

# CFI

## AN ADVENTURE IN LEARNING TO TEACH

WHAT IT'S LIKE TO BECOME A CFI THROUGH AFIT'S ACCELERATED PROGRAM | STORY AND PHOTOS BY MARC C. LEE



*Earning the CFI certificate is a considerable effort that involves coordination with the examiner, thorough preparation from the candidate and mentoring from the candidate's instructor. (LEFT to RIGHT: Examiner Scott Taylor, Marc C. Lee and John Templeton)*

Probably the greatest responsibility in aviation is training new pilots. If any of us look back to our student pilot days, many of the things we do today are carry-overs from those early flights. Whether you had a great instructor or a lousy one, some of what he or she taught you is still with you. While not for everyone, the weight of that motivates many in aviation to give back—to pass their own skills and ideas on to a new generation of pilots. Enter the certificated flight instructor or “CFI.”

The FAA knows that the CFI is the first and most important line of safety in aviation. For this reason, the national failure rate of first-time CFIs stands at around 75%. It's a tough certificate to get simply because the responsibility is so great. It's not a “pencil-whip” rating where you ride with a designated pilot examiner (DPE), do a couple of turns and talk about some basics while headed back for a quick landing and some perfunctory paperwork. More than anything, the CFI certificate establishes whether or not you can teach others the skills and knowledge of aviation. While absolutely attainable, it's not for the weak of heart. You'll have to know your stuff.

Like other rungs on the ratings ladder, there are several ways to earn your CFI certificate. The traditional method is to go to a local flight school, train for several hours (the FAA doesn't have a specific training-hour requirement for the CFI), pass both knowledge (written) exams and then take the practical test (checkride). An alternative, one that most aspiring airline pilots prefer, is to attend a dedicated program through a college or academy like Air Transport Professionals (ATP). There's also the accelerated route.

### AFIT

Accelerated Flight and Instrument Training (AFIT) offers accelerated programs for all the basic ratings. “Accelerated” is really an incorrect word because it implies condensed time. Rather, the term should be “focused” training. The time required for the rating, whether it be private, instrument, commercial or CFI, doesn't change. However, it's focused into a week or two (depending on the certificate), and the student is dedicated fully to the flight and accompanying ground training. It's an intense way to train, but research into learning laws of primacy and intensity prove that focused training works. In fact, the military uses focused training as its primary flight training method.

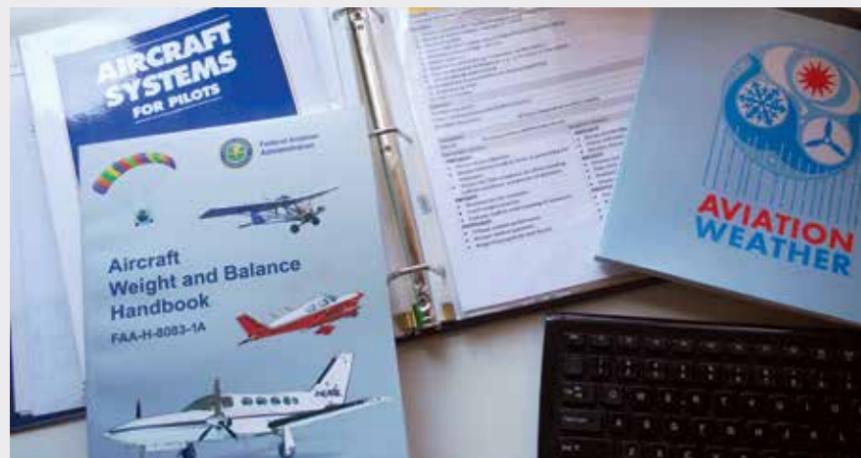
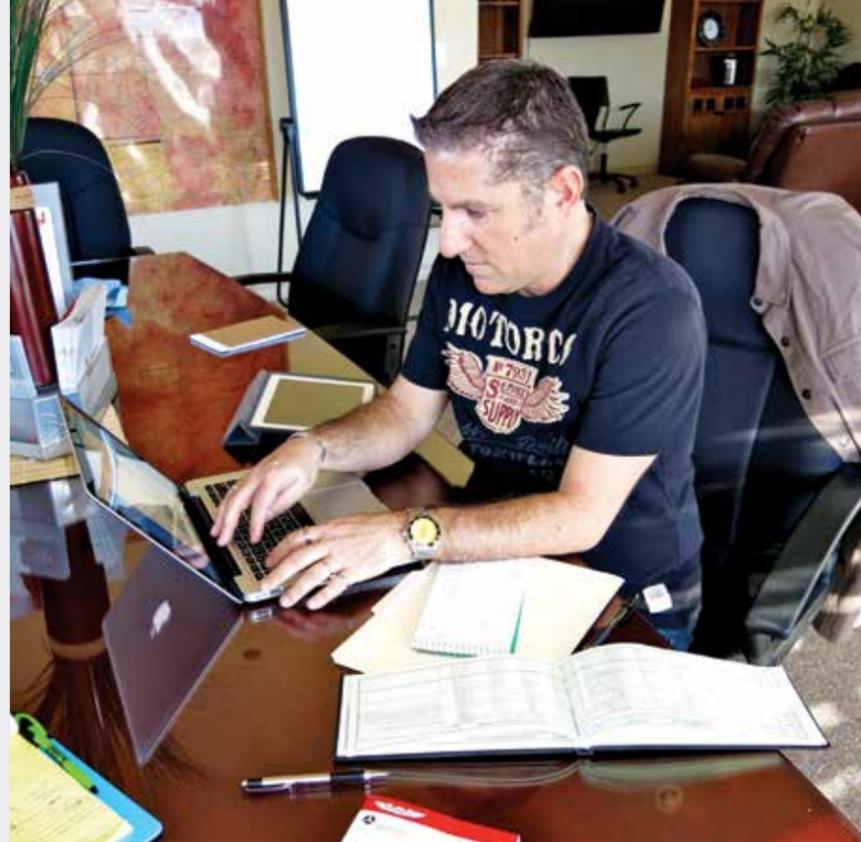
In my case, I opted for AFIT's five-day CFI program. Understand that this is only the flight training portion. My CFI journey entailed three solid months of research, compilation and creation of lesson plans, four weeks of intense, round-the-clock study, hours of maneuver preparation, and many weeks of refining materials and maneuvers. The AFIT portion would include the logistically difficult task of learning to fly a complex aircraft from the right seat, while performing the commercial maneuvers (to commercial standards), all the while teaching every maneuver and task in the Sport, Recreational, Private and Commercial PTS.

