

Transcript: “Ensuring Effective Integrated Missile Defense Architecture with our Allies and Partners”

Mr. Riki Ellison:

Good morning, ladies and gentlemen, from a spring sober day as we reflect on the anniversary of the invasion by Russia in the Ukraine. And the 300,000 casualties that have happened since and the destruction of their lifestyles and infrastructure. And the prayers and support go out to that.

I'm Riki Ellison. I'm the founder and chairman of the Missile Defense Advocacy Alliance. We created this alliance after 9/11 in 2002. It's about 20 years old. And we have a single purpose, making our nation and the world a safer place through the development, evolution, and deployment of missile defense systems around the world.

Today we have a great opportunity to understand and be educated on enabling an effective, integrated missile defense architecture with our allies and partners. And this can apply to other regions of the world, certainly CENTCOM, certainly INDOPACOM, but specifically in Europe with what we're dealing with today.

I was just over in Europe earlier this month. We held our European Missile Defender of the Year on the 10th in Breda, Netherlands. We also had high level discussions on this exact topic that we're going to talk about today. We had several meetings with NATO and our armed forces in Germany.

What the basis of our discussion today is going to be with the intent to look at our policy, at NATO. And maybe reshaping that policy for the IMD threat that Russia has put on Ukraine and look at shifting a policy to enable a defense design that could be rapid, could be agile to defend NATO countries against the Russian threat that we are seeing in Ukraine.

Secondly, we would like to talk about the architecture and enabling specifically the sensors from all our NATO countries and not just one specific area of counter drones, cruise missile defense or BMD or Hyper, and not have those siloed. Have them together and being able to have that architecture be able to pass effective tracks to the effectors.

And lastly, to talk about open architecture and how important that is to be able to include all 30 or the coalition of the willing to be able to enhance the air picture and capabilities to effectively defend and to deter an IMD threat on Europe from Russia.

We think there's a great opportunity ahead of us. We know that the 30 NATO leaders will be in Lithuania, at the capital city there in the summer. And that is about the closest any NATO summit has been to an actual missile threat that's being active during that time period. So, we believe there's an opportunity here for both policies, both architectures to be debated, discussed, and showcased around those 30 leaders in the summer against the threat that is outstanding there.

So that's where our discussion is going to go. And today we have just some great speakers, but I think probably one of the best in the world as the former commander of United States Air Force Europe, of AIRCOM Europe, of Africa. The safety commander that was there a year ago in place during the first day of conflict and through July of last year. A man that was also the CENTCOM commander, that should be AFCENT commander. So, he takes that experience with the integration of those allies with air and missile defense, but he was responsible for the air and missile defense of 30 countries in Europe in one of his major assignments.

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So, a good friend from Arizona, beloved home state. Ladies and gentlemen, former Retired General Jeffrey Harrigian. He goes by Cobra. And welcome, Cobra. It's just an honor to have you here today.

General (Ret) Jeffrey Harrigian:

Thanks, Riki. It's great to be here with you and Mark. And as you highlighted, it's a great opportunity particularly today to reflect on what happened a year ago, how we got here, what great work the Ukrainians had done to defend themselves, and to see the NATO nations come together. And frankly, globally, the nations across the world to recognize what the Russians have done and how they have responded.

I think importantly, as you highlighted, it also gives us an opportunity to reflect on where we were and frankly where we need to go as you highlighted from both a policy perspective. But particularly from where I sat, some of those key capabilities that we needed to ensure could connect to... In my words, begin to ensure that number one, we have domain awareness from the UAS threats up through hypersonic type capabilities. But at the same time, recognize that that's a heavy lift there, there's a lot of moving parts there. But at the same time, I think we would all argue, given the threat that's out there, we need to work our way aggressively through what it's going to take to achieve the vision that we would all envision for the nations, particularly inside NATO.

I guess if I can step back just for a second and reflect a little bit. We collectively, the US learned a lot of really good lessons about the importance of information sharing, particularly with partners that we're going to be potentially involved in this activity as the Russians were pulling together their plan. And I think that is actually the fundamental of what you're going to lean into is how we get to an architecture that protects those particular areas when we talk about data that the nations are concerned about. But more broadly open the architecture up to ensure the right data is getting shared, to have that domain awareness, and then ultimately to be in the right place and the right time to affect any inbound threats.

Many of those lessons started as we began communicating not only with the Ukrainians, but I think importantly with the NATO nations to help them understand, "Hey, here's what's going on." And I would offer to everyone that we cannot forget those lessons and how important that was. And I can tell you from the airman's perspective, it facilitated my ability to share with the NATO air chiefs what was going on so that as we built our plan, we could integrate by the design of the plan. And you've probably heard General Brown talk about this now, but this idea of integrating by design was fundamental to being able to posture ourselves appropriately when the Russians finally invaded.

And I would offer that same type of mentality is what we need to keep driving on as we go from not just the air defense from the air domain perspective, but moving away from the basics of missile defense to integrated air and missile defense. And that's an important step that NATO has to continue to move forward on and take these lessons and then apply them, operationalize them in a way that brings the nations even closer together to provide the capabilities that are clearly going to be necessary as we move forward.

I would highlight that what we were able to do though is pull together nations that allowed us, from the Baltics all the way around into Romania, to be in position the night the Russians

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invaded. We had airplanes in the air from multiple nations, we were flying from multiple locations across Europe, and we were coordinating closely with the Ukrainians to ensure that collectively with what we could share, we were sharing with them to enhance their situational awareness and allow them to maneuver as appropriate.

