that an adversary that looks to space and thinks there's a vulnerability, will think twice, because not only will they not achieve their objectives, we'll continue to operate effectively. And just as quickly as they believe they can degrade those constellations, we'll have an answer for. Third thing you do is you leverage the power and innovation of the American mind and the investment we're seeing in the commercial sector. As I said, you know, leading the way in terms of proliferated architectures, the commercial sector. Leading the way in terms of how you pass data globally and rapidly through space, the commercial sector. Leading the way in ISR constellations and truly creating a transparent environment, where we are either today or soon faced with, the ability to see and sense and observe and understand just about everything that happens on the surface of planet Earth, led by the commercial sector. We need to you know, as our Space Systems Command has said, the first thing we have to do is see if we can buy it before we build it. And when we can buy it, we will. And when we can't, then we have to build it, and we're still going to understand and learn the technology investments, the operational concepts and the way that we can use that power and that investment and that innovation. In the Common Digital Relay, in ISR, in launch, in a whole host of areas, leverage the power and the ingenuity and the investment that the commercial sector is bringing. The next thing you do is strengthen your partnerships, strengthen your partnerships. And I know, I think later today, Air Chief Marshal Winston from the UK and Gen Goretti from Italy will be up here. I've had the opportunity to meet with them as they've been here in town. Never before, you know this series of events that

have occurred have given both them and us the recognition of the power of partnerships and how they need to be strengthened. We're growing closer together every single day, we're understanding increasingly with time how to operate effectively together as a coalition in space, just like we've done for decades in the air, on land and at sea. Increasingly, those nations are looking for ways to invest in their own space capabilities. And their question for us is always the same. We know we have to invest, we know we have to work together. We know there are things that are important for our nation. But we also want to know what's important to the coalition partners that we serve with and how we can best, not only serve our needs, but fill some of the gaps and shortfalls in a coalition approach. We're doing it now. The US Space Command is pursuing their relationships. US Space Force now has 14 bilateral relationships not just with long standing partners, but with new security partners looking to cooperate in space. Other partners, the intelligence community, especially the National Reconnaissance Office. We've shared a long standing partnership with the NRO that has only been strengthened over the last several years. I credit, certainly, I credit the leadership of the National Reconnaissance Office, but also our current Chief, General Jay Raymond, who has been committed to that partnership for a long time. It's stronger than it has ever been, it's closer than it's ever been. And I will tell you, continue to watch that space. You will see in the days, weeks and months to come, evidence of a stronger working relationship and partnership between the United States Space Force and the National Reconnaissance Office. We're strengthening our partnerships with combat commands and services. Just recently, the Secretary of Defense authorized the establishment of Space Force components at the first combatant commands. Clearly, we have a relationship with US Space Command, we have a very large Space Force component that contributes forces to US Space Command. But on the 22nd of November, Admiral Aquilino, will establish and the space component flag to Brigadier General Tony Mastalir to establish the first true Space Force component, built on the foundation of the Director of Space Forces that we developed with the Air Force over decades. And very quickly thereafter we'll follow with space components at US European Command, the US Central Command, as we not only work with US Space Command, and its missions and responsibilities, but more closely with joint, the other combatant commanders to make sure that not only do we understand what they need in terms of space capabilities, but they truly and deeply understand the full suite of capabilities available to them, to the United States Space Force, to other military services to our IC partners and through the commercial sector, to be more effective in their operations. Second thing we've done is, we've built, we have begun strengthening our relationship with other services. We've already held staff talks with the United States Navy and Marine Corps, we're in the process of planning staff talks with the United States Army, we basically have stocks, that talk to the United States Air Force just about every single day. But we've actually learned, especially in this most recent budget cycle, we've learned some lessons already about the importance of that connection, the importance of really understanding the needs and the concerns, and sometimes the fears of the other services. And basically preparing ourselves, preparing our plans, preparing our programs, and providing them the assurance that we're here, we understand our priorities. And our priority is providing those things that they need to organize train, equip, and present their forces to combatant commanders. And then lastly, strengthening partnerships in the commercial sector. As I said, we've done it through Space Systems Command, if you look at the Commercial Services Office that they're standing up, as you look at some of the other things that we're doing across the Department of Defense and Space Force, to understand commercial capabilities, to leverage them, to figure out how to use them to our purposes, we're strengthening that partnership as well. So that's yet one more thing that we're doing to ensure and to choose not to be a dinosaur in the face of these cataclysmic events. And then the last thing I think I would say is, you got to resource the plan that you have to address these global changes and the upheaval in this ecosystem. Since 2018, I'd say Space Force is the only service who year after year has seen, percentage-wise, double

