TRANSCRIPT
Event
“Strategic Landpower Dialogue: A Conversation with General James Dickinson”

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FEATURING
General James Dickinson
Commander, U.S. Space Command

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CSIS EXPERTS
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Transcript By
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All right. Well, good afternoon, everybody. And welcome to those in person and everybody online, really, for the third in the Strategic Landpower Dialogue.

And I know the – I’m General Bob Brown, the president and CEO of the Association of the United States Army. I’m really proud to be here and we’re very proud to be partnered with CSIS on this, and just a tremendous partnership in a key area where we’re really making a lot of progress in knowledge in landpower and how critical it is for our nation and security.

I also want to thank General Dynamics. It wouldn’t be possible without General Dynamics sponsoring this, so really appreciate General Dynamics making this – making this series possible. We had two events to kick it off. We had the secretary of the Army, Secretary Wormuth; and the chief of staff of the Army, General George. And they really talked landpower overall, and it was incredibly successful. Then we went on to the U.S. Army Pacific commander, General Charlie Flynn. He talked about the role of landpower in the Indo-Pacific. So, really, both events showed the enormous value of this forum on strategic landpower. Today, we couldn’t be any luckier than to get another great leader, General Jim Dickinson, the commander of U.S. Space Command, for a discussion on the role of the space domain for landpower in the joint force.

So some of you may think it’s a little odd that we’re here at a strategic landpower forum and we’re talking about and discussing the space domain and what role does space play for landpower. And in reality, the U.S. Army is the biggest, the largest user – not just the biggest, but the largest user of space-based capabilities in the Department of Defense. They’re the largest user, the U.S. Army. And really, but when you look for the past two decades, most of us never had to think much about space. You know, when you needed navigation, it was there. When you needed communications, it was there. It was secure. It worked great. Satellite intelligence, targeting coordinates was always there, always worked, and not really contested, if you will.

But today and in the future, as we all know, we must think multidomain, and space is the most critical example of why we need to think about all domains. U.S. competitors, especially when you look at China and Russia, have spent decades studying the information-centric U.S. way of war that largely depends on our advantages in the space domain. And they seek to deny this advantage through multidomain threats, whether using kinetic weapons, as Russia demonstrated just two years ago, or through cyber and other less-kinetic means. The stark reality is that in a
conflict with a peer competitor today, U.S. land forces and the entire joint force would likely face disrupted communications, disrupted navigation, intelligence, and targeting, all the things I went through a few minutes ago that we took for granted.

It’s not hard to imagine the massive secondary challenges that degradation in all these areas would cause – you know, reduced ability to communicate with friendly forces, sustain soldiers in the field or any force in the field, to locate and destroy enemy formations, and other capabilities as well; would all be degraded, all have a huge effect. So the importance of the connection between land forces and space forces is just critical, and land forces must understand the risks they face from the space domain and, just as importantly, how land forces can converge effects in the space domain and present adversaries with multiple dilemmas.

And that’s why today we’re so fortunate to have General Dickinson with us to help us understand this essential connection. And I’ll only briefly summarize his extensive bio. It’s impressive, but you can find it on the CSIS or the AUSA online. It’s there.

General Dickinson assumed command of the U.S. Space Command, the newest unified combatant command, on 20 August 2020, after serving as the first deputy commander of U.S. Space Command. He’s a native of Colorado, a 1985 graduate of Colorado State University, where he earned a bachelor of science in mechanical engineering. He also holds a master of science in operations research and systems analysis from Colorado School of Mines, and a master’s in strategic studies from the United States Army War College. Throughout his time in the Army, he’s commanded at every single level from platoon all the way up through combatant command, where he is now, and is the senior air and missile defense officer in the Department of Defense. No pressure there, right? (Laughs.)

But I know – I’ll tell you again, very fortunate having had the privilege to serve with Jim. Very fortunate to have him here. And I know you can’t wait to hear from him on these critical topics. So let me pass it over to our moderator, Dr. Tom Karako. Tom, over to you.

Tom Karako: Thank you, General Brown.

And thank you, General Dickinson, for being here. Of course, in addition to being a senior fellow in the International Security Program here, I also direct the Missile Defense Project. So the fact that you’re the department’s senior air defender is a very big deal, and you’ve held a lot of positions there from the commander of 94th
and 32nd, AAMDC; the director of tests for MDA; the CG for Army Space and Missile Defense Command. I’m sure we’ll come back to that in just a few minutes.

So we’ve got a lot that we’re planning to discuss. We also have a place on the event page for folks online to submit questions. Please do that. We’ve already got a bunch come through. Through the magic of tactical satcom, they’ll come right here to – (laughter) –

General James Dickinson: It wasn’t denied. (Laughter.)

Dr. Karako: Not today, but we have backups.

So thank you, General, to kick this – for being here. And to kick things off, I’ll just ask the same question I asked Secretary Wormuth and General Flynn, and that is: Recognizing your position with the joint force, what is your view of the role of landpower within the joint force both today and in the force of 2040?

Gen. Dickinson: Well, first of all, thanks, General Brown, for that very kind introduction. And I’d be remiss if I didn’t take an opportunity publicly to thank you for your service and all the things that you have done in the Army to support not only missile defense, but space. And so thanks for what you do.

Tom, thanks for having me today.

I would tell you that’s a great question. So I’ll answer it from the perspective of I always think that the land component will be a very pivotal, critical element to any future fight, whether it’s today or 2040. But I would also tell you that space will make those formations, that army, successful in all that it does. When you look at the amount of dependency on critical space assets, critical space enablers – and I’m talking about satellite communications, GPS, missile warning, and electronic warfare – those core space enabling effects will facilitate any future fight and a current fight today. And we’re seeing that today in and around the world with all the different conflicts that are going on in Ukraine and Russia, as well as Israel. Space is decisive, and it’s critical to what we do each and every day.

Dr. Karako: Let’s just start, as we always do, with the threat. You know, space – and you frequently, as well, describe it as contested, competitive, and congested. Talk to us about what that means to you. What do you – what do you think about there most?
Gen. Dickinson: Well, certainly we spend a lot of time in U.S. Space Command, as you would think, understanding our competition. So in my strategic vision I talk – one of my key tasks for the command is understanding the competition. And when I talk about that, I’m not talking about just understanding numbers of capabilities that the PRC and the Russians are putting into space or utilizing – having an effect from ground to space; I’m talking about actually understanding their philosophy, their thinking, what their leadership is, and how they’re incorporating space into their operations.

Both Russia and the PRC established their space commands back in 2015. As you all know, we established our U.S. Space Command in 2019, August, as well as a Space Force in December of that same year.

