

RSA Ep 3 Innovation Part 1

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Julian Hernandez (Host): Ladies and gentlemen, welcome to episode three of Ready, Set, Airlift! From all of us here at the 433rd Airlift Wing Public Affairs Team, we hope you are having a great start to your new year. I'm your host, Julian Hernandez.

With all of 2024 now ahead of us, the focus of today's episode is transforming for the future. A key line of effort for the Air Force Reserve throughout 2023, and one that is sure to remain relevant this year and beyond. To discuss innovation efforts throughout the Alamo Wing and AFRC, I'm joined on this episode by Major Paul Lentz, the 433rd Operations Group Chief Innovation Officer and head of the Galaxy Spark, along with Technical Sergeant Taylor Mogford, a 433rd Logistics Readiness Squadron Flight Training Manager, and a Liaison Facilitator for Tesseract, an Air Force entity with the purpose of accelerating change.

AFRC recognized both of them for their innovation efforts in 2023 with a Process Improvement Award.

Major Lentz, Tech Sergeant Mogford, thank you for joining me today on Ready, Set, Airlift. So I want to start with a somewhat of an easy question. Both of you have had a chance to innovate in your time here at the 433rd Airlift Wing. On a fundamental level, what is it that draws you to be an innovator?

Where does that passion for innovation come from? Major Lentz, I want to start with you.

Maj. Paul Lentz: Hey, Thanks for having us and talking to us about this hopefully it'll spark some interest somewhere else. Pun intended of course. So for me, I think I've always been very critical of different things around me.

I mean, if you want to think of what's something everybody can think of as traffic and you're sitting there constantly going through traffic going, man, I hate this. I hate this. I hate this. I've always kind of been like, I hate this. What if we did it this way? Or, you know, what if we, everybody did X, Y, and Z or whatever it was.

So for me, it was always. Yeah. Kind of like that, but in every situation. Coming through school here, at the C5FTU, it's not any different. Hey, I wish we could have done it this way and that way. So the way I kind of approach things now, especially now that I actually have the ability to affect some change, which is kind of exciting, what would I have liked to have seen as a student?

What would I have liked to see done and what can we all make to do better? So I feel like I kind of owe it at that point to everybody else who's behind me. It won't affect me now. I'm not going to go through the training again. But if I can make things better for somebody else, that's kind of what drives me and continuing to just make things different for everyone.

TSgt. Taylor Mogford: Yeah, I think that holds a lot of weight and a lot of truth for me as well. For me, really, I mean, it's almost. Too simple, right? It's there, there was a chief that spoke at an event he said, essentially, you know, at some point we've got to hang this uniform up and at some point we've got to hang the blazer up, you know, whichever service capacity you're in, it has an end to it.

And so for me trying to leave it better than I found it when it's time to hang it up to know that I gave enough where there's not too much left in the gas tank left is really why I'm aiming at there. So, I mean, really, you know, what, what, what can we do to empower airmen and use these tools and exploit them for good.

Maj. Paul Lentz: That kind of goes with that old Boy Scout adage, right? Leave things better than the way you found them. You know, if you go to a place and you find trash, you should pick it up. So I've come to a place where I'm like, Hey man, I wonder if we can do this better. Like, can we just change a process to make your day a little bit faster or you're training a little bit better?

If we have the power, let's do it.

Julian Hernandez (Host): Absolutely. And you know, the military part of its values is that leave it better than you found in mindset. That's something I heard a lot during my time in service. And you'd think the infrastructure would be a little smoother to make those kinds of changes.

But anybody who's worn the uniform knows that. Change is a complicated term in the military. So the air force has been using the spark tank system in the past couple of years to drive innovation. And that's kind of what has brought the galaxy spark to life. If I'm correct on that major Lentz

Maj. Paul Lentz: all right, so the genesis of Galaxy Spark and all the innovation stuff, kind of a tough question to answer.

Straightforward, but let me attempt it. we didn't really start off as Galaxy Spark or even innovation or whatnot. We were kind of looking at different things. So the first thing that really happened is I had a sergeant who said, if Joe Bob Cessna school can make a pre flight for a Cessna, why can't the United States Air Force, which is a profound statement.

And if you kind of. Look at it and say it. So we started looking into that and trying to do that for our students in our school. So that was probably the first genesis of projects to try to do things better. Along with those lines, other units were starting to do the same things around the same time.

So we'll talk about the 2019, 2020 timeframe. I had a lot of friends at Travis and Dover, which worked out really nice. And Travis and Dover also probably started two of the biggest Spark cells that I can think of. So with Phoenix Spark at Travis and Bedrock at Dover. So with that, as we continue to move on with different projects and stuff, I finally went to leadership and I was like, this needs to be big. Can you please let me start an office and focus on a lot of the things?

