

Thrills, Risk, and Dying

“Fear is a super important thing, man ... without fear, you *will* die.” Jeb Corliss, 2016

So who is Jeb Corliss? Only about the world’s most well-known proximity (yes, that means close to things) wingsuit pilot.

In January 2012, just seconds into a flight off South Africa’s Table Mountain, about two metres off the ground and doing 193 km/h, Corliss clipped some rocks. He was critically injured and had he not been able to deploy his emergency chute, a spokesperson later said, he would have surely died.

Corliss claims that 10 years earlier, he’d almost died jumping from the same mountain.

What is it about certain pilots who willingly edge closer and closer to catastrophe in the pursuit of a thrilling flight?

According to a 2017 literature review¹ for the CAA’s safety investigation unit, it’s a combination of things.

Firstly, a certain part of the brain of the most extreme risk-takers appears to lack effective dopamine ‘receptors’, which help control the brain’s reward and pleasure centres. Risk-takers don’t get the same buzz as the rest of us from enjoyable activities, so they up the ante.

Secondly, according to a 2004 study of skydivers, risk can become ‘normalised’, the more flights that are successfully completed. Risk doesn’t stand out as risk any more, it’s just part of a great flight.

Thirdly, a study in 2010 published by *The Research Quarterly for Exercise and Sport* found extroverts tend to tolerate more risk for the psychological arousal they seek. Neurotic people may accept a higher degree of risk in an activity that counters stress or tension.

A 2011 study of hang glider pilots by the New York Academy of Sciences found a significant factor in the pilot weighing risk and reward of a certain activity was being able to enhance their reputation with their flying peers. This is particularly the case in what have been described as “hyper masculine” extreme sports groups. In these groups, it is not uncommon to find participants regarding their peers who die in the sport as ‘heroes’, who lived life to the full.

This philosophy is expressed by a 31-year old climber whose friend had died in a mountain climbing accident.

“People spend their whole lives, maybe, doing something they don’t want to do ... instead of dying at 25 and doing what they want to do! I do see merit in that ... dying at 25 doing what you really want to do, eyes open.” Creighton, 2015

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¹ A Literature Review of Risk Taking Behaviours and the Regulation of Private Hang Gliding in New Zealand, Civil Aviation Authority of New Zealand, E Duggan, 16 June 2017.



Photo: iStock.com/vuk8691

That someone can be so enchanted with a sport that they dismiss any consideration of risk, was highlighted to the CAA's safety investigators a few years ago.

Watching video of a fatal paragliding flight they were struck that, despite the paraglider being at times only a few centimetres from the ground at an estimated 50 or 60 km/h, the only expression on the pilot's face was sheer exhilaration.

Now CAA safety investigator, Steve Rogers, and Jim Burtenshaw, the CAA's manager of safety investigations, are making a plea to such pilots to always build a margin of safety into their flying.

It's not that Jim, a former Muriwai surfer, and Steve, a former hang glider pilot, are without sympathy for chasing the thrill.

It's just that they've had to investigate a few fatalities in their time.

Steve has even witnessed the death of a parachutist as she tried to carry out a steep turn, low to the ground.

"She stalled, and fell from about 20 or 30 feet."

He investigated the death of a glider pilot who, looking for lift, got in very close to a hill without a clear escape path.

"Suddenly there was a downdraught," says Steve, "and there was nowhere to go."

"If you look at the safety net around a major airline," says Jim, "they have layers and layers of procedures and training, and all the airspace they fly in is regulated, and they've got people watching them and controlling them, so their safety net is *huge*."

"But the safety net around people jumping off the side of the cliff, for instance, is, 'Did I check my rig properly? Are the weather conditions okay? What is my alternate route if the wind changes?'" Their safety net is them, and maybe their mates.

"If they choose to reduce a safety margin that was kind of minimal anyway, they're bound to have an accident."

Someone who now understands how intoxication with an upcoming flight can blind even an experienced pilot to risk, is a hang gliding instructor with 14 years of flying under his belt.

Normally subjecting himself and his rig to a thorough risk assessment before each flight, in October 2017, he nevertheless "missed a step".

"I'd discovered my brand new glider had a tendency to pull to the left. I'd done two flights in it, but was able to fly in such a way as to make up for that. I'd been in touch with the

manufacturer so I was taking steps to remedy the issue. In the meantime I was still flying. The tendency to fly left didn't make for ideal flying but I could manage it.

"The conditions on the day of the accident were perfect for a great cross country run, possibly the only opportunity in the season for a flight like that.

"I ran off the hill, and the glider sunk slightly – maybe there was a little lull in the air coming up the takeoff – and lost a little bit of height. I skimmed a fence – just – but the left tip of the glider caught it.

"The glider spun, which initiated a stall that was irrecoverable. Because the hill was dropping away, I ended up falling with a stalled wing and landing on a big rock, which broke my right femur.

"And I'm an instructor and warranted to check gliders. I've got more than a thousand hours flying. But I'm in that group that suffers from what we call 'intermediate syndrome' – you sort of get to a point where you go, 'Hey, what can happen to me? I know everything.'

"So that day, I'd become obsessed with the potential of the day and I almost negated, or forgot, that there was a risk with the wing."

Four months after the accident, the pilot was still not back at work and flying was out for at least another two months.

That's if he decides to fly again.

"I'm questioning myself," he says, "if it's really worth it."

Always, a margin

How do you build a culture of 'always, a margin' when so many participants in the more extreme flying sports may be neurologically or characteristically resistant to it?

Jim Burtenshaw believes there's a crucial part to be played by training organisations and their instructors.

"It would be great if they could focus on instilling in novice pilots from the outset, the absolute necessity to have some wriggle room should things go wrong.

"There are many instructors and senior pilots who do that, of course, but they – and their organisations – need to foster a total safety culture, including leading by example.

"So, along with all the talk about edgy flying, there should *always* be the question, 'And what have you got up your sleeve in terms of margin?'"

The safety investigators would be very happy to see such messages in all communications, from instructor-student conversations to marketing material and community newsletters.

"That's particularly important with the more accident-prone sports like paragliding²," says Jim.

"Some of the would-be pilots 'educate themselves' watching YouTube videos. They then set out to emulate what they've seen, without realising – or perhaps even caring – that the pilots they've been watching have years of experience.

"They need a reality check, in the form of someone more experienced, asking them what they'll do if things go pear-shaped.

"It can be done. Look at the attitudes towards drink driving. A generation ago, it was 'one for the road'. Now it's 'who's the designated driver?'

"In the same way, if everyone is saying the same thing, 'What's your *out?*' it just becomes part of the flying culture, rather than a slightly tedious add-on to exhilarating flying."

"It's in the interests of the training and membership organisations to lead that," says Steve. "Sure, exciting flying is good for business, but injuries and deaths aren't."

After his near-death experience on Table Mountain, Jeb Corliss spoke about fear. He said in a later promotional video for GoPro, that his biggest mistake in South Africa was that he had "lost fear".

"I'm actually pretty happy this happened. I think in the long run, it saved my life. I feel very fortunate that I was able to make so many mistakes and then have such a catastrophic accident, and not die. And get an opportunity to live again."

Jim and Steve want that message out as well.

"Future chute and aircraft design may well increase the rush of a great flight," says Jim. "But if someone ends up a statistic, they'll never discover that."

Steve agrees. "Why only have this many thrills," he questions, with his hands close together, "when you can exercise just a bit of caution, and have this many?" he finishes, grinning, with his hands wide apart. ■



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² 2017 – Twelve reported paragliding accidents, two deaths, six serious injuries, five minor injuries.