It's important to remember, and I think this will be a topic we can talk about later, is that fundamentally, we were working to deter the Russians from invading NATO at that particular time. As you'll recall, that's the policy we were operating under. And I would offer to the collective group that's listening that the way we were postured made it clear to the Russians they didn't want to... I'll just use the term mess with NATO at that particular time because the way we were set up.

But because we were in, I'll use the term kind of the contested environment, the rules of engagement, the way we were operating with air traffic control across the different nations, how we gained domain awareness, was something that we'd been working for the last six months to a year to ensure we have that not only command and control, but I'll say more importantly the battle management part of the solution solved.

And so that led then to, hey, we realize there are some other gaps that we got to work through, particularly when it comes to missile defense, that we've got to now think about how we fully integrate not just the air piece, but the whole picture. And I think that'll be an important part that we'll talk about today as we work through some of the key areas that you highlighted. So let me just start with that and we can kind of go from there.

Mr. Riki Ellison:

Thanks, Cobra. I want to just push a little bit on you've got the integration for the air domain with your offensive capabilities and your deterrent capabilities. But now shifting that to, because you're in charge of it, overdoing them and explaining that aspect of it. And then inheriting a legacy system that we're still trying to fix or add on in a system that is not compatible to the fast movement of software middleware that can really connect you very quickly to other sensors that are not on your network. And that seems to be a huge limitation to our ability to integrate the air picture and the missile defense picture in particular.

Can you just give us a little status on that and where you think we should be going in terms of being able to make this open, make this easier, make this more effective, and more efficient than what we have today in the missile defense domain?

General (Ret) Jeffrey Harrigian:

Yeah. So, as you can imagine I have a few opinions on this. But it really starts with the infrastructure that you're operating. And arguably, that architecture is a legacy at best and needs to be continually upgraded to operate at the speeds that you're talking about. My thought in the approach I had was you kind of had to start with, okay, let's understand the problem we're trying to solve here and then incrementally work towards the solutions that you're talking about where we make sure the sensors are connected.

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And to a certain extent, they are, as you look at, and for those of you that aren't familiar, there's CAOC (Combined Air Operations Centre) Uedem up in Germany that has worked really hard as we've gone through what's been occurring to pull together a picture. But part of it is to understand the resources they have there from a people's capability from, as you highlight, the actual tools that they're operating with.

And so, as you look at number one, okay, how do you ensure that the architecture... And I'm talking about the pipes, those things that we tend to take for granted to make sure those have the throughput that are required. And then you've got to make sure that users have the appropriate tools. We spend a lot of time, particularly in the US Air Force, talking about machine-to-machine and AI. I think we need to start with the fundamentals, get those right. And then as you bring in the right commercial entities that are able to work through the NATO process because as you do this, one of the key challenges is going to be the policy piece of what the nations are willing to share, which I would argue, and one of my ways of thinking about this is you continually have to have a forcing function to drive some of this change.

And I would say, "Hey, if we don't have that now, I don't know what it's going to take to start moving more aggressively on this." And so, working through that from the nation's perspective to share the appropriate data, and then put the necessary information technology, the IT piece of it together, that then puts the tools in place for the users to be able to make the decisions that would be required both from a missile defense perspective and launching fighters.

And I would tell you, the launching fighters' piece, we know how to do that. It works. But to your point, it's that next step that we've got to dig into. And I think approaching it has a first step so you don't try to chew the whole elephant here. You look at something like the activity with the NATO summit or a regionally focused area to ensure that you can connect to the max extent possible, all those capabilities that begin with the sensors and then leads to the effectors. So that was kind of the approach I was taking. It's challenging and you get a little bit into the bureaucracy of NATO. But my belief is, the time to do that is now and we can't keep admiring this problem.

Mr. Riki Ellison:

Cobra, who would be the leader on this? Is it the United States that's supposed to lead this? USAFE? Is it the USARC commander? Is it NATO? Is it a specific country that's got to get the momentum? So that's number one.

Number two, if we're going to say defend the NATO summit, you know how to do that, right? We've got to point defense, it's usually the US and the host country. But that's not good enough yet to take on the bigger threat and how you include the other nations to be part of that with open architecture. What are the policies that are limiting you not to do that? Or do you need policies to integrate an open architecture with that type of formula that come in there? I threw a lot at you, but I just want to pick it apart to see what we can do, how we can do it, and who should be in charge of it.

General (Ret) Jeffrey Harrigian:

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Yeah. So let me step back to the policy piece. First, I can't remember that exact year. I think it was '19 or '20 where NATO came out and actually declared Russia was a threat. That came out in the strategy, made its way down into our operational plans. But the next step is to get, and I think you highlighted this in your opening comments, is to get to an operational design that now reshapes our defense design to focus on that, versus the threats we had talked about previously.

And I can't tell you where it's at right now inside the NACC. But to me, that discussion needs to be ongoing such that as we dig into the details of what you're highlighting, those broader architecture from Aegis Ashore and all the different capabilities that are out there. And I can tell you work has been done on this, but now you've got to operationalize it into actually building that out into an order and those types of things that would describe what the different organizations are doing to support that plan.

In terms of who leads this, here was my take, Riki. When this thing kicked off, the US has a natural inclination to lead. But my position was, and maybe it was a little easier for me because I was dual-hatted as a USAFE commander and the NATO AIRCOM commander was to say, "Hey, AIRCOM is leading this. US, you got to roll in underneath this and this is a NATO-led operation in terms of how we were going to construct it, posture ourselves." And then when it got into the operational details of special instructions, the air tasking order, all that needed to be linked. It takes some work, but it's completely doable.