So as we look towards the PRC, for example, you know, we’ve seen them develop capabilities. You know, just within the last couple of years they’ve doubled the number of satellites on orbit. They have done technical demonstrations that show that they have a direct ASAT capability – ASAT capabilities that can hold our high-value assets or our satellites at risk. We’ve also seen the fact that they can fly their own version of space plane a couple of times. And we also know that they are building capabilities from a terrestrial perspective that can have effects on space, everything from lasers to electronic warfare. And they absolutely understand how important space is to their operations. They’ve watched us for many years, understanding and watching how we leverage space capabilities to have a power-projection capability worldwide. And as we – as we do operations around the world, particularly in the Middle East, we leverage, obviously, space very much. They’re watching us. They’re understanding what our philosophy is and how we incorporate space.

The Russians, on the other hand, you know, we’ve seen some destructive activity from them as well in terms of the Nudol anti-satellite test that they demonstrated back in 2021 where they created a debris field of about 1,500 pieces of debris that we continue to track today. And so we saw them demonstrate that. They, too, have a large inventory of directed-energy weapons, terrestrial-based, that have electronic warfare as well as laser capabilities. They, too, have on-orbit counter-space capabilities that they’ve demonstrated. And they, too, understand how fundamental and important space is to what they do in their operations as well.

So we’re seeing, you know, a PRC threat that’s increasing in capability very quickly, the Russians not so fast. So they’ve had some limitations, as we know, given the conflict in Ukraine in terms of, you
know, financing to be able to do those types of capabilities. They haven't stopped, but they're continuing that at maybe a little bit slower pace. So from an adversary/competitor perspective, that is – that is large.

The other thing I would mention is, you know, that's the contested part of the domain. The competitive part of it is, you know, the growth of the commercial industry in space. I can talk about that here in a little bit.

But then the other piece is the congestion. So U.S. Space Command has a responsibility of tracking and reporting out on debris and objects in space, whether they're active or inactive satellites, debris that has been caused by events like the Nudol, as well as satellites that just start to deteriorate on orbit. And so when this command stood up back in 2019, we tracked about 25,000 objects. Today, it's over 45,000 – and that's a short period of time of four years. And that's due to many things, but that is the congested part of the domain, particularly in the low-Earth orbit.

Dr. Karako: Well, you mentioned paying attention to how they're weaving this into their operations, their philosophy. The PRC has claimed to be destroying or capturing satellites and other sensors. They've talked about, also, this mega-constellation that I think you alluded to. Why do you think they're doing that? What is their philosophy on these things that makes sense of these activities?

Gen. Dickinson: Well, of course, they're a spacefaring nation right now, but they do want to have the dominant – in my opinion, dominant role in space. And they understand our dominant role in space right now and the capabilities that we have today and into the future, and what we've used in the past. So they – I think they clearly understand the importance of that and the dominance of that domain, and so I think that's where they're proceeding.

And you mentioned some of the demonstrations on orbit. You know, I would just highlight the SJ-21 that we saw not too long ago, which was a dual-use space capability/counter-space capability that they have out there where they were actually able to grapple – grab a hold of one of their defunct GPS or Beidou satellites and actually take that satellite out past the GEO orbit, drop it off, and return back to the GEO orbit; and did that in very short period of time, only a few days, demonstrating what? Demonstrating that they have a technical capability that they can use and they can employ it in terms of planning and operations. So while they call that a dual-use capability, you know, we also know what that means to us in terms of a military
operation as well. So they’re demonstrating how they can do that.

Dr. Karako: So you also alluded to Chinese space plane tests, for instance. If you could speak to kind of the salience of hypersonic things coming in and out of the atmosphere and, likewise, that – basically, things that orbit and de-orbit as well.

Gen. Dickinson: So that’s a – that’s a capability that we’re watching, obviously, very closely. But demonstrating a capability of being able to put something in orbit at a very high rate of speed that can move – you know, circle the Earth in 90 or so minutes in one revolution; and then, you know, potentially has the capability of reentering where they desire it to reenter; and then presenting a challenge for us in terms of missile warning, missile defense, tracking, custody of that capability. And so we continue to look at that very closely, but that’s a capability they just recently demonstrated.

Dr. Karako: You also highlighted, as well, the Nudol test from 2021. How did that look from your – from your vantage point at Space Command at the time?

Gen. Dickinson: You also highlighted, as well, the Nudol test from 2021. How did that look from your – from your vantage point at Space Command at the time?

Gen. Dickinson: Well, so I’ll just right up front: Irresponsible act. If you recall when that happened in November of ’21, we had the National Space Council about two weeks later just here in D.C., and then we heard the vice president of the United States talk about how a(n) irresponsible act that is.

I would tell you, you know, demonstrating that technology or that capability producing that amount of debris on orbit, you know, really, debris on orbit doesn’t know whether it’s friendly or foe, right? Debris is debris. So when you do an event like that, that threatens everything from, you know, any country that would have a satellite on orbit. It’s not like the debris they produced was able to, you know, be there for some other country to fly through or have an effect. It’s there. It remains there. And in some cases, it remains there for many, many years. And because it doesn’t necessarily act as you would expect with gravity, it can sustain that orbit for a period of time depending on the altitude at which that event happens. So it’s very important to remember that in terms of the amount of debris that it created.

By the way, I just mentioned, you know, we had the International Space Station that was a few hundred kilometers beneath it in altitude, but what else was up in that – in the low-Earth orbit that’s there today that hasn’t been there for – or it’s up there for the very first time, would be the Chinese space station. So, again, you know,
when you demonstrate something like that, conduct an event like that, it has long-term effects.

And when we look at the tenets of responsible behavior for space which the Department of Defense has formalized – Secretary Austin has signed off on it – there are five tenets of that responsible behavior. And the world, the United Nations as a whole is recognizing the fact that we need to have norms of behavior in space because of the dependency not only of the military, but of our civilian – our civilian populace as well. The amount of information that we rely upon, the amount of technical capabilities that come from space is very, very important.

And I would just tell you, you know, of course, I’m in the military. Obviously, I’m in the Department of Defense. I think – I’m in charge of military type of operations and how we protect and defend on orbit. But we all need to remember that space has a very, very big part of humanitarian support, whether it’s weather, whether it’s other types of capabilities that we’re able to share with the world. And it’s not just the United States; it’s our allies and partners, too. So there is a – you know, there’s not only a commercial, but there’s also, you know, capabilities that we provide and information that’s so important that starts in space.

Dr. Karako: So here at CSIS the Aerospace Security Project, currently led by Kari Bingen, puts out an annual Space Theat Assessment using just open-source material. And this 2023 report talks about the, quote/unquote, “cat-and-mouse games” that are apparently going on between U.S. GEO SSA satellites and Chinese things. Question for you is: What are we learning about China’s rendezvous and proximity operations and perhaps their TTPs?

