

Mr. Riki Ellison:

Good morning, ladies and gentlemen from Alexandria, Virginia, where it's a little hotter than London today. I'm Riki Ellison. I'm the founder and chairman of the Missile Defense Advocacy Alliance founded in 2002 when our nation withdrew from the ABM treaty, when NORTHCOM was founded and after the 9/11 strike where our nation moved to get a missile defense capability, both cruise and ballistic in place.

Mr. Riki Ellison:

I have just come from Europe last week and I'm very familiar with Europe. My first visit there was in 1983 as an MDAA chairman. We have been involved with live fire tests with missile defense in Romania, in Poland, and in Crete. We have hosted our European Missile Defender of the year events in Berlin, in The Hague, and in Ramstein, Germany. We've had a phenomenal trip last week, and having drawn discussions on what the challenges are for NATO, for our services, for our partner nations, and there's no question. The biggest gap in capability capacity is missile defense for NATO, for our services, and for the partner nations. It is still a shock that over 5,000 civilians have died because of missile attacks over the last several months. Russia has fired 3000 missiles into Ukraine, and the military casualties are much more than that. So we have a real combat situation that's killing lives still today, yesterday, that we have not resolved and putting a solution in place to defend that, to deter it and to stop it.

Mr. Riki Ellison:

We also see Ukraine with very minimum capabilities of MANPADS, Stingers and Russian S-300s. They have enough to keep them in the fight with Russia. That's also a vital ingredient for their survival. So today, it's not about recognizing the gap. The gap is there, and I can go all the way back to March when we had a drone fly from Ukraine, a Russian drone, that went through three NATO countries undetected and no fire solutions with that. We are at the top level of both missing a joint domain, service allied and partner command control to track missiles, and to create firing solutions for missiles. We have lack of sensor capabilities for overhead horizon. The Russians are using the mountains to disguise their missiles coming in. We have lack of that, and we have lack of effectors. We can't rely on Patriot. That is a ballistic missile effector at 120 degrees.

Mr. Riki Ellison:

So today's discussion is to look at what are the near term solutions right now to defend civilians and our troops forward. And what is the vision? What is the vision for NATO, for our country in having a solid missile defense architecture that's effective? That is what we are discussing today, and we're able to bring you the experts and we've balanced it from the Navy, from the Air Force, USAF, from the Army and from NATO. It's important. Our President has put in the same system that he has in the United States capital for cruise missile defense to NASAMS and he's put that in Kiev. That's a movement, and that's not a program or record. For our Army, we have got to look at some of the realities here of what has to be done quickly.

Mr. Riki Ellison:

So I'd like to begin the conversation with Commander John Lipps. Known him quite a while. He is our first inaugural INDOPACOM Missile Defender of the year from the United States Navy back in 2017. John's the task force commander, 64 out of Naples, Italy, I believe that's in charge of all the maritime integrated air missile defense capabilities, and he has been exceptional in that role. And the Navy's been exceptional in that role. As you know, our president has upped the ante and given us six Aegis US BMD ships to row to Spain. We've had four there. And in 2003, when we began the movement to defend

Europe from ballistic missiles from Iran, Navy was a core competent leader in that. They have led the charge with supporting their commander control, the BIMDOC and Ramstein, and having a well-run management control centers and effectors to defeat and defend Europe from Iran. So I'm going to pass this over to my good friend, Commander John Lipps. It's all yours, John.

CAPT Jonathan Lipps:

Hey, Riki. Thank you very much, and ciao from Naples, Italy here. It is a great opportunity to sit down and have this conversation with you and the other leaders of the integrated air and missile defense community. So I sincerely appreciate that.

CAPT Jonathan Lipps:

A few points that I think are important to highlight is as we look at time now, you spoke about ongoing operations in the Eastern flank, and that is absolutely an astute observation of an employment of these threat systems that is occurring right now. It is relevant and it is happening. At the same time, I would also submit that as we look at the leadership changes within the theater, it is the summer permanent change of station season, and we are not missing a beat across the Alliance, under the leadership of the USAF AIRCOM team, the 10th AAMDC, and the JFCs, the component's support, quite frankly.

CAPT Jonathan Lipps:

And so I think that's an important as we look at the capabilities that we subscribe to in the future, recognizing that in order to get there, first we have to have a weather eye on the situation, and I would offer that that is being provided in Ramstein on a daily basis, quite frankly. And so I express a great appreciation to the team as we look at the IAMD fight because it affects all components. When I talk about air missile defense in the maritime operations center, or with Navy leadership, it is a mission that we have to conduct from the ocean bottom all the way up to lower earth orbit. And we have to be successful because as I look at the maneuver force in the maritime domain, if I am not successfully able to conduct the totality of the missions that I am tasked with, be it force protection or defense, I can't support that integrated air and missile defense architecture that is needed across the Alliance.

CAPT Jonathan Lipps:

And so just a couple of examples, I think, where we are going forward here in theater quickly. Last month I was embarked as a surface action group commander on an HMS defender. And so she's one of the UK Type 45s. They're high end air warfare platforms that use the Sampson radar and their Sea Viper missile system. And it was a fantastic integration of both NATO Alliance partners, but also, we had in my task group, Swedish and Finish Navy assets as well. And so when we looked at the generation of effects in the Baltic, it was a great opportunity to stitch together this holistic picture that's required for the execution of the mission. We're building towards next May, the Formidable Shield 23. And you talked, early on, the nascent Formidable Shield 15 was a single SM-3 launch on the Heberden's light range against the ballistic missile target. Formidable Shield 23 will include F-35s, GBAD, NASAMS, Patriot, ships from 11 different countries. And we are going to be conducting all domain operations to include engagements of anti-ship cruise missile targets with fighter aircraft.

CAPT Jonathan Lipps:

And I don't even like to consider that an exercise. I use the parlance that it's a mission rehearsal for a live fire campaign, quite frankly. And so it spans all the domains, it spans all the components, and it's a good

example of being able to pull together this high end combat capability that is necessary in light of real world activity. It is a reflection of what the Alliance does with the leadership that's in theater.

CAPT Jonathan Lipps:

And finally, the other piece that I was mentioning to the team today is I grew up in a world where I thought of integrated air and missile defense constrained by my organic radar or my organic effector, and that is no longer the world that we live in today. Just as integral to being able to close the fire control solution across the joint force is the sensors, the effectors, but it is that architecture that is able to bring us together and provide an uninterrupted track. We are all constrained from either geography, curvature of the earth, topography, weather, it affects us all. And so we have to take that into account and leverage the totality of capability across the joint force in order to bring together the holistic solution. And I think I'll pause there.

Mr. Riki Ellison:

Thanks, John. Your command and control is done so well with Aegis that you do have fire control that spreads across different effectors and sensors and different domains. That applicability to Ramstein to the BIMDOC, to the other services, how do we get their non-Navy systems to be able to have that type of fire control network and can the BIMDOC, that's a ballistic missile defense command and control, also take on the integrated air and missile defense cruise missiles, et cetera, underneath that, or is that blatantly not able to do that?

