

# Col. Charles Galbreath, USSF (Ret.):

Thank you very much. Good afternoon, ladies and gentlemen. Welcome to our session on Partnering to Win in the Space Fight. I'm Charles Galbreath, a Senior Resident Fellow at Mitchell Institute's Space Power Advantage Center of Excellence. It's become almost cliche, but the space domain is more congested, contested, and competitive than ever. The challenges and threats facing the United States and are allies are growing at an alarming rate. But there are other C words that can also characterize the current space environment, collaboration, cooperation, and coalition. The best way to overcome the congested, contested and competitive nature in space is through collaboration and cooperation with like-minded space fairing nations. That's why Partner to Win is one of the three major lines of effort from the Chief of Space Operations General Saltzman. To discuss the value opportunities and challenges of partnering, we have assembled leaders from the Space Force and some of our closest allies, Canada, Australia, and Great Britain.

First we have Lieutenant General Michael Guetlein, Lieutenant General Guetlein is the commander of Space Systems Command, which manages the research design, acquisition, development and sustainment of satellite systems and services, supporting a range of missions from SATCOM, PNT, space superiority and launch. Next we have Lieutenant General Eric Kenny, who was appointed commander of the Royal Canadian Air Force last August and in the past year has worked to reaffirm the longstanding alliance between Canada and the United States and the importance of deterring aggression in the air and space domains. This includes increasing the Canadian partnerships within NORAD and U.S. Space Command. We're also glad to be joined by Air Commodore Angus Porter, the Australian Air Attaché to the United States. He leads and supports Australia's Air Force team in the U.S. This team provides coordinated air and space power expertise to further Australia's defense and security interests and relationships.

Finally, we are proud to welcome Air Marshal Harv Smyth, the Air and Space Commander within the Royal Air Force. He is the Senior Air Force warfighter responsible for the conduct of operations at home and overseas. In his previous role, he was the UK Ministry of Defenses inaugural director of space. Building the Space Directorate, and setting the foundation for the standup of UK Space Command.

Gentlemen, thank you all for being part of this discussion today. Let's jump straight into questions. The four countries represented here have over 100 years of coalition operations and combined development activities together. As we now focus more on space, what lessons from that experience can best shape our partnerships in space going forward? General Guetlein?

## Lt. Gen. Michael Guetlein:

Hey, good afternoon everybody. Let me start with the easy button here. Talk a little bit about what we're learning from Ukraine. I would say going into Ukraine, we probably were not thinking coalitions as much as we possibly should have. I will tell you though, now that we're fully ingrained in that conflict, it all becomes about coalitions. And what we do know going forward, especially in the space domain is that we can't go it alone. We don't have enough kit. Our kit wasn't built for a contested environment. That means we're going to need partnerships. We need partnerships with industry, but we're especially going to need partnerships with our Allied partners. And if I look at what is the U.S. competitive advantage, it's our partnerships. We've always gone at it in a very collaborative and a very coalition type manner. And going forward it's going to be absolutely critical that we continue to do that.

If you look to the north with Canada, we have one of the longest borders in the world sharing with Canada that we are doing the protect and defend on. But not only that, but we have the only by country command on the planet. So we have two countries both in charge of NORAD and protecting North America. If we go across to the Pacific, we have a significant partner that has always been there since



the '40s. That is guaranteeing and sharing our importance of guaranteeing freedom of the Pacific, and a tremendous partner there. And then if we go across to UK, we've been fighting side by side with the UK for hundreds of years and I don't see that changing. Going forward, coalitions, especially when it comes to space, is going to be the way we fight. And one of the main reasons we stood up the United States Space Force was to open that dialogue with our coalition partners and to build partnerships a little bit stronger.

## Lt. Gen. Eric J. Kenny:

All right, I think I'll just add, so good afternoon everyone. Real pleasure to be here. Maybe add some context actually to what you just said Michael, and thank you for highlighting the binational command of NORAD, something that we're very proud to contribute to for our Homeland Defense aspect. As I think it was maybe General Raymond, space is hard, and the reality is we can't do it alone and that's what you've highlighted. We need to work together as allies and partners, whether that's in the commercial space, whether that's amongst the Five Eyes Nations, NATO or whoever we're working with at the time. So, from a Canadian perspective, one of the things that we're focused on is what are some of the niche capabilities or what are some of the gaps that we can help fill so that we're not duplicating effort and that we're building a more resilient and proliferated orbit and capability and resilient one that can allow us to conduct operations worldwide as allies and partners. Thanks.

