

Where Do I Go From Here? Part 1

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So you have a Private Pilot's license, and the trips for hamburgers and pancakes have been fun. But now it is time to spread wings and go further. Here are some possibilities.

The first thought that comes to mind, for the pilot who has not ventured far from home, is a long cross-country flight. Not just a flight of 50 miles further than your training flights, but one that crosses a couple of state lines. Go see that college friend, or those relatives that you have not visited for some time. Planning for a longer cross country is no different from planning a short cross country. There is just a bit more of it.

Here's another fun challenge. If you live in an area within or near the boundaries of a Terminal Area Chart, pull it out and look at all of the airports within that space. If you don't find yourself within that big white square, pull out your sectional, put a point on your home airport, and draw a 75 nm radius around that point. In either case, hop in an aircraft and start landing at all of the airports in that area. The public ones are easy. You can find all of the information you need in the AFD or your favorite on-line airport guide. The private ones will take a little sleuthing. You really want to contact the owner before you drop in, both to make sure that you will be welcomed as well as learning some of the quirks of the field. But you will increase your skills, and meet a lot of nice folks along the way.

Another adventure in learning that you can attain without any FAA involvement is some advanced air work training. Check out spin training, upset training, or some aerobatic work. The nice thing about all of these activities is that there is no pass-fail exam. Find an instructor and soak up some knowledge.

But there is another opportunity that comes to mind when I think of new challenges. Remember those FAA test questions regarding Category and Class, type ratings and endorsements? Pull that knowledge back out of your head and put it to use. Over the next several columns, I will talk about what is involved in various ratings, and what privileges you attain with each. However, at this point, I will just discuss the differences between adding category ratings, class ratings, type ratings, and endorsements to your license.

Like everything from our friends at the FAA, all of these are the result of perpetually adding to our "rules-to-fly", otherwise known as FAR Part 61. In the beginning, there was a single-engine-land rating. (Actually, at the beginning, there wasn't anything – Wilbur and Orville just flew.) But when the FAA decided that they actually wanted to grant licenses to fly, they figured out fairly quick that flying a balloon took different skills than flying a heavier-than-air craft. And then Igor Sikorsky came along, and they determined that a flying craft with a rotating wing on top took different

skills than either of those other two. And then we had those flying machines with wings but no engine. And as time went by, we discovered even more ways to get into the air and stay there. So, the FAA declared that we should break all of these broadly different types of flying machines into different categories. At the present time, the FAA lists these categories of aircraft:

- ▶ Airplane
- ▶ Glider
- ▶ Rotorcraft
- ▶ Lighter-than-air
- ▶ Powered lift
- ▶ Powered parachute
- ▶ Weight-shift

So, I can picture an FAA bureaucrat announcing that a pilot who flies an airplane will need an additional license if he wants to fly a lighter-than-air craft. But then another FAA bureaucrat saying, “But even for aircraft, there are different skills required. Operating off of a runway is really different from taking off and landing on water. And there are different skills required if there is more than one engine.” So, they broke the categories down into classes. In the Aircraft Category, these are:

- ▶ Single Engine – Land
- ▶ Single Engine – Water
- ▶ Multi-Engine – Land
- ▶ Multi-Engine - Water

And just when the FAA decided that a person with a single-engine-land airplane rating could fly any single-engine-land airplane, and a person with a multi-engine-land-airplane rating could fly any multi-engine land airplane, someone pointed out that

there is a big difference between a Piper J-3 Cub and Paris jet. They both have a single engine, but . . . And there is a big difference between a Piper Seneca and a DC-3 and a Boeing 737. They all have two engines, but . . . And so the Type Rating was created. The FAA decided that special training was created for “large” aircraft and for turbo-jet aircraft. And they decided that “large” meant “aircraft heavier than 12,500 lbs”. So, even though I may hold a Multi-Engine-Aircraft rating, I will need a specific “Type-Rating” to fly any multi-engine jet or any large aircraft.

There is one similarity between adding a category, class, or type rating to our license. And that is that FAA requires that we prove our capability to a Designated Flight Examiner. We do get one small break though. We don’t need to take another written exam.

But there is a way to gain additional “permissions” without calling your favorite Designated Flight Examiner – endorsements. Actually, you are already familiar with endorsements. As a student, you received an endorsement from a flight instructor to fly solo. And another to allow you to fly various cross-country flights. And perhaps yet another to allow you to fly into your local Class B airspace. (Actually, I truly believe that most Designated Flight Examiners delight in examining an Applicant’s log book to ensure that the CFI has included every required endorsement.)

We had been floating along, just fine with Category and Class and Type ratings until the FAA, when examining accident statistics, determined that learning to fly in a Cessna 152 did not necessarily provide the knowledge and skills required for a tail-wheeled aircraft. Or for a high performance aircraft. Or for a high-altitude aircraft. But rather than decree a need for yet another check ride with a DFE, someone in the FAA argued (wisely, I think) that a knowledgeable flight instructor could provide the necessary instruction and merely make a log-book entry to that effect. And so, endorsements were added to the mix.

At this time, here are the available / required endorsements (per FAR Part 61.31):

- ▶ From part (e) - Complex airplanes. These are land aircraft which have retractable landing gear, flaps, and a controllable-pitch propeller, or sea planes which have flaps and a controllable-pitch propeller. We need to understand the how these additional systems work, and how to handle any emergencies that may come up when they don't work.

- ▶ From part (f) – High-performance airplanes. These are aircraft which have an engine with more than 200 horsepower. Because of the higher speed that these airplanes

fly, we need to understand the techniques that are required in flying faster.

- ▶ From part (g) – High-altitude pressurized aircraft. These are aircraft with a pressurized cabin that have a service ceiling greater than 25,000 feet. We need to understand all of the consequences of flying at these higher altitudes – aerodynamics, weather, respiration, and other effects on our bodies. Additionally, flying at higher altitudes requires us to learn about aircraft pressurization and oxygen systems.

- ▶ From part (i) – Tailwheel airplanes. Those aircraft with a tail wheel, rather than a nose wheel. These aircraft just take off and land differently than those with the wheel in front. They are not harder to fly – just different.

In all cases, the appropriate paragraph in Part 61 lists in detail that skills and knowledge required for the endorsement. And the nice thing about adding an endorsement is that there is no pressure of a checkride. To attain any of these endorsements, we need only to find an instructor who is qualified to give the training, then receive the training, and then prove to the instructor that we have attained (and retained) the knowledge and skills, and finally

have our instructor make a statement in our logbook.

So far, in this discussion of learning new skills, I have omitted one major category –additional ratings. The other group of “new skills” comes from adding a new rating to the license – a Commercial, Instrument, or Airline Transport rating. And that is a subject for next month.

All of the information regarding ratings comes from FAR Part 61 which is available free, on-line. But if you would like to hold only one book

with everything you need to know about flying, the one book to put your hands on is Everything Explained for the Professional Pilot by Richie Lengel (available at www.aviationpress.com.) I have no interest in this book, but I do think that the author truly covers everything that any pilot needs to know.

Questions or comments on this topic or any other piloting topic? Drop me a line- thehopes-chris@kc.rr.com

*Don't just practice until you get right.
Practice until you don't get it wrong*

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