Gen. Dickinson: Well, so, obviously, I can’t talk exactly what we’re learning from them, given the forum that we’re in today. But I would just tell you that it’s obvious that they value maneuver in space, just as we do. We’ve been doing that mission for several years, which is with our GSSAP vehicles that are in GEO orbit. They’re termed our neighborhood watch capability as they traverse the GEO orbit. But if you look at what they’re doing, they’re doing a very similar thing. And they value the opportunity to be able to exercise their capabilities that they’re developing and putting on orbit.

So, you know, if you were to draw an analogy – which I always try to do when we’re talking about space – we watch what they do in the air domain, the maritime domain, and to a lesser extent the land domain in terms of how they are improving their capabilities in being able to
Dr. Karako: So you highlighted a couple things, the grappling and taking it to a graveyard orbit and that kind of thing, and you don’t have to be too imaginative to think about what that could do for disrupting our kill chains. So how – in the context of that, how critical is service-to-service connectivity and interoperability for – among the several services?

Gen. Dickinson: Well, I think, you know, that’s that broader question of how are we getting to a command-and-control capability that not only goes service to service, but transcends the different domains. And so how do we build that? You know, that’s really something we’ve been looking at for many years within each respective domain, and we have had some success in it. But how do you have it so it spans all the domains and all the services? So, really, the department’s efforts here has been on the CJADC2 and how you build a, you know – you know, a database, if you will, that has that kind of repository of that information for the domains. And then how is that accessible to each of the consumers, if you will, or services, that would need that particular information? So how do you build that? That is a big challenge, and we’re looking very closely at it – and not only how do you build it, but how do you protect it.

Dr. Karako: All right.

Now, so our adversaries are clearly messaging that they see space as a warfighting domain. Maybe kind of we could move now to your operational perspectives. What does that mean to you, space as an operational domain or as a warfighting domain?

Gen. Dickinson: Well, I would just say that, you know, we approach operations in space every day in U.S. Space Command. In other words: How do we build capability and have a culture of operations/warfighting in the command? Because, as we look to the future and some of the events that I just described, it’s going to take a mindset and a culture like we see in the other domains – air, land, and sea. In other words: How do we do the planning? How do we do the execution? How do we do the targeting? Those are all critical elements of what we’re doing within the command. And really, over four years we have built that out in the command.

The command right now is a joint combatant command just like the other 10 combatant commands. We are the newest and we’re the most popular. No, I’m – but – (laughter) – but you know, when I look at that, it’s like, so what does that mean to my operations in space?
What it means is I’ve got a joint warfighting force within the command that does what? Has had many years of experience in Iraq and Afghanistan. They’ve come in; they have the experience of what it means to do joint operations, joint planning, joint targeting. And we couple that with our space expertise within the command, and that has accelerated us from where we were in 2019 until where we are today in 2023, which is a combatant command that is able to produce strategic effects for the nation and for our leadership.

And so I would go back to the Nudol test in 2021. When I was sitting in my joint operations center, I had my staff around me. I had plans and options in front of me. And what was I able to do? For the – you know, one of the first major events that we had as a COCOM, I was able to develop strategic dialogue with my leadership and the other combatant commands of what we saw, how we characterized it. And just as important, we were able to strategically message to the world that that was an irresponsible act. And by the way, that was fully supported and emphasized with our allies and partners.

And so when you talk about strategic effects, it has to do with a joint command; has to have a command that understands the importance; understands the competition, like I mentioned earlier, so we can do our – do our mission areas.

Dr. Karako: Well, you are a popular command –

Gen. Dickinson: (laughs.)

Dr. Karako: – and space is a popular topic broadly. But the question then becomes: Is there a congestion of space organizations across the Pentagon broadly? And I’m thinking here of an article by my friend Todd Harrison and Mackenzie Eaglen kind of questioning the need or the logic of having both a Space Force and a Space Command. Your reaction to that?

Gen. Dickinson: Yeah. So my reaction to that is, first of all, as I mentioned, you know, what is the role of a COCOM? What is the role of a service? And so, you know, the COCOMs, by the Goldwater-Nichols Act of 1986, does what? We do operations and warfighting. The services do organize, train, and equip. So normally I use the Army. Since this is AUSA, I’ll use the Army analogy that I draw on. And that is: What is Forces Command? What does the big Army do in support of CENTCOM, for example? General Kurilla will say, I’ve got a demand signal for an Army division, for example. And so what’ll happen is that demand signal gets back to the Army, the Army does what? Organizes and trains and equips a division, certifies it, and deploys it. Once General
Kurilla gets that capability, he does as he sees fit in terms of how that will fit or accomplish the missions that he has been given.

It is very – the analogy is the same to the relationship between Space Force and U.S. Space Command. General Saltzman and U.S. Space Force organize, train, and equip our exquisite space capabilities – trains the Guardians that do that mission, and then when they’re trained and certified he presents them to U.S. Space Command and I do the operations piece to it, whatever that may be – PNT, satellite communications, missile warning, and other effects such as electronic warfare. Those are the things that are done. That relationship is critical. There has to be that division so that one can concentrate on warfighting and one can concentrate on organize, train, and equip. And part of that is bringing better capabilities, more sophisticated capabilities to the space domain here now and in the future.

Dr. Karako: So what are your operational priorities?

Gen. Dickinson: So, since I’ve been the commander of U.S. Space Command for the last three-plus years, my intent was to try to be consistent with what my priorities are. My first priority is making sure that we are able to understand the space domain. And what I mean by that is: How are we able to look into the space domain and characterize whatever actions may be happening or events that are happening in the space domain? And that’s a large task, because if you can’t see it and understand it and characterize it, there’s certainly nothing you can really do about it. You have to be able to have that situational awareness just like you do in the other domains, whether it’s air, land, or sea – and, for that matter, cyber.

So we’ve spent a lot of work – a lot of time and effort over the last three-plus years of doing that very function, and it breaks down into three categories.

One is we have looked across both missile defense and space and said: What sensors are out there today that could do space domain awareness for me that we haven’t leveraged in the past? And so we’ve kind of settled on some of these missile defense sensors – TPY-2s, Aegis BMD ships, other sensors that are – that are part of the air and missile defense portfolio – and how do we bring them into our architecture so that they can do space domain awareness for me, because in space it’s all – we talked about the FOB, it’s all about having custody. And so if I can maintain custody of an object, whether it’s exquisite or not exquisite, that’s the key, because if it’s not exquisite then I can maintain custody and hand it off to an exquisite
capability. But maintaining custody frees up a lot of time for me in terms of always having to look up and decide if that’s the thing I was really looking at or whether or not it’s something that’s in custody and passed off to an exquisite capability. That’s one.