So, as you get into this question that you're bringing, I would tell you that NATO's got to lean into this. And frankly there are some nations when it comes to mind when I talk about some of the work that the Dutch have done, some of the northern tier nations have spent a lot of time thinking about this. But it really gets to your point on, this is a lot about software and making sure that there's a policy piece that the nations will have to work to say they're willing to share their data, which to me, I'd want to look them straight in the eye and go, "Really? What more is it going to take?"

And then some of it will be on the US as we look at, okay, what are we willing to share to be able to facilitate this, I'll call it domain awareness, that is critically important to being able to execute this mission, which then leads into the open architecture piece. Arguably, if you get the open architecture piece right, it makes the sharing of the data a little bit easier, but you're going to have to get into the engineer piece. And that goes back to ensuring the architecture, the infrastructure from an IT perspective can support what we're trying to do here.

My thought was we shouldn't be looking, NATO should not be looking for industry to come in and say, "I can solve this all at once." I think you got to get at specific, you got to understand the problem and get at that particular pieces of the problem and go, "Okay, let's solve this first, then let's solve this, and incrementally move forward." And I apologize for the long answer, but-

Mr. Riki Ellison:

No, it's good.

General (Ret) Jeffrey Harrigan:

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... this is not an easy problem to solve.

Mr. Riki Ellison:

And Cobra, just last question here. What's the driver? Is the Ukraine fight, are the missiles that are being displayed by Russia in combat the driver? Are the balloons that flew over our country that we couldn't see, is that driving Europe to come to a consensus to be able to deal with this and be able to have the open architecture to use every asset possible to understand what's coming at them? Why haven't we done this? It's been a year. It's been a year of missile combat with deaths and everything, and we still haven't shifted.

General (Ret) Jeffrey Harrigian:

Yeah, that's a great question. I mean, I can't give you the exact answer. I think the politics of it at the higher levels drive some of the nations to want to quite frankly protect some of their sovereignty. But at the same time, I look at the problem set and go, "Hey, I'm not sure other than a missile hitting a capital is going to be enough right now to convince people."

And let's face it, it's going to cost some money. It's going to cost some money, but if you lay out, and this is why I think my... Not my, but the approach that I'm offering here is doable is that if you lay it out, recognizing you have to have some sense of urgency. But if you understand the problem and talk about the battle management piece of it and the infrastructure. And I think you got to look at it regionally first and then expand it, that to me is a solution that I think people can align themselves with and move forward.

So, there's no silver bullet in my mind that's going to convince them all they need to do this. But you said it, how many lives have been lost? And I'm sure somebody's done the breakdown of where and how those lives have been lost. That's probably worthy of a little bit more analysis to say, "Okay, this is how this is happening in the threat that you're dealing with."

Mr. Riki Ellison:

Thank you, Cobra. And I think the summit NATO, this has to be addressed. This has got to be addressed by them during that aspect. All right, ladies and gentlemen. Our next speaker, Mark. He's on our board. But Mark in his previous command I believe was the deputy J3 for EUCOM and was in EUCOM when the movement of our missile defense design was created against Iran. We have a 3 or \$4 billion missile defense architecture that is designed and put in play against Iran since, I think, 2008. Ladies and gentlemen, brilliant mind, Mark Montgomery.

Rear Admiral (Ret) Mark Montgomery:

Hey. Thanks, Riki, and great to be here with Cobra. I was the DJ5, just to be fair to Punch Moulton and his team who are on the three. And if EPAA only costs 3 or \$4 billion, I'd be thrilled.

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Hey, look. When you think about this, this kind of reminds me to put it in terminology you'll like Riki.

When we look at what Russia's up to right now, you think about Dennis Green when he was coach of the Arizona Cardinals talking about getting his ass kicked by the Chicago Bears. He goes, "Hey, they are who we thought they were." And when Russia got in trouble in their ground offensive when Russia's ability to conduct large scale removal warfare faltered, when their cyber attacks weren't properly synchronized to have the effect they needed, they turned to the old trustee cruise and ballistic missile defense. And they've stayed on that tune for nine months now.

And it says a lot about, A, their inventory, which I think is starting to get low now. And B, their belief in this type of warfare that they have been heavily invested in cruise and ballistic missile defense, if they had hypersonic, they'd really be shooting it. And drones, when you think about the Shahed 139s are coming in and what they're probably be getting from China. So, they've really used this heavy reliance.

A lot of us look at this and say there's an important lesson to be learned in NATO. Now, there is a silver lining to this. A silver lining is I think the UK reported the other day that 92% of the Russian army has been committed to the offensive in Ukraine. And at some point, that has an impact on their ability to conduct future operations against NATO. So, we have a little bit of time. By the way, time is something NATO burns pretty quickly.

So, we do have a little bit of time, but we've absolutely got to understand what the primary lesson learned here is, which is their heavy reliance on cruise, ballistic, hypersonic missiles and drones is something we have to prepare for. We, being NATO and the United States, and I think there's two different aspects to this. There's a NATO aspect and there's a coalition of the willing US European Command-led aspect. And in both places, we have to have the right policy in place, the right architecture in place, and the right systems in place. And sometimes they're the same, a lot of time they're the same. But with NATO it's not always the same. At the end game, they can make things harder.

So, on the policy side, this is about a focus on Russia. The fact that we even have to say this out loud is insane. That Russia is the problem in Europe, not Iran. Let me just tell you, the guy who was maneuvering us the hardest back in, I guess, 9, 10, 11, 12 about EPAA being led in Iran was their Deputy Foreign Minister Lavrov, the guy who's currently a war criminal is foreign minister in Russia. The idea that guidance he was giving us in 2010, 2012 still has an impact on NATO, says a lot about NATO, and not in a good way.