digit increases in our space budget. I know many of you are going to follow where we're at in the '23 budget. Obviously, Congress is still working through the details of what that will look like. But as you've seen in our budget submission, as you've seen in the reports out of Congress, there's certainly a couple of details here and there that they're working. But yet again, in 2023, you're going to see a significant increase in the resources for the United States Space Force and other space missions. Can't talk about the current budget process that we're in, but you should not expect that emphasis and that understanding change as we move into the future. Tremendous opportunity, tremendous need for growth. Again, when your national leadership understands and they're committed, they're providing the resources that we need to get after all of the missions—the missions that we have to continue to do today, the pivot that we have to do to have more resilient architectures, the resources that we need to take on new missions as they migrate to space. And then the third is missions that we didn't do a decade ago, that we now need to do to defend and protect our interests and our capabilities and our use and freedom of action in space. So those are the things that you can do to choose not to be a dinosaur, and to stare an extinction level event in the face, in its face, and ensure that you're one of those species that doesn't just survive, but thrives in that new environment. And so that's really the question we have before us today. This series of cataclysmic events for the global national security space ecosystem, is it an extinction level event for the United States of America? And my answer to that is, clearly, it is not. The United States of America, our allies, and our partners, have faced extinction level events before. And just like 66 million years ago was only one of six global extinction level events. We're still here, the United States of America, our partners and allies in our history, we felt, we faced extinction level events in the past. And we've responded with strength, and with commitment, and with resourcefulness and with courage. And there is no doubt in my mind, as you look at this event, or this series of events, how the nation has responded, the tools that it's given us, the organizations it's put in place, and the expectations it's placed on our responsibility to do that. This is not an extinction level event. And the last thing I'll say is, as long as guardians of the United States Space Force stand on watch, deliver capabilities, protect our interests, it is not the United States of America that needs to worry about extinction level events. It's those who choose to challenge us who have to worry about it. Thanks so much for your time this morning. I look forward to your questions.

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#### Speaker 1 27:04

Thank for this, for the talk. You talked about extinction level events. I think that was a great intro. One of the things that clearly survived was the focus on the SAPCO, and the security processes that have kept us from doing all of those things that you've been talking about. And so when you look at what the Air Force operational imperatives are, Department of the Air Force operational imperatives, and how the Space Force and others are trying to address those, it's almost impossible, sir, to bring forward ideas, to talk about technology to share with others. So how do we work through the critical needs that you've identified, especially addressing China's growth when we tied our own hands, and we can't really take the full power of industry and the Department working together to address those issues, sir?

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#### Gen David "DT" Thompson 28:09

Yeah, you're right. You know, it wasn't just the mammals that survived the extinction level event 66 million years ago. I'm gonna stop there, better stop there. But security remains probably one of our biggest challenges and one of the things that, while we own the ability to

change it, we just have some form of bureaucratic inertia that will not let us do so. It is a focus of the Deputy Secretary of Defense, she is very focused on streamlining and hopefully, what I'll call normalizing, that structure. I will also say this is not the first time we've attempted to do this, and we have not really succeeded significantly in the past. I don't know what it'll take. I know, let's just say I guess I've seen in the current crisis, Russia, Ukraine, as usual, the United States and its institutions have the ability to change and adapt rapidly when faced with a compelling need. And we've seen it in other ways in Ukraine. That might be what it takes to address the security enterprise. I hope not. I do know that it has the focus and attention at the highest levels of leadership. I've seen the Deputy Secretary of Defense, our own Secretary and Undersecretary, pushing us really hard in that direction. We'll have to see if we can end up delivering. It just continues to be a challenge and a sclerotic part of our bureaucracy and organizations that has been resistant over many years to change. But it's got to. You're right. Go ahead and pick them. I don't have I don't have a vote. Just pick somebody with their hand up, and let's go.



