

Taking Off: Aviation Careers 2015

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The last five years have proven to be a tumultuous time in aviation careers. A perfect storm of conditions has created a situation where the demand for pilots is beginning to outstrip supply, with a number of key indicators supporting that assertion. If various industry projections hold true, future demand for



pilots will be dramatic. Meanwhile, new areas in aviation have opened up, with unmanned aerial vehicles (UAVs) making news on a daily basis, and the prospect of commercial space flight coming closer to reality every day. Helicopters and charter operations are growing as consumers find more efficient (and pleasant) ways to travel. Aviation is growing and changing at the same time.

Is The Shortage Real?

For years now, a large number of people has maintained that a pilot shortage is simply a myth. They point to all the pilots on furlough as examples of the hordes of employable pilots who would rejoin the workforce if a shortage ever became reality. But, they never counted on several factors coming together to cause airlines to cancel routes and park their planes because there's nobody to fly them.

This past September, the Regional Airline Association (RAA) released a report that said airports across the United States, both large and small, have suffered major cuts in airline service ranging from 10% to nearly 81% as airlines have been forced to cancel flights due largely to the growing pilot shortage. Eighty-six large cities have already lost more than 10% of their regional flights, including Cleveland, Memphis and Louisville, among many others. The RAA report estimates the cost of these cancellations at \$2.1 billion in domestic airline revenues in cities that comprise over 10% of the U.S. population and 7% of the U.S. GDP.

In fact, United Airlines spokesman Rahsaan Johnson cited regional airline pilot shortages as the reason why the carrier dropped Cleveland Hopkins International airport as a hub,

eliminated nonstop service to over 40 cities, reduced peak-time departures from 199 to 72, and left the city of Cleveland with a gaping and silent concourse.



Industry watcher and consultant Kit Darby sees the impact that pilot shortages are having on regional airlines—traditionally the feeder system for major airlines—and notes, "For the regional airline, the shortage arrived about a year ago, and it is now approaching the acute phase where they cannot fly all of their routes, so they are offering signing bonuses up to \$12,000 and employ recruiting bonuses up to \$2,500."

The driving force of this pilot shortage is a combination of factors: mandatory age-65 retirements coming due, major airlines hiring for the first time in years, toughened requirements for pilot training, newly implemented pilot rest rules, a lack of pilots from the military sector, fewer student pilots in the general population, increasing training costs and starting wages at the regional airlines that challenge minimum-wage levels.

To be fair, there are many who say there's no shortage of pilots, only a shortage of higher wages and benefits, and that if starting salaries were to increase, there would be plenty of pilots available. In fact, the Airline Pilots Association (ALPA), a union representing some 50,000 pilots in the U.S., claims there's no pilot shortage, as does Louis Smith, president of FAPA.aero, an airline pilot career consultant firm. He believes the problem is attrition due to major airlines pulling pilots away from regionals and a lack of pilots from the military. He calls the current situation a "pilot workforce structural defect." "I will call it a pilot shortage when pilot employers begin paying students to learn to fly," says Smith.

Call it what you will, but the career opportunity for those willing to tread the turbulent waters of employment as a professional pilot is there for the asking. Stephen Farrow, president and chief executive of Piedmont Airlines, recently talked about how the regional carrier needed 50 new pilots in the first quarter, but could only hire 28. "This is not due to a lack of motivation or compensation. Piedmont pays one of the highest first-year salaries (\$30,000) in the regional industry and offers a \$5,000 signing bonus for new hires," said Farrow. "This is due simply to an acute shortage of qualified, appropriate pilots on the market and the unprecedented demand for their services."



Unmanned aerial vehicle ("drone") pilots are in high demand as existing crews complete their duty commitments. Lucrative salaries and benefits come with jobs in both the private and military sectors.

Drone Pilots Wanted: \$100,000 To Start

Aside from airline flying, one very bright spot in the aviation world is drone flying. Formally called unmanned aerial vehicles (UAVs), drones are making the news daily. From small quadcopters to full-sized lethal military behemoths, UAVs are a hot ticket and are invading everything from border patrol to wedding videography. Drone pilots are in demand both in the government and the private sector, with lucrative salaries and enviable working conditions.