Like US European Command, NATO has to align itself to Russia as the threat. So, policy-wise, we've got to get that right. And another important thing is coming out in these attacks, and that's the counterforce, countervalue issue. Let's be clear, the Russians are hitting a lot of buildings, electrical power plants, things like that, that are not discreet military targets. Some of it's an accident. As opposed to our cruise missiles, ballistic missiles, which I think are range in the 90% hit what we aimed at ratio, they're in the 50 to 60%.

So, I get some of it is an accident, but a lot of it is intended. And so, they are going to pick on counterforce and countervalue targets. And let me tell you, we don't have enough to do either one of them well, but we've got to do something which is hard. And it won't be hard for European command, it'll be extremely hard for NATO and that's prioritize. So, first thing is get your policy right and concentrate on Russia.

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Second, start to figure out what counterforce and countervalue look like. And the one good thing where we're really kick-ass good at the US Air Force, that's defeating missiles before they take off. We do have the ability to do that, and I'm confident EUCOM's work in that. And EUCOM can just work that alone and they can... The only people who are doing high level mensuration of targets is the US and maybe a tiny bit the UK. So, in the end, EUCOM and the US forces really drive that within NATO. But those are the policies you got to get right.

The next thing is the architecture. And it's got to start at a belief of integrated and interoperable. Now I'll give you at a very, very, very localized point defense level, a Gepard's gun or a C-RAM unit, you do not have to be integrated, interoperable. There you're about at an absolute, the likelihood of fractalization low, the likelihood of shooting two things with the same targets low because of the ranges involved. I'm okay with those not being integrated, interoperable. Everything else from NASAMS to Aegis just assure has to be integrated and interoperable. Sounds easy, right?

And if it was the US Navy alone or the US Navy, the US Air Force, I'd say we're good to go. Throw in the US Army, we might still survive it. But once we throw our European allies in, this becomes a cluster. Not the European allies who have bought and operate US gear or Norwegian gear, then we're okay still. But once you start to bring in these other systems, you get into challenges. We've got to drive it. We've got to think about JADC2s circling in the US developing here in the background.

NATO and European command have to be thinking like JADC2s coming. And those same principles of all sensors talking to each other, all sensors talking to shooters, fire and quality track data. So, this is the plus up. Right now, it's a Link 16 based system that just says, "Hey, there's somebody over there at about this range in this altitude. You probably want to take care of that." Right? You can even send a force order saying, "Please take care of that."

What we need to be doing is passing fire and quality track data. It is rocket science I guess, but it's not hard. The Navy, which is not the core of technicality in the US military, right? I'd give that to the Air Force and Space Force. The Navy's figured out for 30 freaking years we've had cooperative engagement capability, doing launch on remote, launch on track, fire and quality track data. The Air Force and Navy have been in this with some of our advanced fighters.

We're in a good position on this. The E-2D has it. The E-7 Wedgetail will have it. We are ready as a US force to do this and we got to make sure our European allies are in on it. Because if you want to be effective, which means we're prioritized. Efficient, which means we don't waste ammunition, two people shooting at the same thing which we don't have enough of. And avoid fractalization. So effective, efficient, and avoid fractalization. You have to be integrated and interoperable. It is rocket science but it's doable.

Now it's not doable when countries bring their national reputations and their national feelings into the issue. And I'll be gracefully said this, we may only provide 28% of the money in NATO. We provide 51% plus of every operational impacting capability. And therefore, the US should be... I really think NATO needs to turn to European Command and turn to the US forces and take it. What I just said is a very hard thing to digest but I think true. And that is not how missile defense has been handled inside the alliance, it's been. And part of it is how the US, what I'm about to say next, which is in systems.

Look, we got to have IRBM systems. There's THAAD and there's EPAA, and there's some Aegis ships. Be careful on Aegis ships. When Aegis ships are defending an area from the sea, it

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is by design, limited by how that weapon, where it's coming from, where it's going to impact, how close the ship can get to that position. That is not an efficient intercept. The efficient intercept is that an EPAA. For SRBMs, we have Patriot and SAMP/T, the French Italian system. For cruise missile, we have NASAM, SAMP/T. We even have a bunch of Hawk... C-RAM, and Gepards, and someone could go buy Iron Dome. Again, I wouldn't be pissed at that level if you buy systems that aren't integrated for the drones.

I do want to mention one thing on this. You got to watch munitions. We're getting screwed right now in Ukraine. The Germans have given 32 Gepards guns. I think they're promising 37 total to the Ukrainians. These things are kicking ass against the drones, against the Shahed. They're shooting them down, they're doing fantastic, but they're running out of ammo. And the ammo is produced in Switzerland. And Switzerland, for not the first time in its history, is not operating properly in a wartime environment.

And they are saying, "We're uncomfortable selling you munitions, Germany, if you're going to give them to Ukraine. And we won't sell them to Ukraine because we don't want to offend Russia," which is pretty highfalutin from a country that is buying F-35s or must bought Super Hornets. It is happy to take care of advantage of all our technology and then not be a team player. What the important lesson though is make sure your munitions, for anything we mention and built, are being built in NATO countries that are going to contribute them.

So, if we can get those systems across the IRBM, SRBM cruise missile defense and drone capabilities that are then integrated and aligned and interoperable, and then fit into a competent policy, that's a solution. And you ask what should be going on in July in Vilnius, in Lithuania, at the NATO summit, is an agreement on the policy that drives down. It's got to come down from the policy down, and then allow the NATO air component commander and the US EUCOM air component commander to drive architecture and then drive system acquisitions. And make sure that when you buy a weapon system it meets that architecture that supports the policy. That's all I had, Riki.

