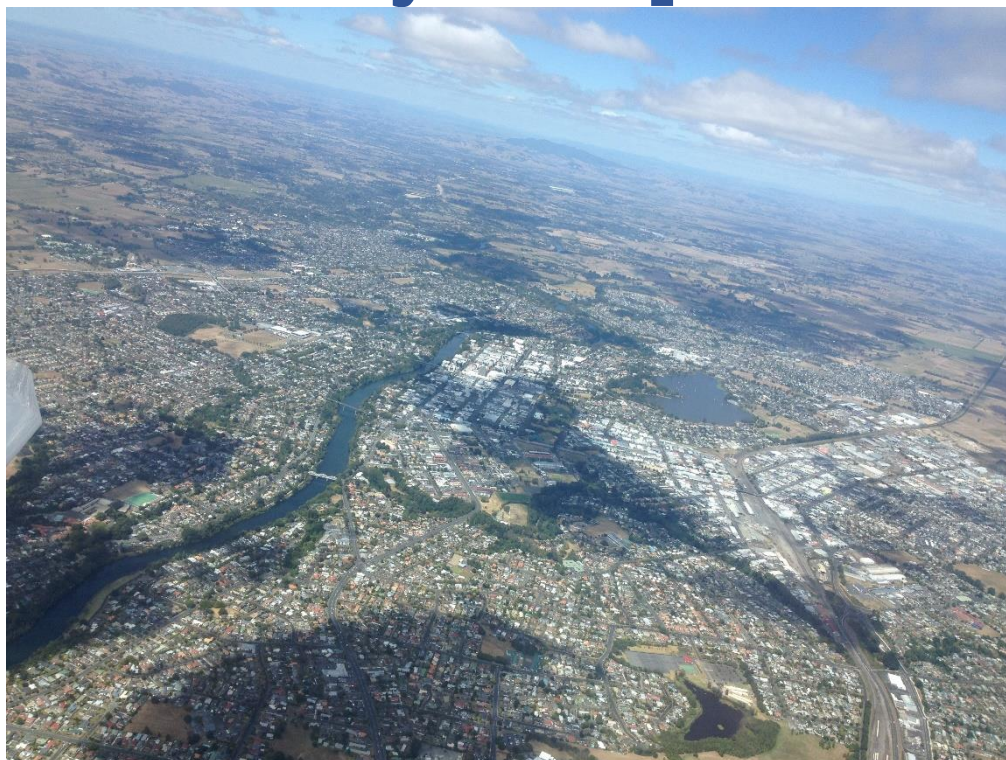


AGC Weekly News

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

The Next Big Event!

Auckland Gliding Club “SUMMERS COMING” Saturday 2nd Sept 2023



Guess where this pic was taken ?

All members, partners, and friends are invited to attend an informal get together to swap plans and lies about the fantastic season approaching - starts approximately 6pm.

Again - Marion Moody with assistance from Anton Lawrence will provide a hearty meal appropriate for this winter, social evening - all cooked in our AGC kitchen – maybe a BBQ.

**Like our last great evening – this is a pure fun social evening
Please !! RSVP to Ross with your name and the number attending.**

rsgaddes@gmail.com



From the CFI

Greetings from Rarotonga. The weather here has been a bit unsettled with the temperature dropping to around 22 degrees and slightly overcast.

I did manage to sneak in a flight, by drone, of the needle in the center of the Island, see photos.



looks to be slightly unsettled with a light SW flow over the Waikato for both days. Sunday looks to be the better day for the ridge.

Russell has offered to fill in for me should there be some interest, so don't forget to make a booking on the Club site and Piako's.



Anton Lawrence
CFI Auckland Gliding Club
021 280 1881

The North Island weather for this weekend in NZ

Some almost vintage gliding

Editor



Now who could this be?

Taken while I was in the Airforce at Hobsonville around 1972, not sure who was in the Slingsby T31 GAL, but I certainly had a few cold flights in it

and even climbed a bit - 30 minutes in those days was a long flight.

Thank you for sending this trip down memory lane in for the newsletter, Russell.

With the airfield Squelch factor still around 95% (but slightly improving), I thought the remainder of the Pawnee historical background story may be of interest to those mechanically-minded club members. Actually, there are a lot of stories that could be written about various interesting things that have occurred within the club's history, which really would make a great selection of short stories. I would like to suggest that some of the older club members actually sit down and write about some interesting "thing" or personal experience, revolving something or someone in the club. It has to be both interesting (and a bit funny) plus be factual. It's actually not that easy, as you cannot promote yourself - rather relate to "we" as opposed to "I"

The kind of interesting stories that could be for example:

- The Ian Pryde method of glider fleet replacement (just do it and talk about it later)
- Morrie Honey's mid-air at Ardmore where he had another glider drive into him from behind.
- There are LOTS of other really fascinating things what have gone on in the past which really need to be documented before those involved make the transition from vertical to horizontal.