The biggest drone pilot employer today is the federal government and those companies associated with them. A drone pilot typically earns over \$100,000 and up per year, along with bonuses and great benefits. According to a report from the Association for Unmanned Vehicle Systems International, as many as 100,000 new jobs will be created in the first 10 years after unmanned aircraft are cleared for commercial use in U.S. airspace. The report estimates an economic impact of \$82 billion.

The United States Air Force is facing a critical shortage of pilots trained to fly drones or, as the Air Force prefers to call them, remotely piloted vehicles (RPV). The military needs some 30 people to operate every Predator or Reaper. Analyzing the reams of video and data resulting from drone flights takes another 80 more people or more. "This is a force under significant stress from what is an unrelenting pace of operations," Air Force Secretary Deborah Lee James told reporters Thursday, January 15, 2015, at the Pentagon.

The Defense Department plans to spend about \$5 billion on unmanned systems in fiscal 2015, most of it for UAVs. There are nearly 1,000 active-duty pilots for Predators and Reapers, though more than 1,200 pilots are needed. The Air Force currently trains about 180 RPV operators a year, but needs about 300 of them and loses about 240 due to attrition, according to Air Force Chief of Staff Gen. Mark Welsh.



Dramatic growth in air travel and technology advances in the nation's air traffic control system mean job opportunities abound.

Airlines

Even with all the turmoil, the wage roller-coaster, shortage hype and change in benefits, many pilots still dream of flying for a major airline. Something about those epaulets and that white shirt takes priority over salaries and schedules. If airline flying is your ultimate goal, the current shortage of pilots is great news. As we detailed in the opening section of this article, whether or not you believe in a pilot shortage, the fact remains that airliners around the world are being left without flight crews. Even though we've moved on from the carefree "golden" flying days of earlier decades, a captain on a major airline still has a great job. According to the Bureau of Labor Statistics, the median annual salary of airline pilots is \$114,200 (that was in 2012, the most recent figure). According to salary reporting web site Glassdoor.com, the national average salary was about \$80,000 annually, with a JetBlue pilot listed at \$145,000 and a Skywest (regional) pilot at \$77,000. A UPS pilot was listed at \$182,000 annually. Incidentally, the maximum salary reported for a JetBlue pilot was listed at \$317,000 annually, with Delta Airlines at \$225,000.

On regional carriers (they used to be called "commuter airlines") the picture isn't quite as rosy, but is still pretty good. Regional airlines are the "pilot feeders" to the major airlines, so salaries are commensurately lower. Most regionals are flying either very small jets or turboprops carrying a maximum of maybe 50 passengers on relatively short hops. It's well known that the entry-level salary for most regional pilots is in the \$20,000 to \$25,000 range; a captain on a regional jet can earn \$70,000 to \$110,000 annually with seniority.

Major airlines only hire the most qualified and desirable candidates. You'll need a minimum of 1,500 flight hours, and more likely closer to 3,000. You'll also need 300 to 500 hours of multi-engine time just to be considered. A four-year college degree is virtually a must for a major airline since more than 80% of pilots interviewed had at least a four-year degree.