Mr. Riki Ellison:

Thanks, Mark. I would just add on. And I heard in that high level talks that because Russia didn't get air superiority over Ukraine, it drove their missile attacks, it drove the motivation for the missile attack. And if you assume that Russia will never get air superiority over NATO, their effective way to come at NATO, it's going to be missile movements on it.

Mark, I wanted to go back to the defense deck because I hear a lot that we could enable a better defense design that we have today against Russia if we're able to access what we have in place for EPAA. And then you talked about the shift. But if you do launch on remote and you've got Aegis Ashore sites, you can leverage that information, you can leverage the TPY-2s, you can leverage those ships to have a much better footprint than you do.

So, do you take on the EPAA? Or do you create a new policy or do you enable a policy that's allowed for self-defense to be agile and go anywhere in Europe to do that? How do we play this or do we just let this thing lie? The EPAA lie?

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Rear Admiral (Ret) Mark Montgomery:

No. You don't let EPAA just be focused on Iran. What you say is that you make a policy that your primary threat to air security in NATO sovereign territory is Russia. And then directly you have an integrated, interoperable air defense policy that uses all available assets. And that would include EPAA.

Mr. Riki Ellison:

We're not able to do that now. Right now, we can't do that. We are not allowed to use those.

Rear Admiral (Ret) Mark Montgomery:

Well, we're self-constrained. And what I'm saying is un-self-constrain yourself. We have smart people in Ramstein that can figure out exactly how to do this properly. I'm not worried. Once the policy changes, the architecture will follow quickly. Believe me, on these US systems, these are not the problems. And I don't want to sound arrogant about it, but we do know how to share sensor data, share firing data, use things effectively. That's not going to be the problem.

The problem's going to be setting up policy and standard that brings everything else in. Like I worry about I'm not a hundred percent confident in Arrow 3 as the right introduction of a German IRBM, SRBM weapon system because I'm not sure about its interoperability at a real, not a, "Hey, look left, look right level", but at a, "Here is the quality data I see firing quality track data. I'm passing it to you so that you have a more efficient, effective shot."

I don't think we've achieved that with Arrow. And I think that there are legitimate policy and security problems on both sides of that arms sale that they're going to make that very hard if they can resolve those quickly. And then to NATO and really US, I want to be careful when I say this, but the US kind of data transfer people inside NATO to their content that I'm okay with it. I just don't think you're going to get there fast enough.

Mr. Riki Ellison:

And as Cobra mentioned, we have legacy systems that are monolithic and they are not open to more patchworking. We have a system that has been in the making since the 1990s for a command and control that is not working and we're probably going to pull out of that. And now we see the German Sky shield that's got at least 14 countries coming in. That also looks to be a closed architecture.

So, can we use this opportunity in Lithuania? Or what is that opportunity besides those three options to be able to move into an open architecture that everybody's happy and can contribute to the overall missile defense picture? And I can go to Mark and Cobra on that too, but go ahead, Mark.

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Rear Admiral (Ret) Mark Montgomery:

I'll just quickly say the first thing at that level of senior leadership, it's the policy decision. But the policy decision can include direction to the air component commander just determine what's the most effective interoperable solution. This is going to be hard because you're right, there's competing national interest involved in this. Although the US, I don't think JADC2 is some big US arms sale initiative. I honestly believe it's about having a network that can take everybody in.

And that you're right, we have to go to that. And if you're telling me NATO's been inefficient in the past, I mean, I don't know where's the hallelujah gone but I'm with you. But look, Russia's changed our philosophy, it's got to change our thinking. We've got to take some agility to this. And I'll pass it over to Cobra and see what he thinks.

General (Ret) Jeffrey Harrigan:

No, that's it. It's good. First your point on JADC2, you're exactly right. I mean, it's all about being able to connect with partners and leverage their data, and then work through the, "Hey, what is it going to take to get everybody at least some level of shared understanding to then employ the appropriate effectors?" I mean, it's not rocket science. It is going to be hard, but the big idea is not that cosmic.

And kind of going back to Riki's point on, okay, what's the forcing function to get everybody to move on this? You just got to look back last year and go, "All right, this is not going away." And then if you look to what China's doing, I mean, this is a problem that collectively we've got to address.

One of the things, Mark, and I'd be interested in your thoughts about this is we have been really risk-averse in how we approach some of this from an IT perspective. And I think there are engineers out there that understand this and know the zeros and ones, and can find ways that you can talk about guards. I use the analogy of, "Hey, if we're all doing our banking on our phone, I'm pretty sure we can figure out how to do this where you can take the appropriate data, filter out the bad stuff, and protect the broader architecture from getting penetrated."

And that to me is something that inside NATO and this will be what the team that USAFE, AIRCOM, and at the NATO headquarters they got to navigate is. If they're going to do this in Lithuania, you got to get the right company together. And you remember NCIA, those were the guys inside NATO that owned some of this architecture that got to be willing to be more agile, just like you talked about. And be willing to buy a smart level of risk, be deliberate about it, that brings in a company that works through, "Okay. How do we connect, to your point, the right things?"

You're right. Point defense stuff, some of that you get, "Okay. Let's not burn a bunch of brain cells on this." But on the other piece of it, in terms of ensuring that, "Hey, we've got the longer range and medium range domain awareness sorted out, such that we've figured out on in the NCR how to use some of the data that you get to make or at least recommend smart tactical to operational decisions."