## Air Commodore Angus Porter:

And thank you very much for having me here this afternoon. I'm representing Lieutenant General John Frewen, who as of 1st of July this year is now responsible for Australian Space Command. So that has moved out of the Australian Air Force and into joint capabilities group. And I think that signals the importance now that Australia really places on the space domain. And I know he is pursuing with vigor a number of capabilities that Australia is looking to acquire and develop. And like the generals have just said to me before, "The last 100 years have really demonstrated us the value of working closely with partners, particularly with the capabilities that we have, and particularly pursuing high-end warfighting training exercises together, so that we feel like we've been in the environment together before we arrive." Thank you.

## Air Marshal Harvey Smyth:

Thanks, Charles, and thanks for the invitation to come and be in this panel on what is probably the biggest room I've ever been in. I think it's all been said regards to the importance. What's been interesting for me, because I'm a little bit of a latecomer to the space world. And probably only started to properly get into it about four years ago after what was quite a long time right in the heart of the air domain, particularly lots of operational experience was it felt sometimes like the discussion we were having around the space table was a start from scratch moment. And that we weren't necessarily leveraging or learning the lessons that other domains had already learned over many, many years. I think we should be quite bold on the space side and try to start off at halfway or two thirds the way up the ladder, rather than starting off at ground zeros, because all those lessons have been learned before. And they're directly applicable, they're almost domain agnostic and we should be bold enough to do that.

## Col. Charles Galbreath, USSF (Ret.):

Great, thank you all. Let me flip that last question around a little bit. Now, the Space Force and U.S. Space Command have only been around for about four short years. But is there anything with the



integration of your country's activities with them that you would like to see other services or other commands emulate or replicate? General Kenny?

## Lt. Gen. Eric J. Kenny:

Maybe I will pick up a little bit on what Harv mentioned, partially about the fact that space is relatively new for some of us. We've been working with the U.S. in particular through NORAD in the space domain for several decades. But the warfighting concept of the domain is relatively new. As is U.S. Space Forces, as is again U.S. Space Command. And all of us have created commands or divisions in the last couple of years. We're all watching what each other is doing. Both Australia and the UK have set up commands. We set up a division, space division. They're all about the same size. They're all doing very similar functions and we're all aligned with U.S. Space forces and how they're moving forward and we're watching closely and the integration with U.S. Space Command. I think what's unique here is because it's relatively new, at least as a domain, we have an opportunity to take those decades of experiences and try to build something completely different.

In other words, something that's allied by design right from the get go that is integrated at least amongst the key partners. Recently had the opportunity to host General Salzman as well as General Dickinson, the CSO and commander of U.S. Space Command up in Canada earlier this year. And we were able to talk about how we can better collaborate both with U.S. Space Command and U.S. Space forces to ensure that we are contributing with value added to the overall space mission. Although we've been working together in our different spots to make sure that we share information. I think there's certain niche capabilities that we can all bring. We're all looking for resources to put towards the space domain, but they are finite resources. So, where can we best put those resources and how can we better integrate through commercial?

One of the challenges remains classified information sharing. Once again, going back to as we stand this up and better integrate at the very beginning of this journey, for some it's not that new, but for many it's relatively new, I would say in the last five years. How can we build this from the ground up to be something that's more of a multinational force, a multinational Space Force?

## Lt. Gen. Michael Guetlein:

Let me build upon what Eric just said. So both Harv and Eric, both you said that space is relatively new for you. And that is absolutely the case, but it's not new for the U.S. What is new for the U.S. is until the standup of the Space Force in 2019, we didn't hardly talk to our allies about space. The only thing we'd really talk about is GPS and a little bit of SATCOM. Beyond that, everything was too highly classified to have a conversation about. We knew about the threat, but we couldn't talk about the threat. It was too highly classified and we kept all that information to ourselves. As a result. We never really built the partnerships that we should have been building from day one to get after this. We weren't exercising together, we weren't doing war games together. We didn't have common TTPs, et cetera.

If you look at what has changed with the standup of the Space Force since 2019, first and foremost is the dialogue. We are actually talking about the threat at levels that I was never allowed to talk about the threat in my entire career. And we're doing it openly in the public. We're engaging with our allies across the entire board, even on SAP and where we can, I will tell you classification is still a huge challenge. There are many things that I still cannot talk about, but when we start talking about Allied by Design, that's really where we're making the most traction. Because even if I can't talk to them about a system that I have in development, we're getting at it behind the scenes through Allied by Design and starting to actually understand what are the data standards, the interface standards, how are we going to actually operate this?



