Perpetual Training

by Bill Frank

In a recent article I discussed making a commitment to safety. The exercise of good judgment and decision making has to start with the right attitude. Part of that attitude is innate or ingrained in our personality; the result of biology and early environmental factors as we mature. Many of you have probably read about, or participated in, a recently published self-test (FAA Advisory Circular AC 60-22) that helps define your base personality traits. This test forces you to select from a series of responses to a flight scenario. The tough part is that none of the responses are ideal; requiring you to select what you think is the "best" and then ranks the responses from best to worst. After completing the evaluation, you create a graph of your choices. The highs and lows on the graph give you insight into your personality traits. Being aware of these traits can help you avoid pitfalls in decision making. The other part of attitude is conscious, and subject to change and development through training. This is the area we are going to focus on.

Training is a Tool

Much of the training we do is mandated. Many insurance carriers require yearly recurrent training and we all are subject to an FAA flight review every two years. Though any training is generally better than no training, this should be considered the bare minimum. Best practices will vary with pilot experience, exposure (type of flying), recentness of experience, and type of aircraft flown (equipment and systems). Regardless, some type of ongoing training on a regular basis should be a personal goal. My good friend is a Boeing 747 captain for a major airline. He has accumulated thousands of hours of flight time and yet he still has regularly scheduled recurrency training. No one is immune from improving his or her skills and judgment. Understand as well, there is a difference between training and being proficient. The goal is proficiency; the tool is training. There is little argument that recurrent training has a positive impact on safety. The pros have an incredible safety record. Though there is always room for improvement, the safety record the airlines have set is tough to beat. The capabilities of the aircraft the airlines fly play a significant role, but remember the pilot remains the most frequent link in the accident chain. The general aviation safety record is improving, and I would like to think that improvement has something to do with better and more frequent training. The closer we emulate the professional pilot in all aspects of our flying, especially training, the better our safety record should become. With that attitude in mind, let's look at some options for staying proficient in our technically advanced Cirrus aircraft.

▶ *The new Frasca Level 5 Flight Training Device at Cirrus Design.*

Staying Proficient in Your Cirrus

From the beginning, Cirrus Design has been heavily committed to safety through aircraft design, systems integration, and most importantly, training. The latest evolution of this commitment is called "Cirrus Proficient." This program, along with the Advanced Cirrus Experience (ACE) course, forms the Cirrus Pilot Learning Plan – a customized program of lifelong training for the owner/pilot. After initial transition training, which extends over the first twelve months of ownership, the pilot continues training events on a six-month cycle. Sound familiar? It's just like the pros.

An integral part of this recurrent training is the ACE course in a simulator or Flight Training Device (FTD). Cirrus Design has placed a Frasca Level 5 FTD into service at the factory and there are now at least four full-motion flight simulators dispersed across the country. Cirrus will soon add an updated Frasca FTD with a 220-degree field of vision. The ACE course is modeled after Line Oriented Flight Training used by the airlines. It consists of a half-day, scenario-based training session that can be tailored to both VFR-only or IFR-rated pilots. It is a great opportunity to develop your skills and explore areas of flight training that are difficult or risky to reproduce in an aircraft.

Recently, I was fortunate to have the opportunity to complete the ACE program, shortly after the Frasca FTD was up and running. As an instructor, it is easy to get rusty sitting in the right seat pontificating all day. A simulator session was an ideal way to expose my weak areas. Under the excellent tutelage of Scott Winter from Cirrus Flight Standards and Operations, I was prepared for the proposed IFR scenario. Scott explained the concept of no jeopardy training used in the simulator course. This reduces the pressure of a typical flight check and eliminates the worry of pass/fail. Rather than acting in the usual role of instructor, he would instead act as a facilitator for the preflight planning and extended post-flight debrief. During the "flight," he would act only in the capacity of air traffic control. This makes for a more realistic flight scenario contrasted with the constant prompting from an instructor in the right seat. Scott also stressed the ride would employ a practical scenario that plays out in real time. This is another departure from more traditional simulator scenarios which often include multiple systems failures not always likely to occur in real life. The idea is not to push to the point of overload. Sure things will go wrong, but in a more realistic fashion, so the pilot is not set up to fail.

▶ *Inside the cockpit of the Cirrus Frasca FTD.*

The FTD simulating rain and snow.

The course begins with a proposed IFR flight and the student is given a DUAT briefing folder, including weather graphics. The pilot in encouraged to use the "5P" checklist (Plan, Plane, Pilot, Passengers, Programming) as a risk management tool throughout the flight. The IFR scenario that I flew consisted of three legs each with unique challenges. Though not a full-motion simulator, I found the experience to be very realistic in both VMC and IMC. I have a fair amount of simulator time in everything from the Link trainer to a DC-10 level D simulator. I can attest that as you focus on the mission, you lose the sense that you are in a simulator. Like most of the FTDs and flight simulators that we are exposed to, there is always some control input sensitivity, particularly in pitch. It takes a few minutes to adjust, but most pilots will adapt quickly. The Frasca model that I flew had excellent visual graphics even with a 170-degree visual field. The current FTD will soon be replaced by an upgraded model with a 220-degree field of vision that is certain to further enhance the experience. Weather conditions such as rain, snow, fog, cloud ceilings, smoke, haze, etc. are all faithfully reproduced with good fidelity. Engine start was routine and I was told to operate the FTD just as I would my own airplane, using my usual to-do and flow checklists. Taxi, takeoff and departure were all uneventful, although that doesn't always have to be the case.

The goal is proficiency; the tool is training.

It takes a lot of work to develop realistic scenarios for the simulator, so a blow-by-blow account of my "flight" could spoil the experience for others and I won't go into the details. I did encounter changing winds and weather that created the need for decision making and risk management. Just like many of our own routine IMC flights, there is the constant challenge to assess and reassess as the flight continues. The choice remains yours, there is no coaching and the outcomes, good or bad, are part of the learning process. A big difference is the decision tree can be pursued much further in the simulator than in the aircraft. Later in the flight, system malfunctions were encountered that created further opportunities to exercise judgment. Again, I was encouraged to respond just as I would on an actual flight away from my home base. Though I was challenged throughout the lesson, at no time did I feel overwhelmed or that the scenario was implausible.

I think the post-flight debriefing was the most critical element of the lesson. It was an extended discussion where Scott acted as a facilitator. Though it is a critique of the session, it is lead by the pilot. This hopefully creates personal insight and constructive recommendations, such as adjusting personal minimums and guidance for further training.

If we aspire to fly like professionals, and we should, then training like professionals has to be a key part of that process. Through good training, we not only become more proficient with our skill level, but we also have the opportunity to develop and improve our attitudes toward flight safety. I would encourage all of us to commit to some form of recurrent training every six months. A great alternative to include in this concept of perpetual training is a Cirrus-specific FTD or flight simulator. Try it – I think you'll like the challenge. COPA

About the author: *Bill Frank owns Turbo Cirrus N787WF (#2178) He has over 3,400 hours total time, 1,600-plus of those hours in Cirrus aircraft. He has COMM/INST, CFII, MEI and CSIP ratings and can be contacted at Aeromax Flight Services, (715) 482-3773.*