

OUTLANDING

The Taupo Gliding Club's Newsletter



November 2023

Welcome everyone to this edition of Outlanding.

Finally summer is here and so are the soaring conditions. We have seen some very good days of late so come on out and make the most them whilst you can. There have been some awesome flights and some to forget, but in all it is shaping up to be the best season that we have had for a few years.

If anyone has an article or notification to be included into the next newsletter, please have it to Trace by 20 December 2023.

Fly well and have fun! Cheers, Trace



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ZK- TPO Back Online

It was the morning of the practise day for the Central Plateau Soaring Competition when Martin arrived in style. And it was just in time! Martin had just retrieved TPO from Helicopter and Wings at Taupo Airport after a very lengthy overhaul process.



All that is left to be done is a snappy paint job when the weather is better. Well done to Craig Hunter for his time and effort over the last nine months.

Preparation by CFI Colin McGrath

When you fail to plan you plan to fail!



But flight preparation is more than just planning; it includes all your training, all your previous flights and experiences.

Every flight we take has a learning content either conscious, subconscious or both. Tool to improve our conscious learning is to spend some time thinking about the flight (post flight analysis) thinking about what worked what

didn't and why. Talking to other pilots about the flight conditions, what they did, what they thought etc. This all goes to preparation for the next flights.

The moment we plan for something new during a flight we need to do additional preparation for this new task or goal as we haven't previously covered it in our training or experience.

This new task or goal needs to be broken down into its component parts then looked at to see how the components can be achieved and the risks associated with undertaking them. How will these tasks be carried out? Where are we going to carry out the tasks? What are the risks involved with each task? How to mitigate these risks? How to maintain a number of options during each task?

Any goals we set will change the preparation needed. Our experience will change the preparation required. These goals could range from a local flight to a 300 km flight or to test a new piece of equipment.

For a local flight the preparation was done during your training and in your solo consolidation. You have learned what heights you need relative to the local land marks and the glide angle back to the field. The amount of new preparation is quite small relating mainly to the preparation of the aircraft, weather and eventualities.

But if you were to fly at another venue you would need to give some formal thought to the things that are automatic at home (just finding the airfield at some new venues can be a challenge, Matamata being one, (they don't all have a large marker like Mt Tauhara)

A 300km flight has a long list of preparation not limited to but including the trailer, retrieve crew, the weather, the flight track, landable areas around the track, airspace, food, water, toilet, the list goes on.

Trev Terry makes this sort of flight out of Taupo seem easy and he needs little extra preparation on the surface. The reality is actually 40 odd years of preparation has gone into these flights so the effort for each flight is like a local flight for the rest of us? (This is where experience comes in)



A personal example of poor preparation.

On a March day, the sky looked great and I climbed easily off tow and decided to head west out along Poihipi Rd cruising between 5000 & 6000 ft and was quickly almost out to SH 32 when my PDA sounded an airspace alarm I was fairly sure that I was allowed 6500 ft in the area but not 100% certain.



I hadn't really prepared to be out there. So here I was flying around in circles not knowing if I could continue or not. As Taupo Airspace is over two charts which again were not folded for easy use and which one is for the area I'm in (I wasn't planning to use them, I had a PDA with the current airspace in it) there is not a lot of room in the cockpit of a glider when you are trying to unfold and read an A1 sized chart, read it and still fly the glider. Consequently it wasn't long before I had lost quite a lot of height and got very frustrated. Net result I abandoned my westward progression and turned for home more than a little bit annoyed at myself.

Summary

Every flight needs preparation, for simple regular flights the preparation has been mostly done previously

For any flight that has a new twist big or small, to be safe, successful and enjoyable, careful pre-flight preparation is essential. **What, How, Where & Options**

Central Plateau Soaring Competition *by Hugh and Trace*

The central plateau soaring Competition kicked off the soaring season here in Taupo on the 4th of November and we had 13 competitors divided into two classes, Open and Racing. All pilots were looking forward to a good week of flying.



We had a combination of experienced contest pilots, those not so experienced, and a first time contest pilot. The Central Plateau competition is run as a friendly event allowing those first time pilots to gain experience without any intimidation and challenging enough for those more experienced pilots within the different classes.

How the week unfolded.

Practice Day dawned overcast but flyable, and after a hive of activity rigging and checking gliders several pilots had good "shakedown" flights. The following day was looking much better, so after a dinner at the Club that night (all done by Neil Harker), it was to be rest time until briefing at 0930 the following morning.

