

## How to Combat the Pilot Shortage

One issue that the airline industry faces is the lack of qualified first officers. Major carriers are recruiting pilots from the regional airlines based on their seniority. This alone is not problematic. The problem is that so many major carriers are adding these kinds of pilots to their crews that it creates a gap. The industry is flooded with those with seniority and there is not enough saturation of qualified new pilots coming into the regional airline system.

On February 12, 2009, the Colgan Air Flight 3407 crashed. It killed all onboard and a civilian in a house in Buffalo, New York. As a result, the courts passed the Airline Safety and Federal Aviation Administration Extension Act of 2010 on August 1, 2013. Also known as Public Law 111-216, this law is the reason for the shortage North American pilots. This shortage impacts the overall operations of the airline.

The qualifications of first officers were different prior to this act. They needed both a commercial pilot certificate and 250 flight hours. Airlines could hire them with these stipulations.

After the PL 111-216, the qualifications greatly changed. Instead of 250 flight hours, first officers now needed 1500 hours. Instead of a commercial pilot certificate, they now needed airline transport pilot certification.

This policy made it much harder for first officers to make it get into the airline industry. On top of that, the airline industry saw immense growth. More people than ever were flying and previous pilots were beginning to retire. These issues created the current shortage in pilots. It's not predicted to get any better as these conditions have not changed.

Boeing, the world's largest aerospace company looked at the long-term market for 2016-2035. Boeing predicts that the North American regional and major carriers will grow and create a need for 112,000 commercial pilots. The Federal Aviation Administration also looked at the long-term market. They predict the fleet will expand from 6,871 aircrafts to 8,414. This will also create a need for more pilots.

A creation of collegiate aeronautics programs emerged to combat this shortage. Many carriers look towards this option in order to keep their airplanes staffed and their flights on schedule. These programs provide approved courses for students and when they pass it, they receive a Restricted Airline Transport Pilot certificate. This is the equivalent of about 1,000 flight hours. Programs such as this help alleviate the harsh 1,500 flight hour policy.

Embry-Riddle Aeronautical University, the University of North Dakota, Purdue University, and Liberty University are only a small number of schools that offer the R-TAP certification. These schools are imperative to pilot industry. Airline recruiters are routinely visiting these campuses in search of new pilots.

"We have multiple regional and major airline recruiters coming to us all the time to speak with students and graduated flight instructors," says James P. Molloy, dean of Liberty University's School of Aeronautics.

"For students who have a definite goal of going to the airlines by meeting the requirements for an R-ATP, interviews and conditional hiring can occur as early as their sophomore year. Many of the airlines

are intent on getting early commitments and are offering attractive flow-through programs.” Molloy continues.

The Regional Airline Association comments on the pilot shortage.

“If you look at the numbers, it’s a very clear picture. The number of new pilots coming in cannot keep pace with the growth and retirements at the major airlines,” RAA President Faye Malarkey-Black says at the annual association convention in May 2016.

“The pilot shortage is here, it’s very real, and it’s impacting every airline. The pool of hireable pilots ages 20 to 59 has shrunk 17 percent since 2009, at a rate of about 927 [pilots] per month.” Black admitted airlines feel the pressure. The reduction of qualified candidates equals a reduction in service.

“Between 2013 and 2015, 222 U.S. airports experienced scheduled service reductions of 10 percent or more, with 27 communities losing all scheduled air service,” she said.

“I can tell you pilot supply is a contributing factor in an enormous amount of these service reductions. We simply do not have the pilot resources to take on all of today’s flying, and we certainly cannot take on the tremendous growth opportunities that are out there without intervention.”

The RAA supports the collegiate programs R-ATP certificate. They discovered that what students want over anything else is security in their careers.

“They want a clear flow-through path from the school to the regional airlines, where they have a guaranteed interview or hiring, and continued flow from the regionals to the major airlines. Because we know these pilots dream of flying the heavy metal,” Black said.

Graduating students from these collegiate programs are the number one targets for airline recruiters. Dr. Frank Ayers confirms this as fact. Ayers is a chancellor at the Arizona campus of Embry-Riddle Aeronautical University.

“Our graduates are in high demand and are hired as they reach the 1,000-hour limit,” Ayers says.

“These students have been immersed in an SMS safety culture right from the start and receive advanced jet pilot practical and theory ground training, so their understanding of aircraft performance, aerodynamics, and the knowledge base of flying is strong. This makes their transition to airline life significantly easier,” he goes on to say.

Elizabeth Bjecke offers more proof on the pilot shortage Bjerke is a chair of the Aviation Department at John D. Odegard School of Aerospace Sciences. It is a multidisciplinary college within the University of North Dakota. Bjecke asserts the following:

“The nation is indeed in the midst of a pilot shortage[...]This shortage is being felt extensively right now at the flight instructor level at collegiate programs and is affecting the regional airlines significantly[...] Many of the major airlines[...] expect to start feeling the full impact of the pilot shortage in the next

three to four years. Our message to prospective students is that there are many great opportunities in the aviation industry.”

UND Aerospace is dedicated to collegiate pilot training. They understand the growing demand for pilots and as such, dedicate themselves to producing a large number of high-qualified applicants.

UND Aerospace signed a purchase agreement lasting seven years with Piper Aircraft at the 2016 “Sun ‘n’ Fun International Fly-In Expo” in Lakeland, Florida. This agreement grants them up to 112 new Archer and Seminole aircraft for training.