So we’ve been doing a lot of that for the last three years. And I would tell you we weren’t – it’s not fully integrated yet. I would term it more of interoperable. And so, you know, in my mind, full integration is machine to machine. But what has been good about it is going out and finding what’s good enough today, and then advance it and prove it to be exquisite tomorrow.

The other piece to that is we work very closely with our allies and partners in that very endeavor of space domain awareness around the world. And we have a Commercial Integration Cell, commercial integration strategy for U.S. Space Command, but in particular we have a Joint Commercial Operations Cell in Colorado Springs that takes space domain awareness commercial sensors and capabilities – telescopes and sensors – that bring all of that together so that we can look into the space domain from an unclassified capability. That has worked very well from a commercial integration piece, but it also has allowed us to work with our allies and partners in a big way in terms of their participation in that, their ability to use that data as well and share that data. And the advantage of the unclassified piece to that is that that allows me, if it’s unclassified, that we can strategically message that very quickly, depending on the event that happens in space.

I described to all of you the SJ-21 a couple years ago. When that happened, that was actually observed using our Commercial Integration, our JCO in Colorado Springs. And so that allowed me to – allowed the command and our allies and partners to observe that event and do the messaging we felt that was appropriate at that time.

We’ve improved that, as you can imagine. You always try to improve things. We’ve been improving that over the years. We’ve actually stood up two more integration cells around the world. One is in the U.K. and one is in New Zealand. And the theory or the concept behind that is those operations centers follow the sun. So it starts in Colorado Springs, it’ll go to the United Kingdom, and then it’ll hand it back over to us when it comes around, you know, that time of the day again. And why is that important? It is because that allows us to integrate with our allies and partners. And as we watch our allies and partners get more capable, we’re watching their space commercial industry within their respective countries starting to participate in that as well.
And so, you know, in my mind, you can't have enough space domain awareness sensors or capabilities because this space is big – (laughs) – and you got to be able to look at it. And when you're talking about domain awareness, it really does matter on location, location, location. So we can have those capabilities geographically dispersed around the world, makes us more – or, makes us better and more capable. And it goes back to my maintaining custody of objects in space.

Dr. Karako: So I wonder if I could ask you about JP 3-14. Big, big changes there in terms of space operations. It's more explicit about offense/defense, retires some terms like counter-space. So I wonder if you could talk to us about some of the most important changes there, why they matter, and how it matters to you.

Gen. Dickinson: Sure. So JP 3-14, in my mind, a big achievement for the Department of Defense, Joint Staff, and the greater combatant commands and services. I think it's – it updated from about three years ago. I think the last one was in 2020. So this is the first time that U.S. Space Command was the primary lead for the update to the JP 3-14. I think it did a lot of good things in terms of defining what our AOR is. So U.S. Space Command is – some people confuse and say that U.S. Space Command is a functional combatant command. We're both a functional as well as a(n) astrographic combatant command. And so different than, like, EUCOM/INDOPACOM, where we have longitude, latitude, or lines on the map or around the globe, you know, our line starts at – and it's defined in JP 3-14 – at a hundred kilometers out to the edge of the universe. So we might be the biggest AOR. I'm pretty sure we are.

Dr. Karako: (Laughs.)

Gen. Dickinson: But you know, my counter to that is, you know, we may be the biggest AOR in terms of space – physical space – but we have the fewest number of humans that live in it. And I think that's going to grow over the years. I know it will, as we – as we go to the Moon and beyond and as the commercial market starts putting more humans into space. But as we sit here today, I won't ask the audience – I usually try to do that – how many humans do you think are living in space right now. And I'll just give you the short answer: there's 10. So there's seven on the International Space Station and there's three taikonauts on the Chinese space station that I mentioned just a little bit ago. So that – the JP 3-14 answers that question, defines that.

It also normalizes some of the language and terms. In other words, as
we look to the space domain, you know, the space domain is not a special domain; it is a very unique domain. And I think we can all agree it's unique, but it's not special. And in that vein, we've tried to do – we tried to develop terms that are consistent with the other domains and the other doctrine within the services, as well as the – as the COCOMs or on the Joint Staff. And so, you know, terms such as key terrain and those kinds of things are terms that we're using. You know, so for our key terrain in the space domain, what would that be? Well, of course, it would be a celestial body of some sort. Could be a Lagrange point. It could be one of those. But that publication is not developed just for General Dickinson and the space enterprise; that doctrine is developed so that folks in other domains that are doing operational planning and operations have a doctrine to go to to understand how they incorporate that into their operational planning.

Because one of the things we've worked on very hard over the last three years in terms of advocacy for space/understanding of space is that you got to include space in your planning efforts at the very beginning of your planning process, not at the end. And so it can't be an afterthought at the end to go, OK, now we got to have space. We want to have it upfront and it's integrated and part of the entire plan from start to finish.

Dr. Karako: So in February, CSO Saltzman came over here to CSIS and kind of unveiled their theory of success comment that talked about campaigning through competition. Obviously, this is a big theme of the – of the NDS. And so I wonder how you're thinking about deterrence campaigns in space. One thing that comes to mind, there is of course the adage that you reveal to deter and you conceal to win, and there seems to be a push to doing a little bit more revealing in the interest of deterrence. So thoughts on that campaigning in space.

Gen. Dickinson: Well, you know, I would just right upfront say that, you know, we compete every day in space now. You know, I mean, it's like – and you know, we stood up in 2019. We were competing the day that we stood up. And so in terms of what we do each and every day, you are correct; you know, that's my philosophy on the reveal and conceal, is what you mentioned. So, you know, you reveal to deter and you conceal to win someday or on that day.

And so we do that each and every day in terms of what we do with – in particular with our allies and partners, and creating the deterrence that the PRC and the Russians, you know, are observing. And so a lot of that I can't get into too much detail here, but you know, really, when you look at what our theories of success is or how
we see ourselves within the combatant command, you know, we see ourselves really working – you know, we have this thing called the convergence of triads. And that’s where we looked at each of the mission areas, each of the operations that we do, and we look at how we’re going to leverage each of those components.

I’ll give you an example. So when we look at deterrence, we look at it through the lens of the three pieces to a space system: there’s the satellite on orbit, that’s very obvious; the link from the satellite to the ground; and then the ground station and command and control to whoever makes those decisions or sends those commands. And so if you look at that – kind of a triad, if you will – that’s how we approach our operations within the command. And that’s both from a red perspective, as well as a blue perspective. So if we think we’re vulnerable with those three legs or three segments of the space system, and we protect and defend on those, those are the vulnerabilities that we look to towards the PRC and the Russians. That’s how we kind of went, that’s one of the triads.

The other one is our allied and partner and commercial integration, and how we do that.

Our newest one is the missile warning/missile defense in space. And I could talk about that here in a minute with our new UCP task.