My contribution is only a small part of historical Club proceedings and of course, really revolves around the Pawnee. For me personally, it has been a significant journey over the 23 odd years that I was the head honcho tow pilot. I did take it VERY seriously and over time organised a significant number of modifications, which have significantly enabled the tug to still be a very effective launching system today. It still gives me a sense of great personal satisfaction to see it flying at Drury with the overall reliability and performance still being achieved. The level of subsequent committee support and a number of Club members over those years, despite some radical changes, was very gratifying. And also the support and assistance from Greg Ryan from Aerotech, who seemed to have a reasonable amount of faith in my engineering expertise.

This article is the last of three and rather than look at the chronological history, as the previous two articles were, I thought discussing specific topics would be much more interesting and entertaining.

Brief Background

My plan was always to keep CEB as simple as possible. During the first rebuild, we removed all the stuff that was not needed, which included the little seat behind the engine, crew door etc. Most of that was mentioned in the previous articles. I think this approach has assisted in its overall reliability where there are minimal fancy bits to break or fall off.

The four-blade prop

This came about from a comment Frank Gatland made to me on a trip to either Sweden or Norway, about the use of four-blade props to reduce noise. We were always getting phone calls from locals complaining about noise. So, on the strength of that, a now deceased mate and I made a four-blade prop using data from an EAA magazine regarding pitch angles etc (I still have that prop). It is an impressive piece of wood made from southland beech. I did actually give it a test flight for about 30 min or so. It was a little too coarse where if I recall the full throttle RPM static was around 2300 and in the air around 2450. God only knows what the MAP was. The thing I remember is that with a firewalled throttle, the airspeed was significantly in excess of 100Kts (but I had better not talk too much about that).



Around that time, a tow pilot (who will remain nameless) managed to taxi into one of the Fergies, thereby turning the existing metal prop into a modern art creation, plus doing a lot of engine damage. Didn't do the Fergie much good either. After the engine repair, we borrowed a metal prop from Bruce Drake (a well-known South Island dude). When he logically wanted it back, it forced the issue where we organised a 120cm pitch four-blade unit from Hoffmann in Germany (actually it was the only one of three pitch

variations 120cm, 115cm and 110cm which had a US STC). For a year we operated it using the European Form 1 certification until the CAA came on heavy and wanted a specific mod approval. There is a bit of a story there too, relating to my communication with the men from the Ministry, but it was done, and we were officially legal. However, after another year or so we began to experience a lot of real expensive ongoing engine issues, mainly around magneto failures. Discussing this with Hoffmann (their now deceased Chief Engineer) the suggestion was the counterweight behind the prop which significantly increased the rotating mass and reduced dramatically issues of dynamic resonance, was causing the magneto (and other) failures. The counterweight was made in New Zealand from a drawing that came from Hoffmann's back door. You see, if Hoffmann acknowledged there was a resonance issue damaging engines, they could be taken to the cleaners. The funny thing is that a year or two later I got a call from some dude in Sweden wanting to know about the counterweight. Guess what? He got my name from the Hoffmann engineer! While the current prop is not the original, the counterweight remains doing a great job.



The tow rope winch

Again, another initiative from Frank Gatland who saw these operating in Europe. Thinking that would be a good idea to prevent someone getting whacked in the head by a set of tow rope rings, we went ahead and purchased a unit from Tost (Germany). Initially it was mounted just behind the engine, because of C of G issues. With the prop counterweight up front, we were then able to reinstall it just behind the cockpit. Well, it was a bloody disaster. Really pathetic and unreliable.

The problem was that the motor Tost used was just a windscreen wiper motor. When it got hot it lost power and stopped with the rope half out (permanent magnets lose their magnetic force as the temperature increases). It was made worse because the system used a thermal switch to detect an overload (i.e. rope wound in), and then switch off. During that time, to detect the stalled motor excess current, the motor got really hot with predictable results.



However, we felt it was still worth doing, so we organised a totally redesigned winch from Tost, which was a lot more professional and used a much bigger motor. To prevent the stalled motor / overload detection system, we purchased a tricky Hall effect proximity switch sensor in the back-end fitting, which detected the weak link hardware as it retracted and latched off the winch motor control instantly. That system has worked really well for many years now.



