# AGC Weekly News

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

# From the CFI

The good news is we are going to open the field up this weekend for general flying. This is on the proviso the weather holds and the ground continues to dry.

There will be no private vehicles allowed on the field, no exceptions. The Land Boss ATV's are the only vehicles to be used.

Wheel brakes are not to be used on landing.

If anyone wants to rig some gliders before the weekend, please do (DX, AK and QQ). Call me if you want a hand rigging.

The forecast for the weekend is winds from the northerly quarter, launching should be started from as close to the road as practical. This position is the normal winch location, the hard spot.

The field may be too soft to allow a winch tow out

vehicle on the field, so there will be no winching.

On another point, I notice there are a number of pilots whose BFR or ICR has expired or is about to expire. Make sure you do your prep and get it done.

We also have a reasonable number of trial flights purchased. Please make these visitors welcome as they all represent possible new members.

The G Dale video link in this newsletter is well worth a watch. This is a prime example of how human factors can put you in deep trouble. On this occasion, only the pilot's skill saved the day. We don't all have that skill when it comes to IMC.

Anton Lawrence CFI Auckland Gliding Club 021 280 188

# Local soaring news

Word has it that John Robertson took his girlfriend for a long flight along the Kaimais on Saturday.

Looks like the soaring season is upon us and some excellent soaring awaits.

# Gerard's videos

Why Pilots Crash | Soaring Show Interview

TRAPPED IN CLOUD WITH G DALE

https://youtu.be/l3xy3JKES70?si=vGS1Dtsplc W11 2W

Worlds Training in Extreme Heat: Strategy & Gliding Performance



https://youtu.be/48ay2GuixG8?si=TGMTF-Gnr4E3zPVe Best of Gliding | 2023 Overview | Ventus-2a | JS-3 | FFVP



https://youtu.be/eQ4\_RXH3VZU?si=3TVrCjWKt decoEpThis might sound like words from the committee but it's not. I am a standard member who is embarrassed at how we look and behave. Over the last month there have been numerous opportunities to be at the club. There was the AGM, start of season briefing and for some, trips to Matamata. Yes, it's winter (well spring now) and we aren't flying out of Drury at the moment but looking at our club glider trailers you would think we have abandoned the field.

It concerns me personally that as a club with such an amazing fleet, we choose to abuse it so much. Attached here are some pictures showing the state of our two premium single seater trailers.



As you can easily see, the level of mould and grime on these trailers is causing permanent damage to the gelcoat. I'm a private owner and don't fly these aircraft but my and your membership fees pay for the purchase and maintenance of these assets. If I was a prospective member and saw these trailers in their current state, I would have to wonder about the condition of the actual gliders too.

At AGC we are one of few clubs that owns its own airfield. We have arguably the best all-over fleet in the country but we seem to lack the pride in looking after what we have. It got to me so I cleaned them. Then a day later, I took QQ to Matamata to fly the ridge. The wings still had bugs and grime from its last flight and the underside of the fuselage was covered in what looked like cow pat from its last outlanding, or soft field landing. Where are the pilots who fly them and where are the pilots that aspire to fly them?

A remedy could be for the club to just pay professionals to do the cleaning work but I don't

think you would like the impact to your fees. We shouldn't be waiting for the annual "working bee" to clean and make all this expensive equipment respectable.



Come on everyone. Have some pride in your club and its assets. If you see a job needs doing step up. Washing trailers, trimming hedges and grass, weeding around the hangers and clubhouse doesn't require special skills but it will make a massive difference to your club and make it look like we care.

### Editor's note:

Interestingly, when I began gliding a long time ago, it was club practise to debit a member's flying account with a certain amount (rather large) as soon as they flew any club glider. This amount represented 50 hours work towards club maintenance and repairs to club buildings and aircraft. The system facilitated members to choose to work off this amount to zero, or pay others to do the work. Though unpopular, it did work.

In another overseas club, everyone has to commit to 50 hours work per season, doing club maintenance. There are regular organised polishing days, clubhouse maintenance days and there is also a youth coordinator to try keep the youth members inspired and integrate them with the more experienced (older) members.

