Interview

with

Col Keith M. Roessig,

Vice Commander

Air Force Test Center

Edwards AFB, California

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KEITH M. ROESSIG, Col, USAF
Vice Commander

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Murphy: I'm John Murphy. I'm the Air Force Test Center historian. This is an interview with Col Keith M. Roessig, who's the Air Force Test Center vice commander. Sir, can you describe or remember your initial thoughts once you learned you were going to be the vice commander of the Test Center?

Roessig: So I will say -- yeah, we'll shut the door. So this is one of those where -- so obviously I was excited, right, that not only is it just another level up, but I had been stationed basically at all the test bases, anyhow.

Murphy: Oh, okay.

Roessig: So I made it to all of them and had an assignment, not just TDY. [Temporary Duty] All the major bases, at least. And so coming here, it was just -- it's going to be interesting to see something from a different perspective to try to look at the entire test enterprise. So excited about that. This is also closer to family. A lot of my family is now on the West Coast.

Murphy: Oh, okay.

Roessig: So that was always good, too. And so -- but it was one of those where there were a few rounds of discussions and things like that, so it wasn't a surprise when I was officially told because it had been kind of ongoing, where yes, I was on a short list and General Azzano's [Maj Gen Christopher P., AFTC Commander] talking to different people and this and that. So it wasn't one of those where I don't know what I'm doing and all of a sudden here it is. I knew it was a potential beforehand, and then it just -- and then in the end, General Azzano did call and say, you know, that it would be me, so --

Murphy: Oh.

Roessig: But it wasn't unexpected by the time the official notification came down, if that makes any sense.

Murphy: It does.

Roessig: Yeah.

Murphy: Have you been stationed at Edwards before?

Roessig: This is my third time, so -- yeah.

Murphy: Oh, third time.

Roessig: So I was here for TPS [Test Pilot School], back in June [20]'04, I started. And then I was also -- had an assignment at the 461st Flight Test Squadron doing F-35s. Right as they --

Murphy: Oh.

Roessig: -- yeah, right as -- I got here 6 months before -- 5 months before the first aircraft showed up. So, yeah, it was right at the beginning of DT [Developmental Testing] for F-35.

Murphy: Oh. Very cool. Cool. So you're very familiar with the area.

Roessig: Oh, yes. Yep.

Murphy: So that's good.

Roessig: And I knew -- even before my first assignment here, you know, we've been out this way a little bit just -- I knew the -- I knew it was desert and I knew exactly what the, you know, exactly what it was, so that was -- it's good.

Murphy: Okay. Great, great. So what are some of your personal goals and priorities as vice commander?

Roessig: Making sure that -- I think one of the things as a test center, right, we've been the test center now since 2012, and yet you can still see remnants of when there used to be multiple centers that would all report to AFMC [Air Force Materiel Command]. And I won't say there was competition, but in some ways there was, in trying to get tests here and there. Bringing that into a big test enterprise and do we have a strategic vision that when there's a new National Defense Strategy -- we talk about that a lot, but are we putting our resources aligned with that? And I think we are to the most part. But how do you do that from a strategic vision both at the DoD level with what General Azzano may have and making sure that the wings are operating in a way that makes that happen, right? So that's something that has been interesting to me to try to see where those things work well and sometimes where they may not, and try to get the entire test enterprise, you know, prioritized along where both DoD and Air Force and General Azzano wants to go.

Murphy: Do you see that as a big problem? I mean, because it's been, what, 8 years now and

there's still, I guess, still --

Roessig: So there still are, and I won't say competition, but there are -- because we're so heavily civilian and there are folks who have been here at each of the bases, have been in one place for so long, that yes, the names have changed, but there are times where people still do business as they've been doing it.

Murphy: Wow.

Roessig: Eight years, you would think that, my gosh, it's been 8 years.

Murphy: Right.

Roessig: But there are still times where you can just see when people's examples of what we -- here's my examples of what -- why I think this is a problem or a good idea or whatever. At first, folks always think of the aircraft. You know, Eglin tends to have their view. Arnold has their view. And just slightly different, just based on historical test programs and things like that. And so how do we make sure that, as we have programs going from early DT ground test a lot of times at Arnold or maybe the cyber test group, depending on what kind of system it is, to maybe preparation for a flight test and then actual flight test, and later on, how do we have those programs move through the test center in a way where -- there are certain ones we've been doing that for a while, and it works well obviously for things like directed energy, hypersonic weapons, there's a lot of new things that we're doing, so -- in these new mission areas, nuclear weapons being another one, that are we -- we say we're doing new mission areas, but are we making sure that all the areas, all the test wings understand what their role is? Because almost every wing has a role in a lot of these projects at some point. So that's kind of what I'm hoping, to at least see where there might still be areas to improve on with that. Like I said, I'm not making it sound like it's not working.

