

AGC Weekly News

Weekend Roster

Saturday

Tug Pilots: Brett Nicholls
Instructors: Nigel McPhee, Graham Cochrane
Duty Pilot: Andy Campbell

Sunday

Tug Pilots: Ron Burr
Instructors: Norm Duke, John Robertson
Duty Pilot: Nathan Montano

The Use of PLB's

Video submitted by Gerard Robertson

An interesting video about the practical use of PLB's. Just follow the link:

<https://blog.doc.govt.nz/2022/04/12/how-to-use-a-distress-beacon/?fbclid=IwAR2shhapVtrNII-YcOB0SoS7AP2lulm4yt2noY1ifSkBNn8kPYSLqPIM9yA>

Winching this Saturday

Grahame Player has organised some winching for this coming Saturday, 23 April. Keith Annabel is available to drive the winch.

The winch is a great way to hone skills in getting away for a soaring flight and very much cheaper

than aero towing. It is also an excellent way of developing circuit awareness.

If club members wish this facility to continue, then some effort should be made to use it.

Exploring the Mountains

Video submitted by Gerard Robertson

Exploring the Mountains-Part 1



<https://www.youtube.com/watch?v=d01jQyx6bcE>

Club Workshop Clearout

Please be advised that the club workshop will be having a major clear out in the very near future. If you have anything there that belongs to you,

please stake your claim right now before it is too late. Peter 021 170 2009.

From the Club President

Loose objects in the cockpit

It is thought that this set of keys belongs to a trial flight passenger. How anyone could leave the airfield without their car keys escapes me, but these keys clearly did escape their owner and were found under the front seat. Please be careful of the contents of your own pockets and encourage passengers to empty their pockets before going flying. The club has lost one glider due to a loose object; he was fortunate enough to depart via parachute.



Vario settings

While the S100 in BI is a great piece of kit, being customisable to glider types and pilots, pilots should return the profile to AGC settings after they use AGC gliders. This will avoid faults being reported (including Ross finding that the glider was set to a Cirrus).

Astir ND delivery to Youth Glide at Omarama

Members may recall that, due to a death in the family, ND's delivery was postponed. ND is presently in Taupo; delivery will re-commence on 1st May, with a ferry booked for 3rd May (funded by Youth Glide).



The editor asked Gerard what it was like towing with an electric car, and here is his response:

Towing with an electric car - experience so far

I have a Hyundai Ioniq 5 electric car, with the larger 72kWh battery giving a nominal around-town range of about 430 km. On the open road, this drops to around 400km or a bit less, due to drag and less regenerative braking.

Starting the delivery journey of ND was a bit of an eye-opener, as it showed how much the shape of the trailer can affect energy consumption. I can get to Matamata and back with SW tucked away in its sleek, low Cobra trailer. However, ND's trailer is very much a product of its time. I left One Tree Hill with 100%, collected ND at Drury and carried on to Cambridge to drop my wife off at her sister's place. A 23 kWh top-up to 80% cost me less than \$14, so I carried on smugly.

A quick charge (at 211kW) at the DC high speed charger in Taupo took me back to 80% for \$23.52 - though the town lights dimmed while I did so. I topped it up to 100% at the gliding club, running the charger lead out the window of the "glidetel" chalet. Fast charging can be detrimental to battery life on earlier electric cars, so I'm being conservative and doing the final top-up on an AC trickle charger (at 10A, so 2kW).

Smugness maintained, I pressed on next morning across the Desert Road, which climbs to a peak of 3,500' from Taupo's 1,300' while having more twists and turns than an election campaign. Imagine one's horror when, at the Army Museum in Waiouru, I discovered that I'd used half the charge in a mere 120 km! A good excuse for a coffee break.

The verdict: it's still a great car to own and has probably saved us more than \$3,000 in petrol costs. Yes, you need to stop and charge but - most of the time - it will go further than my back or my bladder will allow anyway.

Committee meeting

There'll be a committee meeting next week, with a report in a future newsletter. **If you've anything you want raised, please send it to president@glidingauckland.co.nz**

Use of Flaps

By Adam Woolley, *courtest Wings & Wheels*

Take-off run

In general, setting a negative flap setting gives you better aileron control at all speeds, for this reason typically we set a stage of negative flap during the initial stage of the take-off run. Once we have built up sufficient aileron control, we can then shift the flaps to the recommended positive flap setting for the remainder of the launch. When it comes to winch launches, consult your flight manual.

Approach to land

The most important thing first, do not change flap settings toward negative (from positive) near the ground, followed by, never select your landing flap until you're assured to make your aiming point – otherwise your flight may end in a very different way than you had hoped, a disaster...

Talking about accidents, many have happened when the pilot has changed their flap settings while in close proximity to the ground. An UN-flapped glider does about 10:1 with its airbrakes out, suddenly the pilot realizes that they're low on approach, closes the brakes and the glider resumes its 35:1 glide ratio, correcting its flight path easily. Sadly, the same isn't true for a flapped glider, the flapped glider when it has its flaps (only) out is doing, maybe doing 20-25:1, so when the pilot closed the airbrakes (from 7-10:1), it only recovers its glide to the flapped best glide figure – which may not be enough to get you safely to the airfield.

In this situation, the pilot might then decide to reduce the flaps to restore full glide performance, however, there is a catch, an important catch to know. When you reduce your flap setting, it reduces lift initially, causing a drop in altitude,

done low enough, this can cause an accident, a broken glider, perhaps a broken back too... The secondary effect of this rapid drop in height low down is that the pilot might counteract this drop with pulling back on the stick, causing a stall. Naturally, both these situations should be avoided!

The important bit that was first and now repeated again, do not change flap settings toward negative (from positive) near the ground, followed by, never select your landing flap until you're assured to make your aiming point.

After touch down

As we said for the takeoff, negative flaps provide better aileron control, which makes it advisable to select them once we start to lose aileron effectiveness – read that again, once we start to lose aileron effectiveness. If we select negative flap immediately after landing, all the lift will be dumped at a high speed, causing the wingtips to drop very quickly towards the ground, add in there superior aileron effectiveness and sensitivity to your input. What can result is an unexpected, high-speed ground loop, naturally something you want to avoid! So my advice is this, settle into your ground roll, plan your stopping point, once you start to lose aileron effectiveness, slowly and deliberately, set your flaps to negative to maintain control. The last advantage of negative flaps before your wings touch the earth again is that you'll be saving your ailerons from a graze!

Happy landings!

Thanks to Russell Thorne for submitting this article.

For Sale



Share for sale in Grob G109 (ZK-GOC). Touring type motor glider in excellent condition. Upgraded with Limbach L 2400, so has much better take off performance than the

PW5 GKF. Current Annual until Dec 2022. Ready to fly. Approx 800 hours flying. Radio, altimeter, airspeed indicator, electric and mechanicals varios. Includes open trailer. Also Includes free use of hangar space at Drury until 31 Oct, 2022, if required. Priced to sell at \$8,000. Ideal for single ownership or cheap syndicate. Reason for sale is that glider is surplus to requirements. Phone Murray on 0275 875 438

standard G109. Contact Russell Jones on 021 180 5544 or email russell.jones@orcon.net.nz