



**CITY OF FORT LAUDERDALE
City Commission Agenda Memo
CONFERENCE MEETING**

#19-0887

TO: Honorable Mayor & Members of the
Fort Lauderdale City Commission

FROM: Chris Lagerbloom, ICMA-CM, City Manager

DATE: September 17, 2019

TITLE: Fort Lauderdale Aviation Academy - **(Commission Districts 1, 2, 3 and 4)**

Background

This memorandum is intended to present a vision for the Fort Lauderdale Aviation Academy and an immediate opportunity to pilot an avionics training program with a cohort of high school and adult students in 2020. The pilot program under consideration is in partnership with Broward County Public Schools, Atlantic Technical College, Broward College, Greater Fort Lauderdale Alliance, Greater Fort Lauderdale Chamber of Commerce and an Advisory Council of aviation businesses at the Fort Lauderdale Executive Airport. The curriculum is being further customized to meet the specifications of industry partners and to prepare students for aviation jobs and/or matriculation into post-secondary degree programs.

Demand for Aviation Education

Ranked second among states in the number of aviation and aerospace businesses, Florida is a leader in the aviation industry. Broward County contributes significantly to the state's aviation sector and is home to 844 aviation related businesses. However, the 2017 *Greater Fort Lauderdale Alliance Workforce Skills Gap Analysis* revealed a shortage in aviation middle skills workers. This study fueled a more intensive focus on the part of the City, local education institutions and business associations to address the gap.

Aviation job projections in Broward County represent a considerable increase over the next five years and outpace the demand of neighboring counties. According to the Bureau of Labor Statistics, Broward County expects a job increase in the aviation industry of 23 percent, representing 3,794 additional jobs by 2025. The expected increase in the number of aviation jobs in Broward County is over two times more than the projected increase in Miami-Dade County and almost eight times more than the projected increase in Palm Beach County.

Aviation business partners have expressed enthusiasm for the Fort Lauderdale Aviation Academy, noting the importance of training in high school to address the skills gaps issue. In 2018, 67 percent of jobs only required a high school diploma or equivalent certification and 75 percent did not require any prior work experience. These statistics underscore the

importance of job-embedded training in high school and industry apprenticeship programs.

City of Fort Lauderdale: Prime Aviation Training Location

The City's proximity to one of the fastest growing international airports in the country, Fort Lauderdale-Hollywood International Airport, and its operation of the Fort Lauderdale Executive Airport (FXE) uniquely position the City to promote aviation education.

FXE is owned and operated by the City and can be leveraged to train future aviation workers and career professionals. FXE is the fifth busiest general aviation airport in the country for itinerant operations with over 180,000 operations in 2018. With respect to Customs, FXE is the busiest general aviation facility in the United States, clearing more than 13,000 aircraft and more than 50,000 passengers per year. FXE is home to over 1,000 aircraft, including 332 jets, and four fixed-based operators. Unique for general aviation airports, FXE operates a 24-hour Federal Aviation Administration air traffic control tower. The campus is 1,000 acres, including a 200-acre industrial park with 2 million square feet of office/warehouse space.

FXE is an integral part of the City's economic and business development programs, representing 12,708 jobs and a total economic impact of \$2,091,276,002. As a leader in general aviation, FXE is a prime training location for developing a quality aviation workforce.

Advisory Council & Steering Committee

Recruitment of business partners for the Aviation Academy Advisory Council formally started in June of 2019. The Steering Committee, comprised of educational partners and business associations, was subsequently formed in July of 2019 to design the academic program in consultation with the Advisory Council. The Steering Committee includes representation from the City, Fort Lauderdale Executive Airport, Broward County Public Schools, Atlantic Technical College, Broward College, Greater Fort Lauderdale Alliance and the Greater Fort Lauderdale Chamber of Commerce. Many aviation businesses have consulted on the long-term vision and pilot avionics program, including Banyan Air Service, Duncan Avionics, Florida Jet, Jet Harbor, Sheltair, JM Family Enterprises, Lynx Aviation and others. Refer to Exhibit 1 for the Fort Lauderdale Aviation Academy Planning Timeline, including engagement activities with education institutions and businesses.

Partner Profiles: Steering Committee

The Steering Committee represents a cross-section of the education and business sectors. Each organization brings the expertise needed to develop a rigorous, industry-aligned curriculum that meets aviation workforce demands.

Broward County Public Schools is the sixth largest public school district in the United States and the second largest in the state of Florida. The district operates 234 schools, serving more than 271,000 students and approximately 175,000 adults. The district's technical colleges continue to earn national distinctions and have been ranked number one for industry certification awards.

Atlantic Technical College is number one in the state of Florida for industry certifications and is the number one rated high school in Broward County Public Schools. In 2019, Atlantic Technical College students earned 302 industry certifications, 98% graduated on time and 90% earned at least one diploma designation. Atlantic Technical College is an A-rated school and a National Magnet School of Distinction and Excellence.

Broward College is continually recognized as one of the top higher education institutions in the nation. The Aspen Institute's College Excellence Program ranked Broward College as one of the top three community colleges in the United States. With specialized aviation programming, Broward College's Emil Buehler Aviation Institute links Broward College's Judson A. Samuels South Campus with North Perry Airport. Students receive industry training from highly skilled instructors at an affordable cost. Surrounded by aviation professionals, students experience flight and maintenance operations in action, and have access to a variety of certificate programs and associate's and bachelor's degree programs.

