

# **JED Interview with Dr. Jerry Wohletz of BAE Systems**

Dr. Jerry Wohletz grew up in Kansas wanting to be an astronaut. He attended the University of Kansas, where he received a Bachelor's degree in Aerospace Engineering before going on to MIT to earn a Master's degree in Aeronautics and Astronautics and then a Ph.D. in Estimation and Control. By the time he finished his Ph.D., he was 29 years old – too old for flight school – and began a different career. Early on, he worked in aircraft design at McDonnell Douglas. He has also held positions at the Air Force Research Lab and NASA's Dryden Flight Research Center. Eventually, Jerry took a position with ALPHATECH, where he pioneered mission control system for autonomous airborne systems. He joined BAE Systems when ALPHATECH was acquired by the company in 2004. After several years at BAE Systems, he became the VP/GM of the company's FAST Labs business, which focuses on developing next-generation technologies in areas as diverse as advanced electronics, autonomy, cyber, EW, sensors and processing. In January 2020, he was named to his current position as VP/GM of Electronic Combat Solutions, which develops EW systems and technologies for a range of programs, including F-15, F-22, F-35, classified programs and LRASM.

## **JED**

What are some of the key things you have learned during your career?

## **JW**

When I first realized I wanted to be an astronaut, I knew that meant I needed to be a fighter pilot first, which meant I needed good grades. So, I started taking steps toward that goal every day. I wasn't starting from a strong position. Fortunately for me, however, Kansas public universities had open admissions for state residents at that time, so I got my

one shot – my one opportunity to go to college and pursue my dream. The effort I put into going down that path brought me to where I am today. That road was not always smooth. There were a lot of failures along the way – I never was a fighter pilot, and I'm not sitting here today as an astronaut. But I learned something from every failure; I kept pushing myself to do my best, and I re-evaluated my priority at every transition.

One of the most difficult transitions for me was moving from an engineering role to a manager role. All of a sudden, instead of doing the hands-on work myself, I had to instead re-distribute that energy into developing people and leading them to find their own ways of achieving the product, program and the company's objectives. I learned a lot about motivation, and I learned that leadership is the ability to develop a vision and inspire others to achieve great results.

**JED**

How do you think about EW today?

**JW**

Full-spectrum, cross-domain EW from the sea to the stars. We understand the threat landscape, and we're focusing on the next challenges facing our warfighters, and systems that outpace the threat. Product velocity, upgradeability and sustainability are priorities, as is maintaining our strong relationships with our customers and partners.

**JED**

What does EW look like in 2025 and beyond?

**JW**

2025 is already here. We're focusing on 2040, and we're

prioritizing agile engineering, advanced manufacturing and innovative sustainment. We're aiming to create the fastest pathway from the lab to the field as part of our Extreme EW 2.0 (EWX) dual-transformation strategy. The environment is becoming more complex, congested and contested, and threats are evolving. Full-spectrum, multifunction, multi-domain EW with adaptive capabilities is the future.

**JED**

As EW evolves into electromagnetic spectrum operations (EMSO), how are you thinking beyond EW?

**JW**

We see the future evolving into a full-spectrum environment to handle the advanced threats. It's important to point out that current and future products need to be designed for Open Missions Systems and continue to take advantage of digital engineering.

**JED**

Because you have a large Air Force footprint among EW suppliers, how does this affect the company?

**JW**

We are proud of our Air Force footprint, and equally proud of our Navy footprint that is less well understood but significant, including the F-35C, F/A-18, and LRASM. We have made thousands of EW systems for a variety of different platforms, from large systems to small-form-factor solutions for bombers, fighters, missiles and classified platforms – and with that experience, we are able to constantly look for opportunities to make our processes more efficient, and our systems more exquisitely capable. Core to our EWX strategy is to leverage the current installed footprint to additional

platforms across all services, including the Army, as we have recently flight tested our most advanced small form factor payload in an Army exercise.

## **JED**

Beyond profit and loss, what are some of the other areas where you focus your efforts in the ECS business area?

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## **JW**

Time-to-market and culture. Product velocity is just as important as performance, cost and schedule, and this is essential for our EWX strategy. Clearly, the bedrock to any strategy is the culture of your team; at BAE Systems, we have a team and culture that is focused on our missions including "We Protect Those Who Protect Us."

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## **JED**

What do you need to think about today, that you didn't need to think about 5-10 years ago?

## **JW**

Today, scientific advances must co-evolve with manufacturing advances. With continuing miniaturization, we have parts that

are not even visible by the human eye. We're also thinking about commercial versus custom military electronics to ensure our allied air forces have overmatch against our adversaries, and finding the right manufacturing mix and volume.

**JED**

How have rapid acquisition initiatives affected the industry?

**JW**

As I wrap up my third decade supporting this industry, acquisition reform has been a persistent topic, but I am not sure that our industry is any faster or efficient today. Either way, we are moving out to reduce our time to market.

**JED**

How are you accelerating time-to-market?

**JW**

Core to our EWX strategy, we are targeting short timelines from contract award to fielding. That means, beyond development reviews and testing, and getting to mission-ready equipment installed on aircraft. We are re-evaluating every aspect of our business model, including converting to a hybrid defense-commercial model. To accomplish this, we are forecasting requirements out 20 years, looking at robust designs, the uncertainty we'll face over that time period, and the critical components we'll need to procure and build – all ahead of the acquisition process.

**JED**

How do you learn what EW operators want, especially when most of your contact is with the acquisition community and with DOD leadership?

## JW

There are really two answers here. First, we take a lot of pride in hiring veterans, many who have firsthand experience with EW and our products. We combine their knowledge with frequent interactions with our broad customer community to help guide our strategies and investments for the future. So, in essence, the first answer is simple, you just talk to them and then do the right thing by addressing their “pain points.”

The second answer is that we’re constantly examining innovative ways to improve our products that spans future threats to sustainment. We like to create solutions for our customers before they come to us asking for them. For example, our Sustainment team created an EW test tool that can be used in the field to pinpoint sources of problems that help the customer avoid taking the platform apart in some cases, and avoid returning working systems. It has helped them significantly cut maintenance costs and helped our team streamline maintenance support. That’s not something our customer came to us and asked for. That was a tool that we saw would make everyone’s lives easier and save everyone time and money – so we made it. We do the same with EW operators. We know that our warfighters – bottom line – want to get home to their families. So, we are constantly evaluating our products and finding innovative solutions that will make our data more precise, make the user experience as intuitive as possible, and keep the end user as safe as possible.