Hans Stancil, a general manager of American sales for Piper Aircraft said, UND chose them due to the long-term relationship with the school. This granted Piper a deeper understanding of what the school needed. The sale, however, was not easy when they first proposed to the manufacturers in 2015.

“The competition for this business was greater than for any other deal that Piper has pursued in the past,” says Stancil.

“Several competitors were looking to win this business, especially when it came to the single-engine trainers. Ultimately, our relationship with the people at UND enabled us to craft an offering that included not only the right aircraft but also the right value-added items to win the deal,” he goes on to say.

Many collegiate aeronautics programs are adapting to the high demand for qualified graduates. They are increasing their student capacity and constantly upgrading their fleets. They want to provide their students with the latest avionic technology.

John H. Mott, the interim department head at Purdue University’s School of Aviation and Transportation Technology notices a growth in student numbers. He says that the school has seen an influx of incoming freshman each year.

“We typically receive many more applicants to professional flight than we are able to admit, due to capacity constraints,” Mott says.

“We’ve now embarked on an initiative to improve the efficiency with which we operate our training fleet to allow more students to be admitted than in the past,” he goes on.

Many of the students enroll in these collegiate programs with dreams of aviation from a younger age. Some enroll with an interest but little focus; these students need more guidance which the schools provide.

This is true for Joseph Jewell of Louisville, Kentucky. Jewell is a student at Embry-Riddle. During a summer camp prior to his freshman year, he met with Organization of Black Aeronautical Pilots. The mentorship of the senior pilots gave him the direction he needed for his career path. These particular pilots worked for the United Postal Service out to the Worldport air hub in the Louisville International Airport (KSDF).

Jewell had this to say:

“The UPS pilots running the OBAP summer program were very inspirational, very kind, and knew how to be charismatic leaders for future professional pilots. They taught me that I needed to stay focused and driven and to be a professional pilot, I had to get a degree. In doing my research to find the right school, everything pointed me to Embry-Riddle. I finished high school with a 3.9 GPA, so I was able to get academic scholarships and a partial basketball scholarship to cover the costs. I don’t regret my decision, and Dr. Frank Ayers has been a tremendous mentor for me there. Prescott is an impressive campus, and everyone you’re walking with always looks up at a plane that’s flying over. Just the feeling of everybody on campus being aviation enthusiasts and being into airplanes motivates me every day.”

Jewell still has three years at Embry-Riddle. He knows that he has a good chance of being hired by a regional airline. This will help him towards his dream of flying internationally for UPS.

New pilot applicants do face obstacles despite their attractiveness to the industry. The cost of the required training outweighs the salary. The training includes the collegiate aviation degree program as well as the additional flight hours for the R-ATP. This is vastly larger than the starting salaries the new pilots receive. Regional airlines are beginning to change. They are offering higher salaries and signing bonuses for new first officers. This helps balance out the cost and the gain.

“The starting pay at regional airlines has come a long way in the last 12 to 18 months,” Bjerke says.

Currently, new first officers are making about \$37,500 a year compared to a year ago when they made about \$21,000 a year.

“The responsibility borne by first officers on regional jets demands better than fast-food wages,” Ayers says, taking note of the improvement on regional pay.

“I would estimate that it probably takes two to three years to upgrade to captain at a regional airline, although some regionals are much faster than that right now. Once a captain, it may take as little as two more years to be competitive for the major airlines. These times to upgrade will decrease over the next few years as the demand for pilots continues to increase,” Bjerke says.

The cost of pilot certification is still high compared to the pay rate. Embry-Riddle breaks down the cost for its 4-year aeronautical program as follows:

-\$44,000 per year for tuition. It includes room and board, books, and fees.

-\$20,000 per year for flight training

This amounts to around \$64,000 per year for all of the training necessary.

In order to earn their degree, students need about \$256,000 for the whole four years. Students can pay a small portion of that when they work as instructor pilots during their senior year. These jobs provide students with the opportunity to get in their needed flight hours as well as funds for their debt.

Not everyone is meant to be a pilot, but those who are interested will find now is a great time to pursue the collegiate path. Regional airlines need qualified and competent graduates as soon as possible.

An increase of new recruits is not the end-all-be-all answer to the shortage. However, this training system does alleviate some of the staffing issues. It also helps students securing jobs after their graduation. With their new certification and their 1,000 flight hours, almost every new pilots will find jobs awaiting them.

### **Alternative Ways To Get the Majors**

-Part 141 Flight Schools

-Military

Holding an ATP license and a degree is almost a guaranteed job since there are targeting those graduates. However, enrolling in a four-year aviation school is not the only path to getting hired by an airline.

Potential pilots can also consider the military. It may also be a fast track to becoming a pilot because they also experience a pilot shortage.

If you don't want to enlist in the military, you can consider a Part 61 flight school or a Part 141 school. It is important to note that the majors do require a Bachelor's degree although an aviation degree is not.

A Part 41 flight school will save you money but if you are serious about your aviation career, you should consider a Part 141 school. They offer a more structured approach.

ATP is one of the largest Part 141 schools in the country. They offer a 2-year accelerated pilot career program. It takes you from a newbie to the seat of a regional airliner. ATP students experience airline-styled training from their first day. They have over 30 locations nationwide. The cost of the program is around \$74,000 with another \$4,800 for examiner fees. It is much cheaper than aviation school.

They have an 180-day track that requires 275 hours of the student's time. This includes 100 hours of multiengine experience. What's best about this track is that it guarantees students a job as a flight instructor when they complete the program. This allows students to begin working on their 1,500 flight hour quota right away.