And I'll probably get into what we were working on. And it wasn't just, you know, pre flight videos or anything. There was a whole bunch of ideas that popped up. We need our own spark cell and we need to be able to do that.

So galaxy spark was kind of born from, from that.

Julian Hernandez (Host): Now, tech sergeant of your Moford I know that you have used the spark in your time in the 433rd

TSgt. Taylor Mogford: I have, I think my first foray into innovation was really in 2017.

I was on an NPA tour with special warfare. they like to do things a little bit different sometimes. they soffit, which can be a derogatory term at some points, but I think where we're at now, there's, there's a lot of truth in where that can help take us. So really I kind of got into this, it sounds bad out of necessity from boredom.

so, you know, I was deployed at the time at the height of COVID which was a blessing, right? However, during COVID there was different schedules, there's different nuances of complexity that came from that. we would see gyms shut down, you know, by the time that you get through PME.

And maybe you can or can't work out because the environment that was constrained at that time I was really just like, I need to find something professionally to do for all of us to stay busy. We don't want to burn this base down, right? And we want to be a good advocate of showing what it's like when we send reservists out.

And so. I was on LinkedIn and ran into the Logistics Officers Association page and their COO had put a, an all call out saying, Hey, Loa, it's not just for officers, it's for enlisted too. I had a really good NCOIC who was a mentor of mine who had posted on that. And he's like, you got some room for an NCO?

And he's like, yeah, come on down. So I had the crazy idea at the time, because just again, contextually, gyms were shut down, were deployed. I've shredded through PME. So I was like, yeah, let me go ahead and just private message this guy and see if I can't get on board with whatever this is. to my surprise, he responded back, Hey, we've got a conference.

It's out of Kirtland and it's virtual now because of COVID. Why don't you attend? It'll be after hours for you. So I was like, that sounds like a great idea. That'll keep me busy. that really got me into these things that led me here and we'll talk more in that in depth when we talk Tesseract and some CPI type stuff, that got me really into Tesseract and participating at, at those Air Directorate kind of challenges which thankfully COVID kind of opened the door for there's a lot of resources there When we came back home, since we deployed with some of our fellow reservists that camaraderie that they built was like, Hey, I don't really want that to stop.

We're not deployed anymore. We're back home reintegrated with the normal force, but this can be a force multiplier like this. If it's nothing but building up the camaraderie, Hey, it's a win. So really that's, that's what pulled me kind of more towards the locus of, of this crazy train.

Julian Hernandez (Host): So your story points out something I wanted to discuss, which is innovation can seem kind of difficult for the average airman to get into, or, you know, just the average person working at the wing level, you know, they may think, well, what do I know about innovation?

Or even if I have an idea, everybody has ideas, you know, your example shows really anybody who's willing can get involved, but specifically with the galaxy spark, is there really any limitation to personnel in the wing getting involved with it?

Maj. Paul Lentz: All right. So there's a few ways to look at this. So the first thing I did when I was kind of starting this, the cell is I ran around kind of looking at the innovation space and it was kind of crazy at the time and it probably still is, but it's definitely kind of calmed down, which is thankful, but it was mostly running around going, looking to see, all right, who's doing what, where's it at what are the, what are the lines of communication, who can do these things and then trying to like share that as much as possible.

around because we all mostly we don't have the time to really kind of go off and do all this discovery by ourselves. There are a lot of events, which they call collider events, where a lot of these like minded individuals are getting together for like industry days or different conferences that were popping up all around.

And so I was trying to collect all that information. And I also got onto a, spark Slack page, I suppose. And so it was just, you know, maybe a couple hundred people sitting there talking about it all and figuring out the coolest thing about that. And this is a little tandem, but. We would all sit there and post these questions basically into the ether.

Has anybody figured out X, Y, and Z? And it was great because any airman could get on that and it didn't matter where you were, you didn't have to be part of a cell or anything crazy. It was just, Hey, I have this project I'm trying to figure out. Like, does anybody figure out how to fly drones on your base?

legit questions like that. And so if somebody else would come up and say, Hey, we did it over here. Here's what we've learned, or I didn't figure it out. And here's the problem points that we all had. And that would go with AI. That would go with drones. That would go with all kinds of things. in a perfect world with some of the resources, I would have collected all that, provided it, and then provided a better point of focus for the rest of the wing, if anybody else had those ideas.

