

interest in flying began years before my first lesson. In one of my early books, The Joy of Flying, I detailed the hours spent as a kid watching airplanes at Chicago Midway Airport (MDW), dropping nickels in the coin-operated binoculars atop the terminal's now-removed observation deck. "Those great silver machines would gather speed and lift into the air folding their wheels away as they climbed," I wrote. "I'd watch until I either ran out of airplanes or money. At MDW it was usually the latter. But I was hooked. I'm not even sure if I knew why, but I was hooked."

I never lost that sense of awe and wonder for a chance to see the world in a way few others could at the time. Doug Stewart, a lifelong certified flight instructor and FAA designated pilot examiner in Massachusetts, sees it from a philosophical vantage point: "Flying gives us a perspective of the world such that we realize our insignificance from a cosmic viewpoint, and yet at the same time flying empowers us with the ability to have control over our destiny," he told me.

What a wonderful paradox. As above, so below.

Student pilot Eva Kozlowski, another Chicago native, recalls her aviation love also began at MDW. "I'd ride my bicycle there and watch airplanes from outside the fence for hours." From central Colorado, Kaleb Timberlake said his aunt Madeleine, a flight instructor, got him started.

Austin Henderson, a newly minted private pilot, isn't even sure exactly why he first became interested in flying, although he has friends who fly. "I remember telling my wife shortly after we were married in 2004 that I just knew I wanted to take lessons, but work and other things got in the way." He started taking flying lessons

in October 2018 and passed his private-pilot check ride in March.

New pilot training is seeing a resurgence after the FAA reported dismal student start numbers in 2009 of barely 70,000 people. Last year the agency issued nearly 168,000 student pilot certificates. The number of people who actually earn their private certificates is still mostly flat from last year, however, and of course the numbers don't explain the motivation behind student starts, nor why some people quit before earning a license.

With the shortage of professional pilots, many of those starts could be attributed to career aviators. There are six-month waiting lists at some flight schools, partly because of a CFI shortage. The FAA said CFI numbers are up 15 percent from 2009, but that's still not enough instructors to deal with a career-pilot tsunami coupled with new students who want to fly themselves for business or pleasure.



While learning to fly is breathtaking to most, the process demands work that begins with becoming and remaining organized from day one. Issues range from finding a good instructor, to filling out the appropriate student pilot paperwork, to deciding on a Part 61 or a Part 141 school, to setting aside studying time, to figuring out how to pay for this adventure and of course taking time to breathe and remember the process is still supposed to be fun.

THE BASICS

Earning a private-pilot certificate means an aviator can carry passengers in good weather, day or night, aboard a single-engine airplane. The steps along the way to that certificate include passing a written knowledge test with a score of at least 70 percent. The practical portion of the final exam includes meeting with DPEs who quiz applicants about knowledge topics

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outlined in the Airman Certification Standards, followed by an actual flight in the training aircraft, where applicants demonstrate their ability to fly. Flight instructors will certify that students meet all the FAA requirements before giving their nod for the practical exam.

A student's paperwork journey begins with "Becoming a Student Pilot," a list of requirements at the agency website - faa.gov. First there's the medical exam. A list of approved medical examiners can be found under the "locate an AME" link at the FAA site. Applicants must be at least 16 for a powered aircraft or 14 for a glider, as well as fluent in English.

Next, the student-pilot-certificate application begins at the Integrated Airman Certification and Rating Application site - icara.faa.gov - by clicking on "New to IACRA." Don't forget to confirm your registration. A student certificate arrives in three to

four weeks and must be in hand before students can solo, just about the time they might run into terms such as FAR Part 61 or Part 141 training. Part 61 usually means training with a local freelance instructor or a small flight school, while Part 141 is a more structured environment with very specific checks and balances along the way.

By the end of training, students' aeronautical experience must include at least 40 total flying hours, of which 20 must have been with authorized flight instructors. Ten of the 40 hours must be solo time, when the student practices lessons as the only occupant of the aircraft — student pilots may never carry passengers. Flight training also includes hours of cross-country flying, some with instructors aboard and some solo.

While 40 hours is the minimum of required flight time under Part 61, weather delays, instructor and aircraft issues, and student scheduling normally mean most people will log more time before their check rides.