How would I hand that data off to our international partners, et cetera, from the very beginning of our program. But then we are also getting with them on architecture working groups at the cog level, the CSpO level if you will, and talking to each other about, "Hey, what are the data standards? What are the interface standards?" We have a unified data library that's going to become our data lake for the Space Force. We actually have a Allied Unified data library now that we're talking to them about. Here's the data I can share and here's the data that they can share back with us. Now, how do I integrate that better into our weapon systems? So I think between the dialogue, between the classification levels and then Allied by Design, we're really starting to get a lot of traction.

## Air Commodore Angus Porter:

Yeah, absolutely. And I could second that from the Australian perspective at the other end, our space command is only two years old and we're really seeing the engagement with both Space Force and Space Command as really impressive from our perspective. We've admired from afar how those organizations have been developed. And then we've been on the receiving end in, I think in April this year we had space engagement talks with Space Force. We've signed a space cooperation MOU with Space Command. We're really seeing that investment in the allies and in the partners. And I think you talk about over the last 100 years, I think often for the three of us when we travel, we feel like we need to take a socket adapter not just for our phone charger, but for a lot of our equipment as well. And we're really seeing that investment in making sure that moving forward we're aligned as we possibly can be, so that when we turn up we can plug and play and we're ready to go.

## Air Marshal Harvey Smyth:

I think it's probably fair to say that had we not seen a U.S. Space Force and a U.S. Space comm, a cocomm for space, I'm not confident certainly that I could have landed the argument in a cross government way to stand up a UK space command. That was one. The other side of that coin is the fact that the threat has changed or maybe not changed, maybe the threat's always been there, but the pace of it manifesting itself has changed. And those two things really have allowed us in the UK to accelerate our approach. And it's also fair to say that we would not have been able to accelerate that approach had it not have been for the dialogue with the U.S. so we've been very grateful for that. A clear partnership both bilateral and multilateral through other agencies like the combined Space Ops initiative, CSpO, et cetera, which have all helped just align our thinking and allow us to drive forward.

When I'm working hard in UK, and we look at budget, everybody's fighting for resource, the U.S. Space Force budget, broader U.S. space enterprise budget alone is bigger than the UK defense budget. And out of that budget we're also paying for a nuclear deterrent. You scrabble around having to really, really fight for the money. It helps when I can sit at the table and say, "Well, the threat is this. The U.S. Space Force agrees and the U.S. Space Force has said these things and they're inviting us into it to be part of that coalition." Because coalition is where you get your most deterrent effect, particularly against some of the potential adversaries like we heard about from Secretary Kendall earlier today. That for us in the last three years plus has been probably the biggest change. And your actions in the U.S. has enormously helped us to take proactive stance as well, which has been brilliant.

#### Lt. Gen. Michael Guetlein:

Yeah, those are good points, because I think where the dialogue has really changed is no longer, what can you give me? It's what can we each provide in a synergistic effect to get after the space threat? I cannot build enough kit myself. We already know that, especially if you look at the 2026 threat that's coming at us, I will not build my way out of that. I can collaborate my way out of it. The conversations



that we're having today really is, "Hey, what can the UK bring and then how can that fill a hole that I have here? And what can Canada do? What can Australia do? And we're looking at the rest of our allied partners along the same way. Those partnerships are going to be key to our ability to defeat our near competitors in the near term because we can't build our way out of this tech dev.

## Air Marshal Harvey Smyth:

And what's been really interesting for us is that it's not always about equipment. One of the very interesting discussions early on when I was director of space was around access to UK geography. So Falcon Islands is a very interesting place, particularly where it sits in the world, and access to that type of geography with other people's equipment as part of an alliance. Or maybe previously we didn't have that. There's lots that can be brought to the table. Discussions around policy, support on policy positions. We've seen such phenomenal progress in the UN with the resolution that's being pushed on as based norms of behavior. And again, that really started properly in the CSpO discussion and then generated a broader narrative that is having phenomenal success. I think actually probably one of the biggest successes we've had in the last two or three years is the progress that that's making. Because that's international, properly global and when and if it is landed as a UN resolution will have a meaningful lasting impact going forward.

Col. Charles Galbreath, USSF (Ret.):

Great.