I probably never really got to the point that I really wanted to for, for that talking to you today might hopefully be something that does spark some interest with some other people.

Julian Hernandez (Host): So that makes me think of kind of the social media Reddit style community, right? Where you are broadly involved with something and you are looking to connect with others who are doing the same thing to see if they've found better answers to the same problems that you all share.

Maj. Paul Lentz: And then it did end up being different things. Like Slack became a big thing, especially in 2020, just to do normal business. But it became a huge help for, for that kind of building of community discord channels blew up grew up. I don't think it was one on Reddit for, for innovation in particular, but there was a lot, everybody was throwing stuff at the wall to see what stuck, which is, Hey, that's exactly what innovation is.

It's like, let's see what we can actually do to make it work. So some of the things didn't work and they kind of, you know, grew into the things that worked out the best. Probably. I mentioned this probably now, one of the biggest gripes I got from different people in different, different realms as they're trying to do their normal day to day job is they're like, man, I wish innovation was like centralized somewhere and I wish we could figure it out.

I think we have gotten to the point. There are some definite centralized innovation. There's innovation everywhere from all the way from headquarters, Air Force, all the way down to the most of the squadrons. So there are MAJCOM on people that can be talked to. There are wing spark cells. There's regular just people that are like, Hey, that's that guy that I can talk to about this thing.

LNOs knows, for example, over with various Tesseract is a spark cell. At the end of the day, it's just at a bit, it's just had a bigger place.

Julian Hernandez (Host): So I think a question for a lot of people when they hear the term innovation is, well, okay, so what, you know, what makes. Innovation different or what makes innovation so important that we need to focus on, you know, and I'm thinking in the sense that a senior airman working in maintenance, just doing his A. F. S. C. You know, why should he care about innovating or pushing forward or, or how would that make his quality of life better? And Sergeant Mogford, I think you can kind of speak on that because you had a project that started from maybe what we'll call like a, a quick thought that turned into an award winning project.

TSgt. Taylor Mogford: Yeah, for sure. So, I mean, the easy answer is we're, we're constrained, right? We're just in a constrained landscape and, you know, I'll, I'll be honest. We, I think we've been constrained as a force in terms of time, people, money, as resources, even I'd say infrastructure, right? Since I've been in, I'm pushing over 14 years now.

There's a good SOF mentality that I kind of picked up, right? The easiest day was yesterday. I highly doubt we're going to be less constrained tomorrow, right? So. The easy answer is we're afforded the opportunity to be creative today to get through tomorrow's problems. Some of that's going to be looking at the future in areas and you look at subject matter experts.

They're going to know where those redundancies are in place and some redundancies need to be there, right? However, there's some that we can trim out and we can be more effective. So I think that's where we're going to have to focus when we look at, you know, other imperatives coming down. We look at other objectives.

Airframes changing nuances to policy and doctrine, leveraging our own institutional knowledge that we have at the wing is going to be crucial. I think. To navigating where, where can we get good and where can we get excellent.

Julian Hernandez (Host): Speaking of excellence, you know, I want to get into the, that project that, that ended up being recognized with an Africa process improvement award, because I think it's a parable, if you will, for how, airmen in the wing today.

May have that idea and they're wondering how do I get this from just an idea to implement it? So I think your story might be able to gotcha illustrate that.

TSgt. Taylor Mogford: So yeah, I appreciate that and really that's all thanks to I think it's what Colonel Morgan and Major Lentz on that award and and our SMEs that that kind of crafted this thought, right?

And we just try to help mature it and give it some legs. That, that award's a funny story, really. Essentially, I, I'm also our awards index guy at our flight within LRS over at Supply, right? And I'm at this awards meeting. We have this fantastic senior NCO and, you know, sometimes we get stuck in this, the way things have been done, right?

Sometimes there is, is a good business practice on where to bring those ideas up. And sometimes where it's a little bit more risque in a, in a forum to, to say

that. Right. And so we had a category of innovation that brought up and I kind of just like, yeah, I've got us on that one. I'll, I'll hammer out those narratives for this piece of this 1206.

Right. And I believe it was for like a unit award and the senior NCO it's POL sitting in the back. He's like taking notes and like, we make eye contact. I'm like, just kind of like, Hey, good to see you. And at the end he said, Hey, I'd like to talk to you about that. I've got this idea. Like, how do I go about that?

Like, are you the right person to talk to? I said, short answer is yes. Like when in doubt, just, just come to us. Right. And I think to, to take, to take one step back to come three steps forward, you know, if you're in doubt on, if you have this idea and if she, if, and if you should come to the spark or not, just come see us.

