



**Looking Forward: The Future of America's Aviation Maintenance and  
Manufacturing Workforce**

**Testimony for the House Aviation Subcommittee  
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Ladies and Gentlemen of the Subcommittee on Aviation, thank you so much for allowing me to speak to this esteemed group. I am honored to be part of this panel of engaged leaders who are working to provide incredible opportunities to tomorrow's aviation leaders.

Vaughn College is in New York City directly across the street from LaGuardia Airport. Founded in 1932, we offer master's, bachelor, associate's and certificate programs in all aspects of aviation including flight, aviation maintenance, air traffic control (FAA approved AT-CTI), flight dispatch, as well as engineering, airport/airline management and other technologies. We serve a population of about 1,650 students (650 students in aviation maintenance, 300 students in flight and airport/airline management and about 300 in engineering and engineering technology); 80 percent are from a minority background and most are first-generation Americans and first-generation college students. Twelve percent are women (nationwide seven percent of pilots are women and less than four percent are maintenance technicians) and we are working to raise our female representation. We also have more than 150 Veterans.

As I'm sure you know, we face an unprecedented need for pilots and maintenance technicians for the next 20 years, according to Boeing and Airbus forecasts. Right now, the United States will not produce enough qualified talent to meet the demand, which is why we must expand the existing pipeline to include opportunities for underserved populations especially minorities and women who have not been exposed to these fields. Prospective students want to know that aviation is a high-tech, in-demand field with well-paying jobs and a solid career outlook.

The average family income for a Vaughn student is about \$39,000 and within one year of graduation 99 percent of those students are employed or continuing their education; 83 percent in their field. For those graduates who pursue an aviation maintenance degree or certification those skills are also transferable to a variety of fields including transportation, public utilities and manufacturing.

In a 2017 a study done by the Equality of Opportunity Project published in the New York Times, looked at more than 2,100 institutions that were the best at moving students from the bottom 40 percent in income to the top and Vaughn was number one in the country. That is the evidence of the transformation possible with a Vaughn education, and we don't just change that student's life we change the whole family's trajectory. As a result of this overwhelming evidence, we made a strategic decision to offer our full-time bachelor of science and associate in aviation maintenance students the Vaughn Guarantee—if they remain enrolled full-time during their studies and meet regularly with our career services office and are not employed within one year we will pay their federal loans for one year. Our students and families are primarily concerned with affordability and the assurance of a career path, and this Guarantee is a declaration that Vaughn considers this a true partnership for student success.

Queens is incredibly fortunate to have an aviation ecosystem that could act as a model for other major metropolitan areas. That ecosystem includes education partners like Aviation High School who we support with “Bridge to College” programs, partnering on Women in Aviation Events, scholarships and more. Between these two institutions, we are one of the largest producers of technicians to the industry. Our other outstanding partners include the Federal Aviation Administration who we work closely with to produce high quality, professional maintenance technicians. In addition, we work with The Port Authority of New York and New Jersey, Delta, Endeavor, Republic, JetBlue, United and the Cradle of Aviation Museum, among others, to provide a clear career pathway.

In order to expand the pipeline, we must create greater awareness at the middle and elementary school levels—waiting until high school is too late—with an emphasis on math and science confidence and sticking with these subjects, especially for girls who after eighth grade are less likely to take technical courses. At Vaughn, we regularly host the Scouting community with interactive workshops, are developing a program with a local middle school that will also include a partnership with a high school, our students offer demonstrations at museums like the Cradle of Aviation, and we host awareness events in cooperation with JetBlue and the New York Hall of Science, as well as send Vaughn students to participate in a variety of secondary school events. These programs help to create the early awareness that is needed to draw individuals who are traditionally not well represented in the industry. More could be done with support for programs such as grant for simulation equipment, curriculum development and funding for the education coordination at the Federal Aviation Administration's regional offices.

Once we create awareness and students decide that aviation is a field that they want to pursue, we must find a way to make it this pathway more affordable. The average debt load for a student pursuing aviation maintenance is about \$17,500 (tuition is about \$9,000 per semester and can be completed as quickly as four semesters but most students take five or six semesters) while the cost of flight training is an additional \$60,000 to \$70,000 on top of tuition. Many of our families do not qualify for a PLUS loan (the traditional loan offered to parents of students) because of their credit scores or lack of credit and must turn to the alternative loan market where the interest rates are much higher. Congress could consider increasing the maximum Pell award from \$6,195 annually and modify the rules which do not allow students to take more than four consecutive

semesters of aid in a row before needing to take a one semester break. By lowering the overall debt load for the neediest students, you provide a lifetime career path with incredible opportunities.

Vaughn's more than 85 years of expertise in aviation provides us with a unique vantage point and a legacy of students who fuel one of this nation's leading economic drivers. To meet the need for a qualified and well-trained workforce we must create awareness in communities that can be the greatest contributors to the aviation industry.