That to me is doable and ought to be something that the NATO leadership pounds their fist on the table. In NATO you got to kind of get the nations all together and help everybody align

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themselves on what the threat is, and then offer a solution like you're talking about that they can see themselves and potentially have a company that can be part of the solution and then move forward together. You're going to continue to admire this and recognize there's challenges.

Rear Admiral (Ret) Mark Montgomery:

I agree with that completely. And in fairness to NATO where it's 14 countries, that's hard. The defense of Guam involves three countries, the Army, the Navy and the Air Force. And we struggle there. I mean, the truth is the defense designed for the defense of Guam has been table slapped with I think a third time now in the last 18 months. And the Congress has consistently thought no matter what they say they're wrong. And rightly, to some degree. So, we struggle there even when it's just us. And it's just systems that do talk to each other. I mean, is the question is how do you want to talk into a mirror? So, I like that.

Hey, Riki, do you want me to jump into the Q and A?

Mr. Riki Ellison:

Yeah, go ahead.

Rear Admiral (Ret) Mark Montgomery:

There's a great question in here I think that's best for Cobra. What is your view about the integration of defensive fires with offensive strike capability as an integrated approach to missile defense? Now maybe better stated, the coupling of IMD with offensive strike land and air as an integrated operational construct.

General (Ret) Jeffrey Harrigian:

Well, there's a lot to that question naturally. And if you take that from the NATO lens, remember NATO is a defensive organization. And one of the tougher questions we always had was, well, at least let's posture ourselves. A perfect example is if you're going to talk about offensive operations from a missile defense perspective, like you said, Mark, hey, on the US side we're going to build out targets. We're going to know where, when, what we want to use.

From the NATO perspective, that was a very difficult conversation because of the way the organization was architected. So, it kind of goes back to that policy discussion is that is this now the time to recognize the world has changed, the weapons have changed to better posture ourselves to be able to take threats and mitigate them earlier? And I'll use the word earlier in the kill chain, i.e., find and fix them early as opposed to waiting to try to catch them. That's the discussion.

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And this is one that we brought up on multiple occasions. And I can tell you, I tried to go after starting to build some target sets to get after exactly that. Maneuvering that space was difficult. But this begs the question, how do you do that? And I don't think NATO's ever going to come out and say they're offensive, that's not going to work. So, you've got to be more creative in how you generate ideas to enhance that capability. Recognizing that on the US side of the house and potentially in some nations, they're already working through that, "Hey, here's some offensive capabilities. We need to be thinking about to target to help make this defensive side of the equation a little bit easier."

Mr. Riki Ellison:

Well, just following up on that. What about the defense of the maneuvering force, which includes your air bases, which includes long distance fires, high marks? We don't have that. And I think RUSI just came up with a report on that this week, but that seems to be the easier way to protect and defend your projection of power sites right now. And what is that? I mean, where is it? What is it? And is that the way to start to move into that offense-defense of COM? Or is that you want to go deeper than that?

General (Ret) Jeffrey Harrigian:

Yeah. Well, so it's the idea, what you're teasing at is agile combat employment. And we can debate this separately. I didn't read the whole RUSI report, but it's getting after the, "Okay. Over the years we've consolidated, we had to. We now got these big bases." And if you look back a couple years, General Brown and I got together and said, "Hey, we got to lean into agile combat employment because right now there's no other, I'll say, easy answer that gives us the agility we need to make the targeting hard for the Russians."

And I think Mark talked about it a little bit. Without getting into all the details of what it takes for the Russians to target, clearly there's a lot of lessons there. I think one of the things pointed out in that report was, "Hey, we got to get better at taking care of moving targets." I'm like, "Yeah, it's not easy." There's ways to do it. But again, taking that to your point as an opportunity to leverage that against the Russians, I think is exactly what we need to do.

And I would offer that you could talk to General Wilsbach and Admiral Acquilino, there's advantages to it also on the Pacific side of the house. Hey, but you know what gets lost in this whole conversation, Riki, and I'm just going to take this opportunity to talk about this. Probably the most important thing that I saw out of us training and operationally constructing ourselves to do agile combat employment is what it did for the people. It empowered them.

We've gone through 25 years of fighting a different type of threat that arguably has been over centralized. And I can give you plenty of examples on that. But the culture of agile combat employment is you're pushing it down to the low level to allow them to operate. And it's not just about surviving. I remind people agile combat employment is about maneuvering to position that will also ensure you have combat power to be able to generate that offensive piece that you just highlighted. So, I'll get off my little bandwagon right there, but that's an important part of what's happening. And you know as a middle linebacker, those are the kind of things you want people

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to have baked into their DNA and you can't do that if you're over centralizing. Okay, I'll leave it at that.

Mr. Riki Ellison:

Mark?

Rear Admiral (Ret) Mark Montgomery:

Yeah, I agree that I like the poll to the Pacific for a second only to say that I think we're going to, at a much more tactical level, see the integration of offensive/defensive fires just in terms of the launcher systems. That as you put these launch systems in the Marianas area for air defense, not all of them, some of them can have precision strike munitions in them. There's a mix in there. I don't want to take away from the fact that the vast, vast, vast majority of strike that's going to happen in the Pacific is going to be delivered by B-1s, B-2s, B-52s, right? Whether it's anti-ship or air-to-ground. So, I do think we'll learn a few things from there as we work through that. And again, that's getting the three countries of Army, Navy, and Air Force together. And throwing a fourth there for the ground, Marine Corp.

