



What happened here?

Sifting the lessons from the wreckage

An interview with Hugh de Lautour, 22,000-plus hour power pilot, shown at AvKiwi 2016, held audiences rapt as he recounted the story of his glider's out-landing and ground loop.

AvKiwi Safety Seminars 2016, *"What Happened Here? Sifting the Lessons from the Wreckage"*, put attendees into the shoes of an accident investigator. Thirty two groups, from Invercargill to Kerikeri, a total of 2203 attendees, witnessed six accidents/incidents that were representative of common themes seen in New Zealand over recent years.

One of the accidents, featuring a high-performance glider, GSW, showed that having high-time experience in one area of expertise, doesn't counterbalance the risk of having few hours in another.

Hugh's Tale

The view from the the ground at Centennial Park, Taupo, hinted at a really good 'street' (a line of clouds with lift potential). On the strength of the cloud formation, Hugh decided to take GSW, a Ventus cT motor glider, out for a leisure flight.

Like any *Air Crash Investigation* story, the plot thickened – Hugh revealed that the motor had proved troublesome in previous flights. It would start, but it didn't function well enough to let the glider climb.

GSW was towed to roughly 4000 feet out to the northwest of the club. But after setting off under the street, it didn't fulfill the promise of expected lift. He turned back to Centennial Park, and that's where Hugh's plan changed and he decided to give the motor a try.

"I had plenty of height – a good 3500 feet – so I decided to start the motor and see if attempts to fix it had been successful. In the past, when I tried to run the motor I was always over the field."

Once deployed, the Ventus cT's motor needs a windmilling start. Hugh put the glider into a dive and the motor started with some success.

"As in previous flights, when I tried to climb, the motor began to fade. I focused on the motor, then dived a bit more, and a little further again, then I looked out the window... 'Oh dear!' I was too low, and what's more, I didn't have the security of the field under me. I decided to give the motor away and head back to Centennial Park."

After cutting fuel to the motor, Hugh began the labour-intensive process of retracting it. To retract the motor in this model of glider, a switch needs to be held down. To complicate matters, the motor can't be stowed while it's still windmilling – the process must be paused halfway to let the blades settle.

"One of my hands was flying the glider, the other was retracting the motor, and as I juggled the two tasks, I stared out at Centennial Park, wondering, 'am I going to make it?'"

"I knew there was another airfield between myself and Centennial Park, Aratiatia strip, but I lost sight of it. So rather than risk getting myself into a worse situation, I decided I'd go for the largish paddock that was right in front of me.

"I still wasn't configured for landing as my left hand had been occupied with the motor. I didn't have the gear down, but I was able to operate the speed brakes. I didn't change the flap setting as leaving it seemed to be the safest option."

The glider touched down with a bit more speed than it should have. To avoid falling victim to a rapidly approaching fence at the far end of the paddock, Hugh ground-looped the glider. The fuselage was torn apart by the force, but Hugh walked away unharmed.

Mistakes Are Lessons

"My first mistake," says Hugh, "was changing my initial plan and attempting to start the motor. A quick change of plan is seldom a good idea unless you really think it through. Also, I think it was compounded by the fact I'd had the glider for only three months. The drag from the motor cuts the glide ratio down from about 40:1 to 16:1. In retrospect, once I had got the motor away, I probably could have made it back to Centennial Park if I was more familiar with the glider's performance."

The CAA often sees accidents where the pilot wasn't familiar with how all the aircraft systems worked, or worse, did not know how their aircraft handled in all phases and configurations of flight.

Distraction also played a large part in the accident, as evidenced in the official report, "Due to the excessive drag caused by the under-performing sustainer motor, the pilot became distracted by the problems with the sustainer motor and did not monitor his height loss and its influence on his landing plan."

While some distractions can't be avoided, they can be minimised. See the article "Avoiding Distractions" on page 16.

Prepare and Keep Planning

More than one pilot has been embarrassed by the farmer's son's comment, "Why didn't you land on my dad's airstrip? It's just over the fence."

Preparation is the key to a safe out-landing. Don't run out of altitude and ideas all at the same time. Always consider your out-landing options, and keep updating those options as suitable landing areas diminish.

"I did have options available, but I persisted longer than I should have trying to get the motor going, which, in the end, ran me out of options," says Hugh.

Gliding NZ's instructor handbook says, "The pilot must have selected a suitable field at any time a landing appears likely – that is, below 2000 feet agl." This doesn't mean you must carry out a landing, but it does mean that you should be thinking about your options whenever you are below 2000 feet.

While it's tempting to think you can squeeze a few more miles out of your current height, don't try to stretch the final glide. There have been far too many instances of that turning out badly – and in New Zealand, at least one fatality. ■



GSW's emergency paddock landing in 2013 after departing from Centennial Park in Taupo. After losing sight of Aratiatia strip (left image), the pilot elected to land on a large paddock directly in front of him. The glider touched down with a bit more speed than it should have, and the pilot ground-looped the glider to avoid a fence at the far end of the paddock. The fuselage was torn apart by the force.

Online Course

GSW's out-landing and ground loop is just one of six accidents or incidents profiled on the *What Happened Here?* online course. Take a tour with us and learn the lessons you will hopefully never have to learn through your own experience.

www.caa.govt.nz/avkiwi

Reporting Occurrences

The booklet *How to Report Occurrences* is available to help pilots, engineers, and operators through the process of reporting an occurrence. For a copy, email info@caa.govt.nz, or ask your Aviation Safety Adviser.

You can report accidents and incidents online, by email, over the phone, and now with a handy app, called *Here and Now*, available on iOS and Android.

The app uses your phone's GPS functions to pinpoint the exact location of the accident or incident. You can also attach photos to your report by using the '+' button under the location map.

