

*arion Devoitine*

# KEEP LANDING

**THE PEOPLE'S GUIDE ON...  
HOW TO LAND  
HOW NOT TO LAND  
WHEN TO LAND  
AND WHERE TO LAND**

**SONGS, OFFENSIVE "JOKES"  
AND A STORY WITH PICTURES  
ABOUT SOME PEOPLE WHO LANDED  
IN SOME STRANGE PLACES**





Isn't it great to have summer? Especially Summer at Keepit. Lord Harold Potts in residence in the Lodge, Duke Geoffery of Keepit up at the big house and that hobo Jim Staniforth on his way over with his swag of goodies.

Although as I write, we have not seen the sun for a while, the days are long and warm and the conditions great for flying, even when they are not.

I have consistently failed at flying in cloudy or rainy conditions but I finally noticed that others such as Harry or Tim Carr frequently excelled and in fact flew a task at much the same speed as normal.

The good thing about a friendly club such

as Keepit is that there are people who are more than prepared to tell how they do it and mostly, they tell the truth.

So my last flight before getting home to assemble this newsletter was over four hours and 400 km with barely a patch of sun on the ground, something I could not do last year. Thank you Tim Carr!

My main mentor is Christian Linnet. His principal flight philosophy is to always fly far enough and fast enough to get you somewhere really frightening so you have to fight your way home (or in his case, outland.) So I did on this grey day.

Having got to cloud base when the conditions were moderate, I clung to my

height like a limpet and headed south beyond Quirindi. Christian overdid it, lost contact with the clouds and went into his #2 flight philosophy which is equally appealing. It says that if you get low, select possible outlanding fields which are near a good place for a beer. Spring Ridge apparently has a good pub and you can always get a beer at Sam Cliff's if he's at home.

But then the unexpected happened. Christian managed to get back to cloud base and home and the beer was had with me back at the strip.

Which brings us nicely onto outlandings which Christian also champions and which is the theme of this issue of Keep Soaring.

Garry Speight, who has probably done around 150 outlandings by now, has written an excellent article on this. I can confirm many of his facts from personal experience... 50% of my outlandings have been with Garry.

Last week up at Keepit was very busy indeed. We had a dozen or more cadets with their three shiny DG 1000s busily doing what they referred to (and I will as soon as they have left) as "Opsnormal". Presumably, this is reduced to OPSN in the jargon of aviation.

We had a gang of pilots from Darling Downs in Queensland who had come south to escape what Earl Geoffrey of Keepit refers to as the "stale Queensland air." So great were their numbers that they stayed at the Sport and Rec up the road (and yes, it was closer to Queensland by a few km.)

And we had a number of others too... a pair of Dutch pilots flying the Duo (I never did get the chance to take them to task for things like Dutch ovens, Dutch Elm disease and Dutch caps) as well as two visiting Japanese and French pilots. And Jenny.

Jenny stamped her authority over the peleton by flying hundreds more kilometres every day than anyone else and waddling around the strip each day, stiff from being in the glider.

Since there was no point in trying to be the Alpha Pilot, the rest of us all had a very relaxed time of it all.

And there was FOO... oh, before I get onto our shiny new tug, I mustn't forget to mention the gang of Indonesians up at the club the week before this.

Very shortly after I hung up my hang glider and joined LKSC (which for anyone who does not know, was very recently) Mr Gloomy (not the Earl of Keepit one, the Dave Shorter treasurer one) shocked everyone by saying that if we did not extract our fingers and do something fast and bold, the club would devolve into a weekend only operation and more... (or less if you get the picture...)

While I was training (which was in early January and at the height of the season, the tug or tugs were frequently unserviceable and we had to resort to winching or not flying at all. There were more than a few disgruntled students, some of whom gave up on us completely.

Following that, the manager and a lot of club members, largely inspired by a few enlightened people on the committee, put in an enormous effort to turn things around with the tug and also in every other area of club operations.

Each year, the committee has a group dental appointment over a few days... sorry, a strategic summit at which the state of the nation and future directions are discussed. It's very well run by Tyrant Tim and is an important event, essential in fact, but one where the committee is locked up in a room longingly looking outside at the sky instead of flying in it. But these summits work.

The result of everyone's efforts, managers, members and committee is that LKSC is now the second largest club in the country, active, busy, prosperous and all that, with a good glider fleet and it still remains by all accounts, one of the most friendly and relaxed places to fly. Well done all!!

And now we have a new tug, FOO which is already hard at work.

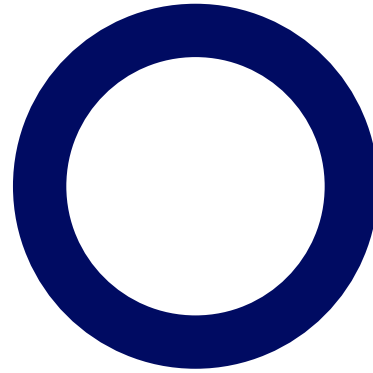
I spoke to Garry Ransby who was the rostered tuggie on one of these very busy days last week and his verdict on FOO was "Love it!" He said the new tug was much lighter on the controls and easier to fly than MRP and as a result, he was far fresher and relaxed at the end of the day than he'd been before.

Enjoy this issue... it's mainly about gliding!

JC



It's interesting to wonder what the world would be like without our imaginary friends. Would things change or would we find something else to fight about?



*You know...for gliders...*

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**SUPPORT YOUR  
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The community of LKSC bakers (and there are a few of them!) are fortunate to have one of Australia's best flour mills right on their doorstep.

Demeter Farm Mill flour comes from the Wholegrain Milling Company at 17-21 Borthistle Road Gunnedah NSW 2380.

A good range of organic bakers flour as well as grains and muesli can be bought from the mill in 1, 5 and 10 kg bags.

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Geoff Sim



# KEEPIT GLIDER TECH

## The Full Time Glider Maintenance Facility at Lake Keepit Soaring Club

Commencing February 2015

For several years, the LKSC Committee has been working to establish a full time maintenance operation at LKSC. We believe this will significantly improve the facilities at LKSC, reduce the time and cost of glider repairs and attract new members to our club. As a result, we are very pleased to advise that Grant Nelson will be establishing Keepit Glider Tech at LKSC early in 2015.

As we all know, the best glider pilots are Kiwi's and Grant is no exception. (See the President's Report for more on this topic.) A long time glider pilot based at Auckland's Drury Airfield, Grant has flying for over 25 years.

In addition to being both a level 2 instructor and aerobatic instructor, Grant is a keen competition pilot having competed in many of the NZ regional competitions - and many of you may recall Grant from his participation in the LKSC Regatta back in 2011.

Grant has an accomplished glider maintenance background, working at Sailplane Services in Auckland since 2005. Grant has the highest of glider maintenance rating in NZ, and we are in the process of having these recognised in Australia.

Grant's ratings include:

- Form 2 inspector for:
- Fiberglass, Carbon Fibre & Kevlar



- Wood
- Metal
- Radio Installation and maintenance
- Maintenance of engines, engine controls, instruments, fuel systems, props and prop belts and drive systems
- Major repairs of fibreglass, carbon fibre and Kevlar gliders
- Glider refinishing

Keepit Glider Tech will operate as a GFA approved maintenance organisation (AMO) and Grant, in conjunction with the LKSC committee, is working with the GFA to ensure that the maintenance facility meets the workshop requirements as stipulated by the GFA and to get Grant's ratings recognised in Australia.

Keepit Glider Tech will be a commercial operation separate and distinct from LKSC, other than as a tenant

of the Club's maintenance hangar. Plans have been drawn up to fit out the hangar for the maintenance operation, including a full spray painting booth on the side, however it will take a number of months to get the facility fully constructed.

As Keepit Glider Tech is a commercial operation, the Committee kindly asks that LKSC members respect Grant's space and his equipment.

The responsibility for the maintenance of LKSC's club fleet will remain in the capable hands of the Club's Airworthiness Officer - David Bull, who will continue to organise the Maintenance Week during August each year. However, the Club's Manager will be able to utilise Grant to assist with minor inspections or repairs to ensure the Club's fleet is online as much as possible.

Grant will be residing on site at LKSC in another cottage similar to the Managers cottage behind the Club accommodation. This will ensure that in conjunction with the Manager, we will always have someone on site, to assist with 'caretaker' responsibilities during quieter times.

Grant will be arriving at Keepit at the end of January 2015, and will be setting up his workshop and working with the GFA to have the workshop certified. In the meantime, Grant will be available to assist with Form 2's and minor repairs until all the GFA paperwork is completed. Should you be planning any work on your pride and joy this year, and wish to contact Grant to undertake this, he is contactable on his email address [keepitglidertech@outlook.com](mailto:keepitglidertech@outlook.com)

The Committee asks that all Members welcome Grant to the Club.

Mates" have you read what I just read on the page before?????

"Everyone knows that Kiwis make the best glider pilots on the world?"

I nearly choked on my Weeties' Who writes this stuff??

As it was, the missus had to clean the screen of the electric thing with the words on it and in her state (which I have to say is nearly perfect now) I'd rather keep her for more useful things ~~such as washing up and the like.~~



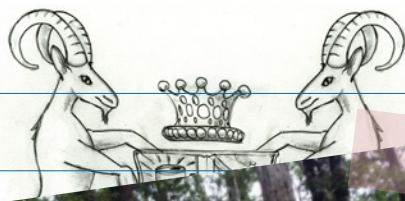
A few of youse know Grant from the Regatta, and he's not a bad sort of a bloke... as Kiwis go, but it's not like he's a Victorian or even an Aussie"

FROM THE  
OFFICE  
OF THE  
PRESIDENT

Now some of youse may think that's a good thing 'cos it balances the poms if you catch my drift hehehe...

I know that you're all be going to make fun of his iccent heaps, I know I will but before you say "fush and chups" and "cozi bro" too often, remember he'll be quite a useful cove at the club.

Cop a Captain Cook at some of the gliders he's fixed and you'll see what I mean.

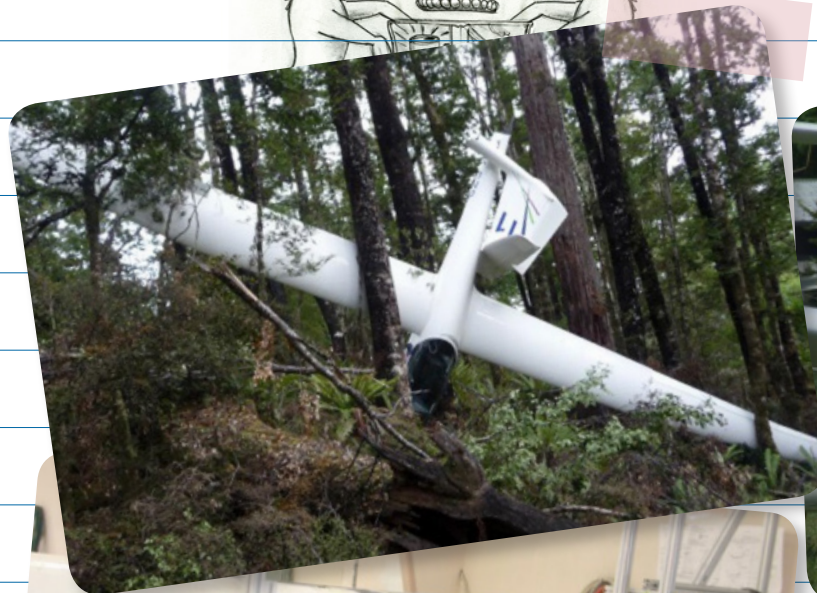


Obviously, being the best glider pilots in the world doesn't mean you don't wreck more than your fair share.