Day One – It was a great start to what was hopefully going to be a great week! The day dawned a bit cloudy, but developed into a very good gliding day. Most gliders made it round the task which had some quite generous AAT circles, so it was interesting to see who cut it short and who went the distance when the results were published on Soaring Spot.

Day Two - The 1000 briefing described an OK start to the day, but not a great forecast. The Met briefing contained good news and bad news. It was good to the Northwest, but the cloud base was quite low around the field and there was severe bad weather approaching from the Southeast which could have made it impossible to get home, so the day was cancelled. Only one intrepid aviator went flying, and he had a boomer, keeping an eye on the approaching thunderstorms which in the end mostly went around us.



Day Three - Definitely a no fly day. Low cloud and steady rain. The good news was that it was looking good for the following day.

Day Four - Very disappointing. The forecast was quite good and SkySight was optimistic, so a task was set accordingly. Our CPC Met man did express a warning that because of the very wet ground and strong winds and the low temperature that things might not be quite as good as forecast, and it turned out he was right.

We sent up a sniffer (the Met man!) at 1200 and he reported difficult conditions, very broken thermals, and not great cloud bases, so unfortunately we could not launch the grid into those conditions.

A "free flying" day was declared, and several pilots took to the air. They could stay up all right, but not good cross-country conditions.

Day Five - Not a boomer of a day, but good enough to launch, and just two landouts, so we could call that a successful day.

Day Six - Best day yet! It's a rare day when you can glide right around Lake Taupo, but today all gliders in the Open Class got set a task which challenged them to do just that, and all of them achieved it. Well done to you all.



Well done to the Racing Class as well - the day winner was in his first contest. Congratulations to Geoff Thompson.

Day Seven - It was forecast to be a blue day, but a task was set which took advantage of the best-looking area of thermals up the middle of the island to near Thames and back.

A few clouds started to appear around the middle of the day so a launch was made and everyone made a start.

The Open Class coped better with the conditions and had a great day with good distances covered and some really close racing, despite everyone being a bit over time. The first four gliders home were all within 12 points, the first three arriving within three minutes of each other! Great stuff.

The first three of the Racing Class were also close, setting up an intriguing battle for overall placings on the last day.

A catered dinner was enjoyed in celebration of a good week, with most competitors electing to go home tomorrow. The door was left open however, with the Sunday being an official Contest Day.

Day Eight - It was a tough one, but turned out to be a pivotal day for the Open Class. Another blue day on the Central Plateau meant that the three remaining contestants had a tough job getting away on their task to the Waikato and back. Two could not get away, but Steve Forman in the Open Class made it to the Kaimais and far enough back to score enough points to move him from 4th to 2nd place overall! Congratulations to David Jensen and Tony van Dyk on 1st and 3rd respectively.

Geoff Thompson was not able to add to his score, but remained Overall winner of the Racing Class - a really creditable performance in his first ever gliding contest. Well done to Gerard Robertson and Trace Austin on 2nd and 3rd.

All in all it was a good week at Centennial Park. As with any competition or event, there is a lot of work in the planning and preparation and of course in the running of the event. A **HUGE** thankyou goes out to all of those that helped throughout the weeks' leading up to, and the week during the event. Without your assistance the competition would not have been the success that it was. Thank you.



Article - Breaking the Rubber Band by Geoff Thompson

After the cross-country course, with prompting from Trace and with considerable trepidation, I entered my first contest. This would be a challenge for me, as it would almost inevitably involve flying off into the unknown and ending up in a paddock with everything that entails. Still, if gliding is to be worthwhile for me, it is something I need to do.



Sunday 5th of November was the first task day, and getting to the grid was somewhat chaotic and things rushed. However, I got up to 5500ft quickly, but then soon lost a couple of thousand feet as the sky filled with gliders, then blink... they were all gone. So off I went, over some small hills with more tree-infested hills ahead. Beyond lay Arapuni, somewhere I'd never been. The navigator said there was a potential landing site ahead called Maleme Rd, and in the details it said "Stock?" I confess, I chickened out and returned to Centennial Park. No-one said a negative word - only constructive comments, but I am always my own worst judge, so wasn't feeling too good about the situation.

Then it rained, and rained, and rained.

