

`U.S. Senate Committee on Commerce, Science and Transportation Aviation Safety, Operations, and Innovation Subcommittee Field Hearing

"Strengthening the Aviation Workforce" March 14, 2023 Submitted by Dr. Sheree Utash, President, WSU Tech

Good morning, Chair Cantwell, and members of the Subcommittee. My name is Sheree Utash, and I serve as the President of Wichita State University Campus of Applied Sciences and Technology (WSU Tech) and Vice President of Workforce Development for Wichita State University in Wichita, Kansas. Thank you for the opportunity to address you this morning.

WSU Tech's National Center for Aviation Training operates a state-of-the-art training facility located on Jabara Airport in Wichita, Ks. It provides students the opportunity to study aircraft maintenance in a hands-on learning environment combining lectures, hands-on-work, and independent projects. The program is rigorous, and our program holds its students to the industry's highest standards. As a result, it has a national reputation for excellence, and places 92% of its graduates in high-demand jobs in aerospace throughout south central Kansas after graduation.

In fact, Wichita, the largest city in Kansas is recognized globally as the Air Capital of the World and is one of five aviation clusters in the world. This designation is largely based on the city's rich history in the early days of aviation and the concentration of aviation



and defense research, development and manufacturing located there today. The average Aviation Maintenance Mechanic salary in Wichita, Ks is \$84,702 as of Feb 2023, but the salary range typically falls between \$73,788 and \$95,478 (Salary.com). Approximately 50,000 people work in Wichita's aircraft manufacturing industry, which is 1 out of every 6 aircraft-manufacturing workers in the USA, primarily at the four main aircraft manufacturing plants: Spirit AeroSystems, Textron (Cessna and Beechcraft) and Bombardier Learjet. Additionally, more than 2,500 manufacturing firms operate in Kansas as part of the aviation supply chain.

Despite our success, we frankly need your help. According to Boeing's latest <u>Pilot and</u> <u>Technician Outlook</u>, between 2022 and 2040, the global civilian aviation sector will need 610,000 new technicians to support the commercial fleet over the next 20 years— 134,000 of those technicians will serve North American markets. The U.S. is ill-poised to meet that demand; aviation technician personnel pipelines are stagnant at best, growing only about 2 percent a year. In contrast, a <u>report published by the Aviation</u> <u>Technician Education Council</u> (ATEC) maintains that technician production must increase by 20 percent to meet industry's growing demand. Additionally, in this same report it is projected that the aviation industry will need 612,000 new pilots across the globe. In North America, specifically, Boeing estimates that we will need 130,000 new pilots by 2040.



Consulting firm <u>Oliver Wyman predicts</u> that the gap between supply and demand for aviation technician workers will reach between 8 and 12 percent this year, that shortfall only eclipsed by the larger shortage anticipated later this decade.

We are seeing the effects. Workforce shortages are creating airline disruptions that reverberate through the network. And while flight cancellations and delays get the most public attention, the lack of technical personnel is hitting third-party maintenance, repair, and overhaul facilities the hardest. A pre-pandemic study by the Aeronautical Repair Station Association found that the technician shortage is costing the repair station industry \$100 million per month, a figure that has likely increased since the industry trimmed its workforce during the uncertain days of 2020 now find themselves scrambling to meet demand.

The Federal Aviation Administration (FAA) reports that, nationally, the aviation sector accounts for more than 5 percent of the U.S. gross domestic product, contributes \$1.6 trillion in total economic activity, and supports nearly 11 million jobs. Moreover, aviation manufacturing continues to be the nation's top net export (FAA, 2016). In Kansas, aviation is a significant economic catalyst. Over 91,000 jobs are directly or indirectly related to the sector, including 42,000 from Aerospace Manufacturing. These employees receive more



than \$4.4 billion in total payroll and generate more than \$20.6 billion in annual economic output for the state of Kansas according to the 2017 Kansas Aviation Economic Impact Study. As such, the aviation sector plays a key role in supporting and building on Kansas's economic strengths, and possesses strong potential for bringing high-wage, high-demand jobs and increased business to the state and region.

Supporting this vibrant sector takes a qualified workforce of highly trained technicians and specialized MRO (Maintenance, Repair, and Operations) facilities that maintain and rehabilitate commercial and military aircraft fleets. According to the Aeronautical Repair Station Association's (ARSA) 2017 report titled U.S. Employment and Economic Impact by State, aviation maintenance employs more than 277,000 people and generates over \$44 billion in economic activity nationally. The aviation industry in Kansas contributes \$7 billion to the Kansas GDP, \$2.25 billion in annual aerospace exports and is #3 in the largest concentration of aviation workers in the United States.

I am participating this morning to encourage you to increase support to Aviation Technology programs like we offer at WSU Tech. I mentioned our program's national and international reputation for excellence, and its rigor. Students complete 1,900 hours of training, over 100 exams, and nearly 300 hands-on projects. The program offers an Associate of Applied Science degree in Aviation Technology and accompanying



certificates for direct employment in the core skill areas of: (1) Airframe and Power-plant (2) Structural Repair, and (3) Avionics. The program is designed to replicate the industry to provide students with a real-world experience throughout the program. WSU Tech is one of about half of FAA-approved schools offering an Aviation Maintenance associate degree in the nation. Additionally, we have recently developed a drone maintenance and private pilot degrees and certifications. At the National Center for Aviation Training, we have developed an academic ecosystem that mirrors all phases of the aviation industry. From engineering design to all manufacturing processes, to maintenance and repair, quality inspection, avionics, and flight we have industry recognized credentials, certificates, and degrees. Additionally, we work closely with our high school partners and deliver our programs to juniors and seniors. We are working to develop a new program that will set up five high school programs a year, across the state and be the provider of Choose Aerospace curriculum in collaboration with Aviation Technician education Council (ATEC). We anticipate we would serve 100 students in the first year and increase that number by 100 each in the second and third years as we expand to more schools. This opportunity to expand into high schools became available with the passage of the new Part 147 that governs aviation maintenance schools. We hope to take advantage of this opportunity and expand aviation career education across the state of Kansas.

We are developing and are implementing industry-education partnerships based in applied learning opportunities to expand our student capacity and build a talent pipeline



for the aviation industries of Kansas. We are also focusing on introducing these career opportunities to students in middle school, working with underrepresented populations to do our part to make certain that the aviation workforce of the 21st century is supported.

But we need to do more. We need your support to strengthen efforts by educators, workforce development programs, and economic development organizations to align education and workforce training programs with employer needs. We need to urge new and more innovative industry-career and technical education partnerships that support student success and meet the diverse needs of students, industry, and our communities, resulting in a much broader talent pool, thereby enhancing the aviation workforce.

Thank you for this opportunity. I look forward to addressing your questions.