We must recently have had a few budding champions around here judging by that standard.

Do you think the tail looks straight on that one?

I guess Kiwiland is so small it's best that the gliders can turn well... we don't want them trying to cross the pond by mistake.. if they made it, we'd never hear the last of it!"



Have any of youse seen that video "Beached As" which takes the puss out of some Kiwi Whale?

Well just get it on your phone and leave it on high rotation. That'll make Grant feel right at home... heheehhe.

So enough of the Kiwi bashing eh? No more chully bun jokes etc. ~~And have you heard the~~

Here's some signs of a few more Ace Kiwi pilots...



What on earth have they done to this glider?? Flown it into a road sign by the look...

I'm a great believer in people learning how to drive before they can fly... I mean, at least they know what the plurry signs mean!



When you see this sort of thing you can understand why it costs so much. What's wrong with builder's boy for a scratch like this?

5 minutes, good as new.

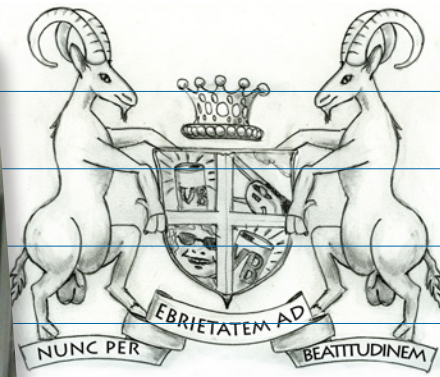
I hope we're not subsidising their insurance!

Look at this one below! Looks like they were trying to bury it... or whack the thing with a front end loader to claim on the insurance!

Still, I guess you should not laugh at folk who are really povo.







Dave "son of Lee" Braithwaite has taken up the summer tuggies role as most of you will be aware. His love of the tuggies caravan is like Lee's love of the donga"



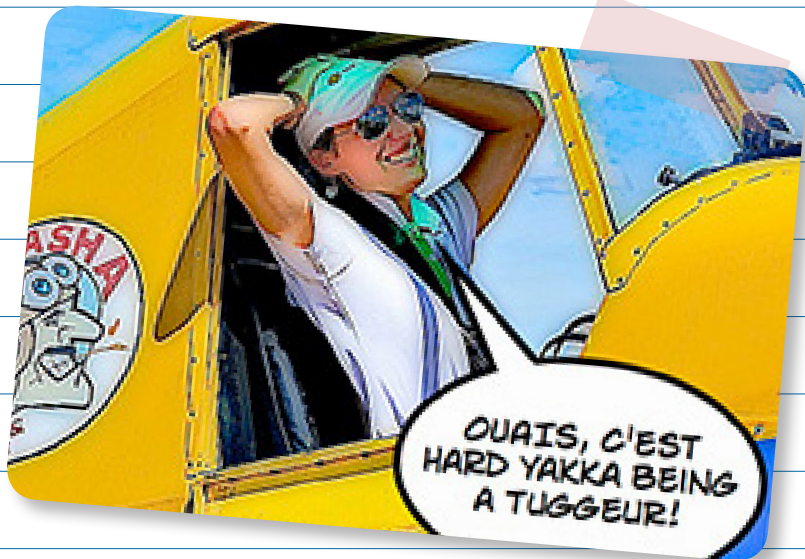
All those piccies of bent gliders are making me feel a bit poorly!

Anyway it's been a significant year for the club with me as pres.

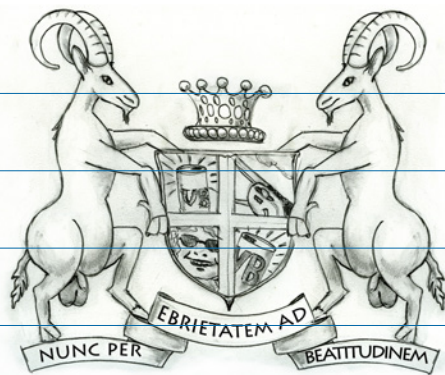
We have welcomed Val Phillips as Manager and Val continues to grow into and enjoy the role even if we can't get a decent piccie of her!

Training continues at a great rate with Mike Birch giving much appreciated assistance to Val. Hope he rides that quad better than me!

Romance blooms amongst the tuggies with Elodie Courtois and Dave Keogh now ~~roo~~ ~~up to no good~~ doing the holding hands fairly vigorously.



Now that El has completed the Australian conversion of her European qualifications, Dave and El will be carrying on ~~like rabbits~~ furthering their flying careers in South Australia.



Many thanks to all concerned for your continued efforts in making LKSC such a grouse place to fly and to visit.

It takes all sorts of people to make a club work and there are a lot of quiet achievers who do every bit as much as the loud ~~notorious~~ ~~christ bows~~ more conspicuous ones (you know who you are!). All contribute to the success that is LKSC.

Finally, may I wish each and every one a safe and happy Australia day - Ozzie ozzie ozzie etc.

I would have said happy Xmas and all that and had my Santa cossie all ready but the newsletter chappie was up to his elbows stuffing turkeys... or so he claimed.

For those who are continuing to recover their health, continue the process and we all look forward to a happy and healthy 2015

Me Downes Ian

# FROM PEDESTAL TO DEEP HOLE

*Dave Shorter*

*This article is reprinted from a 2009 Keep Soaring with Dave Shorter's permission.*

I sat in the cockpit of my broken glider furious with myself and cursing my stupidity. I couldn't believe I'd done this. What an idiot! The canopy was shattered, dirt all over me from the impact and I could see daylight between the rudder pedals. I cursed myself again as a couple of bystanders appeared at my side. How could've I done such a stupid thing?

I'd had a very heavy landing and was feeling very disgusted with myself. Now, months later, I would just like to forget it all and put it behind me, but that is impossible. In my mind I have re-run the accident over and over. Unfortunately you can not run it backwards and start again. If only!

It was Saturday, the last day of the Qld State Gliding Championships at Warwick and we were heading for a turnpoint at Dalby. My week had been good with a few reasonable placings. On Day 2 we'd had 11,000' convection with streeting, followed by a big change in conditions when we tip-toed over wet ground in blue conditions and convection back down to 7000'. Things worked well for me that day and I ended up on the pedestal. What a pity every other day was not the same.

On the last day I was still placed near the leaders and was anxious to put in a good result to finish the Comp. The task-setters obviously thought conditions would be OK and they set a fixed task around Dalby airport, then south and home. But it was pretty thin, and blue. (Eventually only 3 of the 16 standard class starters got home – the rest outlanded.)

I started at 5,700' and after a few useless bubbles flew straight down to 2,500' (QNH) and breathed a very big sigh of relief when I managed to scrape out of that hole with a 2½ knot thermal. I was joined by a couple of other gliders, but it was so weak I pressed on and was rewarded with a 4½ knot thermal which took me from 3600' to 6,600'. "This is beginning to look a lot better", I thought as I left that thermal and pressed on. A couple of top up thermals

of 3 knots and then I was back down to 3,400' again and took a big deviation to join a couple of other gliders in a weak climb.

We were climbing at around 2½ knots and drifting in a 10 knot headwind from the north.

I still had water ballast on board and with another glider below me I could not dump it. Remembering the earlier 4½ knot thermal I got impatient with this climb and at 4,700' I decided to move on and find something better.

The Warrego Highway was just a few kilometres north and I figured that the movement on the road, and the fence and tree line along the road might trigger some better lift, or at least buoyant air.

What a mistake!

But it need not have been the disaster that it turned out to be. There are plenty of good paddocks alongside that road into which I could safely land.

I cruised along just south of the road for 10 minutes, dumping water as I got lower. I tried a few buoyant bubbles ... climbed a few feet, and lost them again.

I had a fallow stubble paddock selected and arrived alongside that at around 600' with the intention of joining a downwind to land in that paddock. But just as I arrived I again found another buoyant bubble and put in a few turns in a last effort to save the day.

It was tantalizingly promising. "Can I find a core? Can I climb away from this?" It was a bit like the Sirens of Greek mythology luring mariners onto the rocks. I got sucked in by my own determination to save the day and in the process overlooked any downwind landing checks. I did not break off the flight until I had done four turns, gradually getting lower and drifting down onto the base leg for the paddock. At all times I had a safe approach into the paddock, but I really did continue turning far too long.

As I was now on base leg and a couple of hundred feet AGL, a landing was now inevitable and I joined final for a very normal approach into the field. If I had just proceeded without change from there it would have been just another outlanding into a very good paddock with at worst a few scratches to the glider. I was naturally keen to avoid any more scratches or dings from outlanding as I had just cleaned up and repainted some scratches and stone chips on the underside of the glider.

At about 10–20' above ground I suddenly realised the landing wheel was still up. Without thinking I grabbed the gear lever and started to put down the wheel, in the process probably releasing the control column. In an instant, the time it took to look at the gear lever to locate it, and look back ahead at the landing, the glider had pitched forward and I was now headed nose down into the field.

I remember the feeling of horror looking down at the ground but can't remember the impact. Three onlookers appeared very quickly to assist. How fortunate it was not a remote paddock.



I could only reply to their questions of concern with expressions of fury at myself and my stupidity for trying such an idiotic last minute correction. A few scratches on the belly would have been nothing compared to the final result.

They called an ambulance, who were required to lift me out of the cockpit ... I suggest that if you ever expect to use an ambulance in Queensland take out insurance ... as a New South Welshman it cost \$930 for a 5km trip into Dalby hospital. But they were a

couple of very professional paramedics and got me safely into hospital.

I have castigated myself over and over and become very frustrated and grumpy with my wife as I have recovered from a broken breast bone, a very sore back and stiff neck. But I was very fortunate that my physical injuries were not worse. The bruising done to my ego was not quite as easy to recover from ... but I might have been in a wheelchair.

So what can I, and others learn from this experience. All accidents are normally the result of a chain of events, and this was no exception.



1) I was very determined to keep flying, as

I was doing reasonably well in the Comp rankings, and allowed that objective to overshadow normal considerations of when to break off a flight.

2) This meant that while focused on a last minute save, this overshadowed the need to do normal downwind landing checks.

3) I allowed myself to be "sucked in" by the last minute tantalizing possibility of a save.

4) I disrupted a normal steady approach on final with an attempt to fix a last minute problem.

5) I took my eyes off the field, and hand off the stick, at the most critical moment ahead of landing.

I believe that all this boils down to attitudinal errors and I am exploring this in my own mind as I need to rethink some basics of my attitude to flying.

The basic training we try and drum into students and had drummed into us, was done to protect against these situations. Under stress we can make very poor decisions, and if at the last moment we are confronted with sudden problems, the decisions we make in stressful situations can be very poor.

The basic training, of downwind checks and circuit planning are designed to eliminate such possibilities arising.