"The national average to earn a private-pilot certificate is between 60 and 80 hours," Stewart said.

Jason Miller, a San Francisco Bayarea CFI, said the quickest he's trained a student for the private was 67 hours, with the longest being 135.

In Seattle, CFI Meg Godlewski pointed to a practical understanding of the time required, saying, "Depending upon the student's aptitude, it takes as long as it takes."

The books available to start this journey hold a considerable amount of information. They were created by the FAA and are available online at no cost. They include: the Airplane Flying Handbook; the Pilot's Book of Aeronautical Knowledge; Aviation Weather; and the Student Pilot Guide.

Retailers such as Sporty's Pilot Shop offer easy-to-use versions of the federal air regulations, the Aeronautical Information Manual and popular content such as Rod Machado's *How to Fly an Airplane*, not to mention online courses to prepare for the knowledge exam. John and Martha King's school—kingschools.com—has taught thousands of pilots and offers a 40-minute

first flying lesson video at no cost. Students also can find their first copy of the ACS online. It's the FAA's updated rewrite of the testing standards demanded by any DPE at final examtime.

Miller — learnthefinerpoints.com — recommends the 1944 classic *Stick* and *Rudder: An Explanation of the Art* of *Flying* by Wolfgang Langewiesche. "It's hard to replace. There are still things from 1944 that don't explain flying any better."

The internet also has created a bevy of video resources, including Miller's, that explore some aspect of flying with experienced instructors holding their hands, so to speak. He also recommends Machado and Flight Chops videos. "People today are very self-directed. They can watch some of these videos while standing in line at the bank. I think that's waking up the learn-to-fly bug in a lot of people. Student pilot starts are up

and I think a lot of that is due to this phenomenon."

WHO'S YOUR TEACHER?

While flying is alien to most everyone when they begin, choosing a flight instructor is a critical element in a student pilot's success. Pilots shouldn't leave their consumer-savvy skills at home when beginning the search. Choose an instructor who treats you like a customer and keeps your pocketbook issues in mind.

One East Coast student, who wished not to be named because of the small community in which he's flying, recalled a bumpy first CFI experience.

"My first instructor never used a syllabus, we never debriefed after a flight and he never assigned any homework. I went along with it for a while assuming he was watching over my training." COURTESY LEARNTHEFINERPOINTS.COM

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airplane every week, but not making much progress toward any particular goal. I think my first instructor meant well, but not all instructors offer good guidance. Then it hit me one day when we were briefing for takeoff. I was supposed to act like the airplane's pilot in command and I realized I needed to be the PIC for my training too. Learning to fly was my dream, not my instructor's." A new instructor now has this pilot well on his way to his private-pilot check ride.

CFI Max Trescott — aviationnewstalk. com — said he believes "The student must trust and respect the instructor," realizing that "It's hard to learn from people a student doesn't enjoy spending time with. If the CFI is someone they don't like, it will take all the fun out of learning."

Kozlowski reported a bumpy experience with her first instructor. "The first guy, awesome guy, had a great heart and was a safe guy, but was very

disorganized. I kept asking for a syllabus because I wanted to see the whole picture before I started and that never happened. It took me 60 hours to solo. I started thinking that maybe I was getting milked, but I should have been more assertive." She found another instructor, one who used a syllabus. "I also don't think flying clubs are a good option for a student unless they have a dedicated instructor staff."

That East Coast student recalled being dropped by an instructor who suddenly left for an airline job. "I got smart and asked my new instructor about his career aspirations before we ever started flying together."

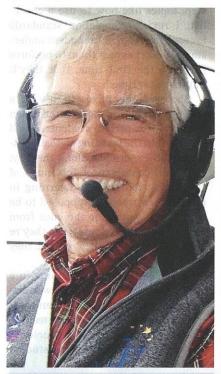
THE WORK AND THE FUN BEGIN

Godlewski likes to start students off on the right foot by emphasizing the need for the private-pilot syllabus: "Many people who learn without one find themselves just taking rides in the airplane. By opening the syllabus, the student begins learning step by step, topics like how to use a checklist. I review completion standards for each new topic so a student understands I don't expect them to perform perfectly the first time, that they'll improve over time."