And so the – and the final one, because there’s four of them – I think I’m at three – the fourth one is: How do we work with cyber SOF – special operations forces – in space? And that, actually, kind of goes back to the triad that I talked about that talks about the three segments of the space system. So when you’re talking about deterrence type of operations, that’s the lens through which we look in U.S. Space Command.

Dr. Karako: So we’ve had basically the same question come in from two people, and since I know them both I’ll credit them both. Both Theresa Hitchen from Breaking Defense and Jason Suslavich from Blue Origin both want to know about space mobility and logistics, and its relation to dynamic space operations, and perhaps any requirements that Space Command is helping set on space mobility and logistics in particular.

Gen. Dickinson: Sure. So when I talked about JP 3-14, you know, I talked about, hey, how do we get common lexicon language like we do in other domains. And so with – what I’m going to talk about is dynamic space operations. And the need for us today and into the future is, how do we have a capability to do sustained maneuver in space? How do we
build capabilities, use technology to be able to have sustained maneuver?

And what I mean by that is satellites that are on orbit right now have a finite amount of consumable resources on them. I’m talking about fuel. I’m talking about battery life. Then I’m talking about, you know, actually breaking and having to be repaired. And we have to have the capability, like we do in the other domains, to be able to refuel, fix, and – if we need to on orbit, because right now we can’t be constrained by consumables. We aren’t in other domains. If you think about the Air Force, they have air-refueling capabilities. You think about ground operations, we have, you know, refueling capabilities that move with our maneuver force so that when we’re conducting an operation we top off, and then when we’re done we refuel. We have to be able to do that in the space domain. That is because the amount of activity and the operations that you just described earlier in your question, those are right now performed by satellites that have finite amount of fuel, and so – in that case. So we’ve got to go to that. We also have to go to another concept, which is tactically responsive launch.

So replenishment, augmentation, reconstitution in the space domain has got to be something we are able to do very quickly and very soon, because as we watch – I just went through the PRC, you know, threat and what they’re doing today and tomorrow – is we’ve got to be able to do that kind of – we do it in other domains, right? You’ll hear me over and over go, tying it back to another domain. So if we have a mega-constellation or if we have a constellation, you know, of any type of capabilities – satellite communications, GPS, or whatever – we got to be able to rapidly reconstitute that if we need to. And so we’re watching the commercial industry today in how they are able to do, you know, launches and buildout of mega-constellations. Don’t need to tell anybody in this audience, you know, the company that’s doing that right now; I think they have their 80th launch for the year. That is a pretty rapid launch cadence. And the – and the use of those boosters, you know, in terms of numbers of time(s) they’re able to be used and capabilities that they can put on orbit or could put on orbit, is what we’re very interested in. So our ability to do that is fundamental.

So it’s dynamic space operations, as well as tactically responsive launch.

Dr. Karako: Well, let me bring us down to, again, some ground forces for this dialogue. We’re seeing a lot of activity in Israel right now, including Iron Dome but lots of other things as well. To the extent you’re able,
could you talk about how Space Command is providing support to our friends in Israel but also perhaps to CENTCOM more broadly?

Gen. Dickinson: Yeah. Well, so, first of all, I’ll say that our support to, you know – to the CENTCOM AOR in this case is consistent with what we do for all the other AORs. So, in other words, space is global. My mission of providing space enabling capabilities doesn't necessarily focus on one geographic – vice astrographic – geographic AOR. And in this case, you know, we routinely provide missile warning; position, navigation, and timing services; as well as satellite communications. And so, if I were to talk about the JCO cell that I just did a minute ago, we also provide that information to that – to the CENTCOM AOR, which is fundamental to what they do. And so we have allies and partners from all – you know, many, many nations that contribute to that. But we’re doing that kind of thing.

I’ll give you an example. In Ukraine right now, war has been going on, what, a year and a half now, or so. We provide missile warning indications, you know, using our satellite capabilities. I think we’re up over 16,000 warnings that we have provided to the EUCOM AOR and to General Cavoli and his forces there. But we routinely do that. We do that anywhere around – we do it in Indo-Pacific. So we do that all the time, because the globalness of our mission set.

So, you know, satellites that we have in geo orbit, you know, people think of that as, well, what geographic region? Well in many cases they service many, several geographic regions, just because of where they are and the geo belt and what they can see on the Earth. So I go back to we routinely provide that. The COCOM will ask us through a request process if they want enhancements to those capabilities. And we respond to that as well.

Dr. Karako: Sixteen thousand, that’s a lot of warnings in the past two years. (Laughs.) So let me return to the – to the missile defense issue. You’re, again, the senior air defender in the Pentagon. You’ve done – you’ve had all these different commands. Big picture, I think especially reflecting on the lessons of the past three years or so in your current role, talk about your understanding and your vision for the relationship between space and missile defense.

Gen. Dickinson: Yeah, so we worked on that for a couple of years within the command, within the department of, you know, where does – you know, where does missile defense belong in terms of the COCOM? For years it had been performed by U.S. Strategic Command. And as we – and if you recall, so, you know, if you go back and you look at the history of U.S. Space Command, you know, we existed from 1985 to
2002. In 2002, after 9/11, a decision was made to stand down the old U.S. Space Command and transfer those space mission areas over to Offutt Air Force Base and U.S. Strategic Command. And part of that, they had the missile defense piece.

But when U.S. Space Command stood back up and I took command, and then I had a former command in the U.S. Army Space and Missile Defense Command, it was obvious to me that there are a lot of synergies between the missile defense enterprise as well as the space enterprise. And so, as I mentioned earlier, you know, we've been leveraging missile defense radars that weren't necessarily built for space domain awareness but have capability. And then take that capability, put a requirement on the department to make it into an exquisite space domain awareness capability. So from a technical piece, there is synergies between the two enterprises, and vice versa.

There's things that we're doing in space that can enhance missile defense.

And so how do you get that synergy, unity of effort, unity of command, if you will, in the department? You do that – our recommendation was, you do that by moving that missile defense enterprise or responsibilities into U.S. Space Command. So in April, unified command plan came out. And that transregional missile defense planning and operations support mission area came to U.S. Space Command. And with that came JFCC IMD, Joint Force Component Command for Integrated Missile Defense, led by Lieutenant General Dan Karbler. And when that organization moved with it, that was an instant infusion of missile defense expertise within U.S. Space Command.

And so, of course, the staff, my staff, had, OK, so how do we absorb that missile defense role? And I think we've made great progress over the last couple, few months since we got the unified command plan. Of course, we were planning for that before the transfer because we were banking on the fact that that was happening – going to happen. So there's a lot of synergies between that. And when you look at it, we're looking at what the MDR, the 2022 MDR came out with, which was that we need to start looking very closely at not just missile defense, but how do you get to missile defeat.