I omitted those and paid the price.



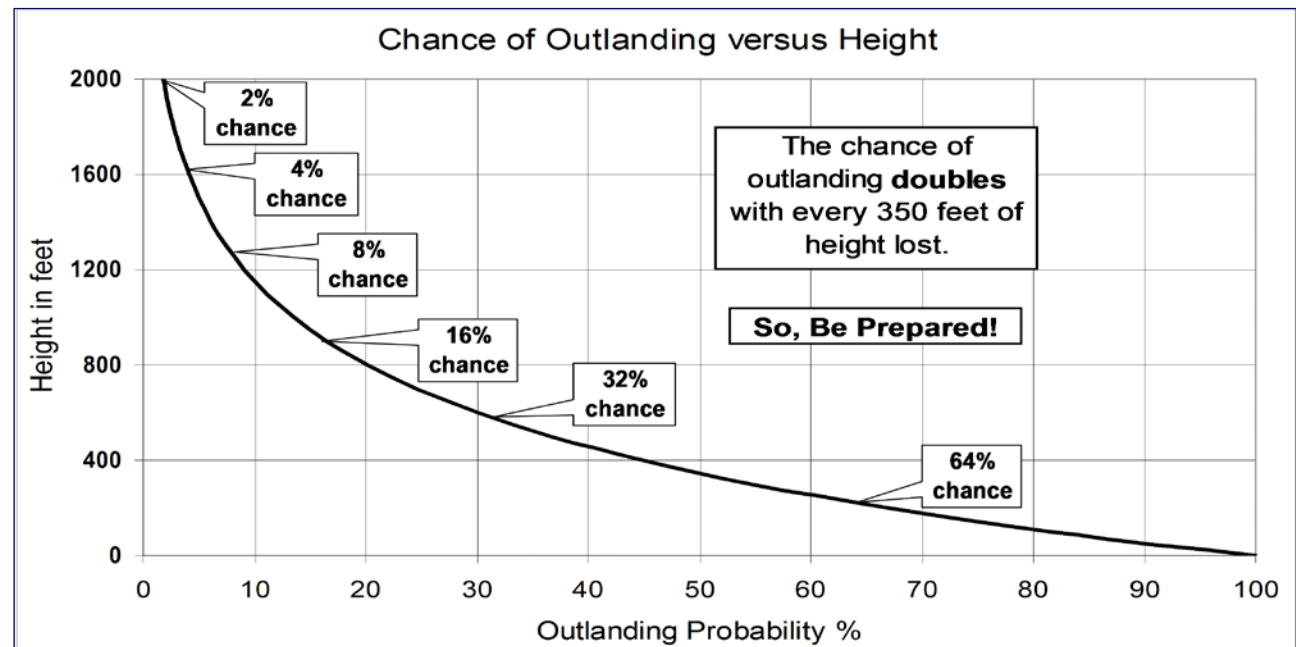
By Garry Speight

Disclaimer: I am talking about gliders that have no engines. Others are better qualified to talk about the other kind.

## THE CHANCE OF OUTLANDING

On a cross-country soaring flight there is always a chance of outlanding. During a competition task, the chance is small, so long as the pilot is flying several thousand feet above the ground. I have suggested that a pilot, by sensible selection of thermals, can keep the chance of outlanding down to about one chance in two hundred (that is 0.5%). Very cautious pilots may keep the chance even lower, while very bold pilots may habitually accept a chance of around 5%.

When any pilot flies down through 2000 feet above the ground, the odds are different. The chance of outlanding must increase, because there will be few thermals left within range, or perhaps none!



My first graph is a plot showing how the chance of outlanding increases as further height is lost. (My maths is rough.) At ground level, an outlanding is guaranteed (100%); at 2000 feet, I have plotted the chance as 2%.

The chance of outlanding increases very rapidly. According to this graph, the chance doubles with each 350 feet of height lost, and that happens every three minutes!

As an outlanding becomes more and more likely, a pilot who has not already planned how best to make a safe landing is in danger. Under the pressure of each new unnoticed hazard, the pilot's errors grow like an avalanche. Often, the result is a crash.

Competent pilots prepare for outlandings in good time; they act in a calm and methodical way that makes crashing very unlikely.

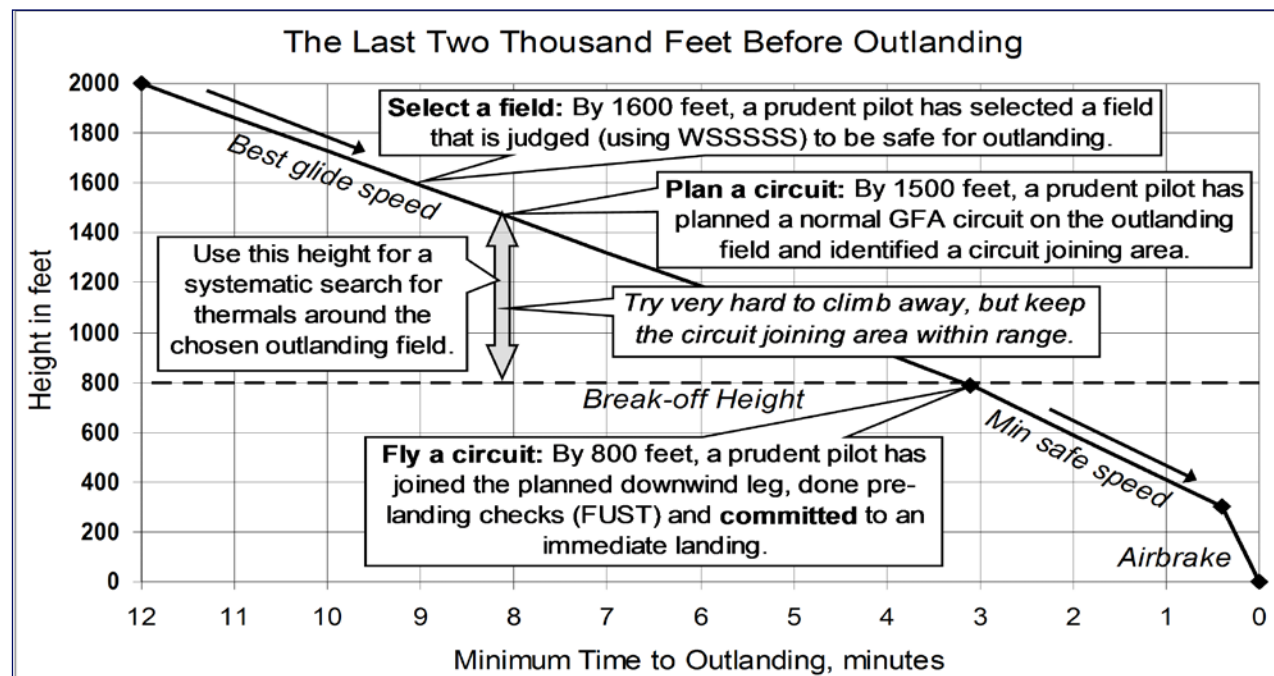
## MAKING OUTLANDINGS SAFE

### USE STANDARD PROCEDURES

One can imagine landing situations that have very different risks of a crash. At 2000 feet above an aerodrome such as Gunnedah in fine weather, the risk of crashing is very very small, perhaps 1 in 10,000. If that aerodrome became covered in fog, the risk of crashing could be close to 9,999 in 10,000.

Generally, however, a pilot who is soaring cross-country can keep the risk of crashing on outlanding very small (well below 1%) by following standard procedures that are in the GFA training syllabus.

Each cross-country pilot will have been "checked out" as competent in these procedures. However, they must be practiced frequently and seriously to ensure that they will help when they are needed. That is really up to the pilot!



## PROCEDURES FOR SAFE OUTLANDINGS

### The sequence

The graph above shows the sequence, height, and timing of the procedures that must be followed to ensure the safest possible outlanding:

- (1) *Select a safe field;*
- (2) *Plan the circuit for landing;*
- (3) *Fly a standard circuit.*

### Procedure (1): Select a safe field.

During a soaring cross-country flight, you must have a safe place to land at all times. So long as you are above 2000 feet above ground, it is safe enough to simply keep aerodromes, airstrips, and cropping country (not cotton) within range.

When you are below 2000 feet above ground things get serious! You must not fail to notice when that happens. You must then identify at least one safe landing place before you get much lower.

Scan fields that are one or two kilometres from you: near enough to see details, but not hidden under the glider. Given the choice, look at fields ahead on track, so as not to have wasted time if you can continue.

A suitable field must meet all the safety requirements (WSSSSS): Wind, Size, Surface, Slope, Stock, and Surroundings. Get this procedure completed by 1500 or 1600 feet above ground if you can.

### Procedure (2): Plan the circuit for landing.

As soon as you have decided on a safe landing place, plan the circuit that you will do, just as you would at your home airfield.

If circuits to the left or to the right are equally suitable, you can leave that undecided. Identify, and keep in mind, the position of each circuit joining area. You may need them. Get this procedure over by 1500 feet above ground.

### **Procedure (3): Fly a standard circuit.**

Arrive at the chosen circuit joining area at the height that you usually do. (A height of 800 feet above ground is safe: competition pilots in current practice may be safe a little lower.)

Prepare the glider for landing using the standard pre-landing check (FUST). Fly a normal GFA circuit, ignoring any signs of lift.

Attempting to thermal away after joining the circuit is very unwise: thermals below circuit-joining height are treacherous.

## **CATCHING THERMALS BELOW 2000 FEET ABOVE GROUND.**

The three procedures above are essential, and must be given top priority. That does not mean that you can't thermal. If, by chance, you meet strong, workable lift while doing Procedure (1) or Procedure (2), take it! It will soon lift you back above 2000 feet, and you can move on.

Once you have completed Procedure (1) and Procedure (2) by 1500 feet, thereby shedding a load of worry, you now have 700 feet left to look for a thermal before getting down to circuit height.

Sinking at 140 feet per minute, you have five

minutes to spare. At 50 knots, you can explore nearly eight kilometres (4.17 nautical miles).

Use your height wisely: plan a systematic search pattern through likely thermal sources. This pattern should end at a chosen circuit joining area.

Your thermal search can have four possible outcomes:

- (1) No lift at all: you must enter the circuit for a landing;
- (2) One or more very weak thermals, each drifting away: at some point you must give up while still able to enter the circuit;
- (3) As in No.(2), but finally there is a good thermal: you climb away;
- (4) A first thermal that is good: you climb away.

## **MENTAL DISCIPLINE**

### **DISCIPLINE IS VITAL**

It takes mental discipline to learn, practice and adhere to these outlanding procedures. But, in any case, mental discipline is essential for success in cross-country soaring. Safe outlanding is just one of many skills to be perfected.

### **CIRCUIT DISCIPLINE**

Instructors require students to show discipline in planning and flying circuits before letting them go solo. I believe that it is GFA dogma to treat each circuit as a practice for a cross-country outlanding. However, few instructors or students take this as seriously as they should.

I find that some students do their pre-landing FUST check well before entering the circuit. When facing an outlanding, putting the wheel down when you still hope to thermal is almost bound to result in the wheel being down when it should be up, and vice versa.