The beauty of AFIT is they come to you. If you're an aircraft owner, AFIT sends one of its cadre of top-notch, hand-picked instructors to you. If you don't own an airplane, AFIT works with a number of FBOs across the nation to provide an appropriate airplane for the task. I chose to journey to central Utah for the chance to fly in wind, cumulus buildups and high mountains in a Piper Comanche 250 provided by the good folks at Aviation Services Group in St. George, Utah. I was also looking forward to flying with stellar AFIT instructor John Templeton.

### Preparation

Earning your CFI certificate is an exercise in learning to teach. First, you need a commercial and instrument rating, so the FAA knows you can fly because you had to prove that to earn those prerequisites. All the preparation is focused on the teaching aspect.

Next, you'll need to pass two written exams—the Fundamentals of Instruction and the CFI-Airplane test (assuming you're teaching in fixed-wing airplanes). The former is a 50-question knowledge test that's solely focused on human behavior, teaching techniques and how humans are motivated to learn. It covers the role of the instructor, as well as specialized areas like aeronautical decision making and risk assessment.



**The CFI candidate must pull from all available resources to prepare for the thorough oral exam and subsequent teaching drills in the cockpit.**

Sadly, many CFI candidates just memorize the answers. The FAA knows this and has made a concerted effort to cover these areas in-depth during the oral portion of the checkride. Many a CFI wannabe has failed during the oral because of a lack of real knowledge in this area. The solution is to know the material the old-fashioned way: through study and application. All the information you need is covered in FAA-H-8083-9, *Aviation Instructor Handbook*. Buy it and study it till the cows come home. You'll actually learn useful information.

Once that's conquered, you'll need to pass the 100-question FAA knowledge test for the CFI-Airplane (or whatever category you're going for). This one is tough because anything is open to question. That means you'll need to know all the material from the Sport, Private and Commercial curricula pertaining to weather, navigation, VORs, FARs, flight planning, performance, systems, etc. Forget memorizing. Like the FOI material, you'll be grilled on these areas during the oral.

John King said in one of his videos that, "CFIs should walk differently; talk differently; have a different demeanor about them." This confidence only comes through knowledge and experience. That means that rote memorization and perfunctory skimming of material won't earn you the certificate, period. It's truly a rating that's earned. While there are likely a few CFIs who simply memorize the material for their particular examiner and "trained to the checkride," the majority of good instructors don't.

### Oral Exam

Once the written exams are out of the way, the real work begins. Earning the rating will require a lengthy oral exam by a special DPE that the FAA deems sufficiently knowledgeable to administer an initial CFI test. That means these are folks who know their stuff...and know when you don't. You'll be asked to teach several lessons chosen from a long list of knowledge areas that appear in the CFI Practical Test Standards (PTS).