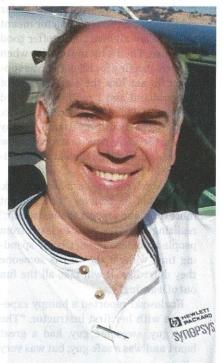
She said she mixes in use of a Redbird flight simulator often when working with private students. She'll also explain the learning plateaus students will experience along the way: "Some students expect too much of themselves too quickly. Learning in the first few weeks is supposed to be rote. I also watch for the cues from each student that tell me when they're getting tired. When they're tired, they can't learn effectively."

One major benefit of training in a flight simulator is it offers fewer distractions than an airplane, enhancing the learning process as well as offering flexibility for an instructor to pause it in mid-flight to help a student









Doug Stewart

Fva Knzlowski

Max Trescott

overcome a particular problem, an impossible task in a real airplane.

Miller mentioned the value of new add-on products such as PilotEdge that add real-time air traffic control communication to a sim session. "I've had students come to me who spent time on a desktop simulator and worked with PilotEdge first. By their third lesson, they're working the radios on their own even here in the San Francisco area." For simulator naysayers, he said, "Look at the success of the military and airlines teaching people to fly, where you don't get near the airplane until you've passed through a procedures trainer and a simulator check." While the cost of the instructor remains the same, the hourly cost of running a simulator is considerably less, while a desktop machine costs almost nothing these days. And some sim hours count toward the required time.

Learning anything new demands regular class sessions.

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student's training to be truly effective, they should fly as often as possible," Stewart said. "If you fly only one day each week and are canceled for weather here and there, earning that certificate will take a long time. And in the long run it's going to cost you more."

Trescott tells students that training once each week means earning their private will take 11 to 12 months.

Meanwhile, "I tell students to think how often they can fly before their first lesson," Miller said. "Anything less than once a week means the entire process will take longer. I tell them to try to schedule at least twice each week, but also mention the 3-to-1 ratio of training. They should be prepared for three hours of study time outside the airplane for every hour they spend aloft. I also take extensive notes after each lesson that I share with my students in Google Docs so they'll know what worked and what didn't."

Flying's Associate Publisher, Lisa DeFrees began intermittent training in upstate New York but recently moved to an immersive flight training program at FlightSafety in Vero Beach, Florida, so she could fly nearly every day.

Most new pilots can expect to begin flying a relatively simple twoor four-place single-engine aircraft such as a Cessna 172 or a Piper Archer. There are also a host of older airplanes being used for training, some 30-plus years old. While they all fly pretty much the same, some older training birds are certainly showing their age, something any student should consider. I remember a South Florida flight school once offering me a Piper Cherokee that was so filthy I felt the need to check for mice during the preflight. I refused to even climb in.

To me, if the airplane is poorly cared for on the outside, I always wonder how much attention the mechanics gave the airplane's guts, such as the magnetos, the propeller or even the engine itself. The cockpit of some older airplanes might also be outfitted with round gauges, while newer aircraft include a glass cockpit with a computergenerated graphic display of the instruments on an LCD screen. Each has its training and financial benefits and challenges.

Finally, there's the never-ending question about the cost. In raw dollars flying lessons are expensive, more so if the student learns in a big city. It's not unheard of for a Piper Archer in New York to run \$175 per flight hour with another \$75 per hour for the instructor. A Redbird flight simulator can be had for \$75 per hour and is why many instructors, including Godlewski and Miller, favor the economics of its use.

Students could invest in the purchase of their own airplanes to learn to fly, adding extra value to the hourly cost of the crafts themselves because it will be around after they earn their certificates. Partners

could further reduce the cost.

No matter what, never pay for all of your flight training in advance. That move robs you of any negotiating leverage, not to mention leaves you high and dry should a school go bust before you earn your certificate.

THE JOY OF FLYING

Don't lose sight of the fact that learning to fly is also quite a bit of fun. "I really enjoyed the training process," Henderson said. "I wouldn't change any of it for anything."

Kozlowski still remembers her first solo fondly. "I greased the landings, made it back to the ramp, shut down and jumped out of the airplane, elated." •

(This story is a peek at the process of learning to fly. For more information, visit flyingmag.com, where you'll find additional in-depth instructor interviews and helpful tips and guides to help you better understand the process and manage the costs of earning your wings.)

