

What the GNZ Operations Team is Talking About . . .

A summary of key items discussed at the Operations Team on-line meeting on 13 December 2022. David Moody (North), David Hirst (Central), Wal Bethwaite (South) and Martyn Cook (NOO).

1. Incident Reports for November - December 2022

- glider stalled and landed heavily after winch launch abandoned, pilot suffered serious spinal injury
- downhill outlanding on airstrip, attempted ground loop but still went through far fence, no injury
- outlanding without a proper circuit, downwind, ran through fence at end of field, glider a write off
- outlanding on known strip, ground loop due to long grass, adjacent field perhaps a better option
- air brakes unlocked on takeoff, opened during launch, radio call prompted pilot to lock them
- control check prior to launch - small stone prevented full and free movement of aileron control
- winch cable coupling not fully engaged, parted during transition to full climb, normal recovery
- power fade late in rotation on winch launch, pilot lowered nose but did not release, resumed climb
- main wheel locked down but retracted on landing, attributed to handle bouncing inwards in slot
- tail dolly was still attached after pilot had strapped into cockpit for launch
- insect lodged in pitot tube caused ASI to respond sluggishly and give false readings
- inexperienced visitors pushing a glider without supervision, nearly damaged another glider
- no ASI reading on launch due to pitot tube fitted into wrong hole in fin, better label requested

Heavy Landing After Winch Launch Failure: The pilot reported a temporary loss of acceleration during the early part of the climb, so elected to abandon the launch at 100 - 150 feet AGL. The pilot stated that he then "lowered the nose and opened the airbrakes". However, eyewitnesses stated that the glider did not dive to pick up speed, but continued in level flight for several seconds while gradually descending. At about 50 feet AGL the glider was observed to suddenly pitch nose down, typical of a stall. The glider partly recovered in the height available, but landed heavily in a slightly nose-down attitude. The pilot suffered severe spinal injuries but is expected to make a full recovery.

A number of contributing factors are still being investigated. It seems clear that the abandoned launch left the glider in a position where it could have been landed safely if flown fast enough to avoid stalling. There was a brisk wind blowing, with wave conditions overhead, so there could have been a wind gradient and/or sinking air to contend with. In these cases, speed is your friend.

Pilots are reminded of the fifth and last item in the "Eventualities" list, which is very specific: *Lower the nose - wait - no airbrakes or turns until speed reaches < approach speed >*. Many pilots find the "waiting" part especially difficult - it can feel like some action needs to be taken urgently. But opening the airbrakes too soon makes it harder to build up airspeed, and by increasing the sink rate it also reduces the height available for recovery.

The pilot did state that he was trying to "stretch the glide" to land on a more favourable part of the runway. This is rarely a good decision, as it can involve reducing the airspeed below a safe level. There can also be a primal reflex to pull back on the stick because the ground seems so close.

Instructors are encouraged to avoid teaching that "moving the stick back raises the nose of the glider" because in some cases it causes exactly the opposite. It is more accurate to describe the elevator as regulating the angle of attack of the wing.

Another observation is that some trainee pilots develop the habit of automatically opening the airbrakes as soon as the glider is established on final, treating the blue handle as a "landing lever". The airbrakes should be opened only after the glider has reached the top of a half-airbrake descent path to the aiming point, and only at or above the approach speed.

Overshoot on Outlanding: There were two overshoot incidents within three days. In both cases the glider landed well into the chosen area and could not be stopped before colliding with the fence.

The first incident was onto a known airstrip but scrub had grown up at the approach end so the pilot deliberately landed further in. The second part of the strip was then found to be down hill (when uphill had been expected), which made it impossible to stop the glider in the remaining space available. A ground loop was initiated to try and prevent a collision with the gate, but the glider still went through the fence, albeit slowly, and incurred moderate damage. There were no injuries.

The second incident unfolded when the landing decision was made too late (well below 1,000 feet AGL). The pilot found himself near a reasonable field but did not complete a normal circuit and ended up landing downwind (unintentionally). The pilot admitted that "*I turned base and final too high, too close and with a tail wind. Apparently I failed to reassess the wind direction, or I got confused, or overloaded.*" The glider floated well into the field and only touched down 80 metres before the end fence. The inner part of one wing struck a fence post, which slewed the glider around and absorbed a lot of the forward momentum. The glider ended up sideways in a ditch just beyond the fence and was extensively damaged. Fortunately the pilot was uninjured.