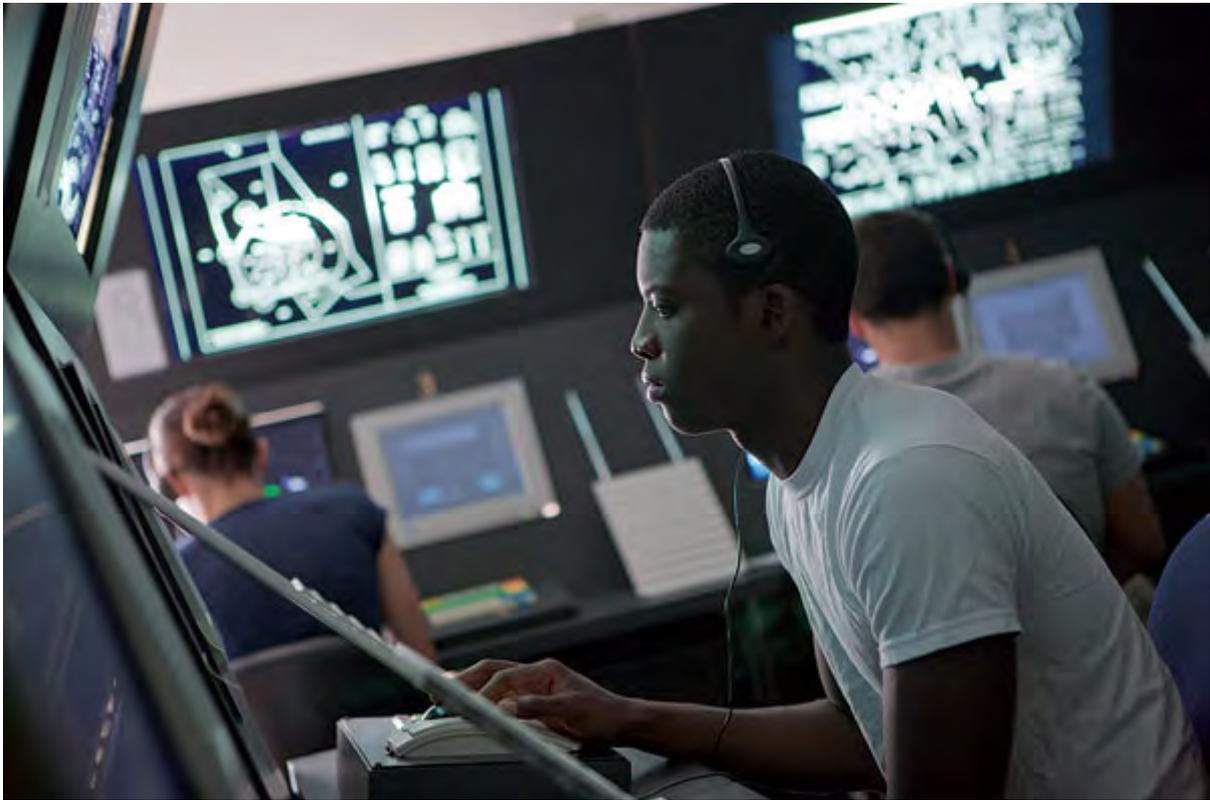
With new rules enacted in 2013, you'll need 1,500 total hours to fly for a regional airline, including 500 multi-engine hours. A four-year degree brings that minimum down, though a degree isn't required for most regional airlines. The current pilot shortfall has many regionals offering signing bonuses, meaning you get a monetary bonus if you're hired to work for the airline. Many offer a referral bonus for bringing a new pilot to the airline.

Air Traffic Control

The FAA plans to hire and train more than 10,000 air traffic control specialists over the next decade. With the advent of the NextGen ATC system, tomorrow's air traffic controllers will be different from today's. More than 15,000 federal controllers at 315 FAA air traffic facilities are on the job today, guiding more than 87,000 flights every day across our national airspace system. The job outlook for controllers looks promising, especially with the projected 4% growth of airline travel each year for the next 20 years.

To qualify for an ATC slot, applicants must be United States citizens under 31 years of age. They must successfully complete the Air Traffic pre-employment exam, have three years

general work experience, a four year degree or a combination of work experience and education equaling three years general experience. Candidates must pass a physical and psychological evaluation, pass a security background investigation, and speak English clearly enough to be understood over aviation communication equipment.



Aerospace

Aerospace encompasses many specialties, but engineering and management are growth areas, especially with the gradual move toward commercial space travel. Engineers in this area are responsible for the design, development, construction, testing, science and technology of aircraft and spacecraft. Since most of the discipline is on the cutting edge, it's an exciting and challenging field. Jobs include government agencies and subcontractors.