## Lt. Gen. Eric J. Kenny:

If I can just pick up on that, because I think it's important to highlight, I suspect many people are aware, but maybe not everybody, the combined space operations CSpO that you're referring to Harv that went from basically U.S. and then eventually four eyes, five eyes, and now seven nations. So five eyes plus Germany and France, and looking at whether or not there's potential expansion of that. That's to get after the responsible space behaviors, policy, architecture, operations, so that we can better collaborate and ultimately see the world the same way, or at least have the same values in understanding how we can better, I guess, deter those that wish to put aggression towards us.

#### Col. Charles Galbreath, USSF (Ret.):

Great. Thank you very much. Building on that concept of Allied by Design, foreign military sales and cooperative development, or traditional ways that the U.S. has worked with allies and want us to improve the overall capacity of the alliance, for example, all four of our nations operate the F-35. What type of space capabilities do you see as potential FMS or cooperative development opportunities? Air Marshall Smyth, we start with you.

## Air Marshal Harvey Smyth:

Yeah, thanks Charles. I've got a very long history in the F-35 program, and actually what's interesting about F-35 is that we're not FMS. We were part of it right from the off as a tier one partner. Which meant we were in the door when it was still a glossy brochure on PowerPoint. We brought money, and then that allowed us to have a proper input to what the requirement set should be through system design and development. And I think that idea of a properly collaborative and cooperative program of capability development, we just don't see that in space. We've not got there yet with that. Normally it is more of a, "Well, we've got these things, would you like to buy some?" And then it's a, well, you get what you buy and it comes off the shelf and there's certain restrictions on that.



And then you get a discussion around operational sovereignty and freedom of action and access to data. And it starts to become really very challenging. And I think it would be really rather interesting, again, if we were bold enough to choose a capability set that we're all interested in and maybe look at what could an F-35 type model be? A collaborative model of capability development where we all bring money, we all bring requirements, we look for, there'll be some compromise, but we look for an 80, 90% solution that meets everyone and we take it forward together collaboratively. That would be really interesting just to tease that out to see what it looked like.

## Lt. Gen. Eric J. Kenny:

I guess as Harv is saying, our preference is not always to go FMS. Ideally we build our own industrial base capacity to contribute to the fight. Luckily, as you mentioned, we're all buying F-35s. We just made that announcement this year for the second time in our history. So very happy that we're moving forward finally on F-35. But yes, thank you for the pause. It was a big moment for me, especially with my background. Now, we're a partner in that. So we've been paying for two decades now into the F-35 program, and we're buying F-35 allows us to have a say in input as to what's going to be on F-35. We buy things through FMS all the time, absolutely. But the challenge with that is that it comes with certain conditions. We may not get IP rights, we're not able to share some of the information or potentially we can't have certain people operating those systems from other nations.

So there's constraints that come with FMS, but with it of course comes proven capability for the most part. In the space aspect, we rely on Aerospace Corporation to do a lot of our studies for us. Right now, one of the things that we're focused on is surveillance is space. We have a satellite called Sapphire that is past its life at this stage, still working, providing surveillance space, situational awareness and contributing to the U.S. SS. And our project replace that is going to be a mix of ground-based and space-based optics. The space-based optics won't be up until the end of this decade. The ground-based optics 2025, 3 sites located across Canada. But we went to them and asked them about the space-based optics about best way to get after that because they have the expertise, effectively through an FMS kind of study that we do. We also do most of our SATCOM through FMS, Mercury Global, WGS, we're looking at mules, some of the protected mill SATCOM, but we also have own capability to do SATCOM.

And so, one of our projects that we have is polar SATCOM narrow band, wide band SATCOM that we're looking to have up in the early part of 2030 is one of our big projects that we're putting forward. I think that helps. I think that provides a SATCOM capability from North 65 to North 90 and the Arctic, which we don't currently have, which will allow us to better share information with all those that fly up there, whether that be on the North American side or on the European side with NATO as well. So once again, FMS does give us certain things that we need. Proven technology, with sometimes some constraints, but I think we're able to contribute in other ways as well.

## Air Commodore Angus Porter:

And I would echo that I think Australia has built, I think one of the best small to medium Air Forces in the world off the back of FMS sales cooperative programs with some exceptions like the E-7 Wedgetail, which we've done largely on our own, but it's also demonstrated our ability to play in that space and to add value. So that's our history with the Air Force and our future in the space domain we see as a mix of those three, of FMS sales, cooperative programs and also some aspects that we will do on our own.

