

What the GNZ Operations Team is Talking About . . .

A summary of key items discussed at the Operations Team on-line meeting on 30 November 2021. David Moody (North), David Hirst (Central), Gavin Wills (South) and Martyn Cook (NOO).

1. Incident Reports for October - November 2021

- glider self-launched with a towplane on short final, wing runner failed to confirm all clear behind
- 1200 ft on tow in controlled airspace, glider radio found inoperative, broken microphone wire
- loss of battery power in controlled airspace due to taking off with flat battery by mistake
- altitude encoder failure on aerotow in controlled airspace - tug + glider reported different heights
- strong sink in controlled airspace, sank below lower limit before obtaining a new clearance
- unable to comply with requirement to remain clear of airfield for 10 mins due to rain and sink
- training flight, heavy landing - possibly due local turbulence, instructor did not take over in time
- winch launch - wing tip dragged along the ground and the pilot failed to automatically release
- cell phone fell in slot for undercarriage lever, gear would not lower, phone was retrieved in flight
- landed out on known airstrip, wing clipped trees on aerotow retrieve due to strong cross-wind
- glider with turbo landed out heavily - hit a hollow area at high speed, no visible damage reported

Commentary on Selected Incidents:

Glider self-launched with towplane on short final: The wing runner must check "all clear above and behind" before calling "all out". The pilot can't see behind, so is reliant on eyes outside the cockpit. The PiC should insist on this check - just in case the wing runner fails make it.

In this case there was a glider and two towplanes on approach, during a competition launch. The glider pilot waited for the first towplane and glider to land, but failed to realise - or be told - that there was a second towplane on approach. That towplane aborted its landing and went around.

Contest launches can be hectic, and a mix of towplanes and self-launchers requires extra care. Grid crew can be scarce at a contest, and untrained people can sometimes be called upon to run wings. It's a wise idea to have a single launch point controller in charge of all powered aircraft movements. The Ops Team was reminded of a recent mid-air crash between two power planes at another aerodrome, where the approaching pilot had sighted one landing aircraft on the ground but failed to appreciate that there had been two aircraft in the circuit - and collided mid-air with the second one!

Operations in Controlled Airspace: Launching and landing at airfields when a controller is on duty presents a number of challenges, and requires extra discipline. Equipment must be in working order - there is no excuse for flat batteries or finding that a microphone is inoperative only after becoming airborne. These should all be checked during the daily inspection or (for radio) prior to launching.

The Ops Team noted that the momentary distraction caused by the requirement to change from the tower frequency to the area frequency while on aerotow in controlled airspace introduces a risk of an aerotow upset at an altitude that leaves no possibility of a safe recovery for the tug. Aerotow requires a glider pilot's full attention, especially during training, and even switching between preset frequencies with a single press of a button is a distraction, especially in a single seater. In the event of a radio failure a cell phone is a useful independent backup, and this method was used successfully in two of the above incidents to obtain landing clearances.

Heavy landing in turbo glider: The glider was forced to land out after taking a low tow and finding the engine didn't start. This was due to the fuel valve not being turned on. An easy thing to overlook if you are under pressure. The key is to identify (or move to) a landable area within easy gliding range before attempting an engine start, bearing in mind that an extended engine significantly degrades gliding performance. And if the engine doesn't start there's still time and space to execute a safe circuit and landing. This is similar to another accident previously reported.

Wing dropped onto ground during winch launch: In this case the pilot realised afterwards the extremely hazardous position he had put himself in. The wingtip only needs to snag on the ground and the glider could quickly cartwheel. The higher wing can lift violently and the glider will then crash, often upside down. See the simulations on the BGA web site if you want more detail. The PiC realised that wing-on-ground launches were tolerated during his aerotow training (where they are much less of a problem) and he had not trained himself to abort immediately on a winch launch. The WASOB eventualities checklist has "wing drop - release immediately" as first item.

Wing clipped trees during aerotow retrieve: A very lucky encounter which could have been much more serious. It takes courage for a tow pilot (or a glider pilot) to insist that conditions are too risky to attempt a safe aerotow retrieve from an airstrip or paddock. Multiple factors were at play: the strip was narrow at the point of lift-off, there were willow trees to one side, and a "strong cross wind on take-off" was reported, with a slight tail-wind component. The glider took off without a wing runner, by putting the into-wind wing on the ground, but directional control could not be maintained as the wing came up, and the glider drifted sideways and clipped the trees. No damage.

Cell phone fell into slot for undercarriage lever: In this case the cell phone was safely stowed in the side pocket, along with a plastic bottle of water. But in rotor turbulence the water bottle tore the pocket open and the cell phone became an unrestrained object. The obstruction was only detected when the undercarriage failed to lower for landing. The pilot was able to pull it out of the slot. The pilot reported that the side pocket was old and worn, and the actuation slot for the undercarriage had no guard against foreign objects. All loose objects should be restrained, plus allow for significant G-loads if flying in wave or strong conditions. Heavy items not stowed in side pockets. The pilot intends to change to a camel-bak type of water container - safer than a bottle.

2. Instructor Training Course

The new, sharpened-up training course for C-Cat and B-Cat instructors requires acceptance by the NZ Civil Aviation Authority (CAA) before it can be formally used by Gliding NZ. The course material was submitted to CAA for review at the beginning of July, and 5 months later we have still not received any comments, feedback or questions.

3. Survey of Instructors and Instructor Trainers

It was reported that Brian Sharpe's survey is almost complete. Preliminary results indicate a marked difference between larger and smaller clubs. The larger clubs seem to be consistently training new instructors, have active instructor trainers and a good supply of instructors to share the load. Some of the smaller clubs are not managing to achieve this, and some don't even have a member who is an instructor trainer, or there are no new instructors in the pipeline.

For clubs to survive they need to overcome natural attrition, and to grow stronger they need to be even better than this. There was discussion about ways which GNZ could facilitate development of Instructor Trainers. The use of on-line seminars to facilitate an "exchange of ideas" was proposed, with a different topic (or set of topics) addressed each month. But first we need acceptance of the program.

Another idea was for Gliding NZ to fund a travelling Instructor Trainer to visit clubs and conduct training and assessment. This would depend on finding a suitable person. Another idea was for GNZ to fund the development in other ways, perhaps by meeting the costs of aircraft hire. This assumes that cost of training is a limiting factor, which it may not be.

Martyn Cook
National Operations Officer
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