Aerospace engineers have at least a four-year degree, with aerospace managers equally educated. Frequently, top-secret clearances are required along with extensive background checks. The Bureau of Labor Statistics puts the median salary of aerospace engineers at about \$104,000 annually with a 7% growth rate overall.



Meteorologists and other support specialists are needed throughout the aerospace industry as demand grows .

Corporate Flying

For some, corporate flying (charter, air-taxi, company pilot, etc.) is a stepping stone to a major airline, while for others, it's a final destination. There are many lucrative reasons to stay in the corporate flying world, including interesting destinations, passengers and aircraft, and challenging flying conditions. In corporate flying, you might be the person who loads and off-loads bags, greets the passengers, and even orders food and drinks. It's a dynamic setting, without many of the staid routines of airline flying, while offering an ever-changing challenge.

Salaries are hard to pin down because the corporate flying world can mean anything from being a celebrity's personal pilot in a Gulfstream III to flying an on-demand air taxi in a Cirrus. The bureau of Labor Statistics puts the median annual wage of what they classify as a "commercial pilot" at \$81,000 with a maximum of \$137,000 (both figures from 2013—the most recent). Annual salaries for captains and first officers of smaller turboprops hover at \$51,000 and \$29,000 respectively.

Commercial Flying

The commercial flying world includes many areas that most prospective pilots don't think about. This includes banner towing, with its lucrative seasonal salaries and flexible schedules; flight instruction, which is one of aviation's most important roles; aerial application ("crop-dusting"), which is populated by free-lancers and small operators; fire-fighting, which demands great skill and stamina; and broadcasting, an area that includes traffic reporting and aerial journalism.

Getting paid to fly includes other areas such as law enforcement, with its large variety of roles, from helicopter flying to highway patrol. The U.S. government employs some 4,000 pilots that fly everything from helicopters to large jets for agencies such as the Department of Interior, Federal Aviation Administration, Drug Enforcement Administration, and the National Aeronautics and Space Administration. Scenic flying in tourist destinations is a great flying job, with seasonal employment, short flights and lots of opportunity to fly in varying conditions.

The commercial flying area encompasses support jobs such as meteorologists and specialists who work at Flight Service Stations or weather centers, airline flight dispatchers, flight simulator technicians, and a wide array of mechanics and technicians. This broad-spectrum area also includes jobs such as flight attendants and airport managers. In each case, salaries vary with position, geographical location and experience.

Finally, commercial flying includes air show pilots, aerial photography, wildlife and pipeline inspection, small-scale freight hauling, and backcountry support. Each area has different salaries that vary according to location, aircraft type and experience. The aviation world is full of opportunity and, far from luck, it just takes perseverance and focus. For those who want to make the cockpit their home, "luck" is just preparation meeting opportunity.

Financial Aid	
Flight training is expensive, and figuring out how to pay for it is a challenge for every prospective commercial pilot. Financial aid is an art unto itself, and most flight training facilities provide specialists in that area. To get you started, we offer a listing of some of the best scholarship resources.	
SOURCE	WHAT YOU'LL FIND
Able Flight	Scholarship source. Awards flight scholarships to individuals with physical challenges. www.ableflight.org/scholarships
Astronaut Scholarships	A unique site that specializes in helping those who wish to become astronauts. www.astronautscholarship.org
FAA Education Resources	The FAA's scholarship and grant page. Lots of information on aviation-specific scholarships. www.faa.gov/education/student_resources/scholarships_grants/aviation_scholarships
University Aviation Association (UAA)	Excellent listing of aviation scholarships. Includes a link to a free Collegiate Aviation Scholarship Listing (normally \$20.00). www.imis100us1.com/UAA
AvScholars	A student's gateway to aviation financial aid information. One of the web's best financial resources for pilots. www.avscholars.com
Money to Fly	Website consolidates aviation scholarship information in one place. www.flightscholarship.info
Women in Aviation International (WAI)	This organization has a tremendous list of scholarships for aviation. They've awarded 4.5 million dollars over the past 10 years. www.ai.org/education/scholarships.cfm
Department of Education	The best guide to financial aid is the "Funding Education Beyond High School—The Guide to Federal Student Aid." You can access it here for free. www.studentaid.ed.gov or call (800) 4-FEDAID
Vertical Flight Foundation	Scholarships for helicopter training. www.scholarships.com/Vertical-Flight-Foundation-Scholarships.aspx
National Business Aviation	Part of NBAA. Several scholarships are available. www.nbaa.org/prodev/scholarships/
GI Bill	The Post-9/11 GI Bill contains all new provisions that could get you completely trained at virtually no cost. Contact the Department of Veteran's Affairs at www.benefits.va.gov/gibill

