

# Building the Workforce Pipeline to Unlock the Future of Advanced Air Mobility



\*By 2045, the Advanced Air Mobility (AAM) industry in Virginia is anticipated to:

- Generate \$16 billion in new business activity
- Add 10% or more to the growth of Virginia's existing aerospace sector
- Produce \$2.8 billion in local, state, and federal tax revenues
- Create over 17,000 new full-time aerospace industry and other jobs in the Commonwealth
- Bring employment and educational opportunities to all regions of the Commonwealth

*\*According to the VIPC 2023 White Paper, "Virginia's Advanced Air Mobility Future."*

With AAM, Virginians of the Northern Shenandoah Valley and across the Commonwealth stand to realize improved quality of life through:

- **Cargo Delivery**
- **Regional Air Mobility**
- **Emergency Services**



According to the Virginia Department of Aviation,

*Winchester is on track to be  
one of the first “Drone Ready Communities”  
in America.*





## *Winchester Regional Airport (OKV)*

- Only public AAM-ready airport
- New Terminal of the Future
- 60 acres ready to attract aeronautical development
- Efforts to attract a new generation of aviation enthusiasts





## *Home to Virginia's only STARBASE site*

- STEM DoD educational program
- Student-centered, hands-on, encourage higher order thinking, and incorporate STEM realworld applications





# *Partnering to Build a AAM Workforce Development Pipeline*

- Aviation Career Expo- Frederick, Clarke, Shenandoah, and Warren Counties, and City of Winchester
- WPS Shihadeh Innovation Center
- Randolph-Macon Academy's Aviation Program
- Civil Air Patrol Cadet Program



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## *Laurel Ridge Community College (LRCC)*

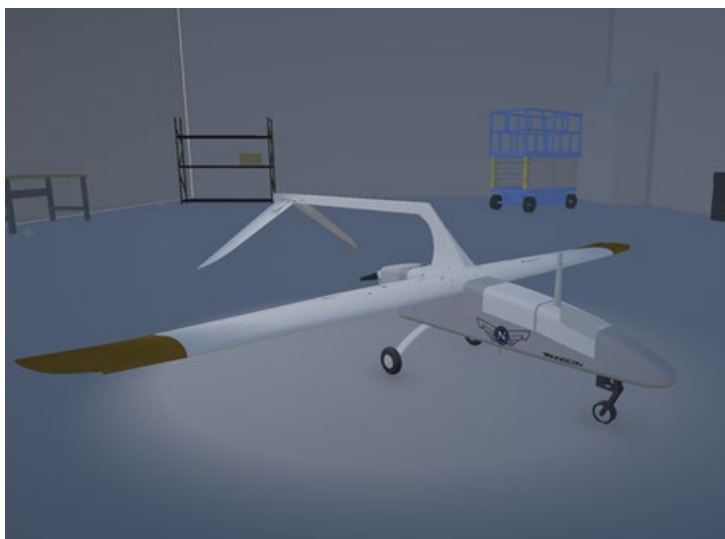
- AUVSI first place for Workforce Development for Drone training programs
- Preparing students for a careers as UAS flight operators or technicians





# *Shenandoah University*

- Programs supporting aviation workforce development: Aviation Studies, Simulation Engineering, Computer Science, Data Science, Applied Mathematics and others
- HIVE- immersive learning center, cybersecurity lab, and resources for emerging technology entrepreneurs
- SCiL Lab at SU- solving realworld problems with immersive technology, while also training the pipeline of simulation professionals



We are building an Advanced Air Mobility (AAM) network to cultivate the Northern Shenandoah Valley region as a workforce hub for AAM by bringing together:

- State and local officials
- Civil Air Patrol
- Educational Entities
- Industry leaders
- Workforce development organizations
- Emergency Management Agencies



The proposed Advanced Air Mobility Simulation Center will include:

- ***Airspace traffic simulation.*** Training environments for tower controllers including tower and radar operations.
- ***Modern CAVE system.*** Tiles of LED screens for immersive interactive team-based simulations.
- ***Pilot and flight training suite.*** Real-time flight simulation and training rigs. Users can train on takeoff, flight, and landing maneuvers.
- ***UAS simulation.*** Provides simulation of drone missions on various terrains with versatile objectives.

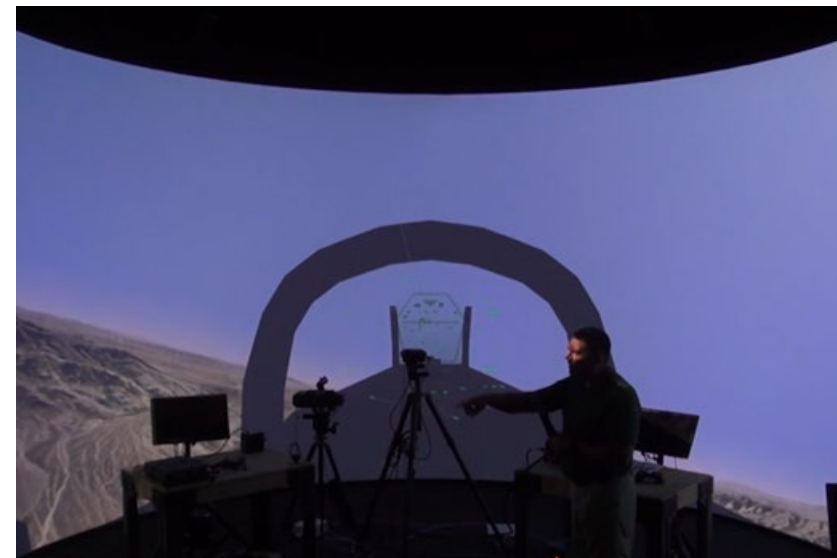




The Advanced Air Mobility Simulation Center will help build an AAM workforce pipeline for a significant workforce impact for years to come.

The Center will be leveraged for students from:

- Shenandoah University
- Laurel Ridge Community College
- Public Schools
- Randolph Macon Academy
- Civil Air Patrol
- and other entities involved in workforce development.



# An Engine for Economic and Social Mobility

To ensure opportunities for individuals from groups who are underrepresented in the aviation industry, the AAM Simulation Center will seek to provide targeted:

- programs
- scholarships
- upskilling
- and training opportunities



There is broad regional support for the the Advanced Air Mobility Simulation Center at KOKV.

*“...Approximately 77.8% of Winchester public school students qualify for Free or Reduced meals. Providing these, and all students with access to inquiry -based, hands -on work based learning opportunities is a smart investment for Virginia.”*

–Dr. Jason Van Heukelum, Superintendent, WPS

*“Over 95% of the students that participate in Winchester STARBASE are from Title I schools, serving low socioeconomic, at risk students. The proposed AAM Simulation Center will enrich our ability to serve these students ...”*

–Susan Corrigan, EdD, Program Director, Winchester STARBASE Academy





***“We need innovative leadership and intentional talent pipeline development , so we have a workforce ready to lead. The talent pipeline will help to attract OEMs of AAM aircraft and their supporting supply chains to the Commonwealth.”***

–Cynthia Schneider, CEO, Top of Virginia Regional Chamber

***“The AAM Simulation Center will provide additional economic diversity , both in the Northern Shenandoah Valley and across the state. The AAM Simulation Center will create training pathways to produce a highly qualified AAM workforce for Virginia’s future.”***

–Patrick Barker, Executive Director,  
Frederick County Economic Development Authority





**Join us as we launch Virginia's advanced  
air mobility workforce together!**



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