

## What the Ops Team is Talking About

Memo to Club CFI's and other interested parties - June 2018

Here is a summary of the key items discussed at the Ops Team on-line meeting on 12 June 2018. David Moody (North), David Hirst (Central), Graham Erikson (South) and Martyn Cook (NOO).

**1. Audits:** Most Clubs will have audits coming up soon. These Operational Audits are required as part of the Gliding NZ certification, at least every 24 months. Additional audits may be conducted for specific purposes. ROO's will be scheduling audits very soon. A guide to help Clubs prepare for Ops audits was suggested, possibly published as an Advisory Circular.

**2. Instructor Training:** There is a growing demand from Club CFI's. It is proposed to hold an Instructor Conference in each region prior to the end of the year. Main objective will be to answer questions and check that instructors are following the same program. It was noted that while larger Clubs conduct regular panel meetings, and review parts of the program at each meeting, smaller Clubs do not always achieve this, so these conferences should be of extra benefit to smaller Clubs.

**3. Recent Additions to Moodle:** The draft training program is at [gliding.moodle.co.nz](http://gliding.moodle.co.nz). For Clubs on this program it is now possible to obtain a restricted passenger rating prior to completing the cross-country component of the QGP. There are a number of restrictions, including flying front seat in a familiar aircraft, remaining within gliding range of the airfield, and gaining approval from the Duty Instructor on the day for each flight. If weather is difficult, or the pilot is not very current, then a check flight might be required. The rating is by log book entry and must be renewed annually until QGP is achieved.

There has been a request for a section on task setting as part of the "Task Pilot" section. Also, putting more material into the Meteorology Study Guide to facilitate forecasting of soarable conditions and what tasks might be achievable on the day.

**4. Incident Review:** OPS-10 forms are slow in coming. Please keep them coming in. Anyone can submit one, and if it can't be completed in full then please send in what you have. Remember, an *incident* is an event which could have turned into an *accident*, but luckily it didn't. Suggested that a general summary of recent OPS-10 incident reports (without identifying Clubs or persons) be included in each monthly email newsletter.

Reports last month included two winch launches (at different Clubs) with incorrect weak links installed. This raised the question of how and when weak links are identified, connected and checked. By colour or by number? Problem of links obscured by dirt or manure? Some Clubs have a coloured arrow on the side of the glider pointing to the belly hook and identifying the weak link at the same time. Perhaps we need to review our standard check lists to include weak link when winching? Different countries have wildly different pre-launch and pre-landing checks, so NZ ones could be tuned to suit ourselves. Please send your comments on this subject to your ROO.

A single seat glider reported two landings on different days where wheel was lowered for landing but retracted on touchdown. Could be poor adjustment of the mechanism or a worn gas strut.

**5. Guidance on BFR's and ICR's:** It seems that some senior instructors are not sure what is required to conduct these reviews. A guidance paper is proposed. One question concerned how to evaluate pilots who fly perfectly well 90% of the time but show very poor judgement the other 10%. A competency review needs to consider recent observations about a pilot's flying as well as how that pilot flies on the day. This could include their own capacity to accurately assess whether they are fit to fly on that day, using the IMSAFE check list.

**6. Stalling in Turns:** The question was raised as to why stall-spin accidents close to the ground continue to feature in our accident statistics. Is there some aspect of our training which could be deficient or insufficiently emphasised? In looking for root causes we discussed the analysis in the 1944 book "Stick and Rudder" which examines this aspect in considerable detail (yes, it had been identified as a problem back then).

That author suggests that the attempt to *exit* from a "hurried turn" (quickest possible turn with minimal loss of height) is the tipping point. The pilot applies aileron to level the steeply-banked wing, which has been loaded to 2-g by the 60° bank angle, and only has an airspeed of around 1.4\*Vs (circuit speed).

The down-going aileron suddenly increases the angle of attack of the lower wing tip, and the outboard section approaches a stall, so the glider doesn't roll out as expected. In fact, the lower tip falls down further and is dragged aft due to loss of lift and increased drag from the pre-stall mush. If the pilot instinctively pulls the stick further back into the top corner then a full spin can develop.

If this is a plausible mechanism for some stall-spin accidents then perhaps the way we teach pilots how to perform and recognise stalls needs review. In particular, "stall indicators" like low airspeed, reduced wind noise and nose up above the horizon should not be offered to describe a stall, as these symptoms are completely absent in the above scenario. To be discussed further.