Let me turn to another series. We had some great questions. I have to say an inordinate number of the questions were things we already discussed, which I think is good. That means the people feeling the same way we were. But there's a good one in here I think again for Cobra, and I'll take a whack after him. Please discuss such threats to allied cohesion as Turkey's decision as a NATO country to purchase Russia's S-400 anti-missile system.

General (Ret) Jeffrey Harrigian:

Yeah, that's a great question, and one I think we have struggled with politically to think our way through this. First, my personal position is Turkey remains an incredibly important strategic ally that we have got to keep on the team and part of the architecture that we're building going forward here. And fundamentally, you can take a hard look at our policies and I know at the highest levels right now we're trying to sort out where we go with them. But nations are going to take decisions and it is what it is.

I think the S-400 one, if you get into the tactical level understanding of what the impacts are, are potentially one that we can work our way through. And I'll say that recognizing we're going to have F-35s operating in that area potentially at some point. But one that we've got to figure out how we get to yes. And if you were to ask me my position, I think we need to figure out how we upgrade their F-16s and keep them as part of an important strategic location that is critically important to NATO and the alliance. And frankly, you can argue globally that we've got to work through to ensure that any potential situation arises, we know they're going to be a part of the solution.

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Mr. Riki Ellison:

Just real quick, Cobra, on that. The S-300s, the stuff that Eastern Europeans have, is it worth it to link that into our open architecture or not? Because those systems don't have any manufacturer support from Russia, they're not going to be there. Do we make a distinct difference of bringing those guys in that open architecture or leaving the heck out of it with those eastern bloc countries that depend on some of that stuff?

General (Ret) Jeffrey Harrigian:

Yeah, my position will always be that we don't try to bring them into it. I think that just opens a Pandora-

Mr. Riki Ellison:

The S-400 too in Turkey. You're not going to bring Turkey in it. You're going to say that.

General (Ret) Jeffrey Harrigian:

Yeah. Well, you got these standalone capabilities and you take that for what it is. But if you say, "Huh, let's figure out how we get there." Then you're going to provide options to nations that we don't want to provide them.

Rear Admiral (Ret) Mark Montgomery:

Yeah. No, I agree solidly with that. I'd leave the S-300s, S-400s out of this open architecture completely. I will say this, Turkey's been... Particularly President Erdogan's been a poor actor. He should be held accountable and we did with the F-35 decisions. But he has come around on F-16s. As I remember, the reason he wanted F-35s and not F-16s is in his mind F-16s tried to kill him during an aborted coup. And he came under this weird delusion that patriot missiles won't shoot down F-16s.

I think there are F-16 and F-18 pilots who are willing to stipulate to the reverse. But he's come around on that F-16, I think we ought to meet him halfway there and get him that and do our best to bring them militarily back in. They are, in many ways, when you think of Russia as the primary mal-actor or bad actor against NATO, Turkey plays an incredibly important role in our overall defense as a southern anchor. And we've got to do, particularly on the military end of it, I get that there's economic and political issues and social cultural issues that are going to be hard. But on the military end of it, we should be working hard to do our best to pull them in. Yeah.

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Mr. Riki Ellison:

I just want to ask Cobra one more thing here. The F-35s. We're going to have a slew of F-35s with NATO nations. There are sensor platforms, they're unbelievable. Are we going to tap that in to situational awareness, missile defense, and pipe that back down to share that information to everybody? And that's while they're in the air. Or can they do both or that's going to take away from their other missions? Because that is a hell of a resource that's not being used, I don't think, like Israel is using them. How we should use those?

General (Ret) Jeffrey Harrigian:

Yeah. Well, you'll be happy to know. We have been doing an extensive amount of work to figure out exactly that and we have actually demonstrated it in real world activities. And back at when I was a USAFE guy, we had a users group that pulled all the F-35 nations together to talk about exactly this to ensure it wasn't a one-off US capability. But back to your open architecture piece, this was US, as Mark calls it, from the country of the United States Air Force to the country of the United States Army. And we did it.

I mean, it's a thing and we've been able to work with several of the F-35 nations now to talk about, "Okay. We've broken the seal, let's make sure that from a data sharing perspective, they're doing it from their platforms to potentially, I'll use the Dutch, to one of their capabilities on the ground." And so, we got to keep working that to expand it even more broadly so it is, to Mark's point, fully interoperable across the nation that's inside NATO.

Mr. Riki Ellison:

But it's not-

General (Ret) Jeffrey Harrigian:

Huh?

Mr. Riki Ellison:

But it's not persistent overhead, right? That's another-

General (Ret) Jeffrey Harrigian:

No, no.

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Mr. Riki Ellison:

This is a lot of cost and you're still going to have to have that as well, right? Yeah.

General (Ret) Jeffrey Harrigian:

Well, yeah. So, we didn't talk a lot about space, but that'll be another important part of this ongoing discussion. Because when you talk about persistence and resiliency, you're not going to have F-35s up there all the time. And so, we've got to figure out, and I'll use the term, where are these assets that are collecting? Where's that data fused and then pushed out? And that's a longer discussion, but it ought to be part of... And I know this is what we're trying to do in JADC2 to sort out how we do that.

Rear Admiral (Ret) Mark Montgomery:

And Riki, I'll do the last question here and then you can wrap. It says, "Is NASAMS part of an international answer?" And I'll just go ahead and say yes, I think I've done four different of these VTCs that I've waxed on about NASAMS. And I don't get anything from whoever makes NASAMS, Kongsberg or Raytheon. I'll just tell you is NASAMS part? We've been arguing for NASAMS in the US Army for almost six years now.

