

## The Longest Day

On the 2<sup>nd</sup> January 2015 I kissed my wife (Official Observer, wing runner and crew chief) farewell, and took a tow behind Bob Butler and the Kingaroy C150 – KML. As we departed on runway 16 we flew into an increasing tailwind and crossed the southern boundary fence much lower than we usually do and I commented on this to Bob over the radio as we climbed away. In the distance I could see that cloud was covering the high points of the Bunya range so I immediately knew that tracking to the west of my desired course would be required if I could stay airborne this early in the morning. The time is 0801 and we are the only people flying in a moist Queensland sky.

The first hurdle was the very cumulus that I was hoping would keep me flying; the tops were rising faster than the tug could climb with a 600kg ASG29 on the back and we needed to get higher than my target 4281' start height. We had planned on 6,000' however I ended up releasing a touch over 7,000' as Bob managed to find a gap in the towering cumulus about 10km north of my chosen start point. I said thank you to Bob for getting me safely away and headed to the start line in the cumulus valley.

At 0819 I crossed the line at 4,169' and set off on course for my first turn point 918km away at Lake Cargelligo in central NSW. As I approached the Bunya Mountains I called back to the airfield to advise that I was down to 2,000' above ground and that the cloud base was still below me. At 1,200'agl I took my first climb of 1.2 knots and waited for the 12kts of tailwind to drift me to a point where I could cross the Bunyas and start what turned out to be the longest flight of my life.

So from here, let's back it up a bit. My goal for the last 12 months has been to achieve a flight of 1,500km and the preparation has been ongoing over that time. It has involved endless hours of time on Google Earth searching and researching out-landing possibilities mainly in South Australia and outback NSW. Goals that met my distance criteria from Kingaroy included Mt Remarkable near Melrose in the Flinders Ranges, Port Pirie Airport, Gawler and Bordertown. I was seeking the most Westerly positions because of having to be on the ground before last light and going to Port Pirie following the sun, was going to give me an extra 20 minutes of flying time which seemed to me to be the most limiting factor on a suitable day.

The first mental obstacle was the very size of the flight. To overcome this the flights were planned in one hour segments starting with an achievable speed of say 80kph for the first hour and increasing to 140kph in the better part of the day and finally a high speed final glide around 170kph. This suddenly reduced the flight to achievable and measurable segments that made it easier for me to wrap my head around it.

Next were the "what if's" and the very serious survival issues should an out-landing occur in the outback on a 45 degree day! Onboard the glider there were such things as the Spot Tracker, a drinking straw (designed to filter and purify water), a signal mirror, a portable solar charger for the phone, waterproof matches, a Swiss army knife, a plastic magnifier, space blankets, plastic zip ties, a portable strobe light, a torch, spare batteries, plastic bags, sunscreen, insect repellent, a fly mesh head cover, a cloth carry bag, a note pad and pens, a tie down strap (which probably would not be used to secure the glider), and as much extra water as I could carry in 300ml bottles

(not to be thrown overboard when consumed in-flight as they are going to be filled from the wing water after landing if needed).

Then there are the “I made it” supplies which consisted of personal items such as a mobile phone, razor, toothbrush, socks, underwear, a spare t-shirt and reading glasses, and any medications (in my case Sudafed or Disprin). Don’t forget your wallet! Gosh are we there yet?!

Now we are back to flying. Is the flight likely to be a Continental record? I now need a Continental Record/World Official Observer. They are not always available early in the morning and at short notice, so if your logger is built into your panel instrumentation get them to attach a security seal anytime prior to the flight. Also pre-print some witness forms and carry them in the glider in case you are not met by an OO when you land. These forms are a critical part of the current requirements of proof. You have to make these up yourself being guided by the sporting code as to what is required on the form.

Now we need to know if your airspace file is up to date. One breach of airspace without an ATC clearance and you will have blown your flight out of the water. If you do get a clearance and enter airspace, get a phone number and later ask for an email confirmation that your entry was approved. Add this to the paperwork.

But wait there’s more (groan!), the obvious stuff. Are the batteries fully charged (glider and loggers), do I know how to make identical declarations and can I claim more than one record by adding a turn-point to a Distance to Goal flight (the answer is yes). Do I have a tow pilot and is the tug fuelled, is my oxygen bottle full and turned on, etc. etc...enough about getting ready already!!

So now the ground work has been done. I’m keeping an eye on the weather. First the big picture stuff like the overall synoptic charts and the 4 day predictions as well as the expected temperatures. I’ve got helpers Like Mark Morgan in Waikerie and Peter Temple keeping an eye out for the “big day” in South Australia. Graham Parker has agreed to lend me his ASG29 trailer (at Gawler) and his partner in the hanger is in Waikerie with the only key! I’ve got a friend in Adelaide, Geoff Capper, who is willing to come get me if the day doesn’t conflict with police duties during the tour down-under. I think I’ve got about as much as I can covered, so...on the 1<sup>st</sup> January Lesley and I drive to Kingaroy in the afternoon and begin the final preparations for the next days attempt.

XCSkies says the weather will be blue west of Broken Hill and over some of the worst possible country even though the cumulus are forecast to be 13,000’ and above before that. Mark Morgan advises me that the weather gurus at Waikerie for the National practice week don’t think the day will be up to the task and a day