Murphy: Right.

Roessig: But there are just places when I've moved around, you just see different thought patterns just based on the things they've done historically, and those things change slowly over time.

Murphy: How are you going to tell if you're making any progress?

Roessig: Excellent question. I don't know.

Murphy: Okay.

Roessig: But at least to understand where those pockets may be. There are certain things that are pretty, I would say, easier. It may not sound as -- it's a support function but enables everything to -- we have three financial systems in the three different wings that don't interact.

Murphy: Oh. Wow.

Roessig: So to transfer money back and forth, to have different wings -- I know we're working on that to improve that, but to have people -- to pay for training from Arnold DBA funds for 412 Test Group folks here at Edwards was -- it was amazing how much work that took. So there are things like that, that just -- they all call it JOCAS (ph.), but they -- you can't have somebody here charge easily out to -- hey, Arnold wants to use their money to pay for training for a test engineering group person out here that's supporting Arnold. It wasn't as easy as you would think, right? And if -- maybe somebody out there knows, hey, it's easy to do that, and they're keeping it a secret. So I'll tell you, that was a struggle. So it's things like that, that if we are one test enterprise and we're all working towards common goals, there's just a lot of things here and there that can be improved upon. And that's a known issue. That's not something I discovered personally, right? But it's just one of those things that you don't think about, but you can have folks spending a lot of time just trying to -- how do you get $2,000 so Johnny or Jane can take this training? It just -- yeah. So things like that.

Murphy: Amazing.

Roessig: Yeah.

Murphy: It is. So now, in today's current environment, what methods are you taking to counter the COVID challenge?

Roessig: Yeah. So me personally, I live on base and I come in here and I'm in my office alone, I mean, and there's just not that many people here. So on a day-to-day basis, we're just -- we're following the social isolation rules that General Higer has specified for base. So at a personal

level in an office environment, it hasn't changed my work, daily work routine a lot. As far as I know what different wings are working, it's been difficult in making sure that you can still put people in control rooms or you have to have a lot of folks working on some maintenance activities where they're in very close contact with each other and things like that. So how do we work through applying the social distancing measures as we can while still trying to accomplish certain missions? And that's usually handled obviously at even below the wing level because a lot of the solutions are going to be different depending on the size of the control room and how many people you need to do that or how many technicians are required to do the maintenance procedures and things like that. So as we've gone from really not sure what was going to happen in March and not understanding exactly how prevalent this virus would be, is we've learned a lot now that yes, it spreads quickly, but we kind of now have a better definition of what populations are at risk versus others, we've been able to shift a little bit and I think be able to get back to I think still getting the bulk of the mission done at this point. Most of the wings are saying that it's still -- it's a little bit less efficient and there's not -- you can't do everything all the time, but I think for the most part we're being pretty productive, all things considered.

Murphy: So as the new vice, usually they would get a center immersion, you know, brief, you tour around and everything, but you weren't able to get that. So do you feel you missed a lot by not having that?

Roessig: No. There are some -- you know, I've met with some of the staff members to talk about things they do. As far as an immersion of getting tours and everything, I haven't been able to travel at all, and there are some things -- I'm going to want to try to do a couple of very specific things. But like I said, I've also had an assignment at each of the bases, so --

Murphy: Well, true.

Roessig: -- while that doesn't make me an expert obviously on everything that's going on, I've got an awareness of when somebody mentions facilities or certain activities. I don't need, you know, a 96th Test Wing brief for the most part because I've been assigned there and at least have an idea. Obviously my information's dated for certain places, but I don't think I've come into this

job where I just didn't know -- there's not huge pockets where I don't understand what's going on. So at least I can usually spell the acronyms when they come up, right? Usually that's just learning the jargon, right? Well, I've got a lot of that.

Murphy: Right.

Roessig: So that's good. And there are, of course, places I need to get a little smarter in, and so -- and I'll target those as I can.

Murphy: Okay. Great. So what do you see -- in this new normal, what do you see as the greatest challenge?

Roessig: Greatest challenge. There are definitely some work -- shifts in how we handle work. It can be as small as, like you're saying, you usually come in and check in with Tammy to come in. Well, Tammy's not here most of the time.

Murphy: Right.