Engine

There already has been a lot of historical stuff presented about the engine/s, so I won't cover old ground. However, there is an interesting story. We decided to go for a "factory rebuilt" O-540 engine rather than a locally overhauled one. The

main reason was that the factory rebuilds had a few really nice engineering improvements, like roller cams and better metal formulations in places that counted. So, we went off the Hawker Pacific (Lycoming dealers at that time) and ordered a 260hp engine of the approved version for the Pawnee. All went to plan and we did the installation in the front of the Club hangar. We really emphasised the engine baffle design to make it as tight as a fish's bum to ensure really good engine cooling.

However, a few interesting things happened. The first was when we had it tied to the power pole beside the tractor shed. I was oil priming the engine prior to lighting the fire, and who should turn up but Sue Trueman. She used to live across the other side of the airfield (ex-partner Chris and his dad Reg were very active in the Club for many years and I knew Sue (Sue Peart) when we were flying at Hobsonville years ago. Sue went on to be an Air New Zealand pilot then, later as a project engineer for British aerospace. A really brilliant achievement but was not easy for her at that time.

The next thing that happened was that a well-known club member wandered by (G.P.) and looked at the name plate on our nice new engine. Then said "but this is a 236Hp O-540. Bullshit, I said, because we had specifically ordered a 260hp (High Compression engine). Well, he was right. So bugger, what do we do now. We had a rather interesting meeting with Hawkers. They agreed to provide a new set of pistons at their cost, but we had to pay for the labour to install. Not really an ideal solution but the best we could live with. A lot of communication with Lycoming

indicated that no other change was needed so that went ahead.

The next issue was that the Pawnee was at Drury and had to get to Ardmore. We had run the engine extensively and all was good. I called Greg Ryan regarding an inspection and he asked me if the engine was running OK. I said yes. He responded "well I'll see you soon then". So I had a nice trip to Ardmore behind a 235 Lycoming. Actually, it was really smooth and ran very well. The new HC pistons were fitted and you know the rest of the story. That engine has by far been the most reliable engine that has ever been in CEB. It still has its original six cylinders after 1500 plus hours, and has been on its nose once. Historically unheard of.

To conclude, I would like to clear up some possible misconceptions regarding the towing operation and the Pawnee. Currently it is performing well (when the airfield dries) and compared with the Fatman (which I have been promoting as an alternative) there actually is no operational performance between the two. The only reason for promoting the concept of a Fatman (GA200) into the future, is long term maintenance as rebuilding / restoring a 60-year-old Pawnee, technically these days, is extremely expensive and time consuming. The same basic logic applies to the idea of a microlite towplane where technical advances in engine and structural design make the concept workable. But the principle of "keeping it as simple as possible" is rapidly disappearing.

I hope you have enjoyed the read.

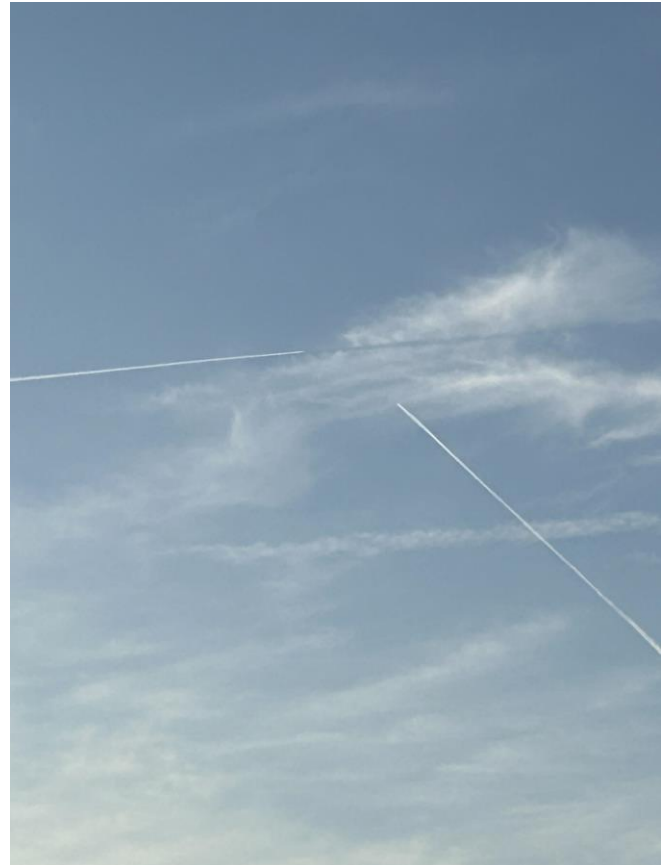


Some pics from Gerard in Europe



Thanks to these rivers, along with the Rhine, we've been mostly riding on good canal paths. With the canicule (heatwave) in full force in the south of France (39C forecast this week), we're having early starts with the goal of being in air-conditioned accommodation by early afternoon.