CAPT Jonathan Lipps:

This will probably be projecting into someone else's wheelhouse, but from a, the BIMDOC as that matures, what we will all recognize collectively is what we've always known, that there is no separation when we're talking about integrated air and missile defense. It's an integrated fight. And so when you walk into the air operations center or the AIRCOM operations center, and you look at the integration of those fights, that migration is happening. We're moving in that direction, Riki, and I'm heartened by that. It's just that we are constrained by legacy acquisition processes across the services and components that is being addressed, I think, within the department, both from an endorsement of the JADC2 construct as it moves forward and matures, but then also demand signals for capabilities that are outside of the EUCOM AOR. When I think of either defensive Guam or NORTHCOM's requirements, as they are articulated in public hearings. So we're moving in the right direction. It's just the accelerant by which to get there as quickly as we need.

Mr. Riki Ellison:

Thanks, John. That VLS and those common systems that you have is just phenomenal on near term capabilities to present both strike and defensive in a wide variety of ranges, and that's what you're seeing in Guam. But I want to move on to who's in charge of the command and control in Europe, which is our United States Air Force, Europe, USAFE. We have Brigadier General, Jason Hinds with us, Bigbee, on that. And that group understands how important it is to defend their maneuvering forces, which are their air forces and their air bases, throughout Europe to be able to create that deterrent and projection of force if needed. But they don't have the capacity to defend those bases and they know it's the Army's mission and the Army doesn't have the capacity to defend those bases. The Air Force has to look at it and it's been looking at it on how to solve this problem. So I think I want to introduce Bigbee. We had some great discussions last week at Ramstein, and want to open that dialogue up to you, Bigbee. It's all yours.

Brig Gen Jason Hinds:

Hey. Thank you, Sir. I appreciate it. You're right. We have capacity challenges internal to the United States Air Forces in Europe-

PART 1 OF 4 ENDS [00:21:04]

Brig Gen Jason Hinds:

... have capacity challenges internal to the United States Air Forces in Europe, and a lot of that's due is just the changing theater structure from the 1990s to today. Like you said, we don't really need to talk much about the threat. The threat's changed over the last 10 years. And just some things that we've seen recently, like you highlighted, were interesting capabilities that Russia has developed and things like the Skyfall Nuclear Cruise Missile that's unique, those different ones. Some of the hypersonic cruise missiles they're using against Ukraine, like you highlighted, those are unique challenges as well. So we've got to make the best of the capacity we have now. And the capacity we've got finally, fifth gen fighters. We've got fourth gen fighters that are getting modified as well with capabilities that are going to help us do the cruise missile defense mission. And I see opportunities there quite a bit and make sure that one, we can integrate with our Army teammates, but more importantly, we integrate with our allies or partners.

Brig Gen Jason Hinds:

If you don't mind, I'll scratch the itch on that as well because that's pretty important to us at USAFE, along with our partners next door at AIRCOM. Some of our partners now have huge capabilities or even capacity readiness, sometimes concept of operations that they've been working on for a long time. Someone else brought up Sweden. They're one of our closest partners as well. And they've learned how to maneuver in the face of a threat that might be projecting power against them while they have to survive and generate combat power.

Brig Gen Jason Hinds:

So we're learning a lot from them. We're sharing a lot of our ideas with them from the planning level all the way down the youngest operator, whether it's on an F-35 from us, or it might be an F-16. And they've been really helpful into making sure that we, collective we, from the NATO powers to us, we have the readiness that we need, at least the highest level of readiness we can in the event that crisis turns into conflict. We don't want that to happen, so we want to have the deterrence capabilities that we need. That's not easy. And it takes a lot of sharing.

Brig Gen Jason Hinds:

Someone brought up connectivity. I focus on air domain awareness and making sure that we have a common understanding of the operational environment from the operational level, the operational C2 level that we do with the Air Operation Center, all the way down to the pilot in the cockpit, trying to work joint engagement operations with the 10th AAMDC while they're operating a Patriot over one of our main operating bases or forward on the Eastern flank, like we're doing in a couple nations right now. That's hard and it takes practice. It takes an understanding of the threat, takes an understanding of everybody else's capabilities. And then it takes the connective tissue. Sometimes we have that connective tissue and sometimes our practicing exposes gaps in our connective tissue between us and some of our joint force and really some of our closest partners and allies.

Brig Gen Jason Hinds:

One of the other opportunities we see is with Sweden and Finland joining NATO. As that starts to progress forward, we're looking for opportunities to ensure that we can share and, let's say, share data. And it's not the collective data about who owns my data. It's about what value and benefit do you see in sharing the data, so we can see fused information that gives us, I'd say, a better, a more accurate picture of the air domain. And that's something we all need real-time. And it's playing out for us front and center with Russia and what they're doing against Ukraine. And we're learning exactly what that layered approach needs to look like in the future.

Brig Gen Jason Hinds:

For us and USAFE, one of the things that we're doing pretty hard is we're trying to make sure that we have the right layered approach. Mr. Ellison, you and I chatted about this in the building last week. And I appreciate the discussion. We need the right sensors. We already have some. We don't have enough. We need the right connectivity. We brought up JADC2 earlier, but the connectivity that we're establishing today [video inaudible from 00:24:34 to 00:24:41] has been such a great partner with us, just to make sure that we have the right connectivity at our level, the operational C2 level, versus just a theater-wide operational C2 structure that we have to integrate the land and airpower. That's a tall ask.

Brig Gen Jason Hinds:

NATO comes into this as well. We're really close to our AIRCOM team. They literally work 300 feet from us in their headquarters, but sometimes that's the longest 300 feet in the entire European theater. Just connecting our two headquarters, we've made significant strides over the last two and a half years, but that's at the headquarter level. And I bet you, Mr. Goffus will probably end up chatting about the connectivity challenges that we have across all of the NATO partners. But we take that opportunity with Sweden and Finland joining NATO in the future as something that allows us to start to weave them in into Norway and into the greater NATO air picture. So we can start to ensure that the operators in the front have that right air picture that they're going to need and that we'll have it for the joint force as well if we have to do some type of unilateral action to defend ourselves.

Brig Gen Jason Hinds:

That layered approach, you've got to exercise it. And that can't just be in a small scale location defending one base. It's got to be integrated across the theater, a theater-wide exercise, all based on the threat. The threat's not going to come at us from one direction anymore. Everybody knows it's a 360 degree threat, which means all the partners that are in NATO, all the partners that are here in the European theater, they've got to see themselves in this theater-wide operational C2 structure, because it's going to benefit them just as much as it'll benefit the United States Air Forces in Europe and benefit the joint force.

