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Paul Thies: When disruptive moments arrive in life, it's usually not the time to sit down and try to figure out what to do. You need to get in the habit of being ready to handle the extraordinary before the extraordinary happens to you, and few people understand this better than the men and women in the armed services. Hello, I'm your host, Paul T's, and on this Episode of F When, we discuss leadership, fortitude, and teamwork in the face of uncertainty with Lieutenant Heather Lucky Penny, a senior fellow at the Mitchell Institute of Aerospace studies, and Lieutenant General Bruce Crawford, Senior Vice President Chief of innovation, and director of Jacobs Global Digital Center of Excellence.

In the discussion that follows I asked Heather about her experiences of flying her unarmed F-16 jet on September 11th, and an attempt to bring down United 93 before it can be used to attack Washington, D.C., and now that episode plus her two tours of duty in Iraq, helped form how she approaches times of disruption. I also asked Bruce to share his journey from being told as a young man whose family was on welfare, that he wasn't college material, to retiring from the US Army as a three-star general, and the Army's Chief Information Officer, and what he learned about mentorship as a result.

I hope you enjoy the tremendous insights that Heather and Bruce share with our listeners. Heather, and Bruce, thank you both much for joining me today. I'm looking forward to talking to both of you, you've had extraordinary careers in your own right, very different in many respects but you also, both of course served our nation with distinction. I want to start by just thanking you for your service. Our discussion today is really going to be around self-control, self-leadership, resilience, dealing with disruption and uncertainty.

I think there's a lot that people who may not have similar experiences that you all have had, can still nonetheless find insights that will help them. Heather, let me start with you, you became an aviator at a time when there really were not a lot of women taking to the skies as military aviators, and how did that help you help shape who you are and how you approach challenges?

Heather: Well, first, thank you for inviting me to be on your podcast, I'm really happy to be here and it's such a privilege to be here with Bruce. As I know, he will say as well, not only has service been the greatest privilege of my life, but one of the greatest adventures, and it made me who I am. Being the first and only woman in my fighter training and in my fighter squadron, frankly, was a challenge. There were times when it was really lonely. There were individuals that did not want me there, but there also were a lot of people who were supportive.

I think when we're facing adversity like that, one of the most important things that we need to do is be very clear on what our purpose is. Our purpose needs to be bigger than our ego, and that's why like if you have an agenda, if this is like about you, or trying to put another merit badge on you, you will not be successful when it comes to facing adversity, because it's about you, and the challenges you'll face will be too destructive. It's not going to help you be your higher self and act and live with integrity and performance excellence if you had that other agenda.

I just wanted to fly fast fighter jets, and serve my nation, I was on fire for that, who wouldn't be? Although it wasn't easy, that purpose, allowed me to stay focused, not only when guys weren't nice to me, but also, and more importantly, when I failed. When I didn't perform to the level of standards or excellence that was expected of any fighter pilot. Certainly not myself. I didn't mind having to work extra hard, a lot of people complain well it's not very good be 150% better. I didn't care. I wanted to be the best anyway.

That commitment to excellence was because I was committed to my purpose, and that's what I hope to take that has driven me through the rest of my life. The rest of my career is that commitment to purpose that something is bigger and more important than me.

Paul: Now, that's well said and that's excellent advice because that does keep you afloat when times are down and stuff and when you don't make it just about yourself. It's okay to fail and to get back up and to keep persevering.

Heather: I think the other reason why that purpose is really important and that purpose is bigger than ourselves is it allows us to ultimately become humble, approachable, and compassionate leaders. If you do have an agenda, and you are successful, I think that's where we get into arrogance and hubris and so there are many things that I think are essential about having a purpose that's bigger than herself.

Bruce: Heather, I'd also add, from what I've read, and just my experience with you here, there's a certain authenticity that's associated with your leadership also, when you have a purpose.

Paul: Well said, now, Bruce you serve for 34 years in the military, and retired as the Army's Chief Information Officer and a three-star general. However, you've mentioned this before, and I know this about you because you and I are friends. In high school, you were told you weren't college material, which seems really odd, what was the catalyst to help you overcome the doubters?