**I practice and teach that the pre-landing FUST check marks a decision point. It signals the end of soaring flight, and I will not soar after I have done the check. Because I have this rule, I never do the FUST check any earlier than is necessary for a safe circuit.**

Circuit discipline remains vital as a pilot progresses. As a pilot advances to higher performance gliders, she/he should practice doing circuits at heights and angles that are appropriate to a glider of that performance, both at the home field and in outlandings.

### **DISCIPLINE IN FIELD SELECTION**

The main point is to be alert, and not miss things that indicate that you are less than 2000 feet above a landing place. As the first graph shows, you are at risk if you leave outlanding planning until you are lower.

Getting this low happens quite frequently during cross country flights. That gives priceless opportunities to practice the field selection procedure.

Practice it as a drill!

Usually, there is no-one watching you to see how prudent or careless you are. I realise that I have an advantage there. As I have so often had to demonstrate this procedure to trainees, I have had to keep current in my procedures. That is how it must be for others too.

# NOT OUTLANDING

(HOPEFULLY)



If you fly a self launching glider or a glider fitted with a sustainer, the chances are that you are unlikely to have to make an outlanding. Unlikely... but not impossible.

The problem is that the motors fitted to gliders are far from 100% reliable. It's claimed that self launchers are more reliable, or rather less unreliable than sustainers, because the motor is commonly used for self launching so in most cases, when it is required to prevent an outlanding, it's already been run that day.

Pilots who self launch get used to engine starting procedures and although starting in-flight, especially low-down is considerably more exciting than self-launching, the procedure is very much the same which makes things a bit less stressful.

Sustainers, especially two stroke sustainers are not built the same way as the motors used in self launchers.

They may only be run a few times a year. Motors can get cold soaked while airborne so that when you want to use them, they're at their most temperamental. There's no starter motor so the pilot has to dive to increase speed until the motor windmills and hopefully starts. Increasing speed while aiming at the ground when faced with an imminent outlanding may be too exciting for most pilots.

This is not just my negative appraisal of the situation. Here's what it says in the manual:

*With a motorglider never rely completely on the engine extending and starting. Plan your flight path so that you are always able to carry out a safe outlanding if necessary. Be aware that with the engine extended but not running the rate of sink increases remarkably. This means that with a motorglider you have to decide earlier for an outlanding than with a pure sailplane.*

And:

*With a motorglider never rely completely on the engine extending and starting.*

*Plan your flight path so that you are always able to carry out a safe outlanding if necessary. Be aware that with the engine extended but not running the rate of sink increases remarkably. This means that with a motorglider you have to decide earlier for an outlanding than with a pure sailplane.*

So what this means is that to fly safely, you need to cease gliding and start landing at more like 1200' than the 800' suggested by Garry. Just as with an un-powered glider, you should always have an outlanding site picked out below 2,000'. You should also have agreed on an engine starting height with yourself.



Normally, you can tell what sort of day it is and should know well in advance what the chances are of outlanding or starting the motor are. This means to some extent that your engine-starting height will be based on the overall chances of finding a thermal, remembering of course than on a 10,000' boomer of a day, the thermals are a lot further apart than on a 4,000' day! Nevertheless, the air has a feel and if it feels lifeless, then start the engine early.

In my (limited) experience, there are two ends to the spectrum when facing an outlanding in a self launcher. At one end, you are in catastrophic sink. The sink-o-meter is off the dial and you are falling out of the sky. At the other end, perhaps at the close of an otherwise good day, the air may be still buoyant but there's just not enough lift to get you home.

When you're in sink city, you don't have a lot of time to do anything so you must prepare well in advance and most likely, have a landing field picked out at 3,000 or 4,000 AGL. Sink city normally extends well higher than this!

Let me give you two examples of big sink and how it shortens your decision time.

1. Once, when caught at the end of the range near Manilla, I was in sink of over 1,000 per minute which had lasted for some time. I was being drilled and although I snaked and sped away from where I thought the sink was, it was plain that I was going to be on the ground very shortly.

I set up on the Manilla strip and started the motor. For several minutes I had a climb rate of zero instead of the normal 800' per minute.

2. On a safari, a group of us were flying at 13,500 towards Coonabarrabran, into a 24 knot headwind when we suddenly encountered widespread sink, off the dial. Of course, the headwind should have been telling us loud and clear that wave was likely, especially when flying towards a range like the Warrumbungles... but if it did say anything, none of us took much notice!

Within 15 minutes, I had lost 9,000' and was heading sideways towards the Pilliga with no sign of lift. Well, this time I got away but only just.

The point here is that an outlanding may be only a few minutes away, whatever your height.

If it is late and the day has ended (at least for you!) or if it's plain that soaring conditions are over, then don't piss about. Start the engine early, at a safe height. Why risk anything else?

## BEFORE YOU START.

There are several things you do before starting the engine while you are continuing to search for lift. One of the most important is to turn the fuel on. Countless people have outlanded with self launchers and sustainers with the fuel turned off... so many in fact that most pilots leave the fuel turned on in flight.

Engines are noisy, so wearing a headset or earplugs is common because it's hard to think with a lot of noise going on. I prefer to wear a headset because it is quick to put on and quiet. Mine is stowed on the headrest so it is a second's work to put it on.

I make a point of putting the headset on, well in advance so I have time to think. I may wind the vario up a notch and concentrate on searching low down

but I have climbed away countless times with the headset on.

As you get lower, all the time searching for lift, you can go over your engine starting check-list. Many pilots have a check list on top of the instrument binnacle which can be flipped down when required. For most of us, flying while feeling for thermals is instinctive so giving some time to preparing to start the engine is easy enough

There's normally a maximum speed at which you can raise the engine and flaps may have to be lowered too. Often, when searching, you'll be close to this speed, but if you are in big sink the chances are that you'll be flying fast have to pull the stick back, otherwise you may strain the engine raising mechanism.

Some pilots recommend lowering the undercarriage at an early stage so that if the motor does not start, it is one less thing to think about. I prefer not to, because I hope I will remember to complete a FUST check at the normal time.

By the time you are near your decision height and ready to abandon soaring, you must be very close to your chosen outlanding field. Because of the unreliability of glider engines, Plan A is that you make a normal and safe outlanding. Plan B is that the engine starts and you climb away.

In fact, it may not be quite that simple. Sustainers, though they might fire, may not run or reach sufficient revs to allow you to climb away. For that reason, for sustainers, Plan B may be to circle the landing site until you are confident that the engine is running well.

For that reason, the outlanding plan procedure for sustainer powered gliders may not be identical to self launchers.

In a self launcher, you would normally attempt to start the engine on the downwind leg. Some pilots recommend that with sustainers, where the starting procedure involves diving the glider fast enough to windmill the propellor, you attempt to start the engine on finals. This way, the height you lose while trying to start the engine takes the place of airbrakes and if the motor does not start, you land straight ahead.

The drawback with this procedure is if the engine does not get up to revs properly and soon, you'll run out of airstrip ahead of you... so choose a long strip!

## RAISING THE MOTOR

With most modern self launchers, the process of raising the engine is a very quick procedure. Slow the glider, pull the right amount of flaps, flick up the ignition which raises the motor, flick from TE to static and hold down the starter button.

When the engine is fully up, the starter motor will kick over and when the engine is running, you increase revs and climb away. With older self launchers, there may be half a dozen more procedures to perform and all this takes time and increases the stress level... remember, you're about to outland!

When the engine is raised, it acts like an airbrake. With a modern self launcher, *"in a normal restarting situation the loss of altitude from starting the extension procedure until the engine is running is only about 70 ft"*, so says the manual, but many things can conspire

to make the height loss considerably more.

If the battery is a bit low, the engine lifting mechanism is slow or tired or you are flying a little faster than you ought to, extending the engine can take a lot longer... perhaps enough to lose 300'.

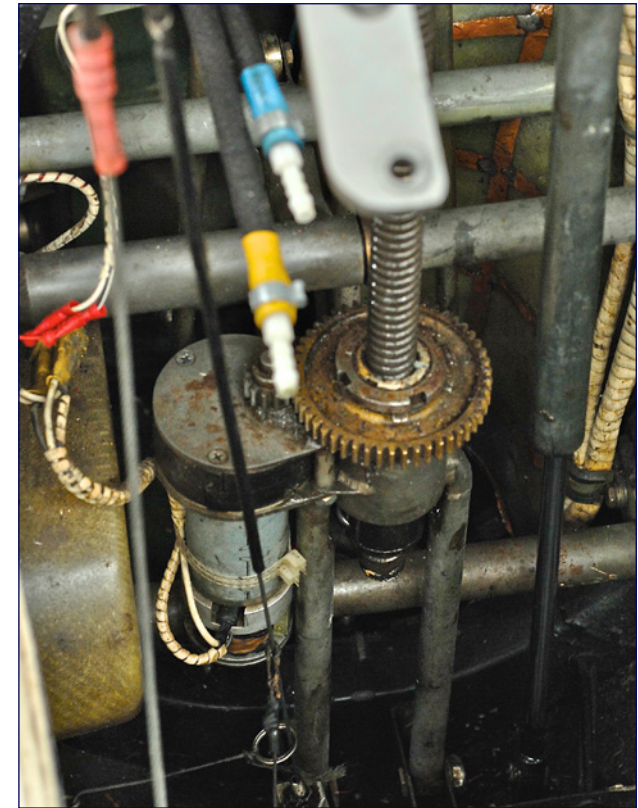
With the engine extended but not running, the rate of sink at 50 knots increases to 400 ft/min (almost four times the sink rate with the motor not extended). With a glider with a fully exposed motor, the sink rate may be more than this, akin to the sink rate of a hang glider. Of course this means that you really need to be fairly close to your selected outlanding site when you decide to pop the motor.

Most importantly, because the sink rate is much as if you were using half airbrakes, you must have additional height to raise the motor, attempt to start it and if not, lower it again and attempt to fly a normal circuit, albeit one with half airbrakes pulled.

There's a significant risk, especially with older designs which may be 30 years old, that the engine raising mechanism may fail and leave the engine half way or fully out.

This could be due to anything from a flat battery to a popped circuit breaker to a winding burned out on the basic (Bosch windscreen wiper) motor used on the screw-jack which allows it to run but stop intermittently.

In this situation, you might be doing a circuit and landing with the equivalent of half airbrakes. It's essential that you plan for this, fly a shorter than normal circuit and be prepared to use no airbrakes when flaring.



**While the engine-less glider can continue searching down to 800', a self launcher or sustainer glider should not and your agreed decision to cease soaring should be considerably higher.**

This is especially true when you are learning to fly a self launcher. Your stress level rises at the same rate as the motor comes up. Even after hundreds of hours this is still true. It's recommended that when you are learning, engine starting should be at 2,000. When you're more confident, you can do down to 1,500'.

Only if your selected outlanding site is an airstrip should you consider starting the engine much lower than this.

The manual states "*Should a flight be conducted over a wide expanse of unlandable terrain, the engine should then be restarted at 3300 ft above ground level so that if the engine does not start, all the emergency starting procedures can be followed unhurriedly including retraction of the engine if necessary*". The manual does not suggest what you do next.

There are pilots of self launching gliders who choose to a normal outlanding and then, after doing standard checks, self-launch from the paddock. I confess that I am more confident than this and (so far) have always successfully started the engine in the air.