Brig Gen Jason Hinds:

So as we start to develop the exercise approach that we need to help us get after the theater-wide operational C2 structures, we've got to make sure from the USAFE side that we've got the right capabilities, whether it's from operational C2 or its weapons on airplanes or it's the sensors on the airplanes to make sure that we're able to defend the skies of Europe and we're practicing it before we ever have to do it in combat. But in the end, each one of our airplanes as we're starting to look at capability gaps, we got to make sure that they can, one, project power, but they can also do cruise missile defense today and against tomorrow's threats, whether that's in 2030 or in 2025. That's not a tall

ask, but it's something that we just have to acknowledge that the jets have to have that capability and our airplanes have to... Or sorry our personnel have to have the training to be able to conduct that mission.

Brig Gen Jason Hinds:

It's a hard mission to do. Cruise missile. Defense is not easy, and you have to be trained to it and so do our partners. Just like the operational C2 part, we got to exercise that as well. So as we start to build out the future capabilities in the theater, one, we'll keep cruise missile defense in the front of our minds, but we also have to recognize that every airplane that we have doing cruise missile defense, it's one airplane less than JFCC has available to do, whether it's offensive operations or to move the airplanes to where there might be a capability gap across the NATO theater as well. So there's a lot there, a lot for us to discover. We could spend an hour talking about all this kind of stuff just each individually from the air component perspective. And I appreciate the opportunities to chat. So sir, back over to you.

Mr. Riki Ellison:

We noticed that most of the European powers have their missile defense capabilities in their air force and their ability to defend their own maneuvering force is inherent in that aspect of it. We know the limitations of our army. We've got Patriots all over, very thin. What is the near-term from your perspective of getting cruise missile defense capabilities on your air bases forward or back? Or are we going to continue to disperse from this and take the hit? Where are we going? Because the future stuff is not coming from four or five years minimum to get something in here. Just want to put that out to create a greater deterrent for all your NATO air forces as well and trade space between having offense and defense, so that needs to be discussed as well.

Brig Gen Jason Hinds:

Absolutely. So first and foremost, there's three things we're looking at right now to help us build out the defensive capabilities for the theater for at least for our main operating bases. And that's the sense, makes sense, and then active mentality. The sense is we've got to have active and passive sensors, the ability to detect any type of cruise missile that might be approaching one of our bases. And that detection is going to come from a layered approach. It might be 300 miles east of Ramstein. It could be somewhere in Poland, where we have to have our first indication, our first ability to sense the cruise missile entering the theater, because that maybe where our first opportunity to see it so we can start to take action. So the sense part is a layered approach that we're going to have to have from things like E3, maybe E7 in the future to sensors along the way that are built and owned by our partner nations. And as long as we're able to connect that into the overall operational C2 structure, that'll increase our own situational awareness for our main operating bases.

Brig Gen Jason Hinds:

The make sense is the hard part, is we want to be able to have our wing commanders at each one of our main operating bases have the same domain awareness that the JFCC does and sitting here at the AOC at Ramstein. So we got to be able to make sure that we can distribute that. So distribute and command and control down to the lowest appropriate level. And then the act part is where you're getting at. That's hard. In the near-term, we know we're not going to get any major changes to capabilities that we know we need to have.

Brig Gen Jason Hinds:

So we're going to have to be able to live with what the army has available to us in phase zero or in phase one. And then if the capacity just isn't there, then we're going to have to get after cheaper things that allow us to have increase our survivability as well, which I really can't get into much on methods that we're doing that, but I'll tell you we are taking action on that and spending significant dollars on giving our base commanders the ability to defend themselves in different manners and then also to be able to disperse their forces. So we've developed the agile combat employment concept of operations. That's going to allow our wing commanders to generate combat power in the face of an attack. And we're learning a lot from some of our partners up in the north that have done that pretty well.

Brig Gen Jason Hinds:

In the long-term, we're trying to build out the budget, if you will, in the Air Force to make sure that we do have the right capabilities in the future to be able to have an active role in defense, because just like you said, the joint force isn't going to have the... We don't expect to have the capabilities that we need to be able to defend each one of our main operating bases.

Mr. Riki Ellison:

So maybe just that one real quick point. That incident of that drone going through three NATO countries, how we're doing basically with trust cloud, where open information gets put out on a cloud and people can draw to leverage it like we're doing very effectively in Ukraine? Are we able to move with missile defense in that cloud? Or is that cloud not to be trusted, it's got to be private with fire control to do something like that? And how do we prevent what that Russian aerospace intrusion happen?

Brig Gen Jason Hinds:

I think you can go to a cloud based architecture for domain awareness, but like you said, when it comes to the operational command and control or even down to the tactical level of command and control, that might be an area where you try to segregate it to federate it, so you can ensure in case the cloud does get cut off for whatever reason that the installation commander, the wing commander that's trying to defend their main operating base, they won't have to rely on an operational C2 structure that is back at a main operating base or reliant upon a domain server that could get cut fairly quickly. We want them to have the domain awareness that's being shared just like our NATO partners want it. And then they want to have the ability to act on their own should that cord get cut. So I think it might be more than one layer. I think there'll be a couple of different layers of data clouds. One that's available to the base commanders and then one that would be more theater-wide.

Mr. Riki Ellison:

Okay. Thank you. We now have the Army perspective. We had great discussions with the US Army over there last week. A change in command for the 10th happened with Mo Barnett. And now we do have David Shank, the former 10th AAMDC commander, with us to give a little light on the Army's situation in Europe, which is very limited with one battalion, four batteries of Patriots and a tremendous mission set to do. So Dave, it's unmute.

COL (Ret) David Shank:

Hey. Thanks, Riki. And thanks to the MDAA team for allowing me to participate. And as always, it's a pleasure and it's great to be on board in this virtual setting with an all-star cast, that's for sure. Hey. I just want to cover really just three areas and both John Lipps mentioned it, Bigby mentioned it there and you even touched on it as well, but the bottom line is just from a ground perspective, from an American ground perspective, or just lacking the capability and the capacity to provide the integrated air missile defense, again, from a ground perspective.

COL (Ret) David Shank:

Now I'll talk just really three areas real quick. from an army air and missile defense command. As you just described currently in Europe, the 10th AAMDC, it's just a lack of capability and capacity on ground. Again, that's on ground in Europe. I'll come back to that point. Well, you got a brigade headquarters. You mentioned that one Patriot battalion time. You have one short range air defense battalion, who is in the process of transitioning to the maneuver shore ad, the striker based platform. You have some separate battery capability. And then of course, you've got some additional attachments that are there supporting the deployed forces forward along the eastern flank. All that said, you've got some sensor capability and let's not forget that I'm an advocate of this and some may disagree, but counter UAS is integrated air missile defense to me. They're part of the process. They use some of the same sensor capabilities, the same feeds, passing some of the same track data in order to conduct a successful engagement of a unmanned platform. And so that's number one.

COL (Ret) David Shank:

What is the AAMDC? What they look like? Well, they don't look like a whole lot in Europe right now. And secondly, you wanted to talk about the responsibilities. And as a double as a former AAMDC commander, the AAMDC commander is the driver of all things integrated air missile defense for the ground forces. Oh, by the way, he or she also serves as the deputy area air defense commander to the [inaudible 00:35:24], which in this case USAFE-AFAFRICA commander. In addition to that, they wear two other hats, that Theater Army Air Missile Defense coordinator, and that's their role as they support the ground force, specifically US Army in Europe. And then lastly and very closely related to that support to the US Army in Europe commander and that team, they're also serving as the senior American air defense artillery officer in the theater.