The Greater Fort Lauderdale Alliance is Broward County's official public/private partnership for economic development. Its mission is to lead Broward County in building a stronger and more diverse economy by stimulating the creation of new jobs and capital investment while facilitating the growth and retention of business in Broward County. The Greater Fort Lauderdale Alliance commissioned a skills gap analysis in 2017 that was conducted by Boyette Strategic Advisors and funded by JP Morgan Chase. The Skills Gap Analysis identified a middle skills gap in aviation and projected an increase in all aviation and aerospace occupations by 2022.

The Greater Fort Lauderdale Chamber of Commerce is the largest and oldest business organization in Broward County. The Chamber is committed to serving the business community and helping promote future economic growth. The Chamber has been involved in working groups to analyze the aviation skills gap and consult on the development of Fort Lauderdale's long-term vision and pilot program.

Fort Lauderdale Aviation Academy

Vision:

The long-term vision is for the City of Fort Lauderdale to be recognized as a worldwide hub for aviation education through innovative partnerships that create experiential, industry-aligned learning opportunities. Reference Exhibit 2 for the Fort Lauderdale Aviation Academy Model. The City is collaborating with the Steering Committee and Advisory Council to develop a shared vision that complements and extends aviation education throughout the region, while developing a customized pilot program with a strong foundation in avionics.

The goal is for an Aviation Academy to be housed at FXE with programming delivered through education and business partners. The intent is to offer multiple learning pathways from elementary through post-secondary and career in the highest demand and cutting-

edge fields of aviation. Ongoing consultation and involvement with aviation business partners will support alignment with industry needs and, ultimately, student job placement.

Immediate Opportunity:

In the interim, there is an immediate opportunity to launch a pilot program in avionics in January 2020 for adults and high school students. The program represents one of many future career pathways at the Fort Lauderdale Aviation Academy and would be the first program to “take flight” toward the full vision. The program will be designed to provide students with a broad-based introduction to the aviation field, fundamental knowledge and experience in aircraft electrical systems with an emphasis on trouble shooting avionics systems.

The avionics program is designed to train 20-25 adult and high school students to become line Avionics Technicians, Aviation Electronic Technicians, Aviation Maintenance Technicians, Avionics Equipment Mechanics and other entry level jobs in aviation. Avionics is the specialization in the repair and maintenance of a plane’s electronic instruments, such as radio, radar systems and navigational aids. The increased use of digital technology on aircrafts means more time is spent maintaining computer systems, creating a greater need for the avionics training. Refer to Exhibit 3 for the Avionics Systems Technician Flyer.

The program will be co-located at Atlantic Technical College and FXE, with a classroom lab at Atlantic Technical College and hands on learning at FXE through business partners. Students will have the opportunity to graduate with a variety of industry certifications, including Aircraft Electronic Technician, Aerospace/Aircraft Assembly, Avionics Electronics, Certified Associate Electronic Technician, Comp A+ and OSHA Safety. An articulation agreement with Broward College will allow students to transfer credits toward an associate’s degree at Broward College.

Targeted enrollment is five adults and 15 high school students for the first year. The adult program is full day, whereas the high school program is half day to allow students to return to their home school to fulfill graduation requirements. Refer to Exhibit 4 for the Avionics System Technician Program Overview.

Broward County Public Schools will provide an enrollment preference and conduct targeted recruitment for high school students residing in Fort Lauderdale. Free transportation will be provided by Broward County Public Schools for students living north of Sunrise Boulevard. The lab equipment will be purchased by Broward County Public Schools through workforce funding and installed in a lab at Atlantic Technical College. The City’s primary responsibilities include cultivating and sustaining business partnerships that support hands-on, real world learning experiences and overseeing the quality of the program in coordination with BCPS and industry partners. The cost to the City would be absorbed by existing staff, which include the chief education officer and airport program manager. Future funding opportunities are being explored at the local, state and federal levels.

Conclusion

The City seeks to leverage the FXE and the expertise of our educational and business partners to address the local aviation job shortage and to prepare the future workforce. The 3,794 additional aviation jobs projected by 2025 sends a clarion call to the City and the larger region to support workforce development and training efforts in the aviation sector. The City has an immediate opportunity to launch a pilot program through Atlantic Technical College specializing in avionics for a cohort of adults and high school students in January 2020. The Steering Committee continues to conduct market analysis to inform future program tracks and to plan for the full Fort Lauderdale Aviation Academy.

Strategic Connections

This item is a *Press Play Fort Lauderdale Strategic Plan 2018* initiative, included within the Business Development Cylinder of Excellence, specifically advancing:

- Goal 8: Be known for educational excellence.
 - Objective 1: Create a call to action with our partners to elevate our focus on excellent Pre-K through 12th grade quality public and private education.
 - Initiative 1: Work within the existing network of government, civic, alumni, and business partners to develop a strategy and action plan to mentor and sponsor schools and students to achieve educational excellence.

This item advances the *Fast Forward Fort Lauderdale 2035 Vision Plan: We Are Prosperous*.

Attachments

Exhibit 1 - Fort Lauderdale Aviation Academy Planning Timeline

Exhibit 2 - Fort Lauderdale Aviation Academy Model

Exhibit 3 - Avionics Systems Technician Flyer

Exhibit 4 - Avionics Systems Technician Program Overview

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