

AGC Weekly News

The weekly newsletter of the Auckland Gliding Club at Drury, Auckland

Saturday Spring Briefing

You'll have noticed the days getting longer and the rain being warmer: the flying season is upon us!

Most of us won't have flown for the last several months and, like it or not, our flying skills are likely to have dulled somewhat. This will affect people differently. Arguably, a low time pilot who's been coming to winter lectures may be more in tune than those of us who've been flying since before some of the students were born.

So whatever your level of experience, coming to the safety briefing is a means of starting the season as a club with a shared understanding of how this will be done. More experienced pilots have something to offer by the questions they may ask or experience they share.

I look forward to seeing you there (pardon me if I'm still a bit jet-lagged).

Gerard Robertson
President



From the CFI

Most of you will have spotted the honest mistake regarding the date of the pre-season briefing.

The briefing is this Saturday the 30th starting at 10:00hrs. Please attend, rain or shine, as there is a bit to go over.

The field is still wet with more to come today, so is still closed for at least another week.

The first group of ATC cadets was planned for next Saturday but at this point it's not looking likely to go ahead. If by some chance the field dries enough by then, any help would be appreciated.

Anton Lawrence
CFI Auckland Gliding Club
021 280 188

Winch Roster

October 2023		November 2023	
Sat 7	Grahame	Sat 4	Keith
Sun 8	Hugh	Sun 5	Grahame
Sat 14	Keith A	Sat 11	
Sun 15	Paul C	Sun 12	
Sat 21		Sat 18	Paul C
Sun 22		Sun 19	Hugh
Sat 28	Grahame	Sat 25	Keith
Sun 29	Anton	Sun 26	Grahame

How We Do Things handbook amendments

The following has been updated:

- Glider tracking is available on the caravan Chromebook. See Flight Following below.
- The caravan now has a permanent IP phone that remains in the caravan. It operates on the Club telephone number, 09 294 8881.
- There is no longer an eftpos machine in the caravan, nor any provision for taking payments other than paying on-line. In this regard, Trial Flight operations are simplified by the on-line booking system. See extracts 15,16 below.

14. Flight Following:

1. Open a new tab on the Chrome Book browser (ask for help if needed).
2. Open www.gliding.net.nz and select "TRACKING".
3. Pilots flying cross-country should be running the appropriate tracking app and their glider will show up on the screen. Club gliders will automatically show up as they have built in trackers.
4. Check the tracking screen when not entering Gliding Ops data.
5. Else the pilot must make "Ops Normal" calls every hour.
6. Note down all "Ops Normal" calls.
7. Write down the time of the call.
8. If any glider does not report "Ops Normal" (every hour), check the tracking screen first, then try to make contact.
9. **If contact cannot be made, report to the Duty Instructor immediately.**

15. Trial Flights – booked - with voucher:

Most trial flights are booked and paid for on-line, and the client must produce their voucher or display it on their phone.

1. Welcome the person and introduce to the instructor as soon as possible. Make them feel welcome and try to arrange their flight as close to the allotted time as possible.
2. Have the client fill out an indemnity form - usually in a blue folder on the desk.
3. Weigh the client - 110kg is the seat safety limit. Pass this information to the instructor.
4. When their flight is hooking up, call the tow-plane on the radio and tell the pilot that it is a Trial Flight and give the launch height.
5. Enter the client's full name and the voucher no. under **COMMENTS**.

16. Trial Flights – Walk In - NO voucher:

As above, except that the client must book and pay for the voucher on-line before flying. This can easily be done on the client's smart phone (or the chrome book if necessary). To do this the client must:

1. Log into <https://glidingauckland.co.nz>.
2. Navigate to ABOUT then Trial Lesson Flight.
3. Select and pay for the desired package.
4. The voucher with numbers will be sent to the client's phone.



Photo by Sean Frank

Gliding is a sport that has captivated the hearts of many over the decades. The sensation of soaring through the sky gracefully, unaided by engines or propellers, but by Mother Nature is a dream come true for many aviation-inspired enthusiasts. To allow us to achieve this silent dance with nature and the earth's energy, one of the lift sources that glider pilots rely on, is a phenomenon known as thermals. In this article, I will try to explore the fascinating world of thermal generation, its challenges, and the importance it has in a glider pilots toolkit.

