

## What the Ops Team is Talking About . . .

Memo to Club CFI's and other interested parties - *please forward to all your instructors.*  
A summary of the key items discussed at the Ops Team on-line meeting on 8 December 2020.  
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### 1. Summary of Incident Reports for Nov-Dec 2020

- near mid-air collision in thermal by two very experienced pilots - both parties admitted fault
- off tops and into valley wind, forced landing into mediocre paddock, broken canopy, minor injury
- high approach, potential overshoot led to S-turns at low level, flap lever jumped out of detent
- P2 pushed stick forward after first spin demo, which restricted recovery from dive, low-G issue
- wheel up landing, pilot flew into area of sink and strong wind, pre-landing checks were not done
- paddock landing, ran across a hole on ground roll, minor crack on fuselage side wall

#### Commentary:

The first incident is a stark reminder of the importance of thermal etiquette. The pilot joining the thermal at about the same height as the turning pilot mis-timed his manoeuvre and arrived at the thermal on the same side at the same time. It was assumed by the joining pilot that the circling pilot would have observed this arrival and open out his turn to accommodate. This assumption was not correct - he wasn't seen! The circling pilot's flarm warning was off due to earlier traffic noise overload. Avoiding action was initiated so late by both gliders that they very nearly collided. To quote one pilot, "It all happened very quickly!" If this can happen to two of our best pilots, it could happen to any one of us if we don't adhere to "see and be seen". Never assume you have been seen!

The second incident is a lesson in alpine meteorology, and how a safe and happy situation can quickly deteriorate. After a good run along a convergence the pilot pushed off the tops to clip the turn point, but then found himself below the tops and unable to retrace his path back to good lift. "From that point on I found nothing but huge sink the whole way out of the valley . . ." The pilot knew his selected paddock was "not a good one" but there were no other options. The glider landed on a hump "reasonably hard" and sustained moderate damage. "The whole thing happened in 10 minutes from hitting the turn point to being on the ground." The pilot wrote, "I became very loaded up with the stress of knowing I was short of a landout and I became overly focused on the paddock itself. I spent the whole time flying down the valley trying to work out the drift of the glider so I could work out what way to land. I opted for uphill, as it was a slightly uphill paddock, but when I turned finals I realised I had a tail-wind which is what caused the big issue: the glider's ground speed was fast which made it difficult to put it down gently."

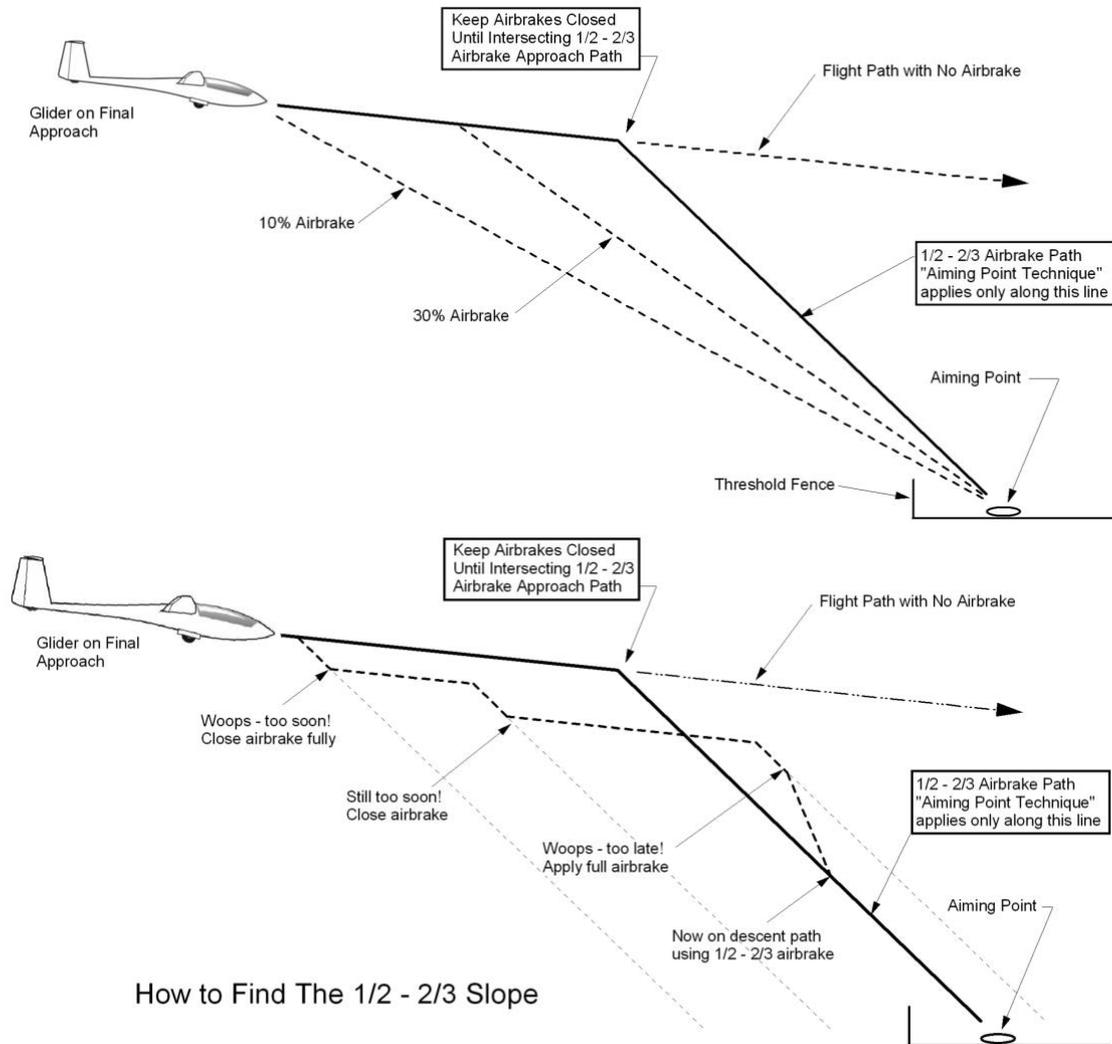
The third incident was a training flight in a Janus, which is a flapped training glider. It was pointed out that changes in flap setting do not make a huge difference on this glider. The intent of the instructor was to land without landing flap due to strong wind. On short final after a high approach the glider encountered strong lift and turbulence, making an overshoot likely. Several attempts were then made to select full landing flap, but the lever popped out of its detent each time. The PIC elected to make S-turns at low level and managed to land safely. The OPS-10 review mentioned that P1 was not current in the Janus, and that alternative methods of losing height might have been more appropriate.

