

## **What the GNZ Operations Team is Talking About . . .**

A summary of key items discussed at the Operations Team on-line meeting on 1 August 2023. David Moody (North), David Hirst (Central), Wal Bethwaite (South) and Martyn Cook (NOO).

### **1. Incident Reports for June - July 2023**

- pilot removed front seat cushion for head clearance, exposed control stick to loose objects
- trial flight in 2-seater launched with tail dolly still attached, distractions during preparation
- near miss with power plane in circuit during training flight at unattended GA aerodrome
- pax flight accidentally exceeded upper ATC clearance of 6,000 feet in wave - by 500 feet
- glider towed too quickly on ground - wing runner couldn't keep up - hit trailer, damaged wing

### **Commentary on Selected Incidents**

*1.1 Removed Shroud Around Control Stick:* The solo-rated pilot was flying in a twin with an instructor, and prior to flight removed the front seat cushion claiming that their head was contacting the canopy. This exposed the control stick cavity to anything loose that could fall into the controls and potentially jam them. The investigation revealed that this pilot was not particularly tall or long-legged so should have been able to fit comfortably into the front cockpit. The seat cushion was reported as only 15 mm thick so removing it would have made very little difference, especially when compressed. Pilots are cautioned against changing the basic aircraft configuration.

*1.2 Launched With Tail Dolly Attached:* The passenger for the trial flight was accompanied by their family on their way to the aircraft. Prior to starting the pre-flight checks the instructor asked family members to move away in order to create a "sterile bubble". However, the ABCDE check needs to be done while the pilot-in-command is outside the aircraft, ideally at the "walking-out to the glider" stage. It's easy to miss a key item if there are other people around at this time. During the launch the instructor suspected that the dolly was still attached so continued the launch to a safe height then made a careful and uneventful landing.

*1.3 Near Miss at Unattended Aerodrome:* The glider was flying upwind and towards the circuit area with the intention of joining at the start of downwind. There was a close encounter with a power plane already on its downwind leg, higher up and further out than expected for a standard power circuit. Separation was estimated at 150 metres. Low sun directly ahead, plus reduced forward visibility due to student's head in front, were compounding factors for the instructor. Investigation report highlighted that a GA aircraft doing circuit training may not be flying a "standard" circuit, so extra vigilance is required when joining. In winter, when the sun is typically low, a clean and clear canopy is beneficial. Glider pilots operating at this airfield have been cautioned to join with the traffic flow, not in an opposing direction. Plus be aware of aircraft making the standard overhead joining manoeuvre, which means that there could be aircraft on the so-called "non-traffic side."

*1.4 Airspace Breach:* The pilot was using wave lift to climb in controlled airspace, with a block clearance of 2,000 - 6,000 feet. The controller noticed that the aircraft was nearing the upper limit and offered a clearance to 7,000 feet. The pilot-in-command didn't think this extra height would be needed, as it was intended to be a short flight, so declined the offer. However, while manoeuvring between wave bands the glider climbed to 6,500 feet, which exceeded the clearance. This resulted in an Airspace Incident Report being generated by Airways Corporation. The Ops Team noted that with ADS-B fitted even small airspace incursions will be instantly recognised and recorded.

### **2. Instructor Motivation**

The Ops Team pondered why some instructors are strongly motivated, and achieve high levels of satisfaction when performing in this role. By contrast, others find it a "necessary evil" and turn up for instructing mainly out of a sense of duty to the club.

In one club for example, only about half of the members holding instructor ratings are active on the instructing roster.

One "theory" was that instructors who achieve a high level of satisfaction in their work have been very well-trained, have built up plenty of experience, and have become very proficient at instructing. Conversely, the reason why an instructor might suffer from low motivation, or "no longer likes instructing," could be due to inadequate initial training, minimal ongoing development, a low level of engagement with the trainees and the training syllabus, or simply a lack of currency due to a lack of trainees or other demands on their time.

Another opinion was that a trainee might have given the instructor a bad fright (usually near the ground), so the instructor's consequent (and ongoing) wariness had taken much of the fun out of their instructing experience.

It was pointed out that a proficient instructor gets a real thrill from seeing their trainees make tangible progress in their flying. If you don't see good results it can be very demotivating. Ongoing development courses for Instructors at all levels could help with achieving this overall satisfaction. It would be good if more resources could be put into this area, in particular having instructors from different clubs get together for development courses.

### **3. Pilot Training for Ridge Flying**

The Ops Team considered the suggestion that we need to do a vastly better job of training pilots in safe and effective ridge-flying techniques. It was acknowledged that flying close to ridges has more hazards than - say - thermal flying over flat land, and that ridge flying is common and popular in New Zealand. The key hazards are that the glider is often close to the terrain, and that air moves in complex ways over and around ridges.

The basic knowledge and skills are largely covered in the training program. However, there is an "art" to ridge flying as well, which demands:

- always flying balanced turns
- being able to select a safe speed in varying conditions and achieve good speed control
- maintaining a good lookout
- being able to competently assess the wind speed and direction at all times
- understanding how wind flows over and through different arrangements of terrain
- being alert to wind shear and wind gradients, especially close to the tops
- knowing where to position the glider relative to the terrain
- continuously planning for and maintaining an escape route

It was recognised that some ridges are predictably safe for early solo pilots, but other ridges can be treacherous, or can quickly become treacherous in stronger or more turbulent winds. The implication is that pilots undergoing training do need to experience a useful amount of dual demonstration on a ridge in order to get a feel for all these subtle elements. In addition, pilots flying solo may still need occasional dual supervision - even after gaining experience - to ensure they have the full story. It may be prudent for all CFI's to identify their local ridges and the pilots that fly them with a view to some dual currency and competency checks, supplemented by classroom sessions with a round-table discussion approach on this topic.

The recently-published document, "[Ten Traps in Ridge and Mountain Flying](#)" identifies a number of traps that have caught and killed some very experienced pilots in the past. Plus there have been several recent incidents in NZ where a glider pilot flying low on a ridge did not have a viable plan when the expected lift did not eventuate and there were no escape routes or safe land-out options.

Martyn Cook  
National Operations Officer  
Gliding New Zealand  
7 August 2023