Good morning Mr. Chairman, good morning ladies and gentlemen of the committee. Thank you for the opportunity to speak to the committee today.

My name is Shadh Molla, and I am an adjunct professor at Emmanuel Christian Academy's Aerospace Institute in Springfield, Ohio. I was an officer in Air Force Space Command for ten years, where I operated ICBMs and satellites. After getting a Master's in Applied Anthropology I taught science for seven years at Springfield Christian Schools. This is my second year at Emmanuel Christian Academy.

Emmanuel Christian is a private K-12 high school that began a pilot dual-enrollment program in partnership with Embry-Riddle Aeronautical University, located in Daytona Beach, Florida. Embry-Riddle is the world's top aviation-centered university, preparing thousands of students every year for a myriad of aerospace-related careers. It recently earned several Top 10 rankings by U.S. News. Colloquially Embry-Riddle is called "The Harvard of Aviation."

Their dual-enrollment program is similar to Ohio's College Credit Plus, where students can take college courses, and earn college credit, while in high school. However, the College Credit program only covers tuition, and only for schools in Ohio. Due to a generous grant from this committee, funds were made available to create a robust STEM program.

It started with an elective technology course and expanded to include topics like Aeronautical Science, Unmanned Aircraft Systems (drones), and Private Pilot training. Over the course of the program students also earned several industry certifications, as well as the FAA's Part 107 license. The Part 107 is like the commercial driver's license, except for drones -- you have to have the Part 107 license to fly drones commercially.

The strength of this program extends beyond rigorous academics, and includes practical, hands-on experience. The grant allowed us to train qualified instructors, purchase operational equipment, and offer enrichment activities like field trips to the Air Force Museum and student flights in actual aircraft. Startup equipment included a flight simulator so sophisticated that it can count as flight hours towards a pilot's license. High quality standard drones with professional cameras were also purchased. Graduates of the program walk away with real-world knowledge on industry standard equipment.

Almost 100 students enrolled in the program from 2018 to 2023, representing 72 college credit hours, saving the students approximately $310k in tuition and fees. Total program costs for this period were $307k, making the cost per student approximately $3k. It was so successful that four additional schools joined the program in the 2023/2024 school year.

These schools were the Global Impact STEM Academy, Northwestern High School and Springfield-Clark Career Technology Center, all in Clark County, and Midview High School in Loraine County. From the time these schools joined in 2023, over 325 additional students have enrolled, earning 258 credit hours, and saving students over $1M in tuition and fees. This

represents a more than 300% increase in enrollment, credit hours earned, and in tuition saved, while the cost per student dropped by 50% to $1.5k per student.

The global drone market is currently a $26B industry, and it's expected to grow to $55B by 2030. This means between 75,000 and 150,000 new jobs over the next five years, and there are simply not enough qualified personnel to meet the demand. The median salary in the U.S. for high school graduates is $35k per year, and for college graduates it's $55k. But a licensed drone pilot right out of high school can command a salary ranging from $55k to $200k, with a median salary of $85k. This is an exceptional return on investment.

Industries in Ohio are quickly integrating drone technology into their operations. Duke Energy, for example, hired a cadre of drone pilots to inspect their lines. Drones are being used in agriculture to analyze crop health and to spray targeted locations. They are utilized by local fire and rescue squads and by local sheriff's departments. Insurance companies are using them to inspect damaged properties like roofs. The list goes on, and as use cases grow, so do available jobs. Since our graduates earn their commercial drone pilot license and obtain experience in many of these areas, they are highly competitive for these positions. This has an immediate impact on Ohio, reducing our unemployment rate and contributing to Ohio's economy.

But this is just a microcosm of the overall aviation industry. Two thirds of aerospace companies anticipate workforce issues within the next five to ten years, because almost 30% of their personnel are expected to retire, and 25% of these companies expect to lose revenue as a result. There is a critical need for engineers, mechanics, pilots, and air traffic controllers. This doesn't just affect the nation's economy, it affects our national security.

That is one reason why so much investment is going into electric vertical takeoff and landing (eVTOL) research. The National Advanced Air Mobility Center of Excellence (NAAMCE) was recently built at the Springfield-Beckley Airport. This modern facility has made Springfield an important hub of manned and unmanned eVTOL research. Just last week the Ohio Department of Transportation announced the creation of the Advanced Air Mobility division, spearheading the integration of aviation technologies into the air space over our great state. The future is here, and Ohio is a big part of it.

These are just a few reasons why more schools are eager to come on board. Limitations in the current grant only allow Midview High School or schools in Clark County to participate. Our proposed amendment to Bill HB96 expands the scope to include any school in Ohio. In fact, four new schools have already committed to joining the program once the restriction is removed. Columbus Adventist Academy in Franklin County, East Palestine High School in Columbiana County, Logan High School in Hocking County, and Vantage Career Center in Van Wert County are all eager to join, almost doubling our program size.

Nine other schools have also expressed interest, the majority of whom are actively exploring the possibility of joining. If all the interested schools were to come aboard, it would represent almost 20% of all the counties in Ohio. Our amendment also seeks a funding increase of $750k per year over the next two years to accommodate these additional schools. This amount

would allow us to usher in up to seven new schools in addition to the five current members, more than doubling the impact we can have on local economies across Ohio.

Fundamentally, the benefit to Ohio through our student's success is what this program is all about. Students have started their own business taking arial pictures of properties for real estate agents. Another got a job right out of high school flying drones for an Ohio agricultural company. Several have pursued degrees in the aviation field, and others have taken their experiences to serve in the military.

Included with this statement is a testimony from the staff at Northwestern High School. While I will not read the whole thing, I would like to summarize some highlights:

- Students who previously struggled in traditional STEM subjects have demonstrated exceptional aptitude in hands-on aerospace projects.
- Students developed critical leadership and communication skills through collaborative projects and presentations.
- Students have overcome attendance challenges and pursued heightened academic achievement.
- Students are inspired to pursue ambitious career goals, contributing to Ohio's future workforce.

As you can see, we are not just investing in their futures, but in Ohio's future. And it is that future in which we are asking you to invest.

Thank you for your time and your consideration.