COL (Ret) David Shank:

So a great responsibility, a must to leverage your staff and your leadership across the AAMDC because you can only be in one place at one time, but again, the support there. And I tried to tie that in to where they fit in that joint picture. So as you think, whether it's the deputy air defense commander, the Theater Army Air and Missile Defense coordinator, there are those relationships, ongoing and continuous relationships, with the joint communities, so USAFE-AFAFRICA, [inaudible 00:36:26], so John Lipps and the team down in Naples, as well as the Marine Forces in Europe. So again, driver of all things integrated air and missile defense.

COL (Ret) David Shank:

Last point is how do the allies and partners fit into this picture? So extremely critical to have those relationships. And this is a continuous process. So whether it's through some type of developed engagement strategy where you identify countries that possess certain capabilities that maybe the opinion is that they're a little more in and all in, ready to participate and support versus other countries

that maybe aren't meeting the 2% spending with regards to the country's GDP, that might be just sitting back on the sidelines, so to speak, and not willing to participate as much. So you want to build, again, those relationships through that engagement strategy and prioritize those relationships, because in the end, it's the integration piece.

COL (Ret) David Shank:

Again, this has already been discussed. How are you integrated, not just at the joint, but at the multinational level. It's the interoperability piece. Bigby hit on that already. No need to talk about it. He talked about the layer, the 360 degree ability. He talked about common air picture, a great point about the cloud and what you can pull from the cloud and making sense of everything ongoing. And then my last point, Riki, if I may, is, and you touched on it a little bit and we talked the other day about, so you have these legacy systems currently on hand and then of course, you've got the way ahead. So the Army Integrated Air Missile Defense program and everything that falls within that program. And right now, that's not going to show up overnight. We all know that.

COL (Ret) David Shank:

So how do you continue to fight and win with legacy systems as you continue to transition towards the future? So it is a transitional process, that's for sure. And I tell you what. I'll stop right there. Riki. I know you're going to ask some questions and we're going to do some Q&A at the end.

Mr. Riki Ellison:

Thanks, Dave. I want to go back and Bigby brought it up too, how important exercising this is, not tabletops, not what we've been doing for the last 15 years as the 10th AAMDC is doing partial exercises with partial countries in different areas in firing one missile. That's not going to work anymore. And I know NATO has been resistant to doing an all-out, fully integrated missile defense exercise across NATO. And this would, for me, be not only Astral Night, but it would include formidable shield, the whole thing together. I mean, it seems like that's got to be done today. It's acceptable to do that today. We have to do that today. And I want to know where we're at without. Are we shifting into demanding that to happen?

COL (Ret) David Shank:

I think John touched a little bit about. He mentioned formidable shield and some of the things going up, ongoing life for exercises up in the Hebrides in northern Scotland. But no disagreement here. And Bigby mentioned it. The days of slow pitch softball are long gone. And President Trump demonstrated that with that TLAM strike on Aleppo a few years ago. And that's what we need to be prepared for, 58 TLAMs coming at one location. How do you defend against that? And so it is through multi joint and combined exercises. It is through massive joint and combined live fire exercises over a large battle space. And I think you just hit on something too, is how do you look at potentially, dare I use the term, a two front exercise, but how do you conduct a joint and combined exercise, say, somewhere in the Med while you're also conducting a joint combined exercise somewhere in the Baltic Sea?

COL (Ret) David Shank:

And so we know there's a number of Hollywood names out there that relate to what I just described. Is that possible? But even more so, and with the current ongoing fight, and Bigby talked about, John Lipps talked about AIRCOM, who's managing this. And so AIRCOM right now has their hands full for all the right reasons, but what a great opportunity. And I failed at this. I was never able to really pull in AIRCOM

and have that node participate and take in an overarching exercise. But how do you take a C2 node like AIRCOM at that level and they truly manage what's ongoing?

Mr. Riki Ellison:

Well, I think we're in a perfect situation where someone like Chris Cavoli can move this and move it not just with defense, but we have to play with the offense as well. And I think-

PART 2 OF 4 ENDS [00:42:04]

Mr. Riki Ellison:

... Not just with defense, but we have to play with the offense as well. And I think the political environment, everything's set for doing something like this, we have to do. So we lead right into Tom Goffus, who is the Assistant Secretary General for NATO for all operations, just a phenomenal advocate. He was the policy director for the Senate Armed Service Committee, and really, Tom, you helped move where we are with Guam and appreciate that, and your experience is renowned. And this is a big problem that I think you are grappling at that level that you are with the secretary. The floor is yours. We haven't got you on mute.

Mr. Thomas Goffus:

That's what happens when you leave me alone with technology, I guess. Thanks, Riki. Yeah. So let me just start with a story. As a recovering fighter pilot I was serving hard time at STRATCOM as a battle watch commander and General Cartwright set up an exercise ahead of a potential North Korean missile launch. And we didn't know whether the missile was going to be a satellite launch, or whether it was going to be an attack on some kind of US facility in the Indo Pacific. And of course the window, as the missile defense world knows, for making that determination and then taking action is very, very small. So General Cartwright smartly said, "We're going to exercise this." And Secretary Rumsfeld said, "I'm going to play in this." And so I'm sitting down on the battle watch commander floor, the exercise kicks off, and General Cartwright's there, and he says, "Call the secretary."

Mr. Thomas Goffus:

So you call the Secretary up, you get his aid. It's like 9:00 at night in Omaha. The military aid goes, "He just went to bed. You want me to wake him up?" I look at General Cartwright who's sitting next to me and he goes, "Yeah." He's got a little smile on his face. I'm like, okay. "Yes, please wake up the Secretary."

Mr. Thomas Goffus:

So they wake him up, rustle, rustle, rustle, get to the secure coms, do all that stuff, finally they get him on the phone and I hand it over to the missile defense guru on the watch floor and he's reading the script and he goes, "Mr. Secretary, you have 31 seconds to decide whether to shoot down this missile." Of course, Secretary Rumsfeld is known for his ability to weave a tapestry of four letter words, which he then subsequently did. I'll do the mild version, which is, and General Cartwright went by Hoss. He goes, "Hoss, what the hell is going on here? Stop this fricking exercise right now."

Mr. Thomas Goffus:

Of course the four letter words are flying, there's only 150 or 200 people on the call, and he proceeds to try and chew him out. Meanwhile I'm looking at General Cartwright, he's got a little smile on his face, and he just is explaining the physics of the thing to the political level. The problem at the time was that weapons release authority at that point in time was held at the Secretary of Defense level. Because if you take this thing out and make the wrong decision you've just created, obviously, an international incident and who knows what's going to come from that.

