

What the GNZ Operations Team is Talking About . . .

A summary of key items discussed at the Operations Team on-line meeting on 11 March 2025. David Moody (North), Roy Innes (Auckland), David Hirst (Central), Wal Bethwaite (South) and Martyn Cook (NOO).

1. Incident Reports for January - February 2025

- in-flight fire started under rear seat due to wiring being crushed and shorted by seat pan
- minor damage after outlanding and rolling through an electric fence unseen from the air
- wheel-up landing on aerodrome by very experienced pilot, attributed to minor distractions
- wheel-up on outlanding, experienced pilot, simply 'forgot to lower undercarriage'
- closed airbrake to reduce sink rate, glider ballooned, over-corrected in pitch, heavy landing
- wheel-up landing, check-flight with visiting overseas pilot, neither pilot did pre-landing checks
- launch aborted by winch driver as glider became airborne, parachute draped over canopy
- landing gear collapsed during outlanding in a field with a deceptively-rough surface
- brief airspace infringement in contest, airspace boundaries were complex and confusing
- ground-towing glider through a narrow gap, allowed wing wheel to drop into a drain
- instructional flight, high workload, landing made in opposite direction to the active runway
- water found in tail tank during pre-flight inspection, previous pilot appears not have dumped it

Further Details on Selected Incidents (extracted from the original OPS-10 reports)

1.1 Fire on board: The 2-seat aircraft was 25 km away from the launch point when a burning smell was noticed. The pilots pulled fuses in an attempt to locate the cause, but then abandoned further attempts, made a distress call for help and decided to fly back towards the airfield. The rear pilot noticed his seat was getting hot and smoke started to fill the cockpit. Airspeed was increased as the situation became more serious. After a hasty landing a fire retardant was used by others to put the fire out. The rear pilot was treated for smoke inhalation.

These pilots considered landing on an airstrip directly beneath them, but decided to fly back to base because they had no fire fighting capability nor people to assist after landing. On reflection, and noticing how the situation quickly became worse on the descent, the pilots now think it would have been more prudent to get on the ground straight away and vacate the aircraft.

The investigation report stated that 'we disassembled the rear seat area and noted that the wiring loom had shorted through the pin that holds the seatbelt bolt in place in the seat pan. It looks as though the bolt had got very hot, which had started the melting of the seat belt. We are confused as to why no fuses blew in the process'.

Operators of the same aircraft type in NZ were alerted but no other aircraft had the same wiring loom configuration so were not at risk. This could have been a manufacturing fault, where part of the wiring loom was trapped and squeezed under a seat pan, so the manufacturer was notified.

1.2 Small distractions and experienced pilots: This period we have four instances where very experienced pilots were distracted by minor issues (like other aircraft parked on a very large runway). In three cases this resulted in wheel-up landings, and in another the pilot failed to notice a vector change and landed in the opposing direction. We also know of a further (unreported) incident where a very experienced pilot launched on a passenger flight with airbrakes unlocked.

The Ops Team discussed this at some length. We wondered whether these lapses could be the first sign of declining proficiency with age. And whether pilots needed to recognise that they might no longer be able to handle the higher workload that they carried with ease in their younger days.

This could mean that as we age past our prime we wisely become less ambitious with our flying goals, and pay attention to how much pressure we put on ourselves - and other pilots - to push on with ambitious goals. We talked about voluntarily limiting our flight duration (perhaps to 3 hours) rather than continuing to embark on long marathon flights. Other potential stressors included airspace awareness during a competition task, flights in very hot temperatures, or the presence of severe turbulence in an alpine setting. A flight can also become stressful when at low altitude, particularly with weakening lift and reduced outlanding options. It seems that 'it doesn't take much' to put us off our game and lead to a mistake - or two!

1.3 Update on jammed rudder:

The previous bulletin reported an incident where the rudder jammed while fully deflected to left. Fortunately the aircraft was at 7,000 feet, and the pilot successfully made a side-slipped landing back at the airfield.

Further investigation revealed that the control surface deflection exceeded the published limit on one side. The right stop was correctly set and the rudder deflection was 22 degrees, as per the handbook. But when full left rudder was applied there was no engagement with the stop - it was screwed in too far. And the locking nut was still tight.

The front edge of the rudder was able to hook around the rear skin of the fin and prevent the rudder returning to centre. 'After we adjusted the (left) stop to 22 degrees it all looked better, but it is still marginal and could happen again'.

There is another incident going back some years where the rudder deflection on one side was only half what was stated in the manual. This was only discovered when it proved impossible to keep the glider straight while taking off in a crosswind, requiring the launch to be abandoned.

Operators are strongly advised to check all control deflections at the next annual, and not assume they are correct. It's a quick and easy exercise.

2. Motor Glider Training

The Ops Team has been planning to add a section on motor glider operation to the Pilot Training Program (PTP). However, rather than describe how engines and other systems work, we examined why a pilot might want to buy a motor glider, and what advantages they think they would enjoy. Then to look closely at the accident and incident record to see what actually happens.

For example, one member of the Ops Team believed that by obtaining a motor glider he would be able to launch himself on days when no winch or aerotow was available. However, he soon realised that - in addition to this benefit - he started to feel more adventurous when flying. He was prepared to fly into locations where he would never have ventured in a glider without a motor, thinking that he could always 'start the motor' if he needed to. He even put himself in situations where he had no landing area within range, or his escape routes were cut off and no longer available. Frightening.

This led the Ops Team to reconsider the type of guidance that we might offer to current and prospective operators of motor gliders - whether turbo, self-launching or touring. The 'how-to' is already covered by operating manuals. It's the false expectations and poor decision-making that can lead to a problem. Like, always having a plan if the engine doesn't start.

We would like to hear from pilots who have learned their motor-glider lessons the hard way. Your contributions will be compiled into a document which - if read and understood - could prevent these mistakes being repeated. Audio files or verbal reports will be accepted as well as written ones.

3. Instructor forum

Aging (and often weary) instructors eventually decide they will no longer instruct, but still have a wealth of knowledge and experience. New instructors are continually being appointed, trained and upgraded.

The Ops Team has been considering ways to pass on the knowledge from one generation to the next. One idea is to have a regular on-line instructor forum, where questions can be asked and ideas shared. A group conversation, if you like. This could be of particular benefit to smaller clubs where lively discussions with other instructors might be rare.

An example was given of a very successful forum at one club's instructor panel meeting, where a training topic was introduced in 3 simple slides, total duration about 5 minutes. Just summarising the basics. This led to a very animated discussion lasting 45 minutes. The key point is that a conversation can be much more engaging than studying the written syllabus on your own.

The Ops Team is seeking ideas on this topic, plus volunteers to facilitate one or two sessions. We are keen to know who might attend, how frequently to have them, how long each session should last and what are some current 'hot topics'. Please respond through your ROO.

4. Resignation

Wal Bethwaite announced his resignation from the position of Southern ROO, effective 31 March 2025. Wal has served in this position for three years and has applied himself very diligently in the role. On behalf of Gliding NZ I thank Wal for all the work he has done, and wish him well for the future.

Martyn Cook
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Gliding New Zealand
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