I have never met a pilot of a self-launcher who enjoys flying with the motor running and few enjoy in-flight starting, especially in sink conditions where things can happen very quickly and the workload is high.

Nevertheless, climbing out under motor after pressing the button of shame normally beats an outlanding hands down and is one of the things which makes the additional complexity of a self launcher worthwhile.

You might need more friends when you fly a conventional glider compared with a self-launcher but there are those who say that people who fly self launchers have less friends anyway!

*John Clark*



# OUTLANDING LESSONS LEARNED THE HARD WAY

It was a last minute decision to enter the competition. I was at Lake Keepit for a week of gliding practice before going to the Narromine Cup the following week. Although I am still new to gliding I had been offered the great opportunity and privilege to join a syndicate with Gary Ransby as a partner in the ownership of his lovely ASW20B. So my objective that week was to become familiar with this new glider type before taking it to Narromine.



However the Australian Qualifying Grand Prix was starting the next day at Lake Keepit and if one extra competitor was registered the numbers would allow 3 instead of 2 Australian pilots to qualify for the FAI GP finals to be held in Italy in 2015.

So I was encouraged to enter, and because I knew competition flying really helps focus your attention and enables intensive learning to occur, I agreed and signed up.

I planned to do cross country flying that week anyway and knew that being in the competition would achieve these goals while being of great benefit towards improving my gliding skills.

The first 3 days of the Grand Prix went well. I was not a serious contender of course and was flying very much within my more conservative limits, but I managed to complete the tasks each day including the 325km task the previous day over the "tiger country" mountains and interesting convergence weather around Bruce Taylor's property in Kentucky.

I had somehow scored my first IGC competition point and even rated a special mention at one of the competition morning briefings.

Day 4 was a 310km task. With Gary's help I had been analysing my performance each day from the downloaded logs and my gliding was steadily improving. But it was clear I was thermalling too conservatively and needed to bring my thermalling percentage down. So I was determined on Day 4 to focus on thermalling more efficiently and effectively.

The pre-start that day began well with lift being plentiful. I was one of the first to launch and used the extra time before the start to climb to cloud base at 10,000' and to test and mark the thermals on the first part of the task.

The racing start went very well and I crossed the line within 30 secs of the start time, at the required 4,000' altitude, and at the required speed of 90kts (170kph). I immediately headed for my first marked thermal and joined a gaggle of other gliders who had the same idea.

Interestingly I found myself thermalling at the same height as Andrew Georgeson in his ASW28 who had been the winner on the previous day and was a very experienced international competition pilot. So I thought to myself this would be a great opportunity to learn from him, so when he left the thermal I followed.

For the next approx. 45 mins and around 100km I kept up with him maintaining the same or higher altitude, watching his energy lines and the route he took, the way he thermalled, which thermals he took and for how long, and how he was maintaining a high task speed with a low rate of thermalling. It was a very worthwhile experience and I was learning a lot.

On the first 130km leg as we passed the southern edges of the Narrabri area I noticed our altitude was slowly decreasing and lift was becoming less frequent.

Passing 2000'AGL I started selecting possible outlanding locations and always kept 1 or 2 in my back pocket, but I never expected to really need them as I assumed that with his experience "my leader" would have a plan in mind that would get us higher in due course. This was confirmed in my mind when Andrew left a couple of thermals much earlier than I would have done, so I again followed him.

However these thoughts were all dashed while I was still above 1000'AGL when Andrew suddenly announced "big areas of sink here, I am outlanding". That sprung me into action. I dumped my water and immediately diverted towards my currently selected outlanding paddock.

The paddock I had chosen was not far away and was fine. It was about 700m long, into wind, had a good level grass and visible soil surface, no power lines

or other obstructions except for a small ridge and a row of low trees at the far end of the paddock.

It was also close to a road and a farmhouse on the approach side that was obviously in regular use due to the lovely green grass surrounding it. It was a paddock that would be suitable for an aerotow retrieve.

After briefly testing a couple of thermals on the way to the paddock I joined downwind at around 600'AGL and was in a good position for a normal circuit. I then noticed that an adjacent paddock on the downwind end of my paddock was a very dark brown colour with a few trees and I thought this might produce some lift, so I extended my downwind leg slightly to pass over it in case significant lift was found.

There was no lift, so I commenced my base turn back towards my selected paddock, did my FUST checks including lowering the landing gear, and prepared for landing.

I delayed selecting landing flap until I was close to the paddock to make sure I would be high on the approach, and when I was clearly high I selected landing flap.

I was now on short finals at around 200'AGL and still slightly high on the approach so I selected some airbrakes to maintain my required glide path.

However I noticed that I was still remaining high on slope and my speed was also getting higher, so I selected more airbrakes. Despite these airbrakes I found I had to lower the nose slightly to make sure my touchdown aiming point would be reached because with the trees at the end of the paddock I certainly did not want any overshoot.

But the aircraft still did not seem to want to slow down. I reached and levelled out at the touchdown point and gently applied more airbrake, but with my higher speed I floated well past my touchdown point. I touched down faster than planned and immediately applied full airbrakes, which on the ASW20 applies the wheel brake.

The touchdown was rougher than I had expected, but what took most of my attention were the trees at the far end of the paddock that were clearly becoming larger. I steered the aircraft towards the right hand side of the paddock away from these trees and with about 100m remaining I did a partial 90 degree ground loop to ensure I stopped well before the trees.

Looking towards the landing direction with the glider and the low ridge and trees visible in the background.

Once I came to a stop I noticed to my dismay that the undercarriage had collapsed and I assumed at the time that this had occurred during the partial ground loop. However I was wrong.



What had really happened was that on short final approach when I began applying the airbrakes my hand had mistakenly selected the Landing Gear lever which on the ASW20 is on the same left hand side as the Airbrake lever and is directly next to the Airbrake lever. Both levers have the same handle grips of the same size, colour, and feel, and are immediately next to each other with one being slightly above the other.

I had been focussing my attention outside looking at the paddock ahead and my touchdown point and had not looked down at the handle when selecting the Airbrake to crosscheck that the Airbrake lever had been correctly identified.

As a result during the last phases of the approach when I thought I was selecting the Airbrake I was actually slowly retracting the Landing Gear.

This explained why I had not been able to maintain the desired glide path to my touchdown point without my speed increasing. When I selected more airbrake I had actually been retracting the landing gear more and at touchdown the landing gear had effectively become completely retracted. My wheels-up landing on the rough paddock which contained small rocks caused significant fibreglass damage to the forward underbelly of the glider.

All this is repairable but highly regrettable. The landing gear in fact was undamaged. If a normal wheels down landing had occurred the landing would most likely have been without incident.

Although I am new to gliding I do have a lot of powered aircraft and airline flying experience. So why did a wheels-up outlanding occur? And what can I and other glider pilots learn from this sad experience?

There are 3 main points that I have learned from the mistakes I made during this outlanding:

### SET CLEAR STRATEGY PARAMETERS:

My strategy in this day became opportunistic when I suddenly found myself thermalling with a very experienced competition pilot. By itself this strategy was not wrong and providing I was able to keep up with him I stood to learn a great deal from watching and following such an experienced pilot.

My mistake was not to set in my mind clear parameters beyond which I would abandon this strategy and revert to my own style of more conservative gliding.

I blindly assumed the more experienced pilot would get both of us out of trouble. Instead I should have set my own strategy parameters so if we descended below a certain height (maybe 2,500'-3,000' AGL) I would discontinue my strategy of following the other pilot and revert to my own self-preservation mode of gliding. This would most likely have prevented any outlanding that day.

In future I will develop and set clear strategy parameters to better match the conditions and my own capabilities and limitations.

### MAKE A DISCIPLINED TRANSITION FROM "SOARING PILOT" TO "LANDING PILOT"

If I had been totally committed to a landing when joining downwind and had conducted a normal circuit instead of modifying it by slightly extending the downwind leg in the hope of getting some lift off the adjacent paddock, my circuit would have been more standard and most likely would have given me more time to identify what was happening on final approach and ensure the correct Airbrake lever was selected. The outlanding would probably have been successful.

At the time I felt I was flying within my own comfort zone and capabilities. But in hindsight I was putting myself under more stress than I realised and I remained too long in the "Soaring Pilot" mode thinking about the possibility of a thermal being found in the adjacent paddock.

In any case such a thermal would have been difficult to work at low altitude. Instead I should have been more disciplined and made the transition earlier to being a "Landing Pilot" to focus all my attention on flying a standard circuit and making a safe outlanding.

In future I will be more disciplined and on downwind will conduct the FUST checks, remove any thoughts of being a Soaring Pilot, and will make the clear transition to being a Landing Pilot. This will give me more time to focus on ensuring the landing is a good one.

### KNOW YOUR AIRCRAFT THREATS AND CROSSCHECK THEM

I am new to the ASW20 and have very few flights in the aircraft; it is a lovely aircraft that is a pleasure to fly and still has competitive performance. I was slowly getting to know the aircraft and was really looking forward to becoming more comfortable with it and learning how to optimise its performance.

But what I did not do as part of my preparation to fly this new type was to take the time to stop, think, and analyse or research what potential threats the aircraft might contain. Instead I basically jumped in and started to fly it.

Therefore I did not notice the design threat associated with having identical Landing Gear and Airbrake levers on the same side so close together. All previous gliders I had flown had the Landing Gear lever on the right hand side and the Airbrake lever on the left hand side. If I had correctly selected the Airbrakes lever the outlanding would probably have been successful.

It turns out there have been a number of wheel-up incidents around the world on the ASW20 due to pilots selecting the wrong lever during landing, even including past events at Lake Keepit. The British Gliding Association has issued a Safety Alert to its members highlighting this design issue.

I made the mistake of not taking the time to analyse more carefully the cockpit layout and to think about any potential threats. Had these threats been apparent to me I would have paid special attention to crosschecking visually that the correct lever was selected on approach.

In future I will pay more attention to the cockpit designs of the gliders I fly and think about what threats may exist. I will also positively identify and crosscheck any controls I select.

### “SWISS CHEESE”

If any one of the above mistakes and learning points had not occurred my outlanding might have been avoided or at least ended with a successful result. It therefore does not really matter which of them is the more important.

But when all of them occurred together on that day the “holes in the Swiss cheese” lined up resulting in a situation that resulted in a regrettable and unsatisfactory outcome.

This outlanding event has been extremely disappointing to me especially after such a long and uneventful professional flying career. It has changed a lot of my thought processes in ways that I think will help my future gliding.

These thought processes were put into practice the following week at the Narromine Cup when I flew the LAK17 which was generously and kindly offered to me by Bill Hatfield when the ASW20 was no longer available due to repairs.

I flew within my limits that week keeping the above learning points in mind, and safely/uneventfully completed all tasks. I still managed to achieve some personal best performances including my first declared 500km flight for my Diamond distance.