#### Common Themes:

Many of these incidents have, at their core, a failure to pay attention to the most critical thing at the time. Sometimes this is because we don't shift our attention to something new (and even more critical) that suddenly demands it. Maintaining good "situational awareness" requires that we keep scanning our total environment and don't get fixated on a single task. This is more difficult when anxiety levels are raised, or our fight-or-flight response is activated. Stay cool and keep scanning!

## 2. "Low Energy" Approaches

For several years our overseas visiting instructors have commented on the widespread adoption of low-energy final approaches in NZ. The BGA advice is to make the last part of the approach with 1/2 - 2/3 airbrake to preserve the ability to deal with unexpected changes in lift/sink or headwind component. However, it hasn't been made explicit how to achieve this, nor how to teach it. The following two diagrams have been added to *To Solo > Pilot Manual - Approach and Landing* to illustrate what is expected, and to amplify the existing text (diagrams are not to scale):



## 3. Cloud Hazard

Many pilots have viewed the video of inadvertent entry into IMC, and some have resolved to be much less complacent around orographic cloud hazard, which is great. The Ops Team is working to identify all the underlying causes and actions needed to prevent a recurrence.

One proposed action is to add additional detail to the Training Program topic *To Soaring Pilot > Cloud Hazard* explaining the nature of orographic cloud and how an optical illusion can arise when close to this type of cloud. Although the cloud system as a whole is geo-stationary, individual elements of cloud are being blown downwind, and their speed can increase very rapidly as they crest the ridge. Watching a time-lapse video of orographic cloud is very helpful to understand this, and there are good examples on the internet. The proposed material identifies safe and unsafe places to fly with respect to the cloud, and the need to maintain visual reference with terrain.

Further lessons could be drawn from other aspects of the flight record.

#### **4. Consulting the Pass Criteria**

As the new training program is rolled out some instructors are finding they need to review the pass criteria for a particular training exercise, just to be sure. On gliding sites without internet access this can be difficult. One solution is to download the *Printable Copy of Topic Headings* that appears at the start of each section in the TP, and print it out or save it to a tablet (as a pdf) so it can be consulted as required. Other tools to provide this information are being trialled.

#### **5. Instructor Competency Reviews**

The new training program provides information directly to the trainee pilot, and this could slightly change the role of the instructor. Instructors will need to become familiar with the new program to ensure that pilots are receiving a consistent message. For example, pre-landing checks are now expected prior to joining the circuit, and not on the downwind leg as may have been previously taught. Part of instructor competency is being willing to adhere to a consistent syllabus, both within the club and between clubs.

The observation was made that in the UK instructor ratings are not lifetime ratings, but require periodic revalidation and renewal. Many professional associations in NZ also require evidence of CPD (continuing professional development) to maintain or renew a practising certificate. It was agreed that GNZ needs to improve the level of instructor competency (including knowledge of the new training program), but we also need to take a pragmatic approach. One suggestion was to set up on-line webinars, perhaps as a regular event, to bring instructors up to speed in an efficient and enjoyable manner. These webinars could function as an ongoing development for new instructors and a refresher for those more experienced, and give opportunity for questions and discussion.

#### **6. Life Cycle of a Glider Pilot**

This topic arose out of discussion about ageing pilots - when to stop flying and bow out gracefully. The point was made that in primitive tribal societies the babies and the elderly are the most revered. Gliding certainly pays a lot of attention to our "babies" (pre-solo pilots) but there is little discussion around the role of the "great-grandparents" of our sport. These older pilots hold a great deal of wisdom and rich experiences, and we could all benefit if there were more forums for the transfer of their knowledge - to pilots, instructors and club leaders.

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