

What the GNZ Operations Team is Talking About . . .

A summary of key items discussed at the Operations Team on-line meeting on 20 June 2023. David Moody (North), David Hirst (Central), Wal Bethwaite (South) and Martyn Cook (NOO).

1. Incident Reports for April - May 2023

- tow upset behind microlight tug at 500' due canopy malfunction and bump from thermal
- after hooking on - LPC noticed rear canopy marks were not aligned - previous latch issues
- towplane in controlled airspace made small heading change towards lift, challenged by ATC
- difficulty lowering main wheel in relatively new single-seat glider, multiple attempts required
- altimeter accidentally set 1,000 ft high, release was lower than planned, hurried return to field

Commentary on Selected Incidents

1.1 Communication with ATC: Air traffic controllers sometimes display low comprehension of the intentions, requirements and limitations of gliding flight. In the past some clubs have taken the initiative and provided their ATC or Flight Service operators with a glider ride to give them a better appreciation of the environment in which we operate. In any case, it is probably safe to assume that a controller has little or no knowledge of gliding, and expects tugs and gliders to operate like power planes (flying at constant altitude and in a straight line directly towards a destination). This means that requests for clearances and any updates to intentions should be made very clear indeed.

1.2 Increase in Engineering Issues: A number of recent incidents have been due to airframe malfunction or difficulty. Canopies and undercarriages seem to be the two main culprits. For example, there was a recent incident in which the rear canopy of a twin flew open in flight and shattered. The canopy was repaired and the aircraft returned to service, but that same aircraft is now the subject of the second incident report as above. This suggests that there could still be an undetected issue with the latching mechanism. The obvious "damage" may have been repaired but the underlying cause of the canopy opening in flight was perhaps not sufficiently investigated.

1.3 More on Canopy Latches: The Ops Team discussed canopy latching at some length. We are all accustomed to our car doors, and how reliably they work, and this perspective may transfer across to gliding. Car doors also have a "safety latch" if the door is not completely closed, which prevents the door flying open when the car is moving. Plus a car often has indicator lights on the dash to alert the driver to doors that are not fully closed.

Our gliders - with their much lighter construction - do not have these features. So we need to train our pilots to be very circumspect when closing and locking glider canopies, and not assume they are "like a car door". A canopy easily flexes when handled in an unbalanced way, and can change shape and size slightly with changes in temperature. Often the pilot cannot visually check whether the canopy is correctly aligned when closing, or whether it has been correctly latched, because the latches are concealed.

External alignment marks have been applied to some gliders to enable a person outside the glider to check for correct closure. This provides a visible check to an outsider that the canopy is in the closed position, but does not confirm that the latch has been correctly engaged. Nonetheless, in the case above it did help to prevent the glider taking off with an incompletely-closed canopy. It was noted that the pilot-in-command is responsible for closing and locking the canopy, and should not have to rely on a (possibly untrained) wing runner or other outside observer to confirm this.

There is a known history of issues with the type of canopy latch where a pin slides horizontally from inside the canopy frame out into the cockpit surround. There is an AD out for DG-500 and DG-1000 gliders on this issue, and the G-103 Twin Astir has a history of similar problems.

2. Correspondence Arising from the Previous Bulletin

2.1 Where to look during a winch launch: The last OTT report suggested that a pilot should "look out at the wingtip during the rotation" to check whether the aircraft was in the correct attitude for the full climb. This was interpreted by one correspondent as "stare continually at the wingtip and don't look anywhere else."

This was not the intention of the advice - a glider pilot needs to continually scan in order to maintain situational awareness. A more accurate statement in plain English would have been "include a quick glance at the wingtip in your visual scan during the final stage of rotation into the full climb" in order to confirm that an appropriate pitch attitude has been achieved.

2.2 Aerial Photography From Gliders: After the last report the Ops Team was advised that some (often younger) pilots indulge themselves in impromptu air-to-air photography that is unplanned and unbriefed. This has potential hazards which need to be taught and managed. Gliding NZ does not have published information or guidance on this topic. The Ops Team agreed that an Advisory Circular could be a useful way to capture the available knowledge and promulgate the necessary information, and will invite those with experience in this area to contribute to such a document.

3. Improvements to Club Audits

The Ops Team is considering whether some additional topics should be included in the 2-yearly audit of a gliding club. The current audit guide (Form OPS-15) provides a series of prompts, typically to confirm that the club officers are complying with published procedures and are keeping adequate records.

However, some other issues have recently been identified, albeit in a small number of clubs, which impact on operational safety. One of these is the loss of harmonious coordination between different functions within a club operation. These "functions" might include the flying committee, the administration committee, the maintenance engineers, the tow pilots, the winch operators, the people who mow the runways and private glider operators, to name a selection.

If these groups don't regularly talk with each other and show respect for the contributions of others then conflicts and "points of pain" can arise. Although these issues could easily be addressed at an AGM or other general meeting of the club, an external facilitator (such as the ROO) could help to iron out differences of opinion and simple misunderstandings. This could help to enhance the safety and efficiency of the club's flying operations.

If adopted then the second part of a club audit would require the attendance of a representative from each of these functional groups, and any issues could be identified, discussed and resolved. This is an ongoing discussion and your comments are invited.

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