Hope these pilots had Flarm!



Prehistoric glider at Musee des Confluences, Lyon

Weather prospects for the Weekend

Russell Thorne

Here is an analysis for the weekend weather at Matamata:

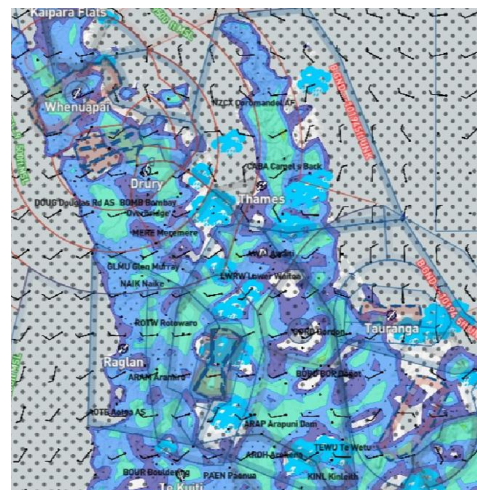
Saturday 26th

Fine with light westerly winds, weak thermals, top temperature 15 deg.

Sunday 27th

Partly cloudy light Southwesterly winds, weak thermals, some showers in the afternoon and evening.

No bookings right now, thermal map attached for Saturday.

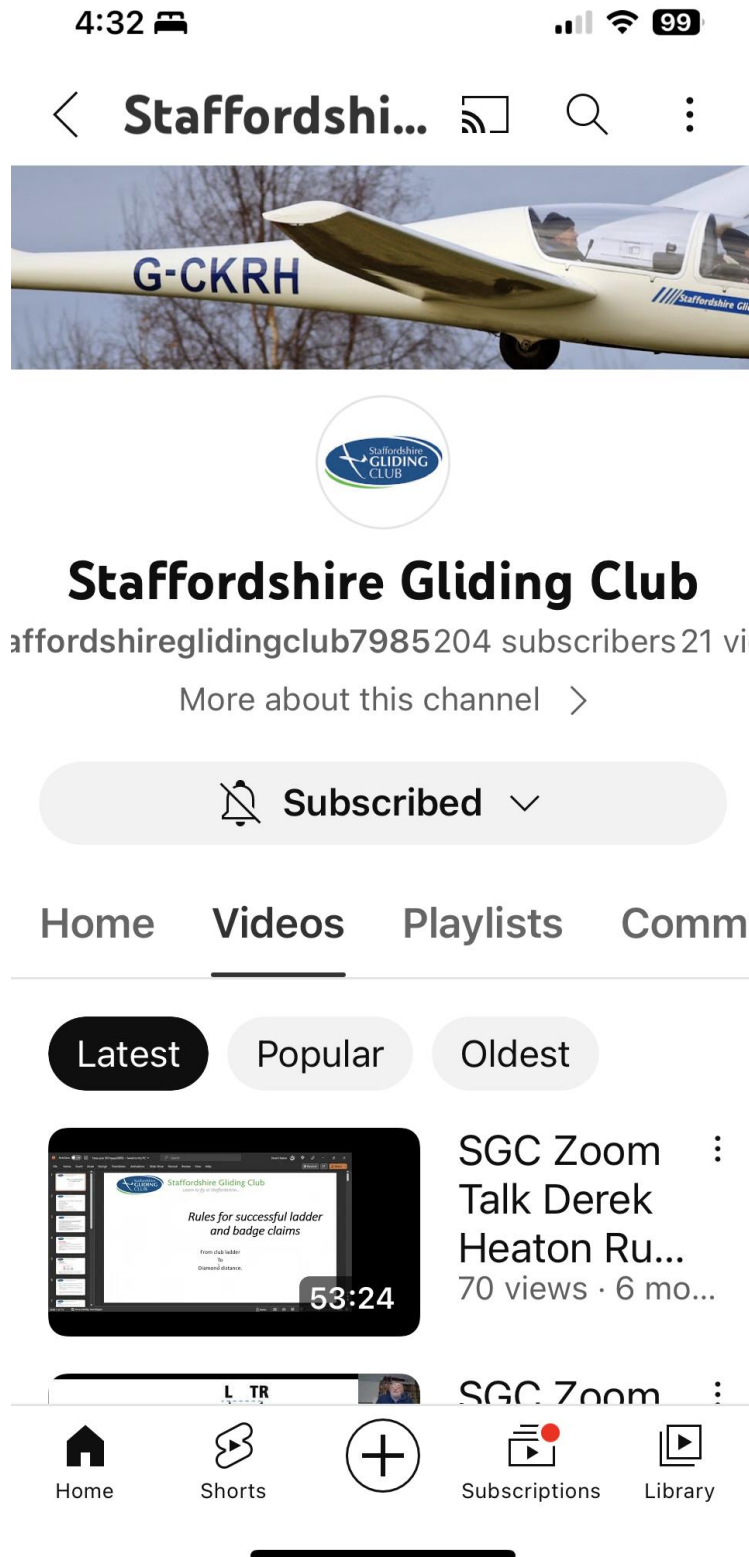


An idea for YouTube Zoom presentations

Gerard Robertson

In the course of looking up UK gliding clubs that I could visit, I came across the Staffordshire GC. They've a YouTube channel where they post their

various Zoom presentations (see clip below). Have a look at this - perhaps this is something our club to do as well?





I had just turned 15 years old in 1991, weighed about 87 pounds and had to sit on two barbell weights to get up to the minimum pilot weight in 1-26 #368. However, this was my second-year flying, and I was now really getting the hang of this! I was not only flying the glider well; I was learning how to soar! I had gotten my Bronze Badge and studied cross country flying. I had realized that this presented a whole new world of experiences for me, and I was ready to see what it had to offer. There were some hurdles to overcome...

Central Indiana Soaring Society (CISS)

My home club, CISS was a typical glider club that sees only a few junior members come and go occasionally and had no real policies set towards those members. One policy they did have was that in order to take a club ship cross country, you had to have your license. Well, this put me in a pickle, because I was not yet old enough to get my license. I had just completed my 8th-grade year which had some speech classes and felt I

was ready to give a pitch to the board of directors as to why an exception should be made to this rule for me. I stood up in front of all those adults and asked for permission to take the glider out. It was granted provided I did the other two requirements for the Silver Badge first, followed by the Cross Country of 50Km. According to my logbooks, the next week I knocked out the altitude gain, (3,281 feet) and the five-hour flight in two separate flights. I had now met all the requirements; I was ready to go!