30:02

Now, General Thompson, you talked about the commercial investment and how it's growing. I was wondering if you could talk about the '23 NDAA and how Space Force is going to support commercial overhead and incorporation thereof into your all's plans going forward?



Gen David "DT" Thompson 30:20

Yeah. We've got a multifaceted approach. And actually we were talking about this recently inside of our leadership is, is we need a coherent strategy, but it needs to be multifaceted and executed in a number of ways. The first is when you look at development and fielding of capability, let's say provisioning of capabilities, the creation of a Commercial Services Office out at Space Systems Command under [Lt General] Mike Guetlein, and that work, to be able to put in place the instruments that allow rapid access to commercial space capabilities. We've done it effectively for years out of the commercial SATCOM office, that was first part of Defense Information Services Agency that moved over to us in 2018. Even they are looking at their approaches to be able to be more responsive, and we're trying to expand that further into commercial ISR and some of these new proliferated constellations, to provide and ensure that the contract vehicles and mechanisms for people to rapidly have access to current commercial services is there, and to do with for combatant commands, for services, for any organization that wants it, and needs it in the manner in which they want. That's the first thing. The second is to use some of those organizations out there in the combatant commands Space Force component, working closely with the NRO and others in the IC who do that as well, to be able to understand, you know, once the instruments are in place, understand how to use them, use them effectively with their various needs. And part of what they were doing to foster that is through Office of Secretary Defense, Research and Engineering, R&E. Dr. Heidi Shyu has established this series of rapid development and experimentation. She's got a fund to be able to do that. And one of the things we continue to work with them on, and they've given us the money is, to experiment and to try various ways to use commercial services and development. So we got a couple of ways to do that. I won't promise you that we got the entire strategy and approach figured out. But we all recognize we got to put things in place to allow people use of those commercial services, and in many cases, then stand back and watch how they use them to their effect.

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Speaker 3 32:45

Sir, George Nicholson, Global Special Operations Forces Foundation. You've talked about tactical ISR. Last year at the Aspen symposium that we had here in Washington, General Raymond talked about opening up the green door, what you can provide in terms of tactical ISR. I know every year at the posture hearings, from SOUTHCOM and African command, the commanders going back to General Ham, General Waldhauser talks about the huge deficiencies that they've got in their theater, is ISR. Now what you're able to do out there, and you're talking about working with the components. What are you doing working with US SOCOM and General Fenton down there, providing that kind of real-time capabilities of using satellites, almost like a JTAC, of finding the targets, providing the information for strikes on them, and then doing battle damage assessment?

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Gen David "DT" Thompson 33:38

For now, we're continuing to rely on what had been our existing platform in the past what we call Director of Space Forces. We have a Space Force colonel and a staff down there dedicated to providing support to them. One of the things that's powerful is SOCOM, is that they for years have not just relied on us in that position to deliver space capabilities. They have their own innovation engine, they have space officers embedded in their staff, that has been working for years on things like tactical comms, tactical ISR, how they can support special users and special needs and special cases. I think that you know, SOCOM, SOUTHCOM, those are the areas that can and should and must exploit the commercial sector heavily, because of the fact that they're not the highest priorities for what I'll call our national resources. And so the use of that colonel that we have in place there, the innovation activities ongoing at SOCOM, and using that as a platform I think is a way to get there. AFRICOM is the same story. We're just not as far along in that regard and embedding with them, but that's a growth area that we need to get to soon.

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Speaker 8 34:55

You spoke to Andrew Cox and the pursuit of architectures, you spoke to process change. So when we look to building architectures, are we looking at getting away from managing programs and funding specifically programs? Where's the convergence of that architectural look, and then the management of it?