## Lt. Gen. Michael Guetlein:

So Charles, if I circle back where you started too, you said what FMS? Where does FMS probably going to grow the most? Like these two gentlemen said, in space we really didn't rely much on foreign military



sales. And we're just now starting to really learn how to do that. And we are really leveraging the lessons learned from air on how to do that. We're good at FMS and PNT position, navigation and timing or GPSA, a little bit in SATCOM. And then after that it dwindles off pretty fast. The biggest thing that has changed is the Sapphire A published the Space Technology and Readiness baseline. That now we have a public document that we can go to and say, "These are the technologies that we've agreed to openly share with our allied partners, and it's star baseline. So what that star baseline allows us to do is move out much faster.

If you look at, we are now selling counter comm systems to our allies in an FMS case, we are doing more SATCOM. We're starting to look at position navigation and timing, and we are really exploding space domain awareness because as Eric said, we are all operating in the same domain. We all need to know what's going on out in space, which is what we call space domain awareness or battle space awareness. And there's just not enough data to go out there. So we've got to share that data back and forth to get a common operating picture with our allies. And we can't buy enough data just as a U.S. alone. We're going to have to go at that with our partners. And how can I do that in an FMS type case? I think that's our next big area that you're going to see explode is space domain awareness and remote sensing.

Air Marshal Harvey Smyth:

Sorry, Charles, do you mind if I come back in?

Col. Charles Galbreath, USSF (Ret.):

No please, please.

Air Marshal Harvey Smyth:

It's just something that we were talking about backstage in the green room. There's a green room here. I'm not sure if you knew that.

Lt. Gen. Michael Guetlein:

That's when we said Harv takes all the questions.

Air Marshal Harvey Smyth:

Champagne and huge partying. We almost didn't come out.

Lt. Gen. Michael Guetlein:

They didn't let me in there. My lawyer's in the front row, be careful.

Air Marshal Harvey Smyth:

I've lost my train of thought now.

Lt. Gen. Michael Guetlein:

FMS.

Air Marshal Harvey Smyth:

In the UK our capability strategy is based on this idea of own, collaborate and access. What areas of capability do we know for sure we need to own, we to have sovereign ownership of it because it's



important for us to be able to use it at a time and place of our own choosing. Things like a ... Let's say nuclear firing chain that's supported by space-based capability, that type of thing. Then where should we collaborate? Where is it better? Maybe we've got some good technology that we're developing. It's really quite unique and niche, but we know we don't have the funds of the resource to scale it up. So, we'll take it to a certain level and then we'll offer to share and collaborate and try to bring all this into the program to scale up and get the mass we need.

And then just simply at the end, what can we just access from the commercial markets? Where can we just literally throw money at a capability problem set and buy it from a commercial market? Like we see some brilliant companies out there like Maxar, Hawkeye 360, Black Sky, there are others, and just buy it so that we don't have to front up with all the resource. So this idea of own, collaborate, access is really very key to us. And that collaborate bit in the middle, which is pertinent to your question, Charles, around FMS or collaborative programs is something we've been trying to champion through the CSpO where there's a capability in architecture's working group. I would say that has proven really very difficult. And in three, four years of working in and out of that working group, we've not made a ton of progress.

We've done a hell of a lot of talking, but we've not necessarily made much progress. And it's because we've not been able to get those requirements lined up. That kind of plays back to my comment right at the start about maybe using more of a collaborative approach to how we do requirement setting.

## Col. Charles Galbreath, USSF (Ret.):

Yeah. Great. You all have hit on so many wonderful topics. We've talked that we've just touched the tip of the iceberg on some of these, and I wish we had more time to discuss interoperability and security classification and establishing norms, but we're running out of time, so we have time for one more question. And so finally I'd like to ask, I know all of us can agree that no one wants a war in space. And that deterrence is the ultimate objective here. What additional steps can we take as a coalition of nations to collectively deter conflict in space and therefore conflict in general Air Commodore?

## Air Commodore Angus Porter:

Well, I remember, I think it was about 10 years ago, I was fortunate enough to spend two years studying down in Alabama, maybe with one or two people that were in the audience, but read a lot of books and a lot of Americans down there talking to me about deterrence and using things like capability, resolve and signaling as three buckets that you could put that in. Whether that's still as applicable now, I'm not sure you could argue it, but in terms of those three, Capability and the resolve and the signaling, I think we've talked about the capabilities here that we are trying to develop that as Australians, we look to the U.S. for a lot of those capabilities, but we have aspirations on our own where we're following leads of other countries and moving space command into its own place in our defense force.