Roessig: Right? So it's really understanding what you can do from teleworking and what you can't, and where -- I think there's some clear -- obviously, flight line maintenance you can't telework, right? And there's a lot of things that you can do. I think everybody knows the things that are clearly one side or the other. It's that in between of figuring out when do you need to travel and not. When is it -- before everybody talked about travel was -- I think everybody just knew people traveled a lot, and then whenever there was a clampdown or somebody abused travel -- it was kind of, you know, hey, I have a meeting somewhere and they're, you know, in Cancun for a week and a half or something, right? So that's usually where it -- where the travel restrictions came from, is almost the *New York Times* test: Does it look like it's worth spending the money to go? Or if we -- you know, during sequestrations or, yeah, those kinds of activities where we really need to save money, obviously travel money was an easy way to do it.

Murphy: Sure.

Roessig: But now it's taken on a different tone, right, of well when do you travel now that we have the CVR and MS Teams and a lot of these software packages that came right about the right time. I don't think -- I think Teams was here anyhow, and COVID hit. I just think it probably

has taken off in a way that it wouldn't have --

Murphy: Right.

Roessig: -- without COVID. So as things get better, right, obviously regardless of -- you know, I've heard talk of a vaccine in the near future. Depending on how good that is, right -- we get flu vaccines all the time and depending on, you know, mutation rates and stuff of the virus. The coronavirus itself, the virus is here, it will always be here. If we get herd immunity, that a year from now it's just one of the many coronaviruses that can give you a cold, then, you know, we'll eventually get back to where we were, right? But it will be interesting to see the things that do hang around even when we get to that point where the SARS COVID-19 is just another coronavirus that is out there.

Murphy: Right. Right.

Roessig: I think you'll still see more of the teleworking. I think there's just a lot of -- it works for people for their families, for their commuting situation. I bet you we still see a lot more of that even a year from now when we would hope that we could return to what we did before. But there's probably benefits to keeping a lot of the teleworking and things like that. I personally don't work well at home. If I'm at home I like to kind of be home, and if I'm at work, I'll work. So for me personally, I'm just in a different mindset when I'm here versus at home with the family. I try not to be in work mode when I'm at home. So I don't like trying to work from home. But there are a lot of people it works well for, right? And if you can save on gas and all those kinds of things and be able to have lunch with your family or something like that, that may work well for a lot of people. And so we'll see how that goes. But the new normal is always a tough one because I think we've had -- we've had pandemics before. Everybody goes back to 1917, '18, of course, but I think that, you know, we did have the swine flu not that long ago. You hear of 1968 there was a big flu pandemic during Woodstock and all that. And so that was within lifetimes of people who could remember and yet it never comes up. So I think we have the ability to know more right now about just all the genetic and the technology we have. It's just understanding what information is useful to make decisions off of versus just -- it's just

information overload and we become hypersensitive to a lot of things maybe. I don't know. I'm kind of wandering off to different topics, but --

Murphy: No, that's fine. That's fine.

But yeah, as far as new normal, so I think we will see some changes. Maybe not as much in the Air Force. It'll be interesting to see what happens with schools, right, with colleges and all the online things and --

Murphy: Right, right.

Roessig: And with how many people trying home school, do they find out that that's -- it's worked well for them; how many people will transition to that? So I think there's a lot of things that it'll be interesting to see where we snap back to, right? If you -- here's the window, I'll say of acceptable, but of potential options for whether it be school or teleworking, whatever, and that has shifted greatly; does it come back to where it was because that's what humans will go to, or does it come halfway and we just, we develop something different? I don't know. But so it'll be interesting --

Murphy: Yeah.

Roessig: -- if nothing else.

Murphy: All right. Great. Do you see yourself as a facilitator of Test Center goals and priorities?

Roessig: I do. Well, so priority -- job one is to make the boss successful in the Test Center's mission, right? So it's how do I make sure that when he says, look, these are the things we need to do in the Test Center, and sets out his vision and goals, how do I help make those happen? Sometimes it's clarification on direction downward. A lot of times it's facilitating things between wings. And there's just a lot of background things that have to happen, so -- in terms of personnel or, you know, plans and program long-term infrastructure projects and things like that. So I definitely see myself working the background to try to either solve problems that shouldn't take the boss's time, or if it's going to be his decision, how do I get him the right information so that he can make those decisions in a timely manner? So that's how I see it. If I'm successful or

not, we'll find out, but I'm giving it a shot.

Murphy: Okay. Great. Now just stepping back to the prior question. If this situation with COVID continues for an extended period of time, what do you see as the toughest thing or the greatest challenge in adhering to that? Like, say, it goes on for another 24 months, is that just we're going to do what we're doing now and we're good, or do you see anything that could be throwing a monkey wrench into it?

