

## What the Ops Team is Talking About

Memo to Club CFI's and other interested parties - May 2019 - *please forward to your instructors.*

A summary of the key items discussed at the Ops Team on-line meeting on 8 May 2019.  
David Moody (North), David Hirst (Central), Graham Erikson (South) and Martyn Cook (NOO).

### 1. Summary of Incident Reports for Feb-Mar 2019

- undercarriage damaged after heavy landing - training flight - suspect too slow on approach
- inboard elevator hinge found delaminated from top skin of stabiliser on DI - has happened before
- brakes unlocked on takeoff - trainee closed brakes but did not lock, P1 distracted during checks
- aerotow launch with pax - glider veered on cross-wind takeoff - came close to fence and maize
- insufficient power to climb from 100 hp microlight tug towing a heavy 2-seater, both landed back
- winch launch attempted with only 40 knots of airspeed due low winch power, aborted at 650 feet
- unsecured ballast weights found in cockpit of 2-seat glider - on 2 separate occasions

### 2. Heavy Landings

The operator which suffered a heavy landing has identified several contributing factors:

- + the choice of 55 kts as an approach speed for the conditions (5-10 kt wind)
- + sink on approach, meaning the aircraft started to fall short of the aiming/reference point
- + the aircraft losing speed below that nominated for the approach
- + the instructor guarding the control column but not the airbrakes

The Ops Team discussion teased out a number of elements from this:

- + the selected minimum safe speed near the ground may not have been sufficient
- + using the minimum speed as the 'target speed' allowed for the speed to fall below this value
- + a glider descending rapidly (either full airbrake or in sink) has considerable vertical inertia
- + arresting a high rate of descent needs a surplus of speed plus height to take effect
- + rounding out too vigorously can result in a mushing effect which does not arrest the descent
- + some clubs suggest to reduce the amount of airbrake at the flare if descending rapidly

Conclusion: review training material for these subtle points.

### 3. Winch Launch Continued at Low Airspeed

Any attempt to enter full climb with low airspeed is clearly dangerous. It was asked how pilots are applying the 'Eventualities' part of the pre-launch check list, and what items are identified. One view was that the 'Eventualities' check should sharply focus on events that might happen in the first few seconds of launch - and require a fast reaction, with no time to think. Hence, a mental rehearsal before calling *All Out*. In moodle the five suggested 'Eventualities' for a winch launch are:

1. If a **wing** starts to go down I will pull the release before the wing touches the ground
2. I will control the pitch **attitude** of the glider on the ground roll and allow it to take off by itself when it's ready
3. I will control the glider in a very gentle climb until the **speed** is \_\_\_ knots (best winch launch speed) and increasing. If it doesn't reach \_\_\_ knots I will lower the nose slightly, release the cable and land ahead.
4. If the speed goes **over** \_\_\_ kts (max winch launch speed) in the first part of the launch I will continue the launch and call/signal for "slow down". If the winch power is not reduced I will release at a safe altitude.
5. If the cable **breaks** I will immediately lower the nose to the recovery attitude, pull the release, and wait for the speed to build up to \_\_\_ knots. No turns. No air-brakes. Then decide where to land.

WASOB (*What A Silly Old Bastard*) = Wing - Attitude – Speed – Overspeed – Break

#### **4. Insufficient Power From a Microlight Towplane**

The operator has decided to discontinue using a microlight towplane with 100 hp engine to tow heavy two-seat gliders. Fortunately the combination was able to make a gentle turn at very low level and land back on the airfield. This was an example of operating in a corner of the safe flight envelope, and while it may be possible to demonstrate a satisfactory tow with a low-powered tug, a slight change in conditions and the combination may be unable to reach a safe speed - or climb. Some microlight tugs with fixed pitch props may not develop much thrust at towing speeds, and/or the drag could reach an unacceptable level. This doesn't just apply to towing heavy 2-seat training gliders - it was noted that some high-performance racing sailplanes may tip-stall if towed too slowly, and it gets worse when carrying water.

#### **5. Insufficient Details in Some Reports**

Many incident reports are short on the kind of detail which would help further analysis. All incident reports should be forwarded to the Club CFI for comment, then to the ROO. If there is any damage then a CA005 form must also be submitted to CAA. Remember, we are trying to establish underlying causes through this system, not attribute blame.

#### **6. Training Program Development - Moodle**

A "compliance matrix" has been drawn up which identifies how each of the 277 check boxes in the existing program has been covered in the moodle program, or confirms that the item has been deliberately omitted.

A request log and change log have been added. These are embedded at end of "To Cross Country" section and available for inspection.

The GNZ Executive is putting in place a consultation process whereby members can provide specific comment on topics that could be improved. An external review panel is about to be appointed.

#### **7. Instructor Forum at AGM**

11:00am - 1:00pm on Sunday 9 June

Proposed format is to open with a short address by a guest speaker on the value and effectiveness of incident reporting.

After that it's up to those attending to bring issues to talk about with other instructors. Here are some sample topics:

- making best use of incident reports to improve safety
- update on moodle training program - the review process + opportunity for instructor input
- completing cockpit checks in a sterile environment (without trying to multi-task)
- ways to reduce the incidence of wheel-up landings
- eventualities: what are the critical ones, and how should they be taught + rehearsed in cockpit
- the hazards of low-energy approaches and how to recognise a correct approach
- how to maintain consistency when a number of different instructors teach a single trainee
- the fine art of conducting competency reviews

The Ops Team looks forward to seeing you there! You may submit topics in advance through your ROO.

#### **8. Proposed Instructor Training Courses**

- Central Region: 6-8 September 2019 (rain date 13-15 Sept) run by David Hirst
- Wellington Gliding Club: 16-22 December 2019, run by Andy Parish, up to 6 participants
- Nelson Region: Date to be confirmed, run by Graham Erikson