

# ISOLATED AND VULNERABLE

Two fatal accidents in 2017 highlight the critical need for low-hour pilots to ‘hang out at the club’ getting much-needed guidance from older, wiser flyers.



The two accidents were separated by just seven days. CAA safety investigation report 17/1785 outlines the stark facts of one of them, near Pio Pio in the Waitomo district of the North Island.

“The gyroplane was witnessed conducting a series of low-level manoeuvres before suddenly losing height and impacting terrain.”

CAA Safety Investigator Lou Child found the pilot “was conducting flying manoeuvres outside of his capability, and well below the prescribed minimum safe heights.”

She concluded that a handling error by the inexperienced 25-year-old pilot “most likely led to a rotor stall and loss of lift.” Her investigation could not establish definitively what caused the pilot to do what he did.

// In the first of two similar accidents in April 2017, this RANS S-6 microlight crashed near Balclutha.



## No-one to kick things around with

The tragedy cannot be dismissed, however, as beginning and ending as pilot error.

As Lou examined the circumstances of the accident, she found elements in common with other recent catastrophic events.

“It so happens that in this case, the aircraft was a gyroplane. But we’ve investigated both fixed-wing and helicopter accidents with factors in common with this one,” she says.

“The first of those factors – and this is crucial – is that this pilot had no mentor. Because he owned his own machine there was no-one looking out for him.

“The other pilots at his local aerodrome were flying other types of aircraft and he had no like-minded pilots to kick things around with.”

## Similar contributors, same tragic end

A double fatality near Balclutha only a week before involved the pilot of a RANS S-6 microlight who was also newly certificated, also operating in a remote area, and briefing and debriefing with a distant instructor on the phone.

Report 17/1635 on the Balclutha tragedy notes that evidence at the accident scene was consistent, again, with “an unrecovered aerodynamic stall at low level”.

This pilot also owned his own aircraft, flew to and from his own airstrip and was, once again, isolated from more experienced pilots.

**// Hanging out at the club... is “crucial in transferring tacit information from more experienced aviators to those lesser experienced” .//**

## The terrible combination of isolation and challenging airstrips

The Sport Aviation Corporation (SAC) says remote pilots operating from their own strip in their own machines are always more at risk than other more ‘connected’ aviators.

SAC Operations Officer David Readman says private strips often have challenging features – particularly for the inexperienced pilot.

“Usually these private strips are shorter, sloping, and are generally in hilly regions,” David says.

“They have unpredictable winds, and the approaches are more hazardous; many being one way in or out.

“These factors combine with the pilot’s remoteness – which means any learned bad habits are being embedded in their flying – to increase the risk of a catastrophe.”

## Hanging out at the club is crucial

Report 17/1635 includes the findings of a Finnish study that traditionally, recreational aviation is a highly communal activity.

Hanging out at the club and exchanging experiences, it notes, are “crucial in transferring tacit information from more experienced aviators to those lesser experienced”.

Lou Child says low-hour pilots, particularly if they’re flying in remote areas, should seek out advice and help from more experienced flyers.

“Getting a licence or certificate means only that you know the basics – but really, they’re a certificate or licence *to learn*.

“That means recognising your lack of ability, and making some effort to get guidance from experienced pilots as you build hours.”

## Be your own devil’s advocate

In the Spring 2019 issue of *Vector*, the article “Flying near Mount Stupid” noted the opinion of some safety experts that there are four levels of pilot competence.

A level one pilot – newly qualified and low-hour – is so inexperienced they don’t even know what they don’t know. At the other end of the competence spectrum are the level four pilots, who’ve reached the apex of flying skill and can handle normal, abnormal, and emergency procedures.

The problem, the experts say, is that a level one pilot can often feel like they’re a level four ‘natural’. They don’t have the smarts yet to understand they have a lot to learn and should take things slowly and carefully.

Social psychologist David Dunning advises low-hours pilots:

“Be your own devil’s advocate. Ask yourself how you might be wrong, or how things might turn out differently from what you expect ... consider ‘the opposite’. Seek advice.”

## The role of currency

A second factor common to both 2017 accidents was the pilots’ lack of currency or experience in their machines.

The type of gyrocopter the 25-year-old was flying, according to Lou Child, isn’t an easy aircraft to fly, compared with more modern designs.

On top of that, he’d hardly flown it.

“He’d started off enthusiastically training at Tauranga – but after he got his intermediate certificate, he appeared to lose interest,” says Lou.

“He put the gyro in the hangar and hardly ever flew it. Then he decided, after about a year, to give it another go. He did his flight check in Tauranga, which went extremely well, considering he hadn’t flown for such a long time.”

Nevertheless, his examiner, while quite amazed at the pilot’s skill, did warn the young man that he must “fly more”.

“There were another 11 days without flying,” says Lou, “then the day of the accident.

“If he’d been part of an organisation, or a club, his lack of currency would have alarmed them. They would have likely recommended going up with an instructor a few times, or just flying in the circuit to start with.”

## The role of experience

The pilot in the Balclutha accident was also inexperienced. He had a total of 99 hours; 60 as pilot-in-command.

The report into the accident notes, “Without the support of more experienced pilots around them, the inexperienced pilot is at greater risk of misjudging hazardous conditions or actions. Significant flight experience allows a pilot to be alert for potential threats to their safety. The inexperienced pilot, however diligent, may not recognise or fully understand the implications of a set of circumstances or actions.”

Rodger Ward, from the Recreational Aircraft Association of New Zealand (RAANZ), agrees that most experienced aviators can quickly tell if an aircraft is doing something that doesn’t look right – even if they don’t have experience on it themselves.

“RAANZ relies quite heavily on eyes and ears at a local

club level to ensure any unusual behaviour is noticed early, and nipped in the bud,” Rodger says.

He regards ‘hanging out at the club’ as priceless.

“In my local club rooms there’s a big table and the amount of informal learning that takes place there is immense.”

Rodger says he would strongly encourage any aviator, no matter what or where they fly, to speak up if they see anything “untoward”.

## The role of contact with others

There were factors unique to each of the 2017 accidents. The normally quiet and careful gyrocopter pilot had recently begun a course of medication that may have had an unanticipated effect on his mood, possibly encouraging reckless flying.

The Balclutha pilot flew directly into poor weather.

“Nevertheless, each of these elements would also have been mitigated to a certain extent,” says Lou Child, “by contact with other pilots.”

## Make an effort if you’re inexperienced, and if you’re experienced

“If you’re new to aviation and flying remotely, you must make the effort to spend time with other aviators,” says Lou.

David Readman says club fly-ins and weekend flying trips might provide that opportunity.

“We at SAC are going to promote these a little more, New Zealand-wide, so pilots operating remotely are aware of these events, and are encouraged to join in.”

Lou Child agrees with Rodger Ward that experienced pilots have a role to play in keeping an eye out for less-skilled aviators.

“If you know that Farmer Bloggs around the corner is a fresh PPL and has just bought themselves an XYZ aircraft,” she says, “and you’re, say, an ag pilot, maybe keep an eye on them, maybe offer some guidance.”

Rodger says in his experience, such advice is usually accepted with grace.

“But occasionally we do have people, quite new to the sport, who demand you show them where in the rules the advice on airmanship that you’re giving them is written.

“But I would say it’s wise to listen to what 100 combined years of airmanship is saying.” ➔