Understanding thermals

Thermals are columns of warm, rising air created by the uneven heating of the Earth's surface. This natural phenomenon is the foundation of thermal generation in gliding. When the sun warms the ground, it heats the air directly above it. Hot air is lighter than cold air, causing it to rise. As the warm air ascends, it cools, and moisture in the air may condense, forming beautiful cumulus clouds.

Glider pilots use these rising columns of warm air to gain altitude without the need for a motor. Riding a thermal is like catching an elevator to the sky. I imagine cumulus clouds to be like the petrol stations of the sky for a glider pilot. The ability to locate, manoeuvre the glider, and then utilise thermals efficiently is a skill honed by glider pilots through training and experience.

The Science of Soaring

So, how does a glider pilot find these elusive thermals? The answer of course lies in a combination of keen observations, training, experience and skillful flying, which of course can be obtained by all those willing to learn!

Observations: before takeoff, pilots will study the weather, often now days with applications like SkySight, or the National Bureau of Meteorology, or talking amongst local pilots to assess the local conditions in order to identify areas where thermals are likely to form. Once airborne, pilots

will look for signs of development of the cumulus clouds, the behaviour of soaring birds, and the differential in heat on the ground which will cause the triggering of such thermals.

Skilful flying: Once in the air, pilots will constantly scan the landscape for visual cues that a thermal may be nearby, this may include another glider already circling in the column of lift, or sinking to show where not to go! When we encounter this rising energy, we manoeuvre the glider into a circling pattern to stay in it. Those who are able to race the fastest at gliding competition are able to find the strongest updrafts consistently...

Navigation: To stay aloft though, and in order to fly great distances (sometimes gliders can fly over 1000km in a single flight!), pilots must strategically connect these thermals. They will move from one to the next, navigating using their observations from point one, their knowledge of the wind patterns and their intuition about where the next one may be!

Challenges and Rewards

Thermal generation in gliding isn't without its challenges. Thermals can be unpredictable in terms of strength and location. A weak thermal may not even be strong enough to sustain height, while a strong one can require the pilot to make quick judgements as they near the cloud base, and sometimes if we fly high enough we must also use oxygen, as that too decreases with altitude and the pilot can't risk becoming incapacitated.

However, the rewards of thermal soaring are immense. The joy of silent flight, the satisfaction of navigating the skies using only natural forces, and the thrill of finding and riding the thermals across great distances. It's a deeply meditative and exhilarating experience that connects pilots with the essence of flight – I highly recommend you extend your own soaring tool kit or if you are interested in gliding, you should definitely give it a try!

Member's Ads



ZK-GYF -Schlempp-Hirth 15m Discus CS (SERIAL No 232 CS) 2817 Hours and 1152 on the hook with New Annual Inspection. Tinted canopy; water 184L; fitted with both standard tips and Maughmer winglets; wheel brake mounted on control stick. Becker radio, transponder (ADS-B out) Trig TT22; LX 9050 with stick remote; 3 x 10Ah Batteries (5-8 hour duration). Mountain High system (bottle needs testing and filling). Run out gear and wing wheel; two canopy covers (a light and a heavy cover). Home built trailer. Price **\$86,000**. Contact **Bill Kendall 027 436 8894 Taupo**



LS3-A for sale (ZK-GLL). Has been refinished and is in excellent

condition. Recent upgrades include LXNav S100 plus remote stick, Trig ADSB, new front panel, Flarm mouse, new galvanized tilting open trailer that I am in the process of making a full cover for. Glider fits in the trailer the same as a cobra trailer with the fuselage and wing trolley's being visually similar to what the expensive trailers use. After several landouts the trailer proves to be successful and easy to use. Comes with tail dolly, wing walker tow-out bar, oxygen bottle and EDS system (I have never used this so cannot vouch for its functioning) Annuals recently completed. A great performing 15m flapped glider. \$45,000

Contact Keith Macy keith.macy@outlook.com



PW5 KF. Current Annual until Dec 2022. Ready to fly. Approx 800 hours flying. Radio, altimeter, airspeed indicator, electric and mechanicals varios. Includes open trailer. 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

This edition of the newsletter was compiled by Peter Wooley – wooleypeter@gmail.com – 021 170 2009