And so missile defeat is much – is much broader than missile defense. And I'll characterize it as saying that traditionally we kind of look at missile defense from midcourse to terminal, in the terms of the phase of flight of a ballistic missile, for example. So you can think of apogee till the time it hits its target. That's the boost phase, midcourse phase, and the terminal phase. The department, we as a community, space
and missile defense community, need to start looking towards the
other part of that flight path, which is the – before the launch as well
as the boost phase in terms of what capabilities can we bring to bear
or have developed that will help us with that cost curve problem.

And so the cost curve problem is where we’re spending so much
money on interceptors in the last part of the midcourse to terminal
flight, as opposed to maybe spending a little bit more money in the
area I’m describing, which could give us capabilities to defeat that
missile before it either takes off or very early on in its flight. And
when you look at it from a capabilities perspective, it is the most
dangerous in midcourse to terminal. It’s the most vulnerable on the
first part – on the first part of that event.

Dr. Karako: So the JP 3-14 talks about missile warning as a key SPACECOM
mission area. But that’s distinct, as you’ve mentioned just now, from
missile tracking and specifically fire control quality tracks to support
all the missile defense. What does fire control quality track mean to
you, and why is it important?

Gen. Dickinson: Exceptionally important. Fire quality track data is – that is going to
determine the success or failure of whatever weapon system you’re
employing to defeat that threat. And so, you know, missile warning in
my mind is a little bit less in terms of the quality of the data, because
a lot of the missile warning is to alert so people can protect, be
protected. The missile tracking piece to that is more fidelity by more
sensors may be looking at that same threat, and providing more and
more fidelity, target quality data, that you can actually use to action
and inform a weapon system from the time it launches until the time
it defeats whatever the threat may be.

Dr. Karako: There’s a whole lot of attention and kind of enthusiasm for pLEO, for
proliferated LEO, for the tracking mission in particular. And SDA and
Space Force are moving out on that front. A lot of attention is to the
numbers, to the proliferation part. But it’s the using of that data. I’m
talking about here the sensor fusion challenge between all this
disparate data from different places and different phenomenologies,
the sensor fusion, and also do we have the ground systems, the
ground nodes, to be able to process that in an effective way? How do
you think about those problems?

Gen. Dickinson: Well, first on the proliferated LEO constellations, you we have
learned that, watching the conflict in Russia and Ukraine, in terms of
what a proliferated constellation means. And it means a lot. So you
know, in the space business you’re looking for redundancy and
resiliency. And when you have thousands of satellites that are
performing that mission, it makes it very complex for your adversary or your competitor to know how many they have to take out and which ones they have to take out. So from, like, a resiliency, redundancy perspective, it is where the department is going. And I fully support that. The efforts of Derek Tournear and the Space Development Agency, we’re going in the right direction.

In terms of your comment about ground stations is that, as I mentioned in my triad, you know, the satellite, the link, and the ground station, you know, we have to remember that you have to have a ground station that’s capable of leveraging the exquisite on-orbit assets that we have today. So in other words, whether it’s a service, but in this case it’s the services, when you put a capability on orbit and it’s fully operational to provide you a better capability, you’ve got to have the ground stations that can leverage that, for many reasons. So the synchronization and the coordination of the procurement of that, given what’s on orbit, is very critical.

And so what you don’t want to have is where you have outdated ground stations that can’t leverage the new capabilities on orbit. Because now you’re not leveraging, you know, obviously, a better capability and where the department has put some money. So it’s important that we remember that. And that requires close synchronization between Space Force, Space Command, and the services in terms of communicating what we’re putting on orbit and when it will be available, so that they have the opportunity to make sure that they not only have the ground segment that they’ll need, but they’ve been trained on it and how to use it.

Dr. Karako: But going back to the – fundamentally, the goals of resilience and the goals of mission assurance, how do you think about the risk of putting all our eggs in the pLEO basket? What is the – you know, there’s certain things that are perhaps able to threaten pLEO, be it cyber, be it debris, be it perhaps radiation of different kinds. So how do you think about the utility of diversifying among orbits and inclinations as well?

Gen. Dickinson: Well, so it kind of look at – I look at it space as I look at missile defense. And that is you have to have a layered approach to both. So your eggs in one basket analogy is, yes, I mean, you know, we don’t want to become so dependent or so vulnerable, potentially, in the pLEO, that we’re not able to have that information or have that function provided to us. As opposed to, you know, having a diversification, where you have capabilities and different orbital regimes that you can rely on so you’re not all on one.
But you got to remember, too, that in that pLEO pieces, there will always be a terrestrial piece as well. So in terms of layeredness, or layers, you will have an on-orbit capability – whether that’s in pLEO, as you describe, could still have some in GEO that we rely on. And we’ll have some that is in the terrestrial domain that we rely on today, in terms of UEWRs, as well as missile defense types of radars on ships or on the ground.

Dr. Karako: So, if I could bring this back to kind of more Army-specific things for a minute. Sandra Erwin from Space News asks: We often hear there’s not enough space resources to meet the ground force’s needs. The Space Force’s budget may not grow that much. So who’s going to pay for this? Will Space Command advocate for more funding to fund those space programs?

Gen. Dickinson: Well, I mean, that’s a role I have as a COCOM commander. You know, I always say that, you know, COCOM commanders are greedy and impatient. And so I’m looking for more capability sooner. But what we do, as the combatant command, is we develop requirements. Requirements that we need to do the mission both from a terrestrial perspective or space enabling perspective, as well as what we have to do on orbit with our protect and defend mission. So the command is maturing. And, in fact, is very mature in our J-8 right now, in terms of producing integrated priority lists, producing initial capabilities documents, issue papers – those levers that I have that put a demand signal on the department to be able to get those requirements fulfilled and capabilities delivered.

So we do that. And now we’re doing that for missile defense as well. Part of that transfer, if you will, of missile defense to U.S. Space Command, we also got the warfighter in the loop, or the WIP process, that came with that missile defense governance process. And we’re also now – you know, one of the – one of the principles within the missile defense executive board governance process. And so that’s another way that we’re putting the missile defense requirements on the department.

Dr. Karako: Well, speaking of that, you know, Space Command being stand up meant that some resources, some personnel were going to flow, obviously, from Army’s Space and Missile Defense Command, your previous command. How would you talk about the relationship between SMDC and Space Command? And how the Army is benefiting and growing in that – in the new new order?

Gen. Dickinson: Yeah. So from the very beginning, back in 2019, U.S. Army Space and Missile Defense Command was designated as the Army service
component to U.S. Space Command, and to U.S. STRATCOM, and now a little bit with U.S. Northern Command. So, General Karbler wears many hats, to include the commander of JFCC IMD. So from that perspective, we've had great integration from the very beginning with General Karbler at SMDC. But I will tell you, you know, we've seen over the last couple of years kind of the transfer of some of the Army space capabilities or space mission areas that they used to do - satellite communications and most recently, the JTAGS, missile warning capability, moved from the Army to the Space Force as well as SATCOM, which is the WGS provider from the Army to Space Force.