## The Gö3 Minimoa



Restored Japanese Minimoa (pic by Helmut Morsbach)

The Göppingen Gö 3 Minimoa is a single-seat sailplane produced in Germany. It was designed by Martin Schempp and Wolf Hirth and was produced the year after their first glider, the Göppingen Gö 1. It first flew in 1935. The name is derived from the name Moazagotl given to lenticularis clouds caused by the foehn wind in Sudetenland.

It established several records, including the world altitude record of 21,939ft in 1938 in a thunderstorm. Richard du Pont and Chet Decker flew Minimoas to win the US Championships in 1937 and 1938.

It was made out of wood and fabric with cantilevered 'gull' wings. The B-version in 1938 had thinner wings with a modified section and the gull's kink in a different place. The undercarriage was non-retractable. It was the first glider built to carry water-ballast in a tank behind the pilot.

Only five Minimoas remain airworthy: two in Germany, one in Japan, one replica built in the Netherlands and the latest one to fly in the U.K. One more is being prepared for flight in Bacchus Marsh Australia.

Wingspan 17m; Empty weight 245kg; Max take-off weight 350kg; VNE 219km/h; Maximum glide ratio 28:1 at 72km/h; Wing loading 18.37kg/m<sup>2</sup>

The club I used to fly at overseas acquired a Minimoa back in the 1930's, when it was one of the "hot ships". At the outbreak of WW2, it was mothballed and hidden away to avoid being

requisitioned by the air force. When the club was reconstituted after the war in the late 1940's, the glider was returned to flying. I was told by pilots from that era that glider designers at that stage of development considered the pilot as a minor, secondary feature to be accommodated in the aircraft design — hence it was rather an uncomfortable glider to fly, especially on long tasks.

This Minimoa had a sad ending to its career: During a routine Saturday flying operation in 1959, the tug pilot Klaus "Sammy" Samson had been towing all morning and was looking forward to taking a lunch break, as the girls had gone to prepare lunch (those were different days). Sammy: "Well I thought, the last one coming up before lunch, I felt I could do with a break. I turned around, the glider had landed, the next pilot prepared to climb into the cockpit. I taxied into position, the helper attached the tow rope to the tug's tail, the starter waved me to take up slack on the rope. I felt the rope tightening, opened the throttle wide to take off but just then the starter signalled me to cut, by moving his flat hand across his throat. I thought Oh no! What now? I turned around and saw a car speeding down the runway towards us. The passenger side door opened and little Mouse, the Club Captain's (CFI) young son, came staggering out with a parachute under his arm. My daddy says you must put it on now, it's just been repacked. The devil with your daddy I thought. Look, I said, it's the last flight before lunch. Oh come on! he said, put it on, my daddy sent me out with it especially - he says it's safer. Who argues with daddy when he is the Club Captain? So off with the safety belt, heave out of the cockpit, climb into the chute, adjust the straps, climb back into the cockpit, refasten the Sutton harness and finally off. A smooth take off into a steady wind, perfect blue, and sunny sky. Throttle back to 1800 RPM at a steady 60 MPH and maintain climbing attitude. Level off at 2000' and fly in gentle circles and S-turns, searching for invisible thermals, while waiting for that slight tug that tells you the glider has released. Then a half-roll and steep dive to drop the rope over the runway, pull up, stall turn into wind, level out, and then for a wellearned lunch break. Then it happened. I felt the tug more violent than usual, persisting, no release, pulling up the tail of the Tiger. I hauled back on the stick - for heaven's sake, get off I thought. Now the nose of the Tiger is pointing straight down. Before I can pull the release, a shadow passes across me, followed by a sharp jerk and a trembling through the plane. Immediately we flick into a spin, the altimeter reading 2000'. Now remember what you have learned and practised time and time again correct the spin, close the throttle, stick hard forward, full opposite rudder and - no dice. We keep spinning. What am I doing wrong? Am I correcting the wrong side? Try the other rudder. No luck there either; the spin gets tighter and more vicious while the earth seems to reach up to meet me.

