



## Aviation Maintenance Workforce Concept Paper

### PROJECT OVERVIEW

A severe shortage of skilled workers, including aviation mechanics and technicians, affects the entire aviation industry. Finding a quick fix any time soon seems unlikely. In its commercial Pilot and Technician Outlook for the 20 years between 2022 and 2041, Boeing said the global industry needed to recruit, train, and hire 610,000 new maintenance technicians. The scale of impending retirements is dizzying; up to 80% of the existing workforce is set to retire in the next five or six years. Indeed, a report from the Aviation Technician Education Council (ATEC) released last year noted that 27% of FAA-certified A&P mechanics are at least 64 years old. The problem is that the schools that produce A&P technicians and avionics technicians across the country have not increased the rate at which they produce technicians, so there is a gap. **Which is creating a national emergency impacting airline safety.** Currently, in the Commonwealth of Virginia, only four active aviation maintenance technician training programs operated by private and public entities exist.

- Aviation Institute of Maintenance (AIM) (Private) – Manassas, Virginia
- Aviation Institute of Maintenance (AIM) (Private) – Norfolk, Virginia
- Blue Ridge Community College (VCCS) (Public) – Weyers Cave, Virginia
- Liberty University (Private) – Lynchburg, Virginia

There is a program in development presently in a partnership between Danville Community College and Averett University.

### PROJECT OBJECTIVES

- Build an aviation maintenance technology program that will meet the demand for existing and future airline carriers, maintenance repair and overhaul facilities and other maintenance programs.
- Estimate the reasonable costs for planning and implementing an aviation maintenance technology program in secondary and post-secondary education systems.
- Produce quantifiable outcomes from the program to address short falls in the workforce.

### INITIAL COST

It is recommended that the next step be the development and funding of a Beta Study of this concept. Under the direction of the Virginia Space Grant Consortium, the program would assess and grow existing resources to include collaboration with programs at Chesterfield Public Schools in increasing the current offerings and adding Aviation Maintenance Technology curriculum in SY2025. Collaborate with the Aviation Institute of Maintenance (Norfolk, VA) to offer dual enrollment credits for students enrolled in the Aviation Maintenance Technology program. (19 credit hours). This will offer students exiting the program in their senior year the ability to sit for the Part 147 General Aviation Maintenance Examination. Step one in obtaining a FAA Airmen Certification in Aviation Maintenance. Additionally work with the Virginia Community College system to develop dual credit programs to earn an FAA Airmen Certification in Aviation Maintenance and to create a centralized aviation careers center.



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The annual cost for this undertaking is noted in the spreadsheet below.

Category	Cost
Personnel Cost	\$473,132.88
Operating Cost	\$2,939,055.00
<b>Total Investment</b>	<b><u>\$3,412,187.88</u></b>

### PROJECT TIMELINE

Because this concept depends on collaboration with local secondary and post-secondary schools, it will be necessary to launch the program with the 2023-24 School Year. The calendar below shows the overall project timeline.

December 2025	Form Planning Team/Consultant Staff
December 2025	Seek Approval from Chesterfield Public Schools
January 2026	Funding Request to General Assembly
January 2026	Hire Beta Program staff, stand up office for program
January 2026	Marketing program to rising 11 <sup>th</sup> and 12 <sup>th</sup> Graders
January 2026	Start Open House Conversations with Parents
February 2026	Purchase Equipment, Simulators, Textbooks, etc.
February 2026	Advertise for Program Instructors
April 2026	Secure Instructional Space at Matoaca High School
April 2026	Finalize Dual Enrollment Agreements
May 2026	Hire Instructors
June 2026	Train and Review Curriculum
June 2026	Start selecting first cohorts of students for program
July 2026	Install Equipment and Simulators
August 2026	Student/Parent Open House
August 2026	Last Call for Curriculum Revisions
September 2026	Launch Program