People asked me if I thought - think that's a - that was a good idea. I think it's a great idea. Being able to realize the synergies of having both missile warning - that missile warning capability that provides missile warning in theater, as well as the satellite communications - having that in the Space Force, where they do similar things with other capabilities with missile warning and satellite communication, I think just breeds efficiency and optimization, if you will, and ultimately support to the combatant commands.

I think the Army has actually done a lot in space in terms of new formations, new capabilities. They absolutely realize how important space is to what they do, you know, now until 2040 in land power. But they've taken a lot of action too. So they've got MDTFs now. I think they've got three multidomain task forces that do, what? Integrate those types of capability, in particular space, and how important that is. And, of course, they've always had their FA 40 cadre within the Army that that understand space. And many of them work within U.S. Space Command. So I think from the perspective of their contributions and how they're integrated into U.S. Space Command, it's very, very good.

Dr. Karako: So, staying with the Army but a different part. I'm thinking of the National Guard here. Not a future space guard, but the National Guard. Already today provides significant space capability; half of our offensive space EW, that you've mentioned before. It provides survival missile warning and operates [one of] three ground-based missile warning [systems], as well as GMD up in Alaska. So how do you think about the Guard's role supporting your command going forward?

Gen. Dickinson: So I've always thought is a big piece to what we do. It is a big combat multiplier for the command, not only in space but missile defense. And so when we stood up the command back in 2019, we had over - just in headquarters - we had over 100 National Guardsmen and Reservists from all the services show up to the door, because we had
a sign on the door that says, we’re open. They said, we’re here to help. And they came in, and they really pushed us in the direction of establishing, getting set up from the very beginning. I think it was over 100 or so, maybe even 120 at the very beginning of 2019. Of course, today that number is a little bit smaller. But they provide an incredible perspective to what we do each and every day. That’s in the headquarters.

Of course, Tom, as you mentioned, we’ve got National Guardsmen that are doing work within the space enterprise itself, from missile warning to electronic warfare. And that is critical to allow us to have that capability when we need to surge or, in some cases, doing day-to-day operations. Their perspective is very interesting, because many of them are working in the space industry – commercial space industry, you know, during their daytime jobs. And then when they come either on active duty or they do their drill time, they bring that commercial space expertise into the command. And it’s an immediate infusion, because many of them are working on cutting-edge technologies. And, you know, for me, that’s where we get some of the good ideas of what is in the realm of possible in the commercial industry.

And so as I talked about dynamic space operations, tactically responsive launch, our commercial industry is looking very closely at that now. And we have to leverage that capability. If I go to the missile defense side, you know, from my old unit, U.S. Army Space and Missile Defense Command, with 100th GMD Brigade, you know, we watch National Guardsmen each and every day protecting this great nation. You know, there’s 300 of them protecting over 300 million Americans each and every day. You don’t hear a lot about them, but they’re standing watch in Colorado Springs and up in Fort Greely, Alaska each and every day. And just want to make sure we don’t forget that and the other 18,000 servicemembers in U.S. Space Command around the world doing the space mission and now the missile defense mission for the country.

The one last thing on the Reserve component I would just highlight, for example, in SMDC there’s the 1st Space Brigade. And that brigade out in Colorado Springs actually has resident within that formation all three components. It has an active-duty battalion. It has a reserve component battalion. It has a National Guard battalion. So when you’re talking about, hey, how does everybody integrate, complement one another, train, and deploy? That’s how they do that. They’ve been doing that for years. And so Reserve component is critical to the command. And, you know, we looked at every opportunity to leverage that in terms of can they provide additional manning,
personnel expertise, or how we can augment our teams right now?

Dr. Karako: Well, since you mentioned the commercial aspect of things, I’ll stay with that. OSD and Space Force are working on commercial space strategies. I’m curious what you’re looking for as that goes forward, and also how you’re partnering with industry. And perhaps what you’re perhaps hopeful for, for whether it be space startups or the bigs.

Gen. Dickinson: Yeah, so we partner with about a little over 130 commercial companies today. That has been a priority within the command, is how do we leverage the commercial market, industry, to complement what we’re doing today in U.S. Space Command. In other words, what is out there that’s good enough today that we can leverage in the commercial market? Much of that has to do with what I described in our SDA efforts in Colorado Springs, and as I mentioned in and United Kingdom as well as New Zealand. The other area we look very closely at is how do we partner with satellite communications. That resides out at Vandenberg spaceport base. There’s 10 partners out there right now, and there’s many more that want to be part of that commercial effort out there, providing satellite communications.

So we developed a – because we had such a bow wave, if you will, of commercial companies that wanted to come work and partner with U.S. Space Command, we had to – we had to stop for a period of time, restructure our strategy, so that we could properly bring them into what we were trying to do in U.S. Space Command. So that’s been out since, I think, April of 2022. And, really, that is more of a – that is a framework for cooperation. So I want to be clear: That’s a framework for cooperation. The acquisition side to that, which you’re describing, is going to be part of the Space Force Commercial Integration Strategy, as well as OSD policy. Dr. Plumb’s commercial integration strategy. And that will be more on, obviously, the policy side, for Dr. Plumb, and for General Saltzman will be on the mechanics, if you will, the acquisition of those services.

Now, from a U.S. Space Command perspective, you know, how do I see commercial integration coming into the command? I think, you know, we have to leverage the great commercial U.S. space industry, for sure. If you look right now, I think there’s about 10,000 companies around the world that do space. About 6,000 of those are U.S. companies. And so there’s a lot of opportunity, a lot of potential in the commercial market. And I will tell you that as we’ve seen, you know, with Ukraine-Russia conflict, you know, the department’s looking very carefully at how those – how those contracts, how those relationships are built, to make sure, what? That we have them in
time of conflict, or when we need them the most. And so as we look at that, you know, I know the Space Force is looking very carefully at how we develop that, so that we have that relationship. And we’ve seen that in other domains.

Again, I go back to – we’ve seen that in the – in the air domain, with the C-RAF framework that they use. Not identical, but kind of a starting point for how we’re looking at what, I believe, they call the CASR that’s being developed in the Space Force that does that similar type of activity, or commitments, if you will, from the commercial industry. Do I see commercial being – you know, are we going to go totally commercial within the U.S. Space Command and the DOD space enterprise? I think the answer is – I go back to my it’s got to be a balanced and layered approach. I think some mission areas that I have, we can leverage a lot more of the commercial industry and maybe a little bit less on the military side. But there’ll be some military mission areas, I think, that we will always want to have exquisite military capabilities that are always there when we need them and are layered in their defense and capabilities.

