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

A summary of key items discussed at the Operations Team on-line meeting on 16 January 2024. David Moody (North), David Hirst (Central), Wal Bethwaite (South) and Martyn Cook (NOO).

# 1. Incident Reports for December 2023 - January 2024

- instructional flight, canopy not completely latched, canopy opened in flight and broke away
- power plane flew through danger zone marking a winch launch site, gliders were operating
- sag in tow rope developed with a trainee pilot, weak link failed on tug as rope became tight
- control column hand-grip pulled off by pilot during transition to full climb on winch launch
- glider near miss with towplane on short final, radio not transmitting, glider battery flat
- rough conditions, passenger became distressed, pilot confused by ATC communications
- first flight in single, controlled airspace, pressed trim button rather than PTT, no comms
- as above, repeated on second flight, pilot back on dual until competent with radio controls
- aerotow rope abandoned on runway after tug released rope and vacated to rectify a defect
- low cloud base, tow pilot distracted by tow decisions, neglected to make a radio call to ATC

## Further Details on Selected Incidents (details extracted from the original OPS-10 report)

1.1 Canopy not latched correctly, opened and broke away in flight: A large, one-piece canopy can be tricky to close at certain temperatures because the canopy can expand and contract at a different rate to the fuselage. This can cause the latch mechanism to be tight, and can feel fully closed when it is not. The pilot-in-command was unfamiliar with the particular aircraft, but had been advised verbally before the flight that the canopy could be difficult to close. It's likely that - with this type - the canopy was seated correctly on the fuselage but the latch was not able to be fully engaged.

A further observation was that in past years there were a lot of incidents where the airbrakes were not locked before takeoff, and opened during the launch. At that time the checklist was CB-SIFT-CB. Since it was changed to CB-SIFT-BEC we are starting to notice fewer airbrake incidents, but more canopy-not-closed-and-locked incidents. Is it possible that the very last item on a check-list gets skipped over lightly as pilots anticipate the next event? Something to think about.

1.2 Managing Pilot Stress: A number of the above incidents identify pilot stress (particularly in early solo pilots) as contributing factors to the incident. This showed up in poor radio work, difficulty in keeping station on aerotow, and lack of familiarity with the controls and instruments on a different aircraft type, especially after converting to a single seater.

Instructors are encouraged to carefully oversee trainee workload and not expose them to too many new situations or environments all at once. Pushing trainees along at a fast pace does not automatically result in good progress, as an incident due to overload can sap a pilot's confidence and may put them off flying altogether.

1.3 Recovery from bow in the aerotow rope: In the above incident the glider instructor reported that "a small sag in the aerotow rope occurred. As the rope became tight the weak link on the tow plane let go. This caused the remaining part of the weak link, rings, shackle and rope to spring back to the forward-moving glider, with the rope hitting the canopy and the metal parts hitting the left wing, puncturing the top skin and leaving a small hole about 4cm in diameter".

On the other hand, the tow pilot reported that "the rope gave the large Pawnee a good jerk, a significant load did occur, and the [500 kg] link broke as it is designed to". The expected cause was a bow in the rope which was not recovered correctly, and the rope went tight suddenly, causing the weak link to fail.

Correct recovery as per the PTP can be summed up as:

Small bows will gradually pull out if nothing is done to worsen the situation. An experienced pilot might reduce the size of a large bow by using the airbrakes briefly, or side-slipping. Don't use large amounts of either. Close the airbrakes or remove the sideslip just before the rope goes taut again, to avoid a violent jerk.

## 2. Visiting Foreign Pilots and Instructors

There has been a recent misunderstanding in regard to the documentation that Gliding NZ requires from a visiting foreign instructor. One CFI assumed that because the foreign pilot had been enrolled as a member of a NZ gliding club under the membership category of "Visiting Foreign Instructor" that the required documentation was already in place.

In fact the visiting pilot did not have a NZ Instructor Rating, and no evidence has yet been provided that a GNZ Instructor Competency Review (ICR) had been completed prior to flying as pilot-in-command. The "Visiting Foreign Instructor" membership category was recently created for administrative purposes only, to provide visibility of the number of such persons. It does not provide the authorisation to instruct.

There is a flow chart which lays out the decision tree, and what documents need to be filed, depending on the intentions of the visiting pilot. This chart has been reviewed and expanded to make the process even clearer. This updated chart is available on the GNZ web page <a href="here">here</a>.

#### 3. Filing Medical, BFR and ICR Documents

Gliding NZ operates an on-line database, thanks to many years of steady work by Tim Bromhead. CFI's and club administrators are required to maintain records of club pilots (MOAP Section 2-8), including medical declarations, competency reviews and ratings. The easiest place to file these documents is almost certainly in the on-line membership system. More details and a link is <a href="here">here</a>.

Some clubs are making very full use of this membership system. The database is very resilient. Club officers may come and go, but the records are reliably stored and don't need to be found and handed over when there is a change of club officers. The database can also be used by clubs to remind members when medical checks and flight reviews are due.

## 4. Gliders That Won't Spin

During a flight review for a BFR or ICR all pilots are required to demonstrate proficiency in spin entry, recognition and recovery. The Ops Team had been asked how to address this point when the gliders available cannot be induced to spin. Sometimes this is due to the weight of the pilot in the front seat. Here are a few pragmatic options:

- have a lighter instructor sitting in the front seat during the review (if one is available)
- visit another club where a "spinnable" two-seater could be made available
- focus on the wing-drop stall and check for correct control actions (full opposite rudder, neutral aileron), then add a note to the review that full spins were not assessed and must be done at next review.

## 5. Filling out *Record of Progress* forms:

While investigating one of the above incident reports the ROO's had the opportunity to review a "Record of Progress" form for a trainee. It was immediately obvious that at least one instructor was not "following the program", or at least not fully documenting the trainee's progress.

Firstly, a trainee should initial the "Self-Prepared" box to indicate that the background reading has been done, and the basic concepts understood. This will reduce the effort required by the instructor, ensure a deeper understanding of the topic, and enable the trainee to make quicker progress.

Secondly, the column labelled "Reviewed" should be signed off by the instructor after the topic has been discussed and demonstrated, and the trainee has attempted the exercise.

Thirdly, and usually after at least one more flight (and sometimes many more flights), the "Completed" column can be signed off when the trainee has demonstrated full competency as defined by the "Pass" criteria in the Pilot Training Program.

The Ops Team was dismayed to be presented with a record card where the "Completed" boxes had been signed on five separate line items, without an entry in either the "Self-Prepared" or the "Reviewed" boxes.

This indicates either sloppy recording technique or poor sequencing of training exercises. One of the discrepancies was that the "To Solo" aerotow sequences had all been signed off as completed without any of the "Circuit and Landing" being finished. The guidance in the PTP is that winch or aerotow launching should not be attempted until the pilot can competently land the glider, with the reasons why.

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