What now? I glance at the altimeter; 900'. Get out you idiot. No panic. I am surprised at how calm I feel. Time is too short to worry. With my left hand I open the cockpit flap, my right pulls the pin on the Sutton harness and I heave myself up head first over the side, bouncing with my left shoulder off the bottom main plane. I find myself floating in midair. No sensation of falling. I don't bother counting to three, just grab the ripcord ring and pull. I am falling head first. The ground is



Tiger

rushing up to me at an alarming speed. I look at my hand and see a ring with a bit of wire attached to it and think – you pulled too hard – you pulled it right out. Between my legs I suddenly see strands of white cord streaming out. The ground is frighteningly close now. I spread out my arms instinctively to cushion my fall, feel a terrific jerk, and the world turns right side up. The sudden deceleration throws my legs up. Virtually sitting down, I crash heavily to the ground.

A few hundred yards away they found the body of the glider pilot. Still strapped in his parachute and Sutton harness in the wingless fuselage of the Minimoa, a plane once as beautiful and graceful as a gull in flight.

### Postscript:

Sammy Samson survived to walk and fly another day. Bernard Crome, the glider pilot, was killed on impact. He was a jeweller from Germany who had come out from overseas, reputedly after the sad ending of a love affair. There was a theory put forward by another club pilot familiar with flying the Minimoa: The glider had two identical, pear-shaped knobs just below the panel. One operated the release, the other the airbrakes. This pilot believed Bernard has pulled the airbrake lever instead of the release, then panicked when things didn't go as expected, diving and colliding with the rear fuselage of the tug.

In any case, the Minimoa had completely severed the empennage from the Tiger Moth, hence the tow pilot's spin recovery attempts were ineffectual.

All that remains of glider ZS-GAB is the stick, currently displayed in the club bar at Worcester, Western Cape Province, and the rudder, which is on display at the SAAF museum, AFB Ysterplaat in Cape Town.

Tech info from Wikipedia; story compiled from a radio programme "Death touched my shoulder"; "The Cape Gliding Club", a book by Mike Pascoe. Other details supplied by the editor.



Minimoa

How long has your gap seal tape been sitting? Too long, it does not adhere? You do not need it! Using thin foam, you can seal your sailplane, wings, tailplane, and other gap openings.



Photo by Sean Franke

Shawn here, with another brief informative article on sailplane sealing. Sealing can be simple to rather complicated. I am not going into detail about the proper way to seal your sailplane completely. Some pilots spend a significant amount of time on this task. Sean at Wings & Wheels (W&W) has excellent information concerning gap seals, mylars, videos, etc. I will defer to him. But we will look at some things I have developed or used over the years. Please remember always to ensure that no flight controls are binding or have any interference at all! Let's go!

### **Gap Seal Tape**

How long has your gap seal tape been sitting? Too long, it does not adhere? You do not need it! Using thin foam, you can seal your sailplane, wings, tailplane, and other gap openings. Run the

foam along the wing profile joint, tailplane, spoiler box, and flight controls. See Fig. one @ two below. An excellent foam source is Amazon. This foam must be placed exactly along the profile edge so you do not "squish" it out when connecting your wings, etc. It may take a time or two to master, but it will be worth it. Foam works great! I recommend changing to new foam every annual or condition inspection. For those who derig every time you fly, maybe replace the foam every 3-6 months, as you may misalign the foam from the profile when installing, let's say, the wings, etc. On my DG-1000T, it remains together in the hangar unless I travel to a competition, etc.

### **Foam**

Foam can be attached to the landing gear doors, engine compartment doors, and even between the ailerons/flap gaps and spoiler box edges.

Again, please ensure that there is no control binding. The foam is so small that I think you would be fine, but check it.





"V" seal tape is a good choice for leaky or noisy canopies. W&W has it. (Editors note: See past article on installing V-Seal Tape at https://wingsandwheels.us12.list-

manage.com/track/click?u=8f733e6a3692fbae6d1 01fdc8&id=43951e32b9&e=7efeeb00e1) Foam can also be applied to the canopy if you desire horizontal stabilizer, wing roots, and winglets if you have them. Regarding canopy seals, be careful that the foam you installed will not deform the frame. Also, ALWAYS close and lock your canopy. It prevents frame deformation due to temperature ranges and an unexpected wind gust from a closely taxing towplane. Never leave a canopy unlocked! W&W has an excellent "V" seal for the canopy <a href="https://wingsandwheels.us12.listmanage.com/track/click?u=8f733e6a3692fbae6d1">https://wingsandwheels.us12.listmanage.com/track/click?u=8f733e6a3692fbae6d1</a> 01fdc8&id=6a4158bc28&e=7efeeb00e1

I installed it on my DG 1000, which makes a massive difference in the quietness inside during flight, including high speed (120 kts +). I then removed my small line of foam.