Flight Instructor Preparation

The day had finally come! All the soundings made it look like a reasonable soaring day. My flight instructor, Don Reid sat down with me to go over the 34NM route I would take from Terry Airport to Shelbyville airport. He had come prepared with a Xeroxed copy of a sectional chart that looked something like this:

Don told me that it would be simple: Just follow the 465 beltway around to 74 and then follow that

to Shelbyville. Don did forget one minor detail in this description: I had never operated a motor vehicle on the roads in my life. Nor had I ever paid any attention to how the interstate system worked. I just followed the line he traced on the chart with my eyes and guessed I would be able to figure it out later. What I did not realize was the number of interstates that run into and out of the Indianapolis beltway. I65, I70, I69, and I74!

Time to Go!

I took off and caught a couple of good thermals right away, then proceeded to head South East. Right away, I snatched a glimpse of the beltway and begun to follow it around. Soon enough I found myself on the South East side of Indianapolis. Here, I74 (The road I was supposed to follow) and I65 merge very closely. I chose the one that looked the most like what I thought matched up on my sectional chart. I did not choose the correct one. Pretty soon, I recognized none of the landmarks on my Xeroxed chart. I kept following the road south hoping I would reconnect and recognize something. In actuality, I had flown off my chart. Soon enough, I saw a large airport that I recognized had a control tower. Having no clue where I was, I decided that the safest bet would be to go ahead and land.

The Landing

Having an old crystal radio with five channels, none of which were the unknown tower frequency or 121.5, I flew overhead the tower rocking my wings. I soon got a green light gun signal from the tower, flew a nice pattern and landed. After I got out of the glider, I pushed it off the side of the runway and began the long walk to the FBO. When I poked my head in, I asked the age-old cross country pilot question: "Where am I"? The man inside responded, "You are at Bakalar, and the man in the tower would like to speak with you".

