



Commercial Pilot Pathway Concept Paper

PROJECT OVERVIEW

Internationally, the aviation industry faces a severe shortage of trained pilots. Estimates exceed 600,000 pilots over the next 20 years. Studies show that interest in entering the industry continues to decline. This decline places pressure on the government sector to take significant steps to increase the number of people who start and complete the process of becoming a commercial airline pilot.

The path to becoming a commercial pilot is expensive and takes dedication and resources to complete. While airlines aggressively invest in pilot training programs, the pipeline of young people coming out of high school pursuing this career path is weak, widening the deficit of commercial pilots. In 2022, the VABA participated in a workgroup and developed a paper outlining a process by which Virginia can positively address the pilot shortage in Virginia and the United States.

The working group advises, Virginia began efforts in 2019 to address pilot shortage issues and notes that the existing program, if expanded can work to positively impact the shortage issue. As such, the workgroup recommends expanding the Virginia Space Grant Consortium (VSGS) Pathways Academy program.

The VSGC program takes a student pilot through ground school and their first solo flight. The Pathways program can easily be expanded to take a student through their private pilot, instrument, commercial and certified flight instructor (CFI) ratings. The fastest method to meet requirements to be a professional airline pilot is to build hours as Pilot in Command (PIC) as a CFI teaching others to become pilots. As such, this pathway addresses the breakdown in the process by increasing the number of students to be taught with consideration that many of these students will also be seeking a pathway to become a professional airline pilot. The VSGC Pathways program provides an immediate addressing multiple goals to address the pilot shortage. It works to garner young people's interest in becoming a pilot as a career, drives students into flight lessons, and provides flight instructors hours required to become commercial airline pilots.

The workgroup noted, increasing the number of young people wanting to become a pilot is the central element to provide professional pilots more quickly. Those seeking an air transport pilot (ATP) rating allowing them to fly for an air carrier must attain specific ratings and attain 1,500 hours as PIC to qualify to fly for a regional airline. The most expedient method to attain hours is to be a CFI and teach student pilots. Once the new pilot receives their CFI, they can earn a living wage teaching the next cycle of pilots. Doing so for young people ages 16 – 18 provides an opportunity to provide meaningful career opportunities to a more diverse population that otherwise could not afford to do so.

The workgroup recommends the VSGC grow the Pathways program three-times by increasing the number of 16–18-year-old students entering the program, and add programs for completion of the private pilot, instrument, commercial and CFI ratings. Over a five-year period the VSGC would continue to scale the program up to a maximum of 150 students a year. The VSGC would continue to work with existing flight school programs operating throughout the Commonwealth. Student will complete each phase before acceptance in the next. During this period VSGC will continually be qualifying student interest in becoming a commercial airline pilot as a career.

The recommendation utilizes existing private and academic flight training programs and encourages awareness in grades ten, eleven and twelve where interest must be developed. Once fully phased in the program will produce more than 150 new commercial airline pilots per year. Positive results will be immediate with pilots qualifying as ATPs and continue to consistently produce like numbers of certified ATPs for years to follow.

PROJECT OBJECTIVES

- Build a pilot pipeline addressing a lack of students for CFIs to teach while attaining required hours to qualify for aircraft transport pilot (ATP) certification.
- Continually introduce young Virginians into aviation as a career path.
- Provide new professional career path to a diverse population of students.
- Encourage enhanced capital investment by private sector in aviation pilot training programs.
- Provide a continuous pipeline of pilots to support commercial airline industry.
- Maintain state expenditures in training.
- Assure a compliance and reporting mechanism through the VSGC.

INITIAL COST AND PROJECT TIMELINE

The Commonwealth provides \$100,000 annually to Pathways Flight Academy through the State Council of Higher Education for 30 high school students to receive instruction up to and including their solo flight.

Pathways A - receives \$100k for 30 students. Grow to 60 students in 2025 and to 100, 2026 and 150 in 2027.	\$279,000	In operation – Grow program from 30 students to 60 (inclusive of \$100,000 in the budget).
Pathways B – virtual private ground school prepare students to take written knowledge test for private pilot. PVCC/VSGC developing.	\$103,000	2023 Deployment – In development now. Target 100 students.
Pathways C – Solo to Private Rating	\$830,000	2023 Deployment - Designed to introduce 100 new pilots annually. Program provides CFI hours. Students have demonstrated interest to be commercial pilots. Program uses existing Virginia flight schools.
Pathways D – Instrument, Commercial and CFI Rating.	\$755,000	2024 Deployment - Will cover 15 to 20 students to begin.
Pathways E – Air Transport Pilot	0	2025 deployment – While earning hours and experience, CFIs will be paid through student fees to teach. The VSGC will monitor and develop programs to supplement need for required ground school and instruction the student cannot readily find.
2023 Appropriation	\$1,212,000	
2024 appropriation	\$1,967,000	