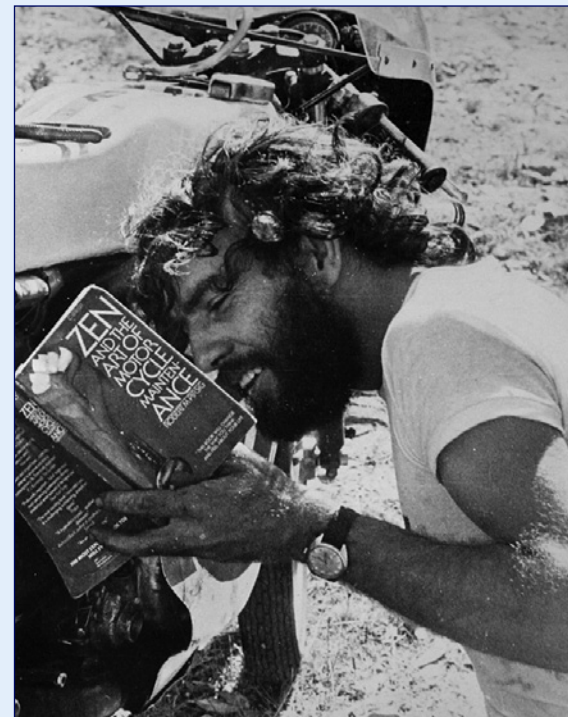
As is the case with all flying, gliding is a continual learning experience. We all make mistakes, but it is what we learn from them that really counts.

Unfortunately my outlanding lessons were learned the hard way. I hope others may learn from the mistakes I made and will find useful the learning points that resulted.

Happy safe soaring, and successful outlandings!!

*Peter Krygger*

## Competition Corner



Isn't there anyone who can guess who this hairy but studious young man is?

Of course, he does not look exactly like this these days but the essentials are still there... eyes, nose, mouth etc. all the same place, albeit a little lower.

So we are awarding a grand prize of a bottle of beer (not necessarily Aldi beer or one of Pete's eccentric buys) but beer nevertheless for the first correct answer from anyone who did not have to be told first. Investigations will be carried out.

## DESIGN FOR SAFETY

Once upon a time, work was quick and easy for machine designers. You could get away with murder, literally. It was up to the users (mainly 12 year old girls) to keep their hands out of the gears and whirling blades but then the nanny state reared its ugly head and spoiled things. Worker's lives (in the west) became more valued and horrors like machine safety laws and standardisation were forced on us.

So now, when you design something like a laser cutter, you may spend as much time worrying about how to stop a silly operator getting in the way of the laser beam and burning themselves as you do with the mechanical design.

If you ever rode a motorbike in the heady days of AJS, Fanny Barnett, Vincent etc. you'll remember the gear change was on the right hand side. It was there in the 60s on my early Nortons. But the Japanese, Italians and presumably the Yanks had their gear change on the opposite side. To add to the confusion, gearboxes often worked in different directions, sometimes one down, four up, or four down one up.

This made brand loyalty a rusted on thing because it was very difficult to swap left to right. A small loss of concentration might have you changing down instead of up, over-revving the engine, locking up the back wheel and going over the bars.

Or a smart tap on the gear lever which was really the brake lever caused the rear wheel to lock up and over the bars you went. In the early 70s we got standardisation.

Now, (hopefully) some of you may take offense at this but never mind. *Having to change hands to*



*lower the undercarriage is madness!* The fact is that it is possible to **design a glider where the joystick is operated only by your right hand and all the other controls are operated by your left hand.**

It's also possible to **make sure that each control knob, handle or lever has a different shape and colour.**

It's not just possible, it is easy. I have included a picture of this here from a 1984 glider. Why would you do it any other way?

It's also not that complicated to **make sure that the undercarriage lever always works in the same sense in every glider...** choose which direction you want, but make it always the same, in every make of glider.

It's also possible to **design an undercarriage which does not collapse.** Note that the above glider has a

home-made gate to stop this happening because the designer didn't get *that* right.

So why is it not so? Is it because sailplane designers are lazier than other designers? Or is it because pilots believe they are a superior form of life which can cope with complex machinery under stress and only lesser beings will fail.

But fail we do, and on a regular basis. While this is not always life threatening, it is silly and humiliating.

### **Why do we put up with it?**

As a secondary consideration, on this type of glider, all controls are run down the left side of the cockpit. There's nothing on the cockpit floor to get fouled by coins falling out of pockets. And the seat pan is bonded to the fuselage, making a stronger structure.





## Winning with Woitjec!

*The legend is here now!*

*Keep Soaring welcomes the mythical Polish soaring champion Woitjec Bziktk back to this newsletter. Countless are the numbers of letters sent in to the offices of Keep Soaring by pilots who want to know the secrets to his enduring success in the air and on the ground.*

*Woitjec has said in the past, "To those who have, it shall be given and to those who seek, it shall be shown". Wise words eh? Whatever they really mean.*

**Chumpy of Church Point asks: Woitjec,** My husband is continually worrying about his wing loading. One day he's trying to lose a few more kilograms and the next he's adding lead to his glider and filling it up with water ballast. Is it worthwhile?

**Woitjec:** As I say to my wife many times, "It ain't the meat, it's the motion, which makes yo daddy want to rock". For me it's easy. The preparation to fly well starts well before breakfast and ends well after dinner.

**Competitive of Coonamble asks: Woitjec,** I have heard that you don't socialise much during comps. Is that a good thing to do?

**Woitjec:** A city built on a high hill and fortified cannot fall, but neither can it be hidden. It is best that your competitors don't know you too well because only with complete knowledge comes complete success.

**Nerdy of Narrabri asks: Woitjec,** NOAA have just changed the format of the base data for generating blipmaps. How do you think this will affect forecasts?

**Woitjec:** Generally, I insist on flying every task fast enough that I have the same weather all the way. If you fly slow, then perhaps the internets are important but... I suggest that you consult with your senses more often so you don't lose your head when you might need it.

**Winning of Walcha asks: Woitjec,** I've come close to winning a day, but how do you actually win? It's driving me mad!

**Woitjec:** Only when you lose the desire to win will you actually win. Renounce the desire to win! Free your mind from longing and concentrate on the journey. Only then will you experience what you need.

**Logical of Loughborough asks: Woitjec,** At the bar last week we were discussing some of what you said and one of the hot pilots said it was all B.S. Care to comment?

**Woitjec:** All reactionaries are paper tigers. In appearance they are confident and often terrifying. However, they are, how you say... binary... bipolar. This is the law of opposites. It is the same with everything. You have lift? You must have sink. You have a tiger? I show you a kitten.

So for every day they are noisy and notorious, there come many days when they are cowering and weak. Only by their results can you know them... and mine are better than theirs.

**Curious of Quirindi asks: Woitjec,** do you make a point of studying your opponents?

**Woitjec:** Strategically, we should display that we don't trust other competitors and we should live well and as if they are all nothing. But tactically, we should take them all seriously. This means we take him seriously with respect to moves he makes or we shall be committing the error of opportunism. In dealing with particular competitors, unless we take them seriously, we shall be committing the error of adventurism.

*Wow Woitjec! That's given us something meaty to think about!*

# THE 2014 LAKE KEEPIT SAFARI

(YES, THAT'S 12.2 KNOTS ON THE CLIMB-O-METER)



## MOMENTS THAT TAKE YOUR BREATH AWAY.

*"In the end, it's not going to matter how many breaths you took, but how many moments took your breath away." Shing Xiong*

Towards the end of each safari when we're clearly on the way home, we sit and talk over the last bottle of woobla about the highs and lows of this year and what we might do better in the next.

Like any safari should be, the 2014 edition was quite an adventure. If safaris were not, we wouldn't continue going on them. We had great days and bad days. We had great weather and we had terrible weather... frighteningly terrible weather in fact.

At this stage, I should probably say that there were only two safarians present over this one last bottle of woobla, the Beloved Leader and me, which might have made things more rambling than otherwise. Harry and Wendy were on their way back after having a coil failure. Al Giles had landed short at Gilgandra. Geraldine was stuck in Broken Hill and her fellow travellers Graeme and Robin Summers had driven home.

But I wondered out loud if things had not been a little too smooth this year. Not enough of the sublime.



I have a book whose title is "I may be some time. Ice and the English Imagination." The first chapter is an essay on the sublime and the Victorian understanding of the word sublime. You can read the book if you want but Wikipedia has a paragraph which covers the same ground. I abridge this here:

Most scholars point to Edmund Burke's writing as the landmark work on the sublime. Burke defines the sublime as "whatever is fitted in any sort to excite the ideas of pain and danger... Whatever is in any sort terrible, or is conversant about terrible objects, or operates in a manner analogous to terror."

Burke believed that the sublime was something that could provoke terror in the audience, for terror and pain were the strongest of emotions.

However, he also believed there was an inherent "pleasure" in this emotion. Anything that is great, infinite or obscure could be an object of terror and the

sublime, for there was an element of the unknown about them.

Hold that thought for a while. I grew up in the green and pleasant south of England. I did very little geography but I remember looking at the map of Australia and marvelling at the sublime idea of 80 Mile Beach in Broome or 90 Mile Beach in Melbourne. Imagine a beach as wide as England! (When I finally saw 90 Mile Beach, it was, like so much of Victoria, a wretched disappointment.)

What was not a disappointment was the Western Australian goldfields. They were utterly sublime, at least in the early '70s when I spent many weeks fossicking around them. Remote, obscure, hot, dangerous and painful... they had it all.

The Australian outback holds a sublime fascination for many foreigners, and by foreigners I mean anyone who doesn't live there. Not just Europeans who may

long for a ruler-straight horizon and the chance of stepping where no human has ever trod but for us Australian city-dwellers who, apart from occasionally being offered roo on the menu, could be living in almost any city in the western world.

When we were preparing for the Lake Eyre safari, I remember seeing for the first time in Google Earth these remote landing strips and the stomach-churning thrill of imagining landing there. A bleak red landscape, devoid of any peace or comfort. Exciting and terrifying in equal measures.

So why would you ever want to fly to and land at a place like this... in a conscious or unconscious search for the sublime?

After a quarter of a century of work in what they call the "creative fields", I am convinced that many of us have a lack of imagination and that's what drives us to create things.

We have an inability to feel emotions unless they are supercharged. My wife says I am aspergic, emotionally retarded and while I disagree with her, there's something in it. Personally, I like to feel big emotions.

Many of us could never sky-dive or bungee jump, one can imagine that after jumping from a plane at 10,000', normal life must feel fairly smooth for a while. In my opinion, safaris offer a manageable amount of the sublime. You are taken out of your comfort zone far enough to get the feeling but not so far that it hurts... hopefully!

## GOING BY THE BOOK.

There's an argument commonly promoted by competition people, that flying in a comp encourages you to fly in air you'd never normally fly in. While that is definitely true, it's also true that few if any competition task setters look at a weather map and then set a task directly into the worst weather... and that's where safaris differ.

You don't fly where the best weather takes you on a gliding safari, you fly where the route map in the safari book says you should. You may take off expecting not to make your destination and have to land short, but each day, you head out towards a destination which was planned months in advance, so you must go that way, whatever the weather brings.

On this safari, the weather was normal safari weather, but perhaps more so. We had four Grand Days Out, two on each side of the weather-o-meter.

A lot of sports are dominated by the weather. Surfing, hang gliding, paragliding, rowing and sailing to name a few. Only A few days in the year are precious days, the ones you remember all your life.