Talk to Tower

As I trudged up the many, many, many steps of the old WWII tower, I wondered what was in store for me. I also wondered where the heck Bakalar was, as I had never heard of it. It turns out, Bakalar was the name of the old Air Force Base I had landed on in Columbus, Indiana. Anyway, as I knocked on the tower door the man inside signaled me to open it. As all 87 pounds of me stepped inside he exclaimed: "Was that YOU

flying that glider?!" I replied that it was me, and he said, "Hang on". Then, he picked up the phone and dialed what I can only assume was the FAA and said, "Never mind, no need to come out here, it's just a kid". After this phone call, he turned back to me and asked, "Is there anyone you would like to call?"

I replied, "Yes, I would like to call my mom please".

Lessons

After a phone call to my worried mother, and her picking herself up off of the floor at having to retrieve me at a place so far away, the paperwork was submitted to complete my silver badge. After all, I had flown over twice the distance required for the badge, even if I did land at the wrong airport. I have found in my glider education that there are two types of instructors required for flying gliders. One type can teach you how to fly well, the other type can teach you how to soar. Don Reid was both. Without his encouragement, I would have never taken those first steps away from the airfield. It does not take much to kick your young birds out of the nest, or away from the home tree, and I encourage everyone to try some sort of cross country some time in their soaring experience. Even if the sectional was a Xerox, I still wouldn't change a thing about that flight and the lessons I was taught.



Mitch Hudson has been avidly flying gliders since he was 14 years old. He is a retired Air Force Navigator who also has hobbies of exercising his ATP rating to fly regional jets around the country and using his A&P rating to keep all matter of flying machines in the air. Mitch has flown more regional and national soaring contests than he cares to count and has crewed at two World Gliding Championships. He and his wife live in Colorado, keep a hangar in Moriarty, New Mexico, and flies happily with whichever club will put up with him.

Header photo by Mika Ganszaug.

Important notice regarding the coming AGM

Keith Macy

With the 2023 Auckland Gliding Club AGM coming up on Saturday 9th September it is a timely reminder that you need to be a full financial member to be able to vote or have your say. Currently there are a number of members that have not either paid their membership fees or have not made an arrangement with the

treasurer. Invoices have been sent and reminders have gone to those that have not paid. Please ease the workload on your treasurer by paying your invoices in a timely manner. If you do not intend to renew this season then please also advise the treasurer so that he does not continue to send you reminders.

Some video footage which may be of interest



Glider mid-air crash in England

<https://www.msn.com/en-nz/news/other/two-gliders-collide-mid-air-narrowly-missing-town/vi-AA1fpC42?ocid=entnewsntp&pc=U531&cvid=ada4188c8c5a48f0b23b86aa7b3964fa&ei=33>



Glider Skimming the Salt River Mountain Peaks - from Gerard

<https://youtu.be/LRrpKeDa9lo>



High Energy Summer - Racing Gliders in Bosnia – from Gerard

<https://youtu.be/hFMNSPvWoEY>

Auckland Soaring Competition

Drury - 6th to 13th Jan 2024

ENTRIES NOW OPEN

“A competition with a difference” – based loosely on the Competition Enterprise format. This simple competition aims to stretch the skills of all those that enter by utilising the best conditions for soaring and providing maximum fun for all that compete.



The Final Dinner on Sat 13th – will be a special event for everyone

We want all pilots, friends – including partners and family to enjoy this unique soaring event – with a difference.

Competition Enterprise

Enterprise does not seek to compete against modern Championship philosophy, but it does aim to supplement it with an interesting and enjoyable alternative approach, based on the following objectives:

- To fly as much as possible whenever possible;
- To enable a wide range of gliders to participate meaningfully;
- To provide a reasonable measure of each pilot's relative success;
- To provide the maximum fun and interest for pilots and their crews.

To this end:

- Tasks are set to maximise the day's potential.
- Access to some G Airspace has been applied for via CAA/Airways
- Take off times are pilot selected.
- The start sector (usually a 5km circle) and finish line are always open, with no height restrictions.
- Gaggle and team flying are virtually non-existent.
- The scoring system is simple and absolute.

Simple handicapping is applied, the slower older gliders can use this to their advantage.

The speed formula/bonus for getting back is significant but not over-riding if a more enterprising flight results in a land out. Enterprise does not cater for those who want to establish, maintain or improve their ratings. But it is designed for those who fly for the sheer joy and adventure of it all and who wish to challenge themselves to their own limits in a friendly competitive environment, whilst flying their hearts out.

Member's Ads



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 varies. 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