Bruce: You and I have talked about this and everyone's got a story and everyone's got a story that I know, where they had to overcome adversity multiple times throughout their career but this particular one, it's all good stories start with moms, okay. My mom actually had me when she was 16 years old, in Columbia, South Carolina. We were both literally raised by my grandparents. They're neither one could read or write. My grandfather was a carpenter, my grandmother was a maid. She could read a little, the Bible, and such but for the most part neither one could really read or write.

Fast forward, now in high school, I'm a senior in high school, and my mom is remarried, and in divorce, and there's four of us. Now, I'm the oldest of four Kids by seven years, I have a sister who's seven years younger than me and this is at a time this is literally in March of my senior year when people are, joyous about going to college and the guidance counselor she calls me in. I remember her name, and I remember it like it was yesterday, he sits me down and says, okay, Crawford, I looked at your grades, looked at your environment where you're from, etcetera, and you're not college material. I just said, okay, because, again, one of the things I

learned several things from my grandmother and grandfather, but one was you always respected your elders and this was an elder who would size me up and said it wasn't college material.

The other thing was we're at a point where we were on welfare, to be quite honest with you, and we were eating soup and sandwiches for dinner, my mom had a job working 311 and I said, "Okay, she just laid it out for me. I'm not going to college." Nobody in my family have ever been to college and I said, "I'll get a job and perhaps maybe my sister who's seven years younger than me will be the first in our family to go to college," and probably about two, three weeks later, my mechanical joint teacher, a guy by the name of Dr. Clarence Hill, happened upon me very casually asked me, Bruce, where are you going to college, so and so it's going there?

The University of South Carolina, so and so it's going to this other place, where are you going? I just told him, I said, "Hey, look, I just spoke to guidance counselor and she said, I'm not college material, and so I'm going to get a job until my sister could maybe go to college." He said one thing at that point, and he said, "Do you mind if I call your mom?" Now, 31 years later, when I pinned on three-star general and became the Chief Information Officer in the army, he flew to DC, and of course, he'd been tracking me and he and I had been talking.

He followed my career, but he flew to DC to be there in person to the ceremony, and I had never asked him this, I asked him, "What did you tell my mom when you called her because my mom was there?" He said I remember calling her and said, "Listen, Miss Crawford. I've been watching this young man since the 8th grade," because I wanted to be an architect growing up. I tell people before there was the internet, there was this thing called World Book Encyclopedia. All grandparents had them for some reason, and so World Book Encyclopedia, I wanted to be an architect, and I took my mechanical drawing from him since 8th grade. He says, "I called her and said, Look, a couple of things, I've been watching this kid since 8th grade, I watch how the other kids respond to him." He had served in the military and he was working on his PhD at a little small historically black college called South Carolina State University in South Carolina.

He said, "Miss Crawford I want let him go with me in the evenings I'd like to try to get him in college." Now, he talked to me about it being an engineer, and then he talked to me about ROTC, and many other miracles had to happen to make me a senior leader in the Army throughout my career, but the key point here being I took away two valuable lessons from that, I carried with me. Number one, you never destroy young person's dream before they have an opportunity to realize that.

The second one, just as important, it may more important, is that one determined leader can make a difference. This was a young man at the time with his own young family who could have very easily looked away, and I would've been statistics, no doubt in mind, but he chose to get involved at the time when I needed him most. Because I went to college, each one of my brothers and sisters went to college, and then all of their kids went to college, and my kids.

You could argue that this one young man at that time made a decision to get involved that changed the entire trajectory of a generation of people, and so I've carried that with me, this whole one determined leader, and I've always strived to be

that determined leader in mentoring others and inspiring them to be better than their thought they could be.

Paul: That's amazing. It's amazing why what one individual who decides to be present to the situation and they step into the gap that the impact that they can have and they may not even really know. He may not even realize what he meant for your entire family, your extended family. Now, Heather, and we're going to talk about September 11th in just a little bit. Obviously, in your career, that's something you're obviously very well known for, but you also served two tours of duty in Iraq, and can you speak to that experience? What it taught you about fostering teamwork and a culture of mutual accountability?