On the 5th day, the water had receded, and the skies were clear; a task was set. This time I was ready early on the grid. Off we went; I made the first turn-point, which wasn't that far out on account of the big circles and turned for the second. Things were getting decidedly gloomy and there was no sun or lift. In the distance I spied a hole in the clouds near Mokai and went for that, but at 1500ft AGL I wasn't going up and a landing was becoming more and more likely. Not too far away was an agricultural strip that I had seen earlier and looked nice, so with one pass over the cow sheds in the hope of a save I landed on the strip. I do like comfortable landing sites. Marc Edgar came and picked me up and it turned out that he was knowledgeable when it comes to flaps and was able to give me some good pointers. Although I didn't make it round, I wasn't disappointed. The out-landing wasn't altogether unexpected, but I had done part of the course, scored a few points, seen Mokai from the air, spoken with the farmer, the glider was back on the field in one piece, and I'd learnt a few things.

Day six was shaping up well. There was a convergence all around the lake, but our task was set in a similar direction to the last two. Over Arapuni to Tokoroa, then out towards the lake and back. Off we went. Not much in the way of clouds, only a few wisps, but they were working in a broken fashion. Over Arapuni and then Tokoroa. I knew this place; I had been here with Bob Gray on the cross-country course from Matamata. The dots were joining up. Ping the circle, off to the next, a bit of a struggle at Mokai in sight of the same strip where I had landed the day before, then back to Centennial. Woohoo; this was a very good day.

In brief, the next day was up to Te Aroha with a landing at Tokoroa and by the last day most people had gone home. A task was set, but the sky was blue and the lift virtually non-existent, so I opted to return to base rather than landing out.

For me I think the temptation to stay within glide of the airstrip will always be there, and it seems to be reset every time you fly. But with the doing and increased familiarity of what to expect, it gets easier. Once the airfield becomes unreachable, things are totally different; the airfield is forgotten and it's then all about what lies ahead, where the next lift is, reachable landing sites, flying the course and the tradeoff between speed and height etc. The competition was a really good experience for me. I made mistakes and I learnt a lot; I appreciated the encouragement and effort everyone put into making this happen.

Dehydration – by Dr Ken Wishaw M.B.,B.S. F.A.N.Z.C.A.

Dehydration is an often forgotten factor in safety and performance in our sport.

As a medical specialist (anaesthetist), fluid physiology and fluid management is a central part of my practice every day.



I'm thirsty

Commonly I hear people only using water to counteract their fluid loss from sweating on hot days, obviously not realising that strict adherence to water only may in fact degrade performance to the point of being hazardous.

A few facts needed to be understood as to why this is so. If basic arithmetic and technical details turn you off, skip to the recommendations!

Our blood and body fluids normally contain 135-150 millimoles (mmols) of sodium and 100 mmols of chloride per litre.

We probably sweat at around ½ to 1 litre per hour on a hot day while gliding. Additionally we lose water at high altitude from breathing air that has a low water content.

What we lose in sweat depends partly on our genetic makeup, but more importantly on whether we are acclimatised. The more acclimatised we are the less sodium and the more potassium we lose in our sweat. Sodium losses for a person that is well acclimatised is of the order of 5-30 mmols per litre. For someone who is not acclimatised (say an office worker who flies one or two days a week) sodium losses in sweat may be of the order of 40-100 mmols/litre.

(As a crude way of gaining an appreciation of these figures, one level teaspoon of table salt, which is just sodium chloride, dissolved in a litre of water equals approximately 100 millimoles per litre). We do possess a very sophisticated sodium control system in our bodies that works well providing we are sufficiently hydrated to produce reasonable amounts of urine. Most of us readily excrete excess sodium in our urine. Conversely we also have a specific salt appetite. Glider pilots with low sodium levels often love salty foods at the end of the day!

Ingestion of water to replace sweat losses will decrease the sodium concentration in our blood, as we are not replacing the sodium that we are losing. Severe acute decreases in blood sodium (say 10%) may cause headaches, lethargy, apathy and confusion. Severe acute decreases (over 15%) may cause convulsions. While this is extremely unlikely to occur in our sport, cases of convulsions occurring in top athletes who only use water replacement are documented. Suffice to say even the mild symptoms are highly undesirable for a pilot!

Potassium losses may cause low blood pressure and weakness.



Small amounts of sodium and potassium in rehydration fluids increases the rate at which the gut can absorb the fluid. Drinking only water, apart from leaving you still dehydrated (because you haven't absorbed the fluid) can make you feel bloated and nauseous.

Pure water ingestion tends to shut off the thirst reflex, even when we are dehydrated.

Taste is a critical factor on whether athletes drink adequately during exercise. Some people love pure water, others loathe it.

High carbohydrate drinks such as energy drinks, fizzy drinks and fruit juice contain 10%-30% carbohydrate. Levels of carbohydrate over 8% inhibit intestinal absorption of the fluid. None of these are appropriate for rehydration during flight.