Mr. Thomas Goffus:

So by the end of this thing Secretary Rumsfeld said, "Hoss, you have weapons release authority." Delegated right there on the spot. That's how we got to sanity. What I think it tried to show was how difficult the political interface is with integrated air and missile defense, and also how important it is to have political interface, to exercise the political interface with integrated air and missile defense.

Mr. Thomas Goffus:

That's kind of where I start with this, and when you all think of ops you're thinking of JA3s and moving pucks around and moving people around and soldiers. I'm more ops policy, quite frankly, and in the fun world of NATO headquarters I actually don't own integrated air and missile defenses, or any part of it, at this point in time. It's owned by what the DOD equivalent would be, acquisition and sustainment. It's because of how things grew up. There's too many stories to tell you about how that happened, but that's where it sits. So I'll try and give you a little bit of my perspective on how we're approaching it from a strategic level on how to do this.

Mr. Thomas Goffus:

One, just like Riki said, lessons learned from Ukraine. That's where we start. Thousands of missiles, a large percentage of those missiles in the first few days. I think the TLAM, the 57 TLAMs, is exactly what I'm talking about. I'm stealing this from one of the NATO generals in the International Military Staff. What we learned is, what we should have learned, is that this is a day zero risk for NATO. We're not going to have a whole bunch of I and W that says get ready, get set, go. We've got to be able to handle this right up front.

Mr. Thomas Goffus:

The Russian reliance on ballistic and cruise missiles and, as Bigby said, they appear to be testing at least their hypersonic capabilities and sending messages with those. So to us, to every single person I know on this video right now, the need for integrated air and missile defense appears self evident. So it's a bit of a paradox that at the political level here at NATO headquarters and beyond, to capitols, to a lot of capitols, integrated air and missile defense is not more of a top priority in Europe.

Mr. Thomas Goffus:

So I tried to figure out why the hell is that true. And honestly in my job I live right at that intersection of politics and military, so off the record there are a lot of ambassadors that want to be generals and admirals, and a lot of generals and admirals that want to be ambassadors. So I do a lot of explaining between those two levels. Why is this so damn hard for NATO to get its hands around? I think, number one, it's political. Number two, it's expensive. And number three, it's hard. I'll talk a little bit about each one of those very quickly.

Mr. Thomas Goffus:

I know that Cora, if he were here, would be telling you getting a critical asset list is really hard. What needs to be protected? And it's inherently political. If you look at it with a political lens versus a military lens then you've got to make a call on what's more important, a population center? Is Paris more important than a port than, say, a power plant or a critical water dam? It's really hard to do that. It's hard to do that within a nation, let alone go yeah, now I'm going to lend my toys to NATO so they can defend what they think is important. It's inherently a political decision and that's part of what makes it so hard.

Mr. Thomas Goffus:

The second piece is, and this is really where we're at, Riki, you know, and I don't disagree with you, that we have a requirement. But here, at the political level, if you admit you have a requirement then you are negligent if you don't fill it. So it's a little bit of a chicken and egg self requirement, and that gets expensive really fast, as you know. The two NASAM batteries that are going, that's like a billion dollars' worth of a commitment, and that doesn't even include the extra AMRAMs and the supporting sensors and the C2 that go with it. If you don't want to be on the hook for a big bill at the end of the day then you might simply deny there's an issue. A little bit of that is going on, I think, for sure.

Mr. Thomas Goffus:

And finally, as you all know, this is really, really hard. I'm trying to explain why it's really hard at the political level so that they don't take it for granted. I don't mean the physics problem of shooting a bullet with a bullet. I get that. But we have technical solutions for that at this point. Maybe way back in the day when Riki was in college and listening to the big speech from Ronald Reagan it was a lot of a technical issue. It was, was this technically possible. Now that's pretty much settled in terms of we have the ability to do that. So why is it hard here at NATO? Number one, it goes across all five domains. So getting things that go across all domains is really hard. I know that Hadji Jalusida is working on multi domain problems at SAT-T.

Mr. Thomas Goffus:

It also requires a compromise, as I discussed, between national and NATO. What assets do you transfer to NATO authority and which ones do you keep under national control? What can you afford to give away, is one of the questions, and potentially uncover one of your national priorities. Like I said, when you look at it from a political lens, from somebody that needs to get elected, how can they put that out there on the street? That's a really tough thing for them to do. So they're going to have to have some courage to do that.

Mr. Thomas Goffus:

And then, Riki, you hit on this. Almost every single nation has a different flavor of who's responsible for what. You have the US where you have ships and ground and air. Many of the nations just have air. Some nations don't even have an air force. So trying to blend those things gets difficult as well. Here at NATO headquarters we have a different division in charge of, they call them emerging disruptive technologies, EDTs, big data and AI, which are going to be critical for this. So you cross all kinds of organizational lines when you do that. I think that makes it difficult for all those different reasons.

Mr. Thomas Goffus:

So that said, the first step is convincing, at the political level, and then the really hard part, even if you do that, over a beer, over a whiskey, they'll say yeah, we've got a problem, but then getting them to say out loud collectively we've got a strategic vulnerability here. That hasn't been done. If it is done it's immediately and we have a plan for that. But it hasn't fixed it to date and I think this is a really big issue to get there.

Mr. Thomas Goffus:

So you talked about large exercises, I've got to tell you, Riki, and I know sometime over a very cold martini you're going to give me a hard time for this, here's what I want to do. This is my idea. And I'm proposing it here for the first time other than at a bar kind of thing, over a bar napkin. One of the things that I'd like to do to get us going from the bottom up, what you were saying is important from the top down if we can do it, and I know we can do it, it's just a matter of having the will, but it's to start with let's pick a level of ambition just out of thin air, it could be more, it could be less, one battery, one week, every two months, is going to deploy forward, set up in a remote location, and it's going to connect, integrate, and then exercise with actual air assets against those air assets. Airplanes, whatever we can get out there, drones, and then pack back up and go home.

Mr. Thomas Goffus:

The reason why I bring this up is NATO knows how to do this. If you use the channels that NATO already knows then they're better. Air policing. For example, some of our air policing missions aren't 24/7, 365. They're a couple of weeks every couple of months, deploy, do the act, show you can do it, come back. It makes the Russians think twice because they go oh hell, they can do it from there too. And it also will work the major muscles that eventually you're going to need for that larger exercise. Can we really integrate a battery?

Mr. Thomas Goffus:

I don't really care where they go. SAC Europe can determine what locations they go to and when they go to help with his vigilance activities. So that's just an idea. But I think if we can introduce it and get the ball rolling where people go oh, this is hard, we need to do it more. We have to do it at a level of ambition that nations, if I try to do it every other week for a year they'd lose their minds because it's expensive and they wouldn't want to move their stuff. But if we do something very mild, whether it's one week every other month or it's once every quarter to start with, once we build it they will come. I am convinced. And that's how you integrate domains.

Mr. Thomas Goffus:

You're deploying the global, or the ground based air and missile defense assets, but you're integrating with the air assets, the air policing mission, or you're integrating with naval assets when they're in the Med or in the Baltic and so it's a way of ... If you can't move the thing in the first place then you're going to have those other issues. And it's a way of doing this routinely and getting those muscles built. Way more than you needed, I apologize.