Routes to the Left Seat

Today, there are many ways to become a commercial pilot. Not only has the realm of professional piloting changed, but more people are recognizing the fact that being a commercial pilot doesn't mean only an airline cockpit. From pipeline surveys to piloting private jets for well-heeled clients, commercial piloting means different things to different people. Just as there are many types of commercial cockpits, there are different ways to get there, and the military or flight instructing aren't the only paths today. Presented here are some of the options for flight training today.

The Military

The military—once the primary source for all airline and commercial pilots—is no longer viable. While well-trained pilots do still come from the military services, the numbers are a trickle compared to past decades. There has been a significant shift—especially in the U.S. Air Force—to using unmanned aerial vehicles (UAVs) for a large percentage of operations in the Middle East theatre. Rising fuel costs, a longer military commitment for pilots, lower wages in the private sector and a changing threat profile have combined to reduce the number of pilots both in the active military and retiring from the services. Only 800-1,000 pilot slots open every year in the U.S. Air Force—and less in the other military branches—with that number reducing each year. The Air Force requires a 10-year service commitment, and all services require a college degree in a mathematical or scientific major, a rigorous medical screening exam and scoring high on different aptitude tests.

Local Airport Flight School

You can learn to fly at your local airport. Unfortunately, economic turmoil and federal regulations keep squeezing out the smaller flight schools. Local flight schools are great because they're convenient and offer most of the ratings you'll need to get you going on your way to a flying career. They almost always have a relaxed atmosphere and friendly staff, and can work around your schedule. The downsides are an unreliable maintenance situation where your airplane might be grounded for days, changing instructors and inconsistent quality across the country. Use word-of-mouth recommendations from local pilots to find the best schools.

Independent Instructors

Some instructors aren't affiliated with any specific flight school. They might instruct in their own airplane and could be less expensive than local FBOs. Freelance instructors advertise on airport bulletin boards, airport cafes and by word of mouth. Ask around about an instructor, interview her or him first and agree to a few "shake out" flights to see if you both get along. Be aware that each instructor has a different style of teaching and that individuals respond differently to each approach. Find an instructor that teaches in a way that connects with you.

Training Academies

If an airline cockpit is your goal, training academies offer the best bang for your buck. First, they focus on training specifically for airline flying, and they do it to airline standards. At a training academy, you're totally immersed in airline-style operations and frequently interact with airline pilot mentors or instructors. Second, some training academies like ATP offer fixed-price training, so you know your costs up front. Academy training is fast-paced and requires your full dedication to achieve success. Academies offer "fast-track" options to get you into a professional cockpit even faster. Training academies require personal discipline and significant time resources. Training academy programs are frequently termed "ab initio," meaning they take you from zero hours all the way to professional certification.



Degree Flying Programs

Several colleges and universities across the country offer accredited degree programs that include earning all your ratings. These schools offer both the academic and the flight training pieces of the flying-career puzzle. While these require a minimum two-year commitment (to earn at least an associate degree), their focused programs yield graduates that are in high demand with airlines and corporate flying departments. Many schools are reasonably priced, and their degree will give you something substantial to fall back on if you ever leave flying. College programs accredited through the AABI are becoming magnets for many of the major airlines via gateway programs.

Training Academies and Degree Programs