My examiner, Scott, is a senior check airman for a major airline. He has been flying for some 25,000 hours, including experience in hauling freight in radial-powered taildraggers, flying in weather long before automation and evaluating pilots with wildly varying skill sets. This man has seen—and done—it all.

During my oral exam, he was adept at zeroing in on exactly the areas I was weak in. He would then drill down to that specific area while I squirmed to answer. When I didn't know, I admitted it, and that's key to this certificate. In preparation, I spent months creating my own lesson plans for

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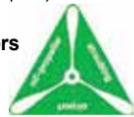
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everything from runway incursions to spins to steep turns. You have to be adept at teaching these subjects and admitting when you need to look for a reference. Trying to fake it with the examiner is a sure way to fail. The other lesson learned here is that you must know where to find an answer when a student (or examiner) stumps you.

My examiner wanted to see my material and sources. He knew what was available online and was looking for personalized plans with individual insights and self-created materials, not downloaded plans. I made individual PowerPoint presentations for each knowledge area. I researched and gathered articles, advisory circulars and online resources. (Boldmethod.com has some particularly useful multi-media resources.) I then organized these all in individual sections in a large binder.

I also had electronic versions of publications like the AIM and AF/D, along with a complete FAR directory and various materials from the Air Safety Foundation and FAA. I brought current charts for the area and the aircraft's manuals and logbooks, with hard copies of several books, including the *Airplane Flying Handbook*, *Weather Services* and *Handbook of Aeronautical Knowledge*, among many others. You must be prepared to find a resource on the spot.

My oral went about six hours, including some time for lunch with the examiner. It wasn't grueling and, in fact, it was a learning experience and an enjoyable way to learn what I was rusty on. Nervous energy stilted some of my lessons, and dry mouth didn't help. But I believe examiners know that and will allow some discretion because of "checkride-itis."

### Flying

I was lucky in that I trained with one of the best instructors I've ever flown with—John Templeton. He instructs because he loves to do it. He has years of experience with AFIT, completing private, instrument, commercial and CFI candidates in weeks instead of months. His insight proved critical to the whole process. It's important to have a mentor, someone who's already an instructor with whom you can ask questions and present challenges.

The CFI checkride is done from the right seat, typically, in a complex airplane (retractable gear and constant speed propeller). The regs say you can use a non-complex airplane for most of the ride, then do the landing and emergency portions in a complex airplane, but this is impractical. Today, most candidates do it all at once.

In my case, I had a disastrous first time. After completing the oral exam portion, we took a break and then headed out

to the airplane. I had to teach the run-up and airport markings lesson to start. During our run-up, I asked the examiner to hold the brakes (this Comanche only had brakes on the pilot's side). As Scott pressed on the brakes, the right pedal slammed to the floor like a limp strand of spaghetti. He tried everything to pump it back up, but no luck. Instant "Letter of Discontinuance." It's a document that says you have to cancel the check ride due to an external issue (weather, mechanical problem, physiological problem, etc.) The checkride would have to wait.

After several hours of work by no less than six mechanics (and a middle-of-the-night trip to the airplane by Rachel Adams at Aviation Services Group, the owner), the Comanche was repaired, and we were ready. I should add that the logistical circus created by the brake failure would make a great clown sequence. Because we met the examiner at an airport several hundred miles from our home base (and in a rural area), the failed airplane created an instant need for rental cars, airport rides, hotel room extensions and a variety of other "maneuvering." The lesson: Be prepared for anything; mechanical problems move for nobody.

Our examiner was nice enough to accommodate a retry the very next day. It did require flying the Comanche into Salt Lake International Airport to meet him and finish the practical test. John and I did so, landing the little Comanche there and taxiing between a slew of large jets. It all looked like a scene from Disney's *Planes* movie.

The ride itself went great. "You have somewhat of a 'get-out-of-jail-free' card in that I already know you can fly these maneuvers," Scott said before we took off. "I'm looking to see that you can teach them—not for perfection in the maneuvers themselves." That took a lot of pressure off my shoulders.

In all, we flew 18 maneuvers including several types of landings, chandelles, step turns, pylon turns, S-turns, steep turns and a variety of emergencies. It was a joy to fly them and teach at the same time, though I can see that it isn't for everybody. You have to want to teach. In my case, I do want to teach, and the experience was liberating because I know I can. I may be green in that sense, but I have the fundamental skills to be a good instructor.

I'm not looking to go to an airline job, so for me, teaching is an end to itself. If the private pilot certificate is a "license to learn," the CFI is a "license to learn a lot more." I've already learned more than I ever expected. P&P

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