Obviously, the National Guard uses very successfully to protect me here in downtown DC, and I'm glad we gave it to Ukraine. The only thing I'll say is it's an expensive shot for shot. NASAMS is not for drones. NASAMS is for low elevation, high-speed maneuvering cruise missiles. And it's done fantastic at doing that in Ukraine over the last four months. And we do have a lot of older AMRAAM missiles to use in that system so I'm all for it.

Five other NATO countries have it. And then some non-NATO friends like Finland and Australia, but Portugal has it. Norway, the Dutch, others. NASAMS needs to be at Ramstein, it needs to be at Anderson in the Pacific. Probably needs to be at Mildenhall. We need to protect those really high-value targets from an initial first night strike before we disperse our forces with those NASAMS along with Patriot, THAAD, Aegis, all those other systems. But the NASAMS is going to play a crucial role. Lithuania has NASAM. I mean, a lot of countries are getting it. But Riki, we're at our time, so I want to catch-

Mr. Riki Ellison:

Yeah, I just want to ask one more question before we go. Cobra and to you Mark, if we're going to defend Lithuania in July, the optimal capability that works today, right? Bringing over a THAAD. We got five sitting in the United States, bringing over a THAAD radar and a THAAD interceptor that I think is going to go somewhere else after that. Bringing in Patriot that's already linked into this, and this is your AAMDC commander of the 10th can put all this together. And that THAAD2 has done remarkable work with counter drones that Sean Gainey's done.

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You park an Aegis ship with the Tromp with a couple other Netherlands and other Navy ships out there, link that in and you're bringing NASAMS in, you've got a hell of a capability. Of capabilities that are in existence today, I think you fly an ED2, or some E-2... Mark will know that. Not an AWAC over the thing to get the pitcher right and play ball. And that sends that if we go to a defend it, that's what we've got.

Can you comment on that or do you think you don't want to do that? Or if we had to, we would. What ramifications of that would be, or I'm missing something with that defense architecture? I would also add using some of the assets for the defense design that's in place today against Iran and the EPAA to help to support this as well igniting the whole thing, BMDO Center, BMDOC down in Ramstein. Let's play. Let's bring our best to the best. Any thoughts on that?

General (Ret) Jeffrey Harrigian:

Yeah. Mark, I'll go first. I mean, the US can do that if we lean into it. I don't want to call it a no-brainer, but we can make that happen and we got plenty of time to sort that out. I think importantly though, Riki, you got to put a NATO face on this and so we got to figure out whether it's NASAMS from a nation or some other capability that it is a significant part of what we're doing here.

Our lips move a lot about how important our partners and allies are. If it were me, I'd be leaning into these nations to figure out, "Okay. Let's make sure we can connect you in." And maybe you crack the seal with one or two new capabilities that now connect into this architecture and make it part of the plan. And then you got a solid, I would see to it and battle management out of Uedem and work it that way to reinforce the importance of controlling it from a NATO perspective. So that would be my thought.

Rear Admiral (Ret) Mark Montgomery:

Now I agree completely. I agree and I think that twist that Cobra put in there at an international system. The beauty of NASAMS is it is one we know well and Link 16 and be right in there. And this is just a demonstration obviously, Riki. The problem we got is we would not actually pour all this stuff into Lithuania if the Russians were making move in the Baltics. We would defend, we would do counterforce systems that protect forces probably at the very tactical level, drone, some cruise missile.

The ballistic missile stuff is going to be saved for protecting our counterforce capabilities that project into the theater from Ramstein and other places in Poland where we might be staging, things like that. Your defense design is not purely at the point of impact. Your defense design is to protect your lines of communication. The thing we're great at, large scale maneuver, logistics warfare. We are still good at that even if the Russians aren't. And our air defense is actually built around that.

Sometimes defending something 500 miles back is a lot more important than defending something 50 kilometers from the border. And that's why you don't have admirals and generals, right? You have like lieutenant colonels and majors pull this stuff together and figure it out and you're in good shape. So, I'm excited. I think there's opportunity coming. I do think EUCOM will

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get farther than NATO faster, but you do need to bring NATO along. And so that's the importance of the Lithuania meeting in July.

Mr. Riki Ellison:

Okay. We want to do closing remarks. Is that yours, Mark? Or do you want to-

Rear Admiral (Ret) Mark Montgomery:

That was my closing remarks there.

Mr. Riki Ellison:

All right. Cobra?

General (Ret) Jeffrey Harrigian:

No, just thanks for letting me be on. I know you guys do this often. It's good conversation, it's an important conversation. And I think the time is right to continue the momentum you all are generating here and drive the nations to continue to work together. We're one year in. This is going to go on, so let's continue to move forward on this and not admire it anymore. But thanks for the time.

Mr. Riki Ellison:

Thanks, Cobra. Thanks, Mark. Again, it's about hitting the right opportunity at the right time for the right reasons that make change. And I think we have an opportunity in Lithuania to make change in awareness. And I agree with you, it's not a US dominant system that needs to be in there. We have to be able to show some sort of open architecture with one or two of our allies willing to showcase it, not exercise it, showcase it to get the rest of the group shift in that momentum to understand how important, how critical IMD is for NATO as a defense organization.

So that I think it is a great movement. I think there is traction over in NATO on this. There's traction to make this happen. And excited that we had the opportunity to flush it out, to look at some of the opportunities that are facing us. But again, you guys know, it's a team game. And everybody's got to be able to compete and play with each other and trust each other, and this is a perfect way to do this. So, thanks for a great conversation, it was awesome. And thank you, ladies and gentlemen, for joining us.