Dr. Karako: So allies and partners. You said no nation can go it alone in space. I was wondering if you could talk about some of the activities – Olympic Defender, CSpO, on the missile defense side Nimble Titan – activities that you’re doing, and maybe some of the challenges on that front.

Gen. Dickinson: Yeah. So, well, I’ll start with space. So we do – we do a lot of exercises and activities with our allies and partners. One in particular is an exercise program we call Global Sentinel. So Global Sentinel, last time we did it last summer I think we had about 25 nations. We’ll do it again next year. We’ll probably have close to 30 nations that show up. And it’s an unclassified event.

And it focuses a lot on – well, it focuses on space operations, where we actually stand up space operations cells for the allies and partners in an unclassified environment, which allows us to do a lot more information sharing, obviously, and a lot more of relationship building. And so we’ll do that again next year. But what we do in that is we have four or five different vignettes that we work through that really pushes them and us to think about policy, makes us think about operations, thinks about capabilities that we either have today or we need tomorrow.

The second one is now with the missile defense transfer into U.S. SPACECOM. We inherited this great Nimble Titan exercise program that’s been around for many, many years. Grown in participants, as
we’d have seen in Global Sentinel, but in a missile defense arena. That
too is an unclassified event that exercises missile defense policy and
operations. And I just spoke about a year ago in Amsterdam to the
whole group. And I challenged them at that time. I said, this is a great
missile defense experiment, exercise. I challenged him to include
space in it. So the evolution we’re doing now with Nimble Titan has
space in it as part of the missile defense play. So the objective is how
do we get, you know, policymakers from space, policy folks from
missile defense from each of these countries, and start talking to one
another and understanding what I was describing as the synergies
between space and missile defense?

Dr. Karako:

Well, I think—I might just sort of transition to your vision for the
future and maybe some reflections on the past couple years. You
mentioned in the context of the Nudol, for instance, the 2021 ASAT,
you know, you called it irresponsible, you know, which presupposes
norms, it presupposes, you know, a certain expectation. We were
talking earlier about the comparison between space and high seas,
right? And it took us a couple hundred years to figure out kind of
what are the rules of that on the high seas. So as you think about your
responsibility to protect U.S. assets and perhaps commercial assets,
how is that analogy to the high seas perhaps useful, instructive and,
again, thinking in the—in the future-oriented sense?

Gen. Dickinson:

Yeah. I think, you know, when you look at the—you know, the high
seas in your question is, you know, I think there’s an expectation that
there’s a—there’s a reasonable amount of security in that specific
domain, the maritime domain, for example. You can’t be everywhere
all the time to defend everything, but you have to have the capability
to defend when you need to against assets that you consider very
important. And so when you look at the space domain, you know, we
really have to, as a—as a global community, come to a realization of
what are the norms of behavior, what are the guiding principles for
responsible behavior in space?

You know, I’ll just talk about the, you know, the commercial market in
terms of putting more—you know, putting mega constellations on
orbit. You know, how do we—how do we govern that in terms of
making sure that, you know, satellites are properly disposed of when
their end of life comes? Or that they understand, like, you know, how
close you can come to a satellite and be considered still at a safe
distance? Those kinds of fundamental things, I think, are important.
Now, in terms of the Department of Defense, I’ve mentioned earlier
that, you know, I’ve got the tenets of responsible behavior from my
boss, Secretary Austin. But that really only applies to Department of
Defense. This is a broader whole of government for the United States,
or really whole the world, if you will, in terms of how do we get to an understanding of what that is.

And there’s a lot of efforts going on. I mean, they’ve got the open-ended working group in the U.N. that has met several times that is talking about this. And you’ve got many nations that are – that are – that understand that Well, a lot of nations do, the importance of having those characteristics or those norms established. But, OK, you know, I’ll just end it by saying we don’t have, you know, 70, or a couple of hundred years to kind of figure that out, like you mentioned in your maritime high seas analogy. I mean, it is here and now. And my hope is that we get to that understanding as quickly as we can.

Dr. Karako: So I wonder if you could reflect a bit on your career. You know, someone looks at your bio, many air and missile defense commands and posts. You’ve got a master’s in ORSA. I’m wondering how your ORSA, operations research and systems analysis, perhaps shapes your thoughts on the future? Just broadly speaking, how would you say things have changed over the course of your career, and what are some reflections that you think about you wish you might have known at SMDC or in some of these other commands over the years?

Gen. Dickinson: Yeah. So that’s a great question. And scratch my head a little bit, because it has been a long – yeah, it’s been a great career. I mean, 37-plus years. But as I – you know, there’s some things that have remained the same, and some things that have changed. And I would just say, one thing that’s stayed the same is really, in my mind – because, you know, along that journey I was a Patriot battery commander.

So made the transition from a Hawk Air Defense System, which is in the museum now, to Patriot, and deployed. I deployed as a battery commander, as a Patriot battery commander. I deployed in my Patriot battalion for OIF. And I think what has stayed the same is how strategic Patriot is to this nation and the world. So a tactical weapons system still has very, very important strategic implications and importance. And we’re seeing that today again. And it’s not only the Patriot of the United States. The absolute investments of our allies and partners in that very system. And so that’s kind of stayed the same, if you will, since I was a battery commander till today.

I think what’s changed is really, on a good note, is really the understanding of that as a strategic asset, how important that is, and how important it is to our allies and partners in the joint force, and the ability to not only take that but start looking at the layered capabilities that are required in order to make it more effective. And
so I’m really proud, you know, of where the Army has gone with air and missile defense. They continue. There’s a lot of great work going on in the Army right now in terms of improvement of the Patriot system, improvement of our ability to have a better C2 system capability that’ll provide the best shooter with the best sensor, best effector, joint kill web, you know, those kinds of concepts. And I think that’s going to make us more – be able to do our jobs even better.

But as I reflect back on that, I would just say that it’s amazing to me, though, not only missile defense, but the understanding and advocacy for space. And so I frequently sit in forums now. Four years ago I would be the one that had to raise my hand and say, hey, space is really important. You know, hey, everybody, space is really important. You know, just as recently as today I sat in a forum where I wasn’t – I didn’t have to say very much about space. It was all the other folks that were in that room recognizing the significance and importance of space for military purposes and operations, but also for our way of life. And so over the course of just four years, I think the department’s made a lot of progress in, well, one, stand up have a Space Force and a combat command. But more so, is the understanding and the integration of space into what we do today and tomorrow.

Dr. Karako: Well, thank you, sir. I really appreciate your coming out. Thanks to our partners at AUSA. We’ve enjoyed having you here over the years, and we always welcome you back.

Gen. Dickinson: Thank you, Tom.

Dr. Karako: Thanks to our sponsors. Thanks for everybody who came out. Thank you. (Applause.)


(END.)