Heather: First let me say that everyone's experience in Iraq or Afghanistan were dramatically different, so many of us who served those were formative experiences in our lives. Here's one thing that I think ties all of us together, is that we don't mind doing hard things, and as a matter of fact, I believe that people need that hard thing to go do to find meaning in their life and to establish self-esteem and prove to themselves that they can, but we don't like to do practice breeding.

We talk about practice bleeding in the air force with the meaningless training and so forth, administrivia, that sucks the life and your motivation. That's not what I'm talking about. It does get back to that purpose and people don't mind sacrifices and they don't mind the long hours if what they're doing has meaning. If it's going to make a difference, so I think that is something that leaders can take away, is that they don't necessarily need to make things super easy although if you're looking for retention over the long term, you do need to understand how to balance the demands that you're making for your individuals.

They need to be able to balance and actually be present for their families and so forth, but when we're asking them to do something hard, we need to articulate why it matters. We need to give them meaning behind what we're asking them to do, and then you would be surprised. You're just shocked at what people are willing to do

and how excellent they perform, because people thrive on doing hard things.

The other thing that's really interesting about that is when you create teams to go do that, then increases trust, increases commitment to the organization, increases morale, **[unintelligible 00:15:00]** and so there are so many good things that come out of being able to articulate a mission and a meaningful purpose for our teams.

Paul: Oh, that's amazing. It makes me think, I actually saw on LinkedIn just the other day, I guess Michael Dell had posted something, made me think about this. He posted this rather lengthy quote from Theodore Roosevelt about the man in the arena, and basically it's that difference between the critics on the sideline and the prognosticators and all that, and say what you want, but the man in the arena is the one who's giving his blood sweat and tears. He's making things happen.

Bruce: The willingness I'd add the man and woman in the arena, that's the person that's willing to take the risk. All right. They've seen a problem and they've stepped forward to take the risk to rectify the problem. You got to also acknowledge that. It's very easy to criticize if you're not in the arena, if you're not the person that's

accepting the risk, if you're not in this particular case, the person who has others who are depending on you to stay alive and or be successful, so there's a little bit of that also.

Paul: That willingness to be present in the moment. Bruce, now let me ask you obviously 34 years in the Army and you retired as a three-star general. I'm assuming there were a myriad of commands and directions that you had to give in your role. What are some of the hardest decisions you've had to make as a military commander?

Bruce: I'd say virtually every one of them had to do with people, either their life or their livelihood. Given the fact that my passion's really inspiring people to be better than they ever thought they could be for the reasons that I talked about earlier, and that stayed with me even here in the industry and in commercial America. I'd say virtually, I'd be a hard decision had to do with people. Looking back I'd say when something did go wrong, and it wasn't necessarily a decision, but it was reflecting on a decision, it was, did I prepare them? Did I do everything within my power to prepare them to create an environment where they felt competent and confident and trusted what they were seeing?

Did I do everything that I could when something did go wrong to prepare them? It's everything from, as a second lieutenant as a young officer, having to be the first one to call a family and tell them that we'd lost a service member. That wasn't a decision, but it's something very difficult that I had to do. Losing a soldier in my 700 men and woman group of paratroopers in the 82nd Airborne Division in Ramada. Thinking back, although not a decision reflecting on what could I have done differently as the battalion commander to prevent that from happening.

I'd say every hard decision that I've ever had to make had to do with people. It wasn't about strategy, it wasn't about resourcing. It had to do with people, and I suspect that if you poll a group of leaders, almost all of them, as they reflect on it, I wouldn't say they come to the same exact conclusion or they come to very similar conclusion.

Paul: A lot of what you've articulated they're not things that you necessarily planned for, it was like, these are things you're having to react to, how did you prepare for those tough moments? What did it teach you about contending with uncertainty or fluid environments?

Bruce: I think Heather mentioned it earlier, is first and foremost awareness and understanding a couple of things. One of that leading is a privilege, that helps you prepare. The other piece that's more important, it can never be about you, and as the leader, when you have something very difficult to prepare for. I think you've got to do other things. In fact, to your question about preparing for tough moments, you've got to be honest with yourself about your own individual strengths and weaknesses. What am I good at and what am I not good at?