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Gen David "DT" Thompson 35:19

I don't know that we, the answer is no, we're not going away from managing programs. I don't know that we can, because I can't tell you that there's a better answer for how to do that. But what I can say, and one of the things I didn't address specifically in my remarks, but it's also one of those major steps and changed our approach, is Congress has, in addition to the Secretary of Defense identifying General Raymond, while the Chief of Space Operations, as the force designer for the Department of Defense. Congress also appointed the Assistant Secretary of the Air Force for Space Acquisition and Integration as what I'll call the program management and architectural engineering architecture integrator for the Department of Defense. And we

now finally have our first nominated and congressionally appointed secretary in there, that's Secretary Frank Calvelli. We've already created that approach through the Space Acquisition Council. We've already employed that approach for missile warning/missile tracking. And I'll tell you having been in those council meetings, and you watch Space Development Agency and Missile Defense Agency and Space Systems Command, and Space Rapid Capabilities Office, the leaders of all of those organizations brief out a missile warning/missile tracking missile defense architecture, explain how each is responsible for which portion, which layer and space to ground architecture, how it all fits together, and how they expect to work together. We're going to have to continue to do program management. But I think the steps that they've taken in architectural integration through that mechanism and through the Secretary of the Air Force for Space Acquisition and Integration is also another powerful new approach that's going to help us stop managing programs in stovepipes.

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Speaker 6 37:13

Good morning, sir. Eric Ries from Blue Origin. You talked about leveraging commercial architectures. And I'm fascinated, the current conflict between Ukraine and Russia. Legitimate targets of war now, I would say. Implications for Space Force and for our space capabilities?

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Gen David "DT" Thompson 37:36

Yeah. And let me make sure I make sure I heard that right. You're talking about commercial space capabilities are now fundamental in conflict. What about, they're now under threat, right? Yeah. Okay. So actually, we have actually been working on this. I don't know if I'll call it a problem. We've been working on this for a number of years through war games that we've had. The 1st Air Force Space Command, now the Space Force, has a long standing series of war games called the Schriever war games. And for years, interested commercial vendors and companies have played a role, both individually but also collectively in commercial sells. And so for a long time, we have worked on ideas and concepts and understanding of what it meant to be a commercial operator in a scenario like that, a military service depending on commercial capabilities. And then we've also exercised it in real time, first through US Strategic Command and their global series of exercises, not war games. And now you have Space Command. So we've actually been engaged in this sort of development and understanding and thought for quite a few years. What I will say is, you know, that is, at some level, in the past been theoretical and academic, because you don't know exactly what the real world looks like. Let's just say that conversation between us, our allies and partners, and the commercial sector has, that conversation, and has picked up a sense of urgency, and a better understanding of what it might really look like, based on the fact that, what's happened in Russia, Ukraine. And I will tell you, on both sides, commercial companies generally are interested in where their limits are, where their capabilities are, how they can contribute, but at the same time, how they can be protected in more ways than just satellites on orbit. And we have also been looking heavily at where, when, how and by what mechanisms, we can come out and count on commercial services. So we've been working on it a long time, but I will tell you, Russia, Ukraine has changed the perspective based on real world. My belief is we will, certainly day to day, we'll be depending on commercial services. And there will be a means by which we use them in conflict as well. Exactly when, where and how, I think is work to be done.



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Speaker 6 40:10

Thank you, General Thompson, Sandra Irwin with Space News. A question about your comments in China. In your speech, you talked about, you know, some of the things that they're doing in the space race. Has, have you looked at any estimates? Or has the Space Force developed any estimates on when there will be parity between China and the US? And is that inevitable? And what do you think could be done maybe to get ahead of them? Thank you.

