



From the Cockpit – When it All Goes Quiet Up Front

Last September, I started training towards a Class Rating Instructor qualification. I'll explain more in a future FtC, but one of the things any instructor needs to be able to do, as well as teach student pilots how to fly, is to fly correctly themselves. When we get our license, we can then relax and do things our own way. This isn't always the correct way, but as long as it's safe and doesn't create problems, we can get away with slightly sloppy flying. Who cares if we gain or lose a hundred feet in a turn? In most cases, it doesn't matter. When you're instructing, it's a different matter, and it's surprisingly difficult sometimes to fly exactly as we were taught.

One of the things all pilots need to learn, and should practice fairly often, is what to do when the noise at the front stops – the dreaded engine failure. If this happens for real, you have one chance of putting the aircraft down safely – there's no opportunity to go around and have another try. There's a set procedure for this, which should be practiced even after qualifying. Called a PFL, or practice forced landing, it can be the difference between walking away unscathed and being taken away in a hearse. I always hated PFLs, and honestly don't practice them enough. That's because they aren't easy, and we tend to avoid things that are difficult. Before I can get my CRI qualification, I need to demonstrate that I can fly the aircraft properly, from the right-hand seat (the pilot in command normally occupies the left seat but when training it's the student on that side). The PFL consists of a number of steps, including trying to re-start the engine, then making it safe if it won't re-start. The hardest part, of course, is making sure the aircraft, which is now a glider, is at the correct height to land in the chosen field, and how to adjust it to make sure that always happens.

The technique varies, but the one I have used recently is

to nominate where the aircraft should be at 1500 feet, and then where it should be at 1000 feet, and to set up the track so that the flight path can be adjusted as needed to achieve it. This should then allow the aircraft to be flying into wind on a final approach to the field, slightly high. Slightly high because the descent can be steepened by adding flaps, but can't be made more shallow by anything but the engine, which of course is now defunct.

Each type of aircraft flies differently. The aircraft I was flying on the CRI course was a Piper PA-28, but that comes in different variants – I've flown a PA-28 Cherokee quite a lot before, and it flies like a manhole cover with the engine off (or throttle closed). The PA-28 the course instructors use is a PA-28 Warrior, which glides like a sail-plane in comparison, so my initial attempts left me far too high even for the flaps to deal with.

Fortunately, when practising, the engine *IS* still running, so mistakes are not catastrophic, just a learning experience. As a CRI, I am likely to be flying in a whole range of aircraft types, but the good news is that most of the time I will be getting the student to fly the PFL. I can then guide them through it, but still need to demonstrate it from time to time – very definitely a challenge if it's an aircraft type I'm not very familiar with.

Another variation on the PFL is the glide approach – when the engine fails when flying in the airfield circuit. On the downwind leg, the throttle is closed (after alerting the tower), and a pattern is flown to glide the aircraft onto the runway about a third of the way along. The turn onto the runway can be adjusted wider or tighter to keep the aircraft at the right height all the way down, and flaps are then added progressively once a safe landing is assured, using the first third of the runway once it is definite the aircraft will reach the threshold.

With all that in mind, I flew a microlight aircraft over the last couple of weeks, for the first time in over a year. I just need to build some hours in microlights, so that the microlight type can be added to the CRI rating once I've completed it. Rather than just fly without any real purpose other than to log the hours, I did a PFL near Benington airfield, east of Stevenage. I was pleased that I would have got the aircraft down accurately on the runway, and in an aircraft that I haven't flown in a while (though I have lots of hours in the type) – I didn't actually land but climbed away from about 200 feet. I guess I should still practice PFLs often, and, who knows, maybe I'll get to enjoy them?

I'm pleased to say that I also logged my 1000th flying hour in all types, so a good couple of weeks all round.

Ray Wilkinson



Piper PA-28 Warrior (image: Ian Kirk)