Then you got to surround yourself with people who think differently than you do, and who are good at the things-- Again, for the good of the organization that you are not. I used to run the strategic leader development program for the Army back in, I think it was 2010. One of the cool things as an example we got to do is we got to go visit

CEOs of companies. I never wrote this down but to this idea surround yourself with people who think differently and may be smarter than you all.

I heard the CEO of McDonald's in a very small room say that if you always find yourself having to be the smartest guy in the room, then you're probably hiring the wrong people on your team. The point being that one of the things that you've got to do to prepare for top moments is you've got to be honest with respect to what you know and what you don't know. You've got to fill that void with people who do know and be comfortable in your own skin there.

I think the other thing I've mentioned is you've got to be authentic, and it's not something you can just go do. Being an authentic leader is not just something you could read about and then just go do it. It's got to be a part of who you're and what you stand for. The last thing I'd say is-- one of the last things here is trust. We talked about trust. Trust is the bedrock. It's the one big thing about the one big thing. The ability to trust each other.

I think being authentic is one of those pillars that leads to building trust. Then the last thing I'd say is when you're dealing with tough moments, you've got to prepare in such a manner that you've made practice harder than the game. Meaning whether it's leveraging technology to put people under pressure situations. I know Heather, in her past life, they did that like nobody's business. A lot of the rest of, I'd say both Corporate America and the military modeling themselves after ability to leverage technology like fighter pilots did, put them in tough challenging situations early on. That last piece would really be about make practice harder than the game and put people in challenging situations before they have to actually go and do it.

Paul: Excellent advice. Now, Heather, I mentioned earlier besides your tours in Iraq, you of course are known for taking to the air in an unarmed fighter jet on September 11th under orders to bring down United 93 before I could reach Washington, D.C. Can you speak to what that experience as well as the TORS in Iraq, but that experience. What it taught you about finding the courage to act in a highly stressful situation?

Heather: Paul, I've already spoken, which I think is probably the most important element, is having that purpose that's greater than ourselves. Having clarity about what that purpose is. There's a difference between uncertainty or trying to seek certainty, which is predictable outcomes, and having clarity. We need to have clarity in what our purpose is, and we need to be committed to that. It has to be so much bigger than ourselves.

I think one thing that's really important as I've spent time reflecting on September 11th over the past 20 years, is that the kind of courage that I think we saw that day, and not just in the passengers of Flight 93, but the first responders and the people who helped each other, and the moments before the tower felt, and how people just took care of each self on that day. We saw examples of everyday courage. I've come to think of courage like a muscle.

If we don't exercise it on a daily basis, when the moment comes it might be too daunting for us to lift. We might not have the internal strength and integrity to rise to the occasion. I think that what that means is in our daily lives, when it comes to being

brave, overcoming our fears, putting those fears to the side, that we do the right thing, overcoming our insecurities, our self-doubt. That we practice that bravery and we practice service on a daily basis in the small ways, in the small things. Only then when our moment comes will be ready.

Paul: This next question, Heather you, I think it might be the tactical application for what you were just sharing in terms of particularly finding that larger purpose, the purpose that's bigger than yourself. That seems to be the fundamental core of how you respond to whatever environment you're in. Whether there's clarity and certainty or not. From a technical level, let me ask you. You're a senior fellow at the Mitchell Institute for Aerospace Studies as a defense policy expert. Are there certain decision-making ideologies that you studied or encountered that you feel are particularly relevant for innovators, creators, and disruptors?

Heather: I wouldn't call it an ideology if, I think it's a broader approach to how we ask the questions and ask the right questions. When we're looking to innovate, create, or disrupt, fundamentally trying to progress. We're trying to solve a problem or do something better, and asking the questions about understanding what we think is insufficient, what we think is broken, and having clarity on what our desired outcome actually is.

Beginning to understand not only that framework, asking the right questions, and being able to zero in on where we think the gaps are is a crucial piece of that. I think it's also key for leaders to try to not only be experts in their field but also be very broad intellectually. Studies on creative genius have shown over time that often time what makes people innovative, creative, or disruptive in a productive and progressive manner is that they're able to apply cross-disciplinary approaches or thought processes to a problem.