With sailplanes, there are more many flyable days than with other forms of gliding but the outstanding days are still too few. However, you don't want to have your nose rubbed in it by being reminded about how rare these days are.

So there we all were at Forbes, waiting at the airstrip for the cars to arrive. We'd easily outrun them at over 125 kph cross country. What a day! There was no point in stopping for anything less than about 7 knots and most climbs averaged well over 10 knots. We probably could have flown on for ever but this was the first day of the safari and what with all the preparation, you're always a bit tired. And anyway, we had to wait for the cars.



March 2014

It's been noted before that the pilot formerly known as Mr. Gloomy (Geoff Sim) enjoys a less sunny outlook on life than some of the rest of us.

"What a day!" says I.

"Hmmm... but you only get one of these a year." says Mr. Gloomy.

"One a year?!" says I, "What's the point of being in a sport if you're only going to have one day like this a year."

"Well," says Mr. Gloomy, "There are other days, perhaps one or two, but you're not at the strip, so you don't fly them."

I nearly abandoned gliding there and then. Based on that rule, the rest of the safari was going to be slow going. And at least the next few days were.

The leg to Mungo Lodge was divided into two by the weather. The first half leg to Balranald and another to Mungo Lodge. As we discussed afterwards, heat does not equal lift. Heat there was plenty of. Lift there was little. Someone else might explain why.

Just because the ground is baking, does not mean there is anything going upwards. I will demand a refund from the publishers of that Hans Killer book, Cross Country Sailing because there's no way you can do a virtual walk across this bush ground and find anything which is not stinking hot!

Both days had thermals which might get a Swede excited but ones which my insensitive backside is not calibrated to find.



## 9000 IS NICE

If you have not flown a safari, or not flown one over un-landable country, I'd recommend 9,000' as being a nice height to fly at in the outback. It's not like flying over the Pilliga, where given 7,000', you can almost always slip off to the side where there are open paddocks, but given 9,000', you do have some time to look for climb of some sort.

That's why flying at 4,000' or below as we were on these days is so character building. Believe it or not, you get quite used to leaving on task at barely launch height. But you have to fly carefully and that's why it took us two days to cover a little more than 200 km. The only thing which makes these sort of days acceptable is when nobody does much better than you.

Leaving Mungo Lodge, I was selected as the wind dummy. For some reason the other three gliders towed out on the crosswind strip, leaving me parked facing into the wind on the other strip looking up at a very odd sky. There were all sorts of scrappy clouds at all sorts of levels other than where they should have been.

There was very convincing alto CU at 6,000' clouds looking like they'd been ripped apart by shear nestling up against the CU. It took longer than normal to find something going up and as usual, everyone else had launched before I radioed in to say that I was in fact climbing. I am still unsure of the role of wind dummy.

This leg was meant to take us to the safari goal, the Clare Valley airstrip, around 400 km away. In spite of the weird cloud, this distance looked quite possible at that early stage.

One of the major drawbacks of the internet and the way it can get to you almost anywhere is that people who ought not to get it, often do. I was ahead and making good progress under the exceptionally peculiar looking clouds, heading towards Mildura and Wentworth when the word came on the radio that the pilot formerly known as Mr. Gloomy was clutching his iPad, head down in the back seat obsessing over some speculative website showing lightning all around us.

The sky did look odd, and up ahead it was getting a bit claggy and overdeveloped. Between the clouds you could see very little of any sort of weather. I guess I was about 40 km on the other side of Wentworth when the others decided that my encouraging view of the conditions ahead was a pack of lies and made to land at Wentworth.

We've all seen dirt strips before but have you ever seen a strip where everything in it is dirt? Devoid of a single blade of grass type dirt? Well, head on down to dry and dusty Wentworth because they've got dirt aplenty.

To a point, Wentworth would have made three screwits for the ease of tying down and they did feel tight enough in the dirt. Down one side of the strip are several hangar-houses and we were welcomed by Dale Castle and his wife Cliff who had the one closest to where we were tied down.



I have never been right under a thunderstorm out in the open... checking on the screwits. It certainly was a moment which took all of our breaths away. You could not stand, see or breath outside as the gust front and then the rain hit. We sheltered in the car watching the gliders in awe until the wind abated.

The rain did not. In 10 minutes, it had bucketed down nearly 30mm of the stuff. The strip was a lake and there was little point in heading out for a look. The stakes holding the ASH 25 and Arcus both pulled out on one wing and the other pressed hard into the sodden ground.

There was some discussion about rain and what that might do to the dirt and a wag from the council who were rolling the dirt runway said it would take a week for the strip to dry out after rain.

Me, I was wondering whether conditions looked good enough to carry on to the south west.

It looked certain that the rain would miss us so we headed into town to sort out the accommodation.

And headed straight back out again when it became apparent that the rain would not miss us at all.







Al Giles' huge tie-downs held, and so did the screwits. We went back to town for dinner, imagining that the worst was over.

It was not. Dale Castle was frantically trying to phone us to tell us to say that it was all on again. Fortunately this time, the rain was only 20mm in 10 minutes and the gliders had moved no further than before other than slightly sinking in the mud.

Well, a day later, we dug the gliders out and took off for Clare. It certainly was a moment to remember. Yes, I did apologise (in a roundabout way) to Geoff Sim but thought best not to rub it in. You know what he's like.

And yes, I will take thunderstorms a lot more seriously next time.









# Flyin' in the Rain

From the 2014 Lake Keepit Safari

1

An arrangement for nose flute, castanets and viola by Ian Downes.

Lyric by Alphonse Giles

Music by Matthew Minter

With unusual vigour

Musical score for the first system of 'Flyin' in the Rain'. It features a piano accompaniment with a treble and bass clef. The left hand (L.H.) is marked 'mf'. The right hand has a melodic line with various chords. Chord diagrams are provided for G, Eb, Gb, D7, G6, and D9/G. The lyrics 'Climb...ing in the' are written below the staff.

2

Musical score for the second system of 'Flyin' in the Rain'. It features a piano accompaniment with a treble and bass clef. The right hand has a melodic line with various chords. Chord diagrams are provided for G6, G#dim7, D7/A, and D7. The lyrics 'glo - ri - ous feel - ing, I'm climb - ing a gain; I'm laugh - ing at clouds, so dark up a - bove. I'm wash - ing the glider ----- and that's what I love. Wav - ing' are written below the staff. The instruction 'DS al coda as rapidly as possible...' is written above the final staff.

Publisher's note: Singers are requested not to attempt more than two verses in a session.

Publisher's note: If you are game, the rest of the words can be found overleaf.

A little ditty Al Giles made up on the last day of (his) safari as he flew at 9000' over the Bungles towards Keepit

Climbing in the rain,  
I'm climbing in the rain,  
what a glorious feeling,  
I'm climbing again;  
I'm laughing at clouds,  
so dark up above  
I'm washing the glider  
And that's what I love.

Weaving through the storms,  
I'm weaving through the storms,  
Clouds all around me,  
Some wonderful forms.  
I'm flying round the sparks,  
Checking out the arcs  
And weaving, just weaving  
Through the storms.

(music breaks (thankfully))

I can see clearly now,  
The rain has gone,  
All of those dark clouds  
Have disappeared,  
I wouldn't mind having  
Them back right now,  
Gonna be a bright, bright,  
Bright sunshiny day...

Al claims that in fact it was very pretty looking out into the sunshine around Mullalley from inside a curtain of rain near Coona, and that was dodging the heaviest falls and suspected Harry and Wendy had something similar but we were too busy putting away the Arcus before the arrival of the sparkus to ask.

Great safari !

Al.





Most of us fly gliders for fun don't we? But sometimes it is hard to remember this as you push yourself into ever more frightening territory to try and improve your speed, distance, duration or height record... or whatever obsession you have at the moment.

In a way I was glad to read that David Janssen had either flown over 1500 km or 1300 km earlier this month because it means I won't have to try to beat him.

On a more local level, don't try to flying longer or later than Jenilla (the two-headed beast of Jenny Ganderton and Atilla Bertok). It does not matter how far you flew or how late you land, just as you are

sitting down for a beer at the clubhouse, you'll hear the rumble of a wheel on the strip as Jenilla rolls to a stop in near darkness and find yourself wondering; A, Where did they find the lift. B, Why did I bother?

Nevertheless, flying by numbers is one of the rites of passage when flying sailplanes. Oddly, few if any hang or paragliding pilots worry about badge flights but they do constantly worry about distances, albeit shorter distances than sailplane pilots.

And some numbers are better than others. 500 and 750 are good numbers, presumably because they equate nicely to motorbike cylinder capacities. Though it has to be said that few motorcycle capacities are what they claim to be... a Manx Norton 500 single

was at best a safe 1cc less than the full number... which the FAI would take a dim view of on a distance flight. A bit like a 12 bar blues, nobody pays for an 11 bar version.

Just in case you pedants are wondering what Norton has to do with gliding, then you need to know that the Midwest engine used by Schleichers was developed by mistake by Nortons (hadn't Suzuki already shown that nobody really wants to drive a rotary bike?). You can buy its grandson now from UAV Engines Ltd in a version which lasts 1 hour, 10 hours or even 50 hours should you want your UAV to fly that long.



However, some numbers are more equal than others. What's wrong with a 250? There are a lot of nice 250cc motorbikes. But in gliding, 100 or 300 are considered better, even if not particularly memorable. I cannot remember flying 300km.

I barely remember my first 500. I was larking around with Dave Shorter. We'd flown to Warrialda, Moree and somewhere like Mulalley and Dave came on the radio and said, "If you fly to Manilla, you'll have 500." It seemed like an anti-climax at the time. And I'm sure that cat's cradles don't really count.

So this year, I had decided to try to fly a proper 750. The safari was going to places where a 750 was entirely possible in December... and more. In fact the weather on the first day of the safari was such that a 750 would have been a doddle, the conditions were so good but we had other plans or just did not notice it.

As it happened, the weather for the rest of the trip was not great. We left the Clare Valley on a reasonable day but with troughs either side of us. A great white sheet of alto cirrus blocked out the sky by the time we got to Broken Hill and since the only alternatives are to fly another 400km onwards to Cobar or divert about 300 to White Cliffs, Broken Hill it was to be.

Oddly, within an hour the cirrus had disappeared and conditions were great for the rest of the day but we had Geraldine and the car to worry about.

I can't remember anyone mentioning the weather on the following day. Our plan was to make Cobar or Nyngan, based on the flying conditions and when we could get Geraldine away in the car. 500 km is enough to drive in that area.

10



We took off just as the CUs started popping (that is, an hour too late!) and I headed over the town to photograph the mine site before heading off towards the un-landable town of Wilcannia.

The clouds were regular and reliable if not boomers so we made rapid progress but then Geraldine called me on the phone. This began a long and difficult exchange of phone calls and text messages.