Mr. Riki Ellison:

No Tom, it was great.

Mr. Thomas Goffus:

Got me all fired up.

Mr. Riki Ellison:

I like to have my panel members give a little criticism or support for your concept there on moving that one further. I want to take it back to the command and control. That seems where NATO owns it, that's the ACT I think it's called, the overall command and control, you've got to have that right. That doesn't need to be moved anywhere. There is a problem with that. Can you talk to that? If there's such a problem with connecting everybody are we going to let the US lead on this with what they're doing and the cloud? How do we resolve that, that seems to be number one on getting everything else right. If we don't have that right it doesn't matter what the detectors and sensors are if we can't connect. So can you give us a little overview on NATO's command and control?

Mr. Thomas Goffus:

Yeah. I'll talk a little bit about it, but I won't go too far because, again, it belongs to Kamee Grand, how is the AST for defense investment. It's probably not a coincidence that the French company with the American company were trying to build that thing. Honestly I think there's recognition here across the board that it's not up to it. So I think we're at the very nascent stages of what could the next thing look like and is it a build on or around that? I mean, the basic decisions need to be is it a build on or around that? Do we need to blank sheet it? Or do we need to tuck in to the slipstream of what the US is doing and plug in there?

Mr. Thomas Goffus:

I know Bigby knows this and others, the number of different interfaces is insane to get all the data put together. It becomes even more insane even if we get the data right, the data formats and we have the data link that everybody can go in and pull the right things out and do the algorithms, the security levels are all over the map. We need a box. I know there's technology out there, but we need a box that says oh, this is Finland, here's what they're cleared to. This is France, here's what they're cleared to. Here's the UK. And figure out that game. It's not that new of a problem, but it is one of the primary ones.

Mr. Thomas Goffus:

Riki, conceptually you're putting the exact right thing on the table. I think that needs to be a part of using what happened in Ukraine to wake up the folks here at the political level and that's going to be a piece of it, which is how do you do that. I did try to tap Cora before he left to try and get, as we talked about before, a checklist of how do we approach this? How do you eat the elephant? Because it's an elephant. What you really get a lot of is you kind of get a bit of the academic world where you go, okay, let's look at the problem from this side, turn it around, look at that side, look at it this side, and everybody acknowledges there are a lot of problems. But we need the checklist of what are the big rocks, what are the big lines of effort in order to make this go. And then assign the cross functional teams. Almost every single one is going to be cross functional to get at those problems.

Mr. Thomas Goffus:

I would say the first part is to start with an inventory. I think EUCOM is already doing some of this, and Bigby can probably comment on that, of what are the sensors out there? What's out there, what's not even connected? The algorithms we have today can take two crappy sensors, put them together, and

actually get a decent picture out of it. But it's a lot more than two sensors, obviously. So I don't have the answer to your questions, that is the right question though.

Mr. Riki Ellison:

This is what's got to be done, the discussion's got to be done at this level.

Mr. Thomas Goffus:

Yep.

Mr. Riki Ellison:

We've got to leverage what we're doing with the cloud, what we're doing in Ukraine, to be able to do the command and control. That's the answer, because once you've got that, then you can build everything else underneath.

Mr. Thomas Goffus:

Hell yeah.

Mr. Riki Ellison:

Okay, well thanks. You're great. We're running a little bit over time but we're going to stay with whoever can stay, I want to have Mark come in, my fellow board member, an expert on a lot of things, certainly Europe is one of them. Mark, it's all yours.

RADM (Ret) Mark Montgomery:

Thanks Riki. So we do have some questions from outside, I'm going to read a couple of them. But in the meantime I do want to follow up a little bit on Tom's point. I think he's exactly right. The challenge is that while the need for the cruise missile defense, integrated air missile defense system is evident, the investment is not evident. He's right, it's across political expense and the fact that it is a challenging thing. But I would say this, we need to remind ourselves there is a lot out there. Tom and his team have done a good job over the last few years and we have five NATO countries with NASAMs, or four NATO countries. Spain, Norway, Lithuania, and the Netherlands, and then of course Finland joining has NASAMs. The Brits have Sky Saber, the French and Italians have SAT-T. I mean everyone but the United States has something to bring to this dance. Those are words that you almost never hear inside NATO.

RADM (Ret) Mark Montgomery:

It's certainly not a principal war fighting need, so the United States does need to get working there. I like the idea of the exercise, I'm not sure I'd even have to ... Not every one of them would have to be a road game. I would actually just exercises bringing those seven countries and their systems, one a month, through Ramstein. Make them integrate with the Patriot systems, make them communicate back and forth to the air battle manager and the ABC and make sure that each one of them can seamlessly move in and out of the systems. To me, A, that would keep the costs down a little bit since they would be hosted almost immediately. Not that NATO is always about cost but it's sometimes about cost. It's in some ways a contributor here. But we need to get people used to the idea that someone's going to need the Fed Ramstein alongside our Patriots and it's for the foreseeable future it's an ally.

RADM (Ret) Mark Montgomery:

The other one I would suggest on this is we probably want to find one of these beautiful warehouses we've built with \$14 billion worth of US armored wheeled and tracked vehicles, with the European Deterrence Initiative money they're spread from Poland to Belgium, including Germany and the Netherlands and even Luxembourg a little bit. We need to defend these things, so having one of these systems go there and just see what the problem, some of these warehouses are near a lot of other airfields and communication systems. Because you have not had US cruise missile systems ubiquitously moving in and out there is a reasonable expectation that there will be some challenges to operate there. You don't want to find those challenges out in a crisis, you want to find them out during an exercise.

RADM (Ret) Mark Montgomery:

So from my point of view I would hit these ... These are things that would certainly be on my defended asset list if I were the air defense commander. If I was the SAC or US EUCOM commander. Because those storage units and the airfields are critical to the first 72 hours of combat with the Russians. I'm going to stipulate, attach myself to everything Tom said about Russia.

PART 3 OF 4 ENDS [01:03:04]

RADM (Ret) Mark Montgomery:

Be late, attach myself to everything Tom said about Russia. There's a lot going wrong for them in combining maneuver warfare, but they're firing cruise missiles and ballistic missiles, like a drunken sailor. They may only be hitting at 60%, but that's what we expected from the Russians. They don't have 90 to 95% precision, like the US Air Force and US Navy have demonstrated with these precision strike weapons. So that they are having a lot of collateral damage, but they're also impacting a lot of intended damage and we can expect to see the same thing.

RADM (Ret) Mark Montgomery:

So I really think Tom and the team really hit on things. I think there's two good questions here. The first, I think this is for Tom. How do you feel about the ability of NATO members to talk with one another, in other words, plug and play, and will this exercise help close that gap in your mind?