We're not building a better mouse trap, we're just thinking harder, but in the same way, we're actually looking at the problem from a different perspective. We're asking different questions, we're taking different approaches to solve that problem. I think this gets a lot back to what Bruce had said earlier about building a diverse team. As a leader, you are not going to be able to solve those hard problems if everyone has the same mentality and experiences as you.

Diversity isn't only about the external markers of gender and color and so forth. Diversity also really is about our experience, our training, our expertise, our education, and our life experience. When we build those diverse teams, and when we empower those teams to speak up, to share their perspectives, that's when we can begin to create that creative innovative solutions.

Paul: That's interesting. It's almost co-opted genius. Diversity of thought. Having a diverse team, of people different world views gives you that in a sense co-opted genius that allows you to have that maybe plasticity of thought so that you can approach a problem from any number of different angles, and then you can create a solution from that.

Heather: Exactly.

Paul: Now, Bruce, piggybacking off of that in your career, you've had the opportunity to serve a network with a variety of great leaders, and what are some of the best leadership lessons you've picked up in the spirit of that diversity of thought? Maybe other generals or non-generals or even non-officers or whatnot who've had the diverse mindset. What lessons have you picked up and how might others apply those as they lead their own teams?

Bruce: First and foremost, the best lessons that I've learned, some of them actually came from people who didn't ascend to be leaders in Corporate America or leaders in the military. One of the first lessons I learned is you can learn from everyone, from your peer group, et cetera. Put yourself in a position to do that. That's one. The other one has more to do with mental health. Obviously, there's a lot of life on that now it's been illuminated the importance of it just coming out of the pandemic.

I tell young people this, that so everyone wants to be very successful. You want to be the very best at what you do. You want to be CEO of the company tomorrow, but understand something, on that journey leading, can be very lonely, regardless of whether you're leading a platoon as a second lieutenant, or you're leading a team as a program manager. Acknowledge that it can be a very lonely business and seek partnerships and relationships that not just give you an outlet, but provide you with someone who's going to give you honest feedback on your current state. No one can progress on this journey alone. That's the second thing. The third thing, it's amazing the name and I think back on-- because I was reflecting this question and every really good super leader that I respect, didn't matter what level, they were also good teachers. Back to it wasn't about them, and do as I say, they invested a lot of time in people and it's almost like they were very passionate about teaching the craft, whatever it happened, the craft of the day happens to be.

Then the last thing on leadership, I'd say there's no substitute in my mind for inspired leadership. Not just directed leadership, but for the ability to inspire a team, to inspire others, back to my point earlier, to be better than they ever thought they can be. Among the most satisfying things, and I **[unintelligible 00:31:05]** they are, and I remember sitting, talking to the secretary of the Army, he said, "Hi Bruce, you're leaving tomorrow? What are you most proud of? Is it the cloud migration? Is it any transformational thing or tactical communications thing? Anything you did personally?"

I said to him, "It's the generals and the senior civilians that we leave behind." I think we invested in the right people. Being the father of a soldier now with two grandkids, the thing that I'm most proud of as I look back is that we invested in the right people. It's the legacy of generals and senior civilians that we leave behind. The best leaders that I've seen that I thought the most affected and left an enduring impact, not just a mere **[unintelligible 00:31:54]** effect, but enduring legacy, were those that had those particular traits. One of which is being a good teacher and investing in the legacies.

Paul: That's awesome. What I'm hearing, I'm hearing a lot of getting outside of yourself, focusing on something bigger than yourself, investing in other people, being humble enough to hear a diversity of opinions that may even shocker, not agree with your own. Really being able to lean on other people and see that it's being able to work as a team, as opposed to trying to go it alone, is a key to success. Well,

Heather and Bruce, I want to thank you both so much for being with me today and talking about this. I want to also thank you both so much for your service to our country.

It's amazing what you both have been through and what you've done for our country. I want to thank you both for that and for sharing your insights with our listeners today.

Heather: Thank you, Paul. This has been great.

Bruce: Well, thank you, Paul. This has been unbelievable. Thank you.

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[00:33:14] [END OF AUDIO]