

## Learning from Your Own Fatal Mistakes

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What kind of a title is this – “Learning from your own fatal mistakes”? Obviously if the mistake was fatal, there’s not a whole lot of opportunity for learning afterwards, at least not on this mortal coil! There’s a joke going around that “the only thing wrong with a murder-suicide is the sequence of events”. If the sequence were reversed, things would work out much nicer for the intended murder victim. There’s another quote about experience – “Experience is a harsh teacher. First comes the test, second comes the lesson”. The point in both the joke and the quote is that in real life, we are often presented with situations that we don’t handle well because we have never seen them before. If the situation is a potentially deadly one, you either get it right the first time, or you never get the chance to practice.

Many pilots (me included) pore over aviation fatality reports, trying to understand what went wrong, and how such an experienced racing pilot arrived at such a tragic end. We do this because we hope to find something in the report or in eye-witness accounts that will allow us to avoid the same fate. Maybe the pilot wasn’t feeling well, or the weather conditions were terrible. Maybe the pilot succumbed to the pressure of competitive racing and tried to make that upwind ridge transition work, even though it should have been clear for the last 10 minutes that things were not looking good. Maybe the pilot (as actually happened at a 2012 Mifflin contest) attempted to circle too close to a ridge and didn’t make it around (the pilot was seriously injured but survived). We are almost always left with the nagging suspicion that maybe we wouldn’t do any better if placed in the same situation, and we don’t even really know what the ‘situation’ actually was. Only the victim knows what happened, and he/she is generally no longer around to answer questions.

One of the first memories I have when I first started flying mountain tasks in Condor was how astonished I was when I crashed into the side of a mountain. One second I was doing fine, and the next one I was stalled and irreversibly headed for doom. I did this a number of times until I finally figured out that I was falling victim to a common optical illusion – as I approached the slope I was unconsciously raising the glider’s nose to keep the sight picture the same. By the time I realized what was happening, it was (I thought) too late to do anything about it before impacting the slope. After killing myself literally dozens of times, I started to understand what was happening and learned to recognize the onset of this scenario in time to do something about it, and I discovered that it’s actually fairly easy to recover from this situation – all you have to do is to get the glider’s nose pointed downhill, and then the visual illusion starts working for you instead of against you. Once things are back under control, then the flight can be resumed. As time went on and I flew more Condor races, I got better at recognizing the ‘slope illusion’ setup and recoveries became easier and more practiced. I still occasionally managed to kill myself, but almost never by getting too slow approaching a slope.

The above story was brought back to me emphatically at the recent 2013 Sports Class Nationals at Mifflin airport near Reedsville, Pa. On Day 5 of this contest, in weak blue conditions, I was trying to

work a piece-of-junk ridge thermal to avoid a landout, when I suddenly realized that I was in the process of committing an almost identical crash-inducing maneuver to the one described above. As I worked this thermal at below-ridgetop height, I had extended my circle toward the ridgeline, thinking the core was closer to the ridge. As I did this, the visual sight picture triggered an immediate alarm in my head, and I glanced down at the airspeed indicator and saw a sickeningly low number. I knew instantly that I was within a few seconds of stalling into the trees. However, rather than instinctively pulling back on the stick to keep this from happening (which of course would ensure that it **did** happen), I immediately rolled away from the slope and **pushed** on the stick to get the nose pointed down the hill. Within just a few seconds, the situation went from pre-crash to normal flight, and I was able to continue the flight (after cleaning out my underwear, of course). I had just experienced a 'Condor save', where lessons learned in Condor at the cost of multiple 'virtual funerals' allowed me to recognize a potentially deadly real-life situation in time to do something about it, **and to be able to apply a well-practiced and effective recovery technique**. I had literally learned from my own fatal mistake(s).

One of the arguments I hear against using Condor as a serious training tool is "Condor encourages risky behavior because the pilot knows he/she isn't really going to die". There is a lot of truth to this argument, but IMHO this is actually a **strength** of Condor, not a weakness. In Condor I engaged in a risky behavior (thermallng too close to the slope, or not noticing the effects of an optical illusion), and paid the price – multiple potentially fatal crashes. After a number of these, I started to realize what was happening, and developed effective recognition and recovery techniques that dramatically lowered the risk factor. I don't for a second argue that this eliminated the risk associated with working close to a mountain or a ridge, but it definitely **lowered** the risk and put effective tools in my soaring toolbox. Thus, when a similar situation arose in real-life, I was equipped to recognize it and respond effectively.

So, here's my new proposal for Condor training – GO WILD! Engage in every kind of risky behavior you can think of; try risky ridge transitions over unlandable terrain, exceed VNE in a dive, fly up box canyons with no room to turn around, and try thermalling too slow and too close to slopes. The only difference between Condor and real life is that when you die in Condor, you get to come back from the dead and assess what exactly happened. You won't have to try and read between the lines of a fatality report – you will know. If a consistent theme emerges from a number of similar 'fatal' crashes, then it might be wise to develop effective recognition and recovery techniques for common fatal accident scenarios. Then, when it happens in real life (as it did to me), instead of becoming another statistic, you can recognize the scenario and apply the correct effective recovery technique.

Author's note: I wrote this article in May 2013, and just a few weeks later almost became a statistic myself as a result of a mountainside crash in the Moriarty soaring area. While I'm sure there will be some who will point to that crash as evidence that Condor training can lead to dangerous overconfidence, my personal feeling is that I encountered wind conditions that would most probably have overpowered any pilot, regardless of experience level.

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