Roessig: It will be how often -- I think we've kind of come to a place where we can get most of the job done. It's one of those where if we start having requirements to get the mission done that really require a situation that doesn't meet the distancing requirements that we have. I'm not sure I can think of an exact example because I think we have mitigations in place for a lot of the things. I don't see us being completely unsuccessful. I just think because we're under such a strain right now for the amount of testing that's required, I think that's going to be more of the problem that we have. You know, nuclear weapons modernization going across -- you know, we have two of the three legs of the triad in the U.S. and we've got modernization efforts on both of those in the Air Force. Hypersonic weapons, of course everybody's trying to go faster. We do have Six-Gen aircraft development ongoing as well, and you've got directed energy startups. At the same time you've got, you know, there's T-7 and there's a lot of EW work. So you've got this massive modernization effort not only with the things that we've classically done, but new mission areas, and everybody wants to get that done in a similar timeframe. And so that's just placing a huge demand on the resources that we do have within the Test Center. And so in times of -- it was stagnant budgets, if not -- maybe slightly increasing or stagnant. But with the stimulus packages that are passed and maybe are still going to pass, that money's got to come from somewhere and the Defense Department budget is definitely a place where that could come from. So potentially now even shrinking budgets at the same time we're being asked to do some of the highest workload we've done in certain areas for a couple decades, for sure. And as that -- all that modernization efforts come through the ground test facilities and then propagate into the flight test, we're seeing that wave of testing come through now, whereas they -- depending on the

part of the life cycle we're in for each of those programs. So I think it's going to be a throughput issue. Maybe not so much a capability but a capacity problem of here are things we're trying to do. Some of it's new capabilities based on some of these mission areas and mission growth areas, hypersonics and directed energy. And then a lot of it is we're trying to do all these things at the same time and we just -- the Test Center has never been given the resources to actually do that. So while we already have those limitations whether COVID was here or not, then all of a sudden now COVID just drops that capacity down even more, whether that just may be because we can't have everybody in here all the time or, if we do start quarantining people, somebody does test positive, well then everybody that was in this shop now goes home for 2 weeks and can't do things that require people. So I think it's going to be a capacity issue that will drop -- that will be reduced over the next year or so, unless there is -- we actually get a vaccine that is -- that works and the side effects are not worse than the disease itself, which is -- you know, we had the whole anthrax vaccine that went on for such a long time.

Murphy: Oh, my goodness.

Roessig: And now you're going to try to do that for the entire population? You know, it's interesting that people think a vaccine is all of a sudden a miracle cure and, hey --

Murphy: I get the flu vaccine and I still get the flu, so --

Roessig: Yeah. And the flu virus mutates very quickly, right?

Murphy: Right.

Roessig: But the coronavirus is also just an RNA so they -- those mutate more quickly. There's multiple strains of the coronavirus already. So we'll just see, right, do we now have a flu virus and a coronavirus flu shot every year, you know, shot every year? Maybe.

Murphy: Maybe.

Roessig: And it may work, it may not, right? So but -- but anyhow, so I think that's probably where I see it, is a capacity drop of where we'd like to be able to execute more and we just, we won't be able to do quite as much as we'd like because of it.

Murphy: Okay. Great. Would you like to make any additional comments?

Roessig: It's an exciting time to be here. Like I said, as much as all the, here's all the things that make the job at AFTC hard with all -- with new mission areas and the amount of work that is being asked of us at the time, you know, right now, but it also makes it an exciting time to be here, right? I mean, we have the ability to really influence the way things move forward and just in terms of understanding how these new systems perform, and so actually giving good information, actionable decision quality information and data to program offices and the users to really understand how they can use these things in any upcoming conflicts. Predominantly in the multi-domain operations is where -- while we test a lot of these systems individually, understand, and how do we put all that together. And so with space obviously in a huge growth area and even a new service, we're working together with Space Force on a test fundamentals course for space. We're TPS, so it's a -- so as we really work with Space Force to kind of help stand up their test cadre, we've got a lot of cross-flow back and forth. We set up the Multi-Domain Test Force. That stood up yesterday. So obviously that's going to play anything -- we're talking about aircraft and land and command and control, right? Space is fully integrated into that. So there's just the amount of things that are going on as well as being able to test them in a way we haven't done before or at least have tried to do but have not been able to do consistently because of just not having the infrastructure there. I think we're getting to that point where it's just -- there's a lot of good work that's going to happen here real soon and so it's an exciting time to be here with all that happening. So, no, I'm happy to be here for sure. And like I said, it was closer to family and it's a win-win for us to be here, so -- for my family and I to be here. So it's great.

Murphy: All right. Well, thank you for your time. That was very good. This concludes the interview.