Or reach out to us, hit us up on teams or email or whatever your, your method of, of reaching us is. But really, you know, we had this idea and it just so turns out that the senior NCO we have is a full stack developer at Leidos during the day. Like, whoa, like the magic of the TR, right? The magic of the reserves.

We have, it's just this huge talent pool. I think that we need to figure out how to utilize. So the senior NCO I was like, Hey, I've got this idea. How do I get through it? And I was like, honest answer is just build it. It sounds simple, but you got to fail to learn the lessons from it. And so it sounds crazy.

But because of what his day job is, he crafted like a storefront mobile app for QA and like a couple hours like this guy's crazy. Good job on Leidos for picking that guy up. And so he, he builds it. And in the meantime, I check vision and gain, which are meant innovation management systems much like the spark spark lives for the uninitiated up at the wing and MAJCOM levels typically because of that connective tissue that it's supposed to provide to the field and then bring up.

And then obviously with me being a Tesseract LNO or a liaison officer you know, I'm on that other side where I can then take it from a wing entity. Validate it their findings. See if they have something that's good enough as a prototype for us to try to tear it apart and let it go through some iterations so we can mature it and give some next steps while we hopefully empower some people and then take it up to their directorate so that we can have it vetted at that level.

And then if there's areas that we need it connected to, then that's where I help bridge. Yeah. And that's really what we kind of exploited for lack of better words. So it was about what, 60 days. And we took the idea, we saw that there was a huge demand level from PACAF in A3 Envision, and that this was something very close to what they wanted.

So we were like, hey, build it, and I'll meet you halfway.

Maj. Paul Lentz: So, what is the, we basically said, or you guys basically said, we have a problem somewhere, right? So what was that first step? We defined that problem, right?

TSgt. Taylor Mogford: Yeah, so we define the problem we...

Maj. Paul Lentz: which was for our award. There's probably a few problems that we've solved, but let's let's focus on the award one.

So what was that one?

TSgt. Taylor Mogford: Essentially, you know, given our landscape of being constrained with resources, especially com assets, right? QA in particular has a lot of double data entry and there's a lot of logistical back and forth to get to doing what they do, which is ensuring the quality of a program and the effectiveness of our force in performing SME type tasks.

Right. that time wasted, you could be like, okay, like what's a couple of hours. What's a few hours. If you look at the kind of person that, that we put in QA, they're career airmen. These are people who are sharp, they're hard chargers, they know the AFI and the regs. And so these are people we've put into positions to help mentor and coach from a different angle to make sure that we get good, right?

And so that time scales a little bit differently, right? So you've got a bunch of people going back and forth. They go do a inspection and that's all written down, which is great. You see, we both came in here with these iPads for, for those who can't see us. But, you know, there's, there's some things you can do real time.

And so we identified that, you know, there's, there's some double data entry. There's some logistical back and forth. And we noticed at the same time the senior NCO and I are both on a, what's called purebred program. So we're

setting up usage. Within our squadron for tablets like, Hey, we have tablets if we could just get another use case out of the tablet fair game,

Maj. Paul Lentz: right... so is it fair to say, basically you were like, I don't want to go out to the, do my job twice, go out there and write it down on paper, go back to my office and write it down on a computer. When I carry a computer in my hand, I'll just do the job there. And then you said that, Hey, this is our problem. Right.

And then he said, Oh man, I had this full stack developer. Maybe he can figure out how to get it onto my iPad. Is that a fair assessment?

TSgt. Taylor Mogford: Absolutely.

Julian Hernandez (Host): I think the interesting thing with that story is, we've all had those frustrations and whatever our line of work is, you're sitting there, you're doing something, and like you mentioned it earlier, major Lentz, man, there's a better way to do this, but.

You know, the struggle is how to get it from idea to implementation. with this case, it was a matter of having the right SME at the right place at the right time, essentially

TSgt. Taylor Mogford: 100 percent

Maj. Paul Lentz: and his struggle to as I watched him because they were watching kind of build this, he came and said, Hey, we want to do this sounds like what do you need?

I'll try to support you. I don't even know if I have anything to give you, but let's do that. Finding the guy to build it wasn't a problem. Then he had to go and find the program management office and figure out what, who's controlling what and what places where the bureaucratic pain points.

So it was real innovation was not so much of, Hey, I can do this on an iPad. Anybody can, not anybody can figure that out, but that's probably the easiest part of what was accomplished. And this is probably where it gets where innovation really shines. It's not so much finding a new tech, but it's figuring out how the air force works and then how to make it work for us.