Consistent with the Swiss cheese model, both of these outlanding incidents featured a large number of "contributing factors". Both pilots have submitted candid reviews of their experiences, and their openness and honesty is appreciated. In the second incident the decision to "carry on and hope for a climb" instead of committing to a normal circuit and landing when less than 1,000 feet above the ground was a key element. The lack of decisiveness resulted in pilot overload and poor decisions during the hasty attempt at landing.

Outlandings always involve some increased risk compared to landing at a known airfield. However, adhering to the advice in the Pilot Training Program does enable this risk to be significantly reduced. Following standard procedures (such as adhering to a standard circuit pattern) and preserving margins helps to reduce the chance of pilot overload and/or poor decisions.

2. Instructor Training Program Update

The new ITP is very nearly ready to roll out. The documents have been loaded onto the Gliding NZ web site [here](#) and the forms are [here](#). The MOAP has been revised accordingly. The updated documents include:

- Instructor Assessment Standards (IAS) for Category C, B and A Instructors
- Instructor Support Material (ISM) - for teaching airborne exercises
- Use of Patter (optional - for those who might find this helpful)
- New OPS-07 Form - Page 2 is the *Assessment Form* for future ratings and upgrades
- New OPS-08 Form - Flying exercises approved to teach
- New OPS-09 Form - Instructor Competency Review
- New OPS-12 Form - Flight Test for XCP Passenger Rating
- New OPS-17 Form - Fit and Proper Person Declaration for Passenger Rating (without XCP)

The plan is to conduct 2-day workshops in each region towards the end of the current soaring season, to explain the new standards to instructors and address any questions or other issues that arise. Some training will be given where there is opportunity. These workshops will most likely be held at Matamata, Papawai and Springfield airfields, plus other venues as required.

One key change is that an A-Cat rating is now required to train instructors. It is expected that those with a current B-Cat + IT rating will be able to upgrade to A-Cat once all the criteria have been met.

The role of A-Cats will be to maintain the highest standards of safety and discipline within the clubs, and to train and supervise instructors.

Another change is that the minimum standard for a CFI is now a B-Cat rating. 12 months will be allowed for all instructors to meet the new standards and upgrade as appropriate.

There is a new ICR form, plus a form on which to record the Flight Test for XCP. Some pilots might wish to exercise the privileges of a passenger rating without completing their 50 km flight. In this case CAA requires that a fit-and-proper person declaration be filled out and ratified. This can be done using the OPS-17 form. The declaration is already included on the application form OPS-03 for XCP Certificate.

3. Aging Pilots - What to Look Out For

The Ops Team discussed what an aging pilot needs to look out for as early indicators of reduced proficiency as a pilot. Submissions are invited from instructors on this topic. One instructor commented that he is now "less relaxed in the back seat" (ie. when instructing) than he was when he was younger. Perhaps he is more aware of all the possible things that could go wrong? Perhaps he is aware that he might miss some vital clue and allow a chain of small events to unfold, ending in some kind of incident? Perhaps he is aware that his reflexes are not as quick as they used to be?

Like hypoxia, deterioration can be very subtle and not easily detected. Often it is noticed first by someone else. But it would be useful to have a list of things to look for. One contribution was to "stay very current" in your flying, and don't allow long periods to go by without flying. Or, if there is a gap then don't assume you can pick up where you left off - be conservative until you get back into the groove.

4. Moving Aircraft after Injury or Damage

The CAA is reminding all Part 149 organisations about the rules for moving an aircraft after an incident where the aircraft is damaged in any way. This reminder is not specifically aimed at gliding - recent gliding accidents have all been reported promptly and permission to move the wreck has been obtained.

The reason for this rule is that CAA is responsible for determining the cause of any accidental damage or injury, and there may be useful clues embodied in the wreckage. This means that the aircraft and any associated evidence like impact marks) can only be disturbed or moved under specific circumstances. These are all explained in the GAP booklet, [How to Deal with an Aircraft Accident Scene](#). This knowledge is required in the new GNZ Assessment Standards at the B-Cat Instructor level and above.

There is more information available on the CAA website. The Civil Aviation Rule is in [Part 12: Accidents, Incidents and Statistics](#) and further advice is given in the Advisory Circulars [AC12-1 - Mandatory occurrence notification and information](#) and [AC12-2 - Occurrence Investigation](#).

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