

Piloting

THE AIRWAYS

AVIATION SIMULATION TRAINING IS TAKING OFF IN OR

By Jackie Kelvington



»» Forget what might immediately come to mind when you think about the airline industry business. Despite factors such as higher gas prices and mixed earnings, there's a silver lining in this cloud. Some positive news coming out of the industry could nurture a blossoming niche and bolster the economy.



With airline passenger traffic rebounding and aircraft manufacturing on a steady climb, pilot hiring has risen to record levels. Between the majors, nationals, regionals, business aviation, freight carriers, and helicopters, more than 6,500 pilots have been hired in 2005. Given these industry indicators, pilot training on simulation equipment is expected to soar. And, places such as Orlando are already showing the potential to provide the billion-dollar high tech training required for these pilots.

A CLUSTERING INDUSTRY

Orlando, unlike most (if not all) other major markets in the United States, has two critical assets to grow this aviation simulation training niche. *The first:* it is home to **Orlando International Airport** — one of the largest and fastest growing international airports, as well as **Orlando Sanford International Airport** and a host of other regional and executive airports. *Second:* Orlando is recognized as the largest simulation industry cluster in the nation. Numerous aircraft and ground support firms, renowned flight training schools, adjacent land to airports

and great year-round weather, round out some of the region's other major assets for the industry.

In fact, these advantages topped the list for **JetBlue**, which selected Orlando as the site for its first flight-training center, aircraft maintenance and Live TV installation hangar — all of which opened in 2005.

"Orlando is a natural fit for our needs," says Mike Barger, chief learning officer for JetBlue Airways. "Among other things, it has great weather, things for our students to do while they're here in training, a cooperative business climate, and land."

In addition to JetBlue, other major pilot training organizations, as well as numerous aviation simulation companies, are located in the Orlando region. They include:

- »» **FlightSafety International**, which is the world's largest provider of aviation services, training more than 65,000 pilots annually on some of the most advanced simulators. The company's nearby FlightSafety Academy is dedicated exclusively to training future professional pilots.
- »» **The Regional Airline Academy**, based in Central Florida, is a renowned airline career school providing professional pilot education and utilizing the latest in aviation technology and modern aircraft.
- »» **PanAm International Flight Academy/SimCom training center** offers business and general aviation pilots one of the industry's most acclaimed simulation training experiences, as well as jet training programs.

- » Numerous companies engaged in aviation-related simulation can be found in Orlando, including: Lockheed Martin, Northrop Grumman, Adacel (which manufactures the most widely used air traffic control tower simulator) and Indra Systems (which develops aircraft and helicopter training simulators for U.S. pilots).
- » **AirTran Airways** maintains its corporate headquarters in Orlando and dozens of other major carriers provide service to Orlando.

And, it doesn't hurt that Orlando has a huge related digital media base and is close to the talent and expertise of NASA.

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the simulation world," says Mark Creasap, general manager of Adacel. "Orlando offers a myriad of capabilities for a young simulation company such as ours, including a strong industry cluster, a skilled workforce, a top-notch university, and a proactive state and city that encourages and assists in growth programs."

HIGH-FLYING SCHOOLS & SERVICES

Three area universities play a significant role in nurturing the pilot profession and creating a simulation training ground in Central Florida.

- » **Embry-Riddle Aeronautical University** is the world's leader in aviation higher education, with more

than 35 degree programs offered and a curriculum that covers the operation, engineering, research, manufacturing, marketing, and management of modern aircraft and the systems that support them. The university also offers its Commercial Airline Pilot Training (CAPT) program, as well as FAA certification programs.

- » The **Florida Institute of Technology** also provides a noted aviation and flight training program with highly regarded instructors and a fleet of more than 35 aircraft.
- » And the **University of Central Florida** (UCF) houses several centers of excellence to serve the industry, including the Center for Applied Human Factors in Aviation, the Center for Advanced Transportation Systems Simulation, and an FAA/UCF Partnership for Aviation Team Training Research.

Orlando's appeal to the commercial aviation simulation sector also stems from a significant cluster of the industry's support and maintenance services. This impressive list includes: **Cessna's** aviation maintenance and repair service center; **FMC Airport Systems**, which provides commercial aircraft equipment, parts and technology-based solutions; ground handling, fueling, cargo and passenger services provided by **Signature Flight Support** and **Aircraft Service International Group**; and **Aircraft Engineering & Installation Services**, which designs, manufactures and supervises the installation of aircraft avionics systems.

With an already established industry niche, along with world-renowned airports; the largest simulation industry in the country; top flight-training schools; numerous aircraft and ground support firms; available land adjacent to airports; and more, Metro Orlando has landed as one of the top locations for pilot training on advanced simulation systems. For more on the industry in Orlando, visit www.orlandoedc.com.

BEYOND AVIATION

Today, Central Florida is recognized as the national center for the modeling, simulation and training (MS&T) industry in the U.S., and is home to a significant percentage of the nation's MS&T companies. These companies derive benefits from an environment complete with leading-edge research facilities, world-class educational programs and vital supporting resources in addition to those outlined in "Piloting the Airways":

- **Marketplace:** As the country's preeminent focal point for MS&T, Metro Orlando has attracted companies specializing in a wide range of industry applications — from entertainment to emergency preparedness to transportation planning. The sector's 100+ companies employ 16,847 workers in Central Florida.
- **Education:** The region is home to some of the top educational and research institutions in the country committed to furthering the success of the MS&T industry.
- **The University of Central Florida's Institute for Simulation and Training** is an internationally recognized research institute that focuses on advancing modeling and simulation technology.
- **Other education options** in this field start as early as the high school magnet program level, and extend through specialized community college and technical school programs.
- **Industry Organization and Involvement:** Orlando is home to the headquarters of the National Center for Simulation, the industry's premier professional organization. The region also annually hosts I/ITSEC, the world's largest international defense simulation conference.