Mr. Thomas Goffus:

Yeah, that's a great question and that's the intent. If you're really going to do integration and all you're doing is hypothetical, that doesn't work. I've talked to the MARCOM commander as well about doing that with either something that is in Operation Sea Guardian or something that is part of the Standing Naval Maritime Group, or just as a vigilance activity, what the US is doing anyway, and doing that part. He's keen and intent, Admiral Blunt, on the plug and play.

Mr. Thomas Goffus:

I think we can do it with limited partners. I feel confident with a limited subset of those that were pretty good. Just like we do on anti-submarine warfare with a select subgroup of NATO, but it's not NATO wide yet. Perhaps, as Ricky implied, the NASAMS going to Ukraine can be a little bit of a wake up call. So ACCS isn't doing what it was supposed to do. That's widely acknowledged here across the board.

Mr. Thomas Goffus:

So if we make one of our lines of effort to make that stuff really work, then I think we can get there. This exercise, that's exactly what it's supposed to do. Start small, but make sure they can integrate. Then not just make sure they can integrate and turn it on and go, yeah, it works, but actually run it and run targets by it, and see whether it does what it's supposed to do.

RADM (Ret) Mark Montgomery:

That's a great response. The one thing I'd said on there is that we just saw in the paper the other day that the Marine Corps MacGyvered together a system with the G/ATOR radar, which is a US C2 system, their common aviation command and control system. Then pulled in the Tamir Missile and his launcher from Iron Dome.

RADM (Ret) Mark Montgomery:

I wouldn't misread the article too much. It's not Iron Dome, which to me implies the command and control system, but it's a US command and control system, which means its integrability is much higher. There's still some work to do with the Tamir Missile and its integrability. As we MacGyver together systems, we've got to be testing them. I'm going to assume for a minute that the US Army is only going to get there with the MacGyver, because the normal acquisition process is not delivered over the last little bit. Riki, did you have something?

Mr. Riki Ellison:

Yeah, I have something. We're not talking about the ability to defend maneuvering force, artillery maneuvering force, as a critical factor. Russia, like you said, does not have their combined capabilities to be able to strike those, but that's coming. That to me is extremely important and could lead a little bit with the command and control on that. It doesn't look like we're taking this at a high level political level, because nobody wants to defend that type of stuff. They want to defend the cities and the ammo dumps. Where are we with that and reducing the cost of that?

RADM (Ret) Mark Montgomery:

David-

Mr. Riki Ellison:

Go ahead.

RADM (Ret) Mark Montgomery:

Yeah. Let's see if David wants to take a whack at that.

COL (Ret) David Shank:

Yeah. So if I understood your question right, Riki, where are we at with defending maneuver forces, is that accurate?

Mr. Riki Ellison:

That's correct. Army maneuvering forces.

COL (Ret) David Shank:

Yeah, right. So we're behind, simply put. The capabilities ongoing it's very similar to the talk of building Patriot Battalion 16 and 17. It's going to take time. So it's no different with onboarding and activating these Maneuver-SHORAD Battalions to do exactly what you just described. If you rewind the clock 20, 30 years, that's exactly what we did as a divisional asset. You had an organic Maneuver-SHORAD Battalion for lack of better terms, a SHORAD Battalion that was organic to every Army division.

COL (Ret) David Shank:

They supported, based on the division commander's priorities, where to project that capability, whether with maneuver brigade combat teams, whether it was providing defensive fires to an aviation forward arming and refueling point, or what have you. Again, to answer your question, we're behind. What's projected right now? Three more M-SHORAD battalions, but we're still, I say we collectively, the Army is still working to round out the first M-SHORAD there in Europe.

RADM (Ret) Mark Montgomery:

So I'll pick up on it, though, and say first I think, probably not to cause you a nightmare, David, but it starts with Sergeant York was the collapse of this capability. I will say this, the Army's funding it. This year 500 million dollars, last year 5 million dollars to M-SHORAD. I contrast that with IFPC, which has gotten 19 million dollars, which is to say, that's the amount of money you give a program when it's at the funeral home. It's hot standby money, just so no one gets laid off in the program office. It isn't actually procurement or R&D money, so I'm worried. I think they're investing in M-SHORAD, Riki. It's a ways to go, but it really is that fixed site defense that where the Air Force reasonably expected the Army to provide it, and I don't think there's a unit there, the system needed.

Mr. Riki Ellison:

Pardon, can I just ask Tom, do they have a lead systems architect for NATO, for missile defense? Is there an architecture being laid like we're doing in Guam like we're doing at US Homeland, that Congress is asking for? Do we have a lead system architect for the integrative missile defense of NATO?

Mr. Thomas Goffus:

Yeah. Mark's smiling. If there is one, I don't know who it is. That doesn't mean it doesn't exist, but as I'm building our checklist, which I'm going to need the help of folks like you, overall is we need a system. Point one is, do we have a lead architect? Do we have a lead cat herder? I don't know that.

Mr. Thomas Goffus:

The other fun part about NATO headquarters is we do everything by committee, so getting 30 people to agree on anything is one of the reasons there's a problem. So that's something to look into. That is how they fixed AGS as much as they have. As a NATO owned element, they picked one lead sled dog. That's not easy because not everybody agrees. It was easier because AGS is actually a MOU program. So you don't have to get all 30. You have to get whoever's signing up to this. If you do it early enough in the process, then the other 29, if you want to join, you sign up to, this is the lead sled dog.

Mr. Thomas Goffus:

So it's different when you try and do something, especially common funded, because then everybody wants their piece of the pie. That's how you ended up with a dual US and French, that was the price, was

you needed multiple companies to do that as part of it. Now I wasn't here for that, so there's probably a lot more nuance to that than I'm giving you. That's the fighter pilot bar napkin answer rather than a detailed one, Mark. There's probably-

Mr. Riki Ellison:

The tough-

RADM (Ret) Mark Montgomery:

Yeah. Let me jump in on... Two thoughts of that. First, I was laughing because when Riki says there was a missile defense architect for Guam, I would say there were two and they managed to screw it up by having two people do one person's job. Which is to say, in our country, MDA should be the system architect and Cape should be the evaluator, not a secondary architect that screws the system up. To get very specifically at it, and thing is Jason had to drop off, I'll pick up and say your European command always has a secondary set of responsibilities. They support NATO, but then they build the coalition of the willing. I think under that, the USAFE commander should be building an architecture that's plug and play, Riki, to get at your answer. Then to get to you, NATO can look at that and probably do a better assessment of, okay, what do we need to build on that?

RADM (Ret) Mark Montgomery:

Now look, that usually works well when the US is the preponderance, 28% or more of the effort. So in the Patriot and THAAD, in missile defense, I think in Aegis Ashore, people look at us that way. In that purely cruise missile defense, it becomes very hard because the United States is not a preponderance of effort now. USAFE struggles to build that plug and play when there's no for the coalition of the willing, because there's no US to set as the base.

RADM (Ret) Mark Montgomery:

So I think in the absence of that, it's probably going to take that special moment when the USAFE, using its NATO hat and its EUCOM hat, has to close that gap. We do it in mine warfare, would be another area where we do that, because the US just isn't willing to push mine warfare assets over here permanently. It takes them about a month and a half to sail here, maybe two, if they get here, and usually on the back of another ship. My point on this is, this is one of those unique opportunities where the US has a hole in its swing and we really need to close that gap. I think it sits in the USAFE slant, NATO Air Defense Commander's role.