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Gen David "DT" Thompson 40:44

Sure. Thanks for that question, Sandra. That, you know, questions and assessments like that are always hard, until you have to, you know, in the old parlance, press the test, and you really need to know, but here's what I can tell you. They are building and fielding space capabilities at an incredible pace. As I said, 260-plus ISR satellites today, their latest version of Beidou, they have built and fielded over the course of about five years. Their space capabilities are still not quite as good as ours, but they are really, really, really good. And so we have to assume that they are a peer competitor in that regard. And just as we've done in other domains in the past, we need to understand what that means in terms of their capabilities, what we need to do to ensure that our freedom of action is preserved. So I can't really sit here and tell you today, at this point in time, you know, when will they be a threat? They are a threat today. Are they better than us? Are they not as good as us? Will we win? Will they win? Are we at parity? I can't say that, all I can say is they are a serious challenge. They are a serious threat. They are serious about what they need to do, their capabilities are close to ours. We simply need to do what we need to do. Continue to resource and field new capabilities resilient capabilities, train our forces and be prepared first to deter but if necessary, prevail.

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Speaker 7 42:17

Hi, sir, I'm Theresa Hitchens with Breaking Defense. Nice to see you. Thanks for doing this. My question goes back to ISR and your remarks about the NRO. Last month, the Space Force finished analysis of alternatives of ISR, tactical ISR, GMTI Ground Moving Target Indicator, on capability. And at the time, General Raymond said that you were still working out with NRO how to, I guess, share that mission or parcel out that mission, I wondered if you've made any progress and what you could say about how that might go down.

G

Gen David "DT" Thompson 42:53

I can say we've definitely made progress and stay tuned for further announcements. But I'll add just a little bit. It has been an important set of analyses. It is one of those force design activities led by the Apace Warfighting Analysis Center. But it brought in a whole host of people, brought in the services. It brought in the combatant commands, it brought in the NRO and others. And no kidding, as objectively and clear-eyed as we could, laid out tens of thousands of options in terms of what we could use. And the other thing I'll say is, I think it was pretty clear in the end, a consensus opinion inside the Department of Defense and the IC, how we should proceed. Stay tuned for further news on what that might be.

S

Sneaker 8 43:45

Speaker 8 43:15

To be succinct, is China doing anything right now in space that our domestic policies won't let us do?

G Gen David "DT" Thompson 43:54

Well, they're, I mean, they've tested direct-ascent ASATs and kinetic weapons in space. And are they doing anything in space..? I'm just gonna say that national leaders and national policies have given us the latitude to do everything we need to provide spacepower for the nation. I'll stop there. Well, I won't stop there. The new administration came in and asked some questions, as you would expect any administration to do. And I will say, once we had the conversations we needed to have, they understood capabilities, threats, issues, concerns. They are definitely charting their course with respect to space policy. They are giving us the latitude that we need, to do we need to do, to provide spacepower for the nation.

S Speaker 9 44:49

Good morning, sir. Captain Mulqueen, NRO. So one of the things that also survived the extinction level events is the FAR, and also kind of approval processes. So what is the Space Force doing to streamline both the regulation that controls our acquisitions and also the approval process to meet the expedient timelines that rapid acquisitions kind of demands?

G Gen David "DT" Thompson 45:16

And I did not think clearly when I developed that approach to my speech. A couple of things about that, I will say, and, and we have found this routinely. Statute and regulations really aren't the problem. It's the way we use them. And we the way we constrain ourselves within that approach. They really are. People always talk about, how should we change law? How should we change statute, the FAR and other things? Really, we find when we look hard, there's a lot of latitude to do what you want to do if you're empowered to do it. And the process, and let's just say the bureaucracy, will let you. We continue to struggle with that a bit. We continue to do ourselves a bit, but I will tell you, inside some of our more responsible organizations, the Space Rapid Capabilities Office, when you look at their timelines, pursued capabilities to get them on contract to get the key points. They have demonstrated that when you have the support and the commitment, you can do it rapidly. If you look to Space Development Agency, Dr. Derek Tournear and his folks. I think he's here today. Later, he'll talk to you. They have found a way to use the law and regulation to move out rapidly and field capabilities. They have demonstrated that FAR and statute are not the problem if we will simply empower and use them the way we should. We can do what we need to do and respond quickly. And I think, I would argue the NRO does it as well. We just have to learn those lessons, commit ourselves to them and move on.

45:49

Thanks so much, ladies and gentlemen. This concludes our Q&A session.