So, using the foam method may save you some bucks and time on sealant tape. Did you know a pilot can spend as much as 30 minutes taping a sailplane? Sorry, Sean!

### Water Drain Holes and Valves

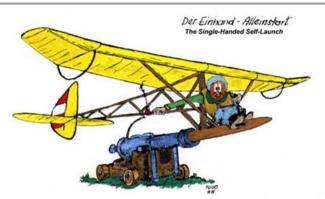
Some like to cover or seal the water drain holes (if you have them) on the bottom of the wing with tape. Having the hole exposed has little effect on performance, if any. DO NOT! My opinion is that when you decide to load water, you will forget! Believe it or not, you cannot dump with that small piece of tape. Some sailplanes (Schempp-Hirth) and most have a drain valve under the wing; for leaking drain/dump valves, simply apply a small amount of toilet bowl sealer around the edges. I think it works very well. Some recommend vaseline. Just to remind you, it is imperative that you cycle your dump valves often. If they are not cycled, they will become frozen. Lube them with a little WD or LPS, etc. Just another quick note: On most sailplane dump valves, you have a small screw-type ball that may be used to install your tailplane, etc. This is also used to pull your dump valve tight after you add water. Do not pull too hard!

### **Add Fabric Softener**

In closing, if you add a cup of Downy fabric softener to your wing during filling, you will prevent water spots from forming on the fuselage when and after dumping!



Shawn Knickerbocker has been flying gliders since the mid-sixties. Is a retired FAA DPE who held designations in Airplanes, Helicopters and Gliders for all rating, including the elusive CFI initial, plus numerous type ratings, he has over 62 FAA authorities as a DPE/SAE/SMFT. He also possesses a TCCA (Canada) License with ATP Ratings for airplanes, all classes (SMELS), plus numerous type ratings and Aerobatic Instructor (ABI) in Gliders for Canada. He was the SME for the FAA in rewriting the Airplane Handbook, Helicopter Handbook and the Glider Handbook and PTS in 2000. He was instrumental in developing the CAP Glider Program for Florida back in the mid 90's to include the "wing runner & tow pilot manual" and has developed many other training programs for the military and US Government Aviation Agencies. He is the current Program Manager for the SSA Cross-Country Instructor Pilot Program. Shawn been flying 58 years, a FAA Master Pilot with over 25,000 hrs. lives at Seminole Lake Glider port. faadpe1604@aol.com. C- 904.382.961



A tug-free launch?

Anton - you think you're under pressure as CFI for the AGC with a wet field? Just be thankful you're not the CFI of Shiflet Field.



# Member's Ads



**PW5 ZK-GAT** 

Ready to fly. Approx 650 hours flying with 211 starts. Two Price Options:

Option 1: \$12,000 Glider, covered trailer, basic instruments (ASI, Altimeter, Mechanical Vario, Radio (Becker), Compass)

Option 2 (Preferred): \$25,000 The Works (Everything you need to fly in airspace, competitions, records)

Option 1 plus; Trig Transponder, ADSB In Out, S100 Vario, easy one-man-rig trailer fittings, parachute,

For negotiation separately: Oxygen system (2 tanks and EDS Mt High regulator). Ready but not previously installed. Ph Murray 0275 875 438



**Drury Hangars x 2** (adjacent hangar spaces, access via southern door access in hangar # 1). The 2 hangars are for sale (together or contemporaneously) and are available after the sale of PW-5 ZK-GAT. Hangar # 1 is the one pictured behind the PW-5 canopy. Ph Murray 0275 875 438

This edition of the newsletter was compiled by Peter Wooley