In terms of resolve, I think, sir, you mentioned it this morning, secretary Kendall up here in front of a large audience, you can feel that resolve in the room, you can feel it. And as an attaché, as I move around the states and I talked to a number of different countries, I can feel that resolve as well. I was at the German embassy only a couple of weeks ago with the 12 countries talking about their vision for the Indo-Pacific, and they're all aligned. Those 12 countries there want to see the same thing. And then the signaling piece, I think we all see it every day on high-end warfighting exercises that perhaps other countries are looking at how well we operate together and how well we do business together. So that's signaling piece there is extremely important. As we move further into the space domain and develop our own capabilities, that's what we're looking to do to signal, to cooperate, to collaborate, and to have interoperable forces that can work seamlessly together.



#### Air Marshal Harvey Smyth:

So just a few months ago I was invited to go to Australia to the Williams Institute and deliver a lecture on integrated deterrence, but I'll not recount that here. You'll be glad to know. But this idea of the three Cs of deterrence, capability, credibility, and communicates, and I think this is what you're saying, Angus, as we've seen the doors open from the U.S. and we're having much more dialogue and we're delivering more together, building a coalition so that a potential adversary doesn't see the world through the lens of it's us versus another country, China versus America, but they see it as it's us versus everyone else.

That in itself is a very deterrent position to be in. But I think to really land this, the credibility piece is key. Your point around doing an exercise, really meaningfully exercising together and then properly communicating that to the world and being happy to share, "We're doing these things together. Look at the enormous success we're having. You don't really want to mess with this," so that it changes the risk calculus for our potential adversaries and just keeping them on the back foot of that. It's okay, we could go now because we've got parity and actually the more we can do to keep them on the back foot of, we're not quite there yet. There's more to be done. So we get back into that old school cat and mouse of deterrence theory. But I think that's absolutely where we find ourselves and we'll continue to be. And what is ostensibly a second space race, which we know all the nations are trying to accelerate ahead.

#### Lt. Gen. Michael Guetlein:

Build on your theory of deterrence and your credibility. It sends a very, very strong signal to our competitors that first of all, we're all aligned on the values of space, responsible behavior in space. Our competitors are not operating responsibility, nor safely in space, but we are. We've got to continue to keep sending that signal. But if I go back to the Allied by design, it really is an interoperability because they may be able to take on one of us at a time. They cannot take on all of us at once. And the more interoperable we are, the more we know how to exercise together, the more we can see two together, the more credible that deterrence piece comes. And that really is going to be the crux going forward into this next competition phase.

## Lt. Gen. Eric J. Kenny:

So without maybe going through some of the things that already been mentioned, some of the focus areas I think remain on making sure we see the threat the same. And I can tell you, all of us that are sitting here see the threat the same way. You need to know what you're deterring against. You need to be able to see what your adversaries are able to do. So that speaks to space situational awareness, space domain awareness. You can't deter it if you can't see it. So we need to have that as a kind of a primary aspect within our overall strategy. And I'm probably not telling you anything new. You would've heard it from the CSO. With that, we all have policy that allows us to do the defendant and protect mission, at least for our own systems, which is an important aspect. You need to be able to defend and protect your own systems, and then you need to be able to do something against the adversary systems if required.

That combined with messaging and overt calling out of irresponsible behavior allows you to create a deterrence, but it's in the eye of your adversary. So I think we're doing a commendable job of trying to showcase that and remain aligned, but we still have a tremendous amount of work to do. The pace of launches and capabilities that are in particular coming up from China is quite concerning. And we're collectively having difficulties keeping up, at least from our perspective with that. So what do we do as an alliance, as partners to make sure that we can continue to have that deterrence available to us so that we don't need to go to the next step, which would be potential conflict? Really appreciate the opportunity to be on the panel and to collaborate like we are right now. I can tell you we have meetings



quite often in all these different aspects and the amount of at least collaboration and unity and purpose is very impressive.

Col. Charles Galbreath, USSF (Ret.):

Gentlemen, thank you very much for a great discussion. Gentlemen, ladies, thank you for attending this session. Again, panelists really appreciate the insights that you were able to provide. And from all of us at MI Space, have a great space power day.