Sports drinks are not excessively high in sodium. At recommended strengths they contain 10-25 mmols/litre. They are also designed to replace potassium losses. They do contain carbohydrate but this is of the order of 6% which will not impede absorption or cause large fluctuations in blood sugar levels.

Recommendations

Guiding principles (on the basis that you are essentially fit and healthy) should therefore be;

- Do not take off already dehydrated. Remember ground preparation is sweaty stuff.
- On short flights whether we drink water or an electrolyte replacement is not critical.
- On longer flights (say over two hours) we should be aiming to replace what we are losing. Sports drinks are appropriate for this. As we are a "light physical activity in a hot environment", some dilution from the recommended concentration can be used if this makes it more palatable. Which sports drink is not as critical as what tastes good to you.
- The carbohydrate (sugar) content is not harmful. Carbohydrate ingestion could only lead to a problem if a large carbohydrate load is taken at widely separated intervals, with the risk of insulin over secretion and low sugar levels occurring some hours later.
- Never take high sodium loads such as salt tablets.
- Food will help contribute to electrolyte intake
- Heavy coffee and tea drinkers are prone to severe headaches on acute withdrawal. Recent studies have shown that caffeine is not deleterious to sport performance and a small amount on the long flying day before or after the flight is OK.
- For the technically minded or undertaking long flying you should meet these three criteria at the end of the flight. Body weight loss should be less than 5%, urine colour should be pale (drugs and B vitamins can alter this) and urine volume should have exceeded 0.5 (ideally 1.0) mls per kilo per hour.

Northern Regionals *by Trace*

The Northern Regionals Championships were held at Matamata between 18th and 25th of November, well that was the plan anyway. Unfortunately, when you schedule a gliding completion, you also undoubtedly organise wet weather as well. Due to the weekend being wet, the safety briefing was postponed until the Monday and the first completion day was on the Tuesday. From there, there was a task every day. In all there were 22 entries, 10 in Open Class, Eight in Racing Class and Four in Sports Class.



The first day proved to be very difficult, with only two pilots being able to complete the task. The others all landed back at the field.

The second day saw a couple of engine starts, returns and landouts. Yours truly had problems when going to grid and had to renew a tyre and tube. (Not what was needed ☺) This small delay saw me miss the flying window and I couldn't make the last turn point. In all it was a good task.

The third day was more of a ridge run and ridge runs are always fun. If you haven't flown along the Kaimais you are missing out on something special.

The fourth day was another ridge run, more fun. More high speed flight and for me, more technical issues.

The last day was tasked but with no real possibility of completing the task the day was cancelled and a mass derig occurred with everyone packing up and travelling home.

In all it was another great week of flying and comradery.

The overall winners were;

Open Class – 1st – Tony van Dyk, 2nd – Steve Foreman, 3rd – Ross Taylor

Racing Class – 1st – Steve Care and Henry Muller, 2nd – Bob Gray, 3rd – Iggy Wood

Sports Class – 1st – John Tullet, 2nd – Dennis Green

No picture of John as he had already departed.



Upcoming and Past Events

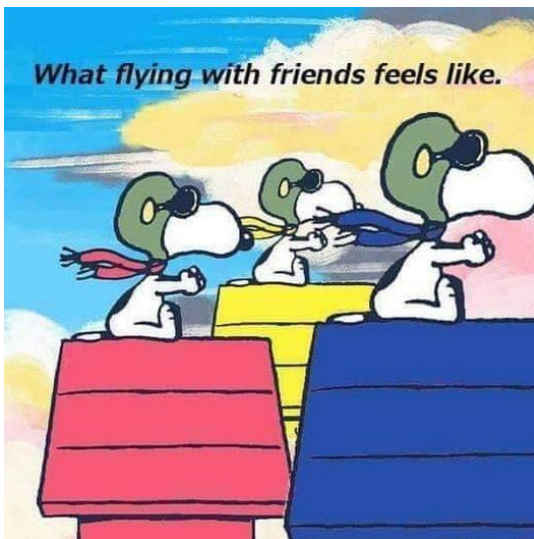
Just a quick reminder about the following events.

- POTLUCK Christmas Party – TGC Saturday 16th of December
- Piako Gliding Club Visit – January 2024
- Walsh Memorial, Matamata – January 2024
- 2023/24 Multiclass Nationals – 19th to 28th January 2024

Martin and Hugh at a very glamorous fund raiser at Wairakei a few months back. They had a similar experience in Las Vegas some five years ago.



Humour



MERRY CHRISTMAS