Mr. Riki Ellison:

Can I hear Jon Lipps on this? He's in a pretty good position on architecture of what they've been doing with MDA and Formidable Shield with some pretty advanced capabilities bringing countries together. Jon?

CAPT Jonathan Lipps:

Yeah. Riki, thank you. I think to Admiral Montgomery's point, EUCOM has been leaning pretty far forward in trying to instill that initiative. As someone had previously mentioned, even though we talked about integrated air and missile defense, this topic within NATO still remains challenged, because when you look at the conversation of ballistic missile defense, you really are constraining both the threat and then also relying on the voluntary national contributions of the alliance members to support that.

CAPT Jonathan Lipps:

Now, the developments on the eastern front have accelerated, I think, many of the alliance and the components of response to this threat, and we've seen that in real world activity. I won't go into any details, but I certainly can share that there have been some very robust conversations that have, I think, resulted in positive movement, with regards to how the alliance and the components look at the COW and the DOW, quite frankly, in theater.

CAPT Jonathan Lipps:

So it's a reflection of what's occurring and that's good news. There's another aspect of this that, also, as we look at the world is learning. When we spoke about precision guided munitions earlier, one of the challenges that I think the integrated air missile defense community is going to continue to have moving forward is the application and employment of these weapons systems from the adversary's wheelhouse, and how he's learning on how to employ these capabilities across domains and what that causes. As we look through the command and control lens of, is it a strategic fight or is it a tactical fight, well-

Mr. Riki Ellison:

Jon, wasn't the MDA the lead architecture for EPAA? Who was the lead architecture for EPAA? Somebody was the lead architecture for that.

RADM (Ret) Mark Montgomery:

It's only missile defense, Riki. I'll jump in. There is good architecture there, but it's about missile defense and it was about our Iran. We got to be very careful here. We're trying to make Lipps repurpose something into a mission that it wasn't designed for and a threat it actually wasn't specified for. Jon, I didn't mean to step on you there, but giving you a little bit of shipmate assist.

CAPT Jonathan Lipps:

No, sir. You're exactly right. I appreciate the weather eye there, because that is exactly right, Riki. The other thing that we need to, I think, recognize is that there are acquisition architectures and then there are policy architectures. As Admiral Montgomery pointed, the genesis behind Aegis Ashore will [video inaudible from 01:16:42 to 01:16:46].

CAPT Jonathan Lipps:

If you look back in that, there's how we apply those things and those tools, and what we use them for, we need to understand their origins. Looking into the future quickly, I won't stump Formidable Shield 23 but one more time. To the previous comments about the integration across the theater, one, I ask everyone to take a look back at the map to consider the maritime domain in the Yukon theater. The size of that, quite frankly, is enormous, and recognize that for Formidable Shield, in this next iteration, we are exercising simultaneously in two different JFCs' battle space, Brunson and Norfolk. In the generation of the effects and the conditions that those commanders desire across all components, integrating that land, air, sea, and space aspect.

CAPT Jonathan Lipps:

So it's going to be a big evolution and it's executing concurrently with USAFE Astral Knight. So we are intentionally teeing up resource decisions that the four star commanders will have to make in the safe

and successful conduction of a live fire mission rehearsal in theater. To your earlier question, it's happening, shipmate. We're doing it.

RADM (Ret) Mark Montgomery:

Hey, Jon, that's great. That counts as your final stump. Let me give Riki with the time, we're passed. I want to give Dave and Tom another minute just to close out. So David Shank, any final thoughts before we pass it back to Riki?

COL (Ret) David Shank:

Yeah. I would comment on something Tom alluded, well, two comments on something Tom alluded to. One is the policy challenges just across the board. We mentioned 30 nations that make NATO, but I experienced it when I was serving, and some of the challenges. There's an old saying never waste a good crisis. So what an opportunity right now to work through some of these policies of Country A talking to Country B, and doing it in a timely manner and sharing that information.

COL (Ret) David Shank:

The other piece to that is the cross domain solution and really the security classification. Not to get too security controlled on you here, but there are some nations that considered information secret, while others can consider that information unclassified. So how do you get beyond that? You do it through some type of cross domain solution device. So we're familiar with several devices that are out there, but just wanted to bring that. Riki, thanks again for letting me participate again with the cast of all stars here. It's been a pleasure.

RADM (Ret) Mark Montgomery:

Hey, thanks. Tom, over to you.

Mr. Thomas Goffus:

Sorry, button hell. Yeah. Thanks. I really appreciate doing this. It makes me feel good knowing that somebody else is worrying, like I am, about this problem set. Amongst us here, I got to tell you that I started out in classic fighter pilot style trying to say the emperor has no clothes. Then I was corrected that the emperor has some clothes, and that's what they wanted me to say. I've settled somewhere in the mode of the emperor doesn't have enough clothes.

Mr. Thomas Goffus:

So it really feels, compared to where you guys want to go, it feels slow and sideways. We're going to keep pushing from this end, if you keep pushing from your end. I got to talk to General Cavali real quick and IMD was on the front of the plate. This is something you need to get after, and this is something you know and that you can get after. I think he's going to be a good landing point for getting this done, he and now General Williams out at USAREUR. We got Scorch coming in new as well, so I think we're going to try and move the ball. Thanks again for doing this.

RADM (Ret) Mark Montgomery:

I thank you, Tom, and appreciate that. I think the emperor's wearing a pair of socks, potentially, and nothing else. All right. I think you're right. You can all the way back to Ben Hodges to say that USAREUR has been an honest describer of the challenge. Hey, Riki, you got the last minute here.

Mr. Riki Ellison:

I would say, Tom, the emperor has clothes in the closet, maybe in the sock drawer, but he hasn't got them on and we got to get them on. There are capabilities today that are in Europe right now that need, even if you can just put on your feet, to be delivered, and Ukraine, it's the moment. It's where you're going to turn. It's where you're forcing capabilities and you've got to continue to bring them awareness. People are dying every day because of not having the missile defense capabilities we talked about today.

Mr. Riki Ellison:

Command and control, I think, is critical big decisions at the highest levels to get that right, to filter it down, and to move current capability. Mark was right. There are countries, they got NASAM capability, the only thing the world right now that does cruise missile defense 360. Why isn't that being integrated into all our systems and getting this thing forward while we wait for IFPC, while we wait for IBCS, while we wait for LTAMDS and all the other stuff coming. They're great, but right now we don't have anything. The clothes are in the closet, man. Get them out of the closet and get them on our emperor.

Mr. Riki Ellison:

It was a great discussion. Thank each one of you for coming and participating in a real discussion. This is a real discussion at the right time for the right reasons to win. So thank you. Mark?

Mr. Riki Ellison:

Okay.

PART 4 OF 4 ENDS [01:23:37]