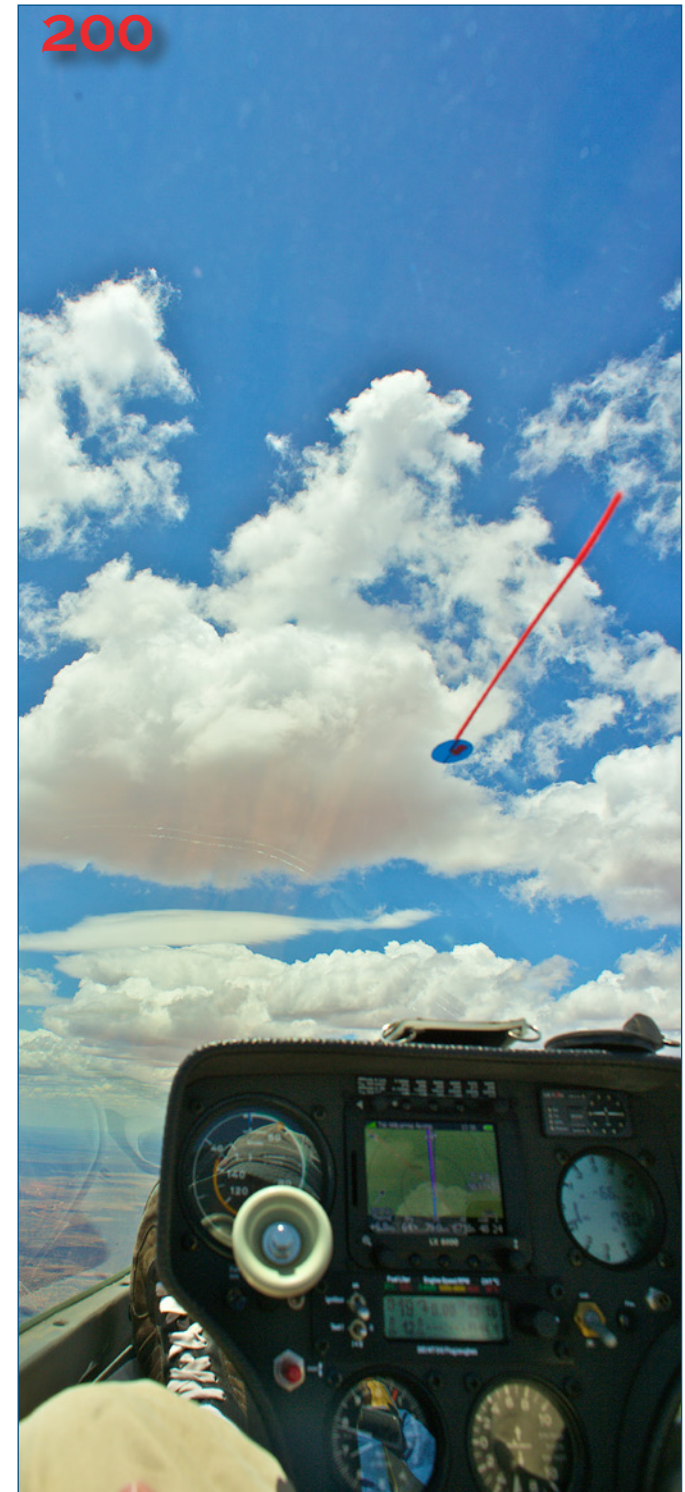
The Kraftdurchfreudewagen had broken down. She said that the fan was not working. Which fan? Yes, well, perhaps the aircon does matter out there these days! But don't leave BH without the engine fan not working.

Perhaps it is because VW made the mistake of putting the engine in the wrong way around that Geraldine and three of the four "mechanics" who looked at it did not realise the fan belt was entirely missing!

By that stage, I was 20 minutes behind Al Giles and Geoff Sim and Ian Barraclough, frustrated and annoyed and more than a little sorry that Geraldine was having to deal with these problems on her own.

Finally, she found a sensible mechanic and organised a repair for the following morning.

200



400



We made the 400 or so to Cobar fairly easily and extended to Nyngan. By then the clouds had developed to the point that there was quite a lot of spread-out making large areas of shadow on the ground.

Maybe my head was elsewhere, I found the climbs more difficult to find, though at 12,000' cloud base, they were going to be fairly far apart. I told the others that Geraldine had broken another safari car and was not going to meet us anywhere that day and soon we decided to push on towards Gilgandra.

As we got beyond Nyngan, the over-development had gone but the clouds were straggly and far apart and you had to try a few to find a good one. Ahead, there was some sparse radio chat about "a lot of it about" on the ground which I almost ignored.

I've been stuck on the way to Gilgandra before. There's a lot of places where rivers, ponds and dams make the ground soggy and thermals weak. As it happened, this was not the case today... the rivers, ponds and dams had overflowed and joined up to make the whole area a giant lake. I had worked out that if we made Coonabarrabran, we'd have flown just over 750 km and we agreed that seemed like a good number to end the day on.

Quite suddenly, Al Giles came on the radio and said he was landing at Gilgandra... a bit of a surprise since I did not know he was low and it might have been only one engine run to the airstrip at Coonabarrabran.

600





700



I guess because I was behind the others, I had slowed down slightly and remained high when I got to the lake between Nyngan and Gilgandra. I took the shortest route across the flood between two likely looking clouds so that by the time I made the higher country towards Tooraweena, I nearly had final glide on Coonabarrabran... and that 750 km.

Geoff and Ian did not have that much height and started their motor. At that stage Geoff had flown 749.98 km, which would have been more than enough for a 750 Norton Commando, but not enough for an FAI 750 by 20 metres!

It was nearly 7pm at that stage and not much sun on the ground. There were solid decks of clouds between me and Coonabarrabran and though I had spent 20 minutes without a climb I was fairly confident that if I flew carefully, some sort of 750 was in the bag. I was under 3000' agl over the ridge at the end of the Warrumbungles which separates Tooraweena from Coonabarrabran and getting a bit nervous but there was still signs of life in the air.

We had a following wind and perhaps it kicked off a weak thermal or two from but there was enough going up to slowly circle in and make 100% sure that I got enough height for 750.

Geoff and Ian then suggested that we aimed for Keepit since we were more likely to find a pair of clean undies there and we'd no tow-out gear... Geraldine had got the lot in the trailer. I agreed and since nobody really likes starting their motor, continued circling and watched the rate of climb.

My weak thermal finally died so I flew on with my hopes fading as rapidly as the sinking air I was in...



and then a kilometre or so further on, I found another bit of lift which slowly increased to better than 2 knots. And then 2.5 and finally nearly 3 knots.

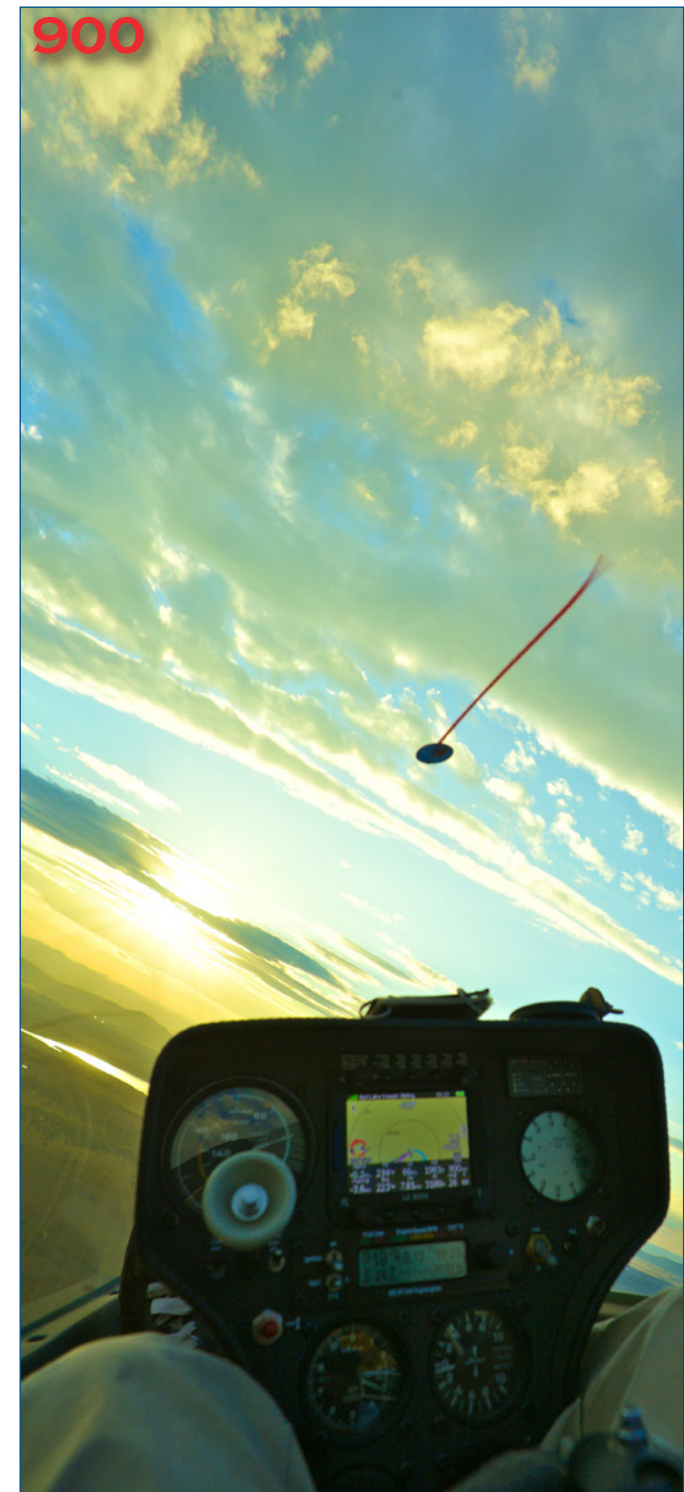
Then a thought gripped me... perhaps I could make it all the way to Keepit. 750 be damned! The thermal was smooth and steady and took me slowly all the way to 9,400' and there was still some cloud ahead. I almost had final glide to Keepit.

I got one more weak climb and then a proper one, all the way 10,400'. The day had died and there were no clouds ahead with worth the mention. I got nothing else at all, not even a bump going up all the way home.

As one does, I held the stick in a vice like grip, countless reminding myself to relax and let go a little. I worked out that by the time I arrived at Keepit I'd have flown 888 kilometres. What a silly number!

I once owned a nice 850 Norton Commando (which was actually 832)... there was a Ducati 888 which was OK but they're not "important" numbers are they?... I headed towards Manilla, eyes on the height-o-meter until the distance-o-meter said 900.

Now anyone who knows Ducatis will recognise that the 900 Dukes were actually 904cc so perhaps it was OK that this was the distance I had flown when I landed.





904 would not have pleased Geraldine. This is the capacity of the MHR900e which I had promised to sell when I bought the DG-808 (and failed).

I was told when I landed by Jenilla that this type of flight with the wind up your bum does not count and she's probably right in a way. Some numbers are better than others.

The interesting thing about point to point flights of any distance is that you fly over such varying terrain and through such varying weather conditions compared with triangles.

At least this does stop it being boring and just a fight against the clock. And I suppose because we started out with the intention of flying at least 400 km, that it was some 6 hours later before I started biting my fingernails. It's meant to be fun isn't it?

Doing a distance like this was fun but perhaps a bit of an anticlimax. Nobody but a Ducati owner would pay for a 904, especially when a solid 750 might do better. So next time, it should be a declared 750 or better, a 1000. Like a Vincent Black shadow.