And so he went and found all those offices and, and different places and who to talk to, to get approval at the right levels and then how to coordinate all those

things. And then he's like, I got all the, I got all the pieces in place. Let's, let's just glue them together.

Julian Hernandez (Host): going through that process what is that lesson you learned of dealing with the bureaucracy?

Right. Cause again, like we mentioned sort of the beginning change isn't exactly the favorite topic of the military,

Maj. Paul Lentz: My number one lesson for any of this stuff is get a nice helmet because you're going to bang your head against the wall a lot. I actually told, I told this to the CEO of one company because she was just talking about how she would constantly have to go in front of Congress or other people.

I kind of want to jokingly get a helmet in my office because you're just going to bang your head against the wall. Like, why is this not working? Why are people not understanding? Why did I not get it? Or why can't we just do it better? And so I feel like half the time you're just trying to figure out how to, to blow through those processes.

So my number one advice is just keep going. it's really easy to lose steam because you just get so frustrated with all the different things that you have to, to face. And sometimes it's just motivation from other people and that's what's kind of infuriating. But if you keep going, you keep going.

TSgt. Taylor Mogford: That's the, that's the magic of major Lentz. Like you've got to have your, your battle buddy right with, as with anything. I mean, with this one, it came from that exodus of lessons learned from the past and, you know, from, coaching sprints at, Tesseract, I've kind of learned what's the bare minimum you need to just like break through the ice.

And so we kind of did that in a, in a very scary way, very fast. So, you know, we took this idea and it was about 60 to 90 days. We took this idea, we validated that there was a demand out there in the enterprise, right, that we could build this in house we knew this wasn't something we wanted to own because of those resource constraints, which, Hey, that's, fine too.

Right. sometimes we've got to be ready to give a hundred percent 20 percent to give. Sometimes giving a hundred percent is giving that 20. Sometimes we have to conceptually think about our situation, right? once I validated it, I took it to test rack proper and said, Hey, you know, we've got sharp senior and CEO.

This would be great for engagement. We've got people coming out here, breaking outside the frozen middle, willing to be uncomfortable to lead by example. I think this is a good use case. We need to really rally behind a champion. And by the way, PAC F8 and NA3 wanted this. Like this is, there's a big demand here.

And there's a great gal that's up at Tesseract proper Georgia Riggs, super smart gal, super into data. And so I, I kicked this over to her. She was QA too, for a while. And she just took hold of it . We just ran with it like crazy from, half a four at that point. She's like, you know what?

I know somebody AFSOC, this is like their thing and they've got it in and they talk to the PMO all the time. So then she took it to AFSOC. It was like a quick five minute phone call. This guy out of AFSOC out of Mildenhall and from there, he's like you need to talk to AMC. I'm gonna get you plugged in with AMC And then AMC's like here's the PMO and the next thing I know we I was hitting up the CNCO I was like, hey when can you meet with this PMO via teams?

let's leverage some virtual here. And I was like just have the storefront ready. And so our ask was Either let us tap into your data point so we can use it test it out in the field or Give us a like product which ironically they had a like product and so we ended up getting that Unstuck where it was at at a pmo Which was crazy.

So, I mean it was stupid fast where we went. Holy cow How are we going to build this app in somebody's basement for lack of better words, too? Hey, here's this product that's like safe for nipper to be on a government ipad, which is cool, right because now It's a resource we have. It gives commander flexibility.

It gives, you know, troop flexibility from the airman up to the senior and CO. It allows us to be agile. So I think that was really checked all the boxes.

Julian Hernandez (Host): This was just the first part of our conversation on innovation. We'll be releasing the other segments in the weeks ahead as part of a mini series on transforming for the future. Make sure you subscribe and like Ready, Set, Airlift! on your preferred podcast platform to get notified when new episodes drop.

You can also check our Facebook and Instagram pages, or our website for the latest updates on all things Alamo Wing. Just search 433rd Airlift Wing on Facebook, Instagram, or Google. Before we go, just a couple of announcements for you. Mark your calendars. The Wing Annual Awards Banquet is scheduled for Saturday, February 3rd.

Stay tuned to your military emails for information on ticket sales.

Fourth quarter award packets are due by 1130 on Sunday, January 7th. And calendar year 23 annual award packets are due before midnight on Friday, January 12th. Chief Williams has emailed out the details on packet submission.

A reminder that we always welcome your feedback about the podcast.

Send us an email to airliftpodcast@gmail.com with any comments or suggestions about the show.

On that note, we are going to wrap up this episode of Ready, Set, Airlift. I've been your host, Julian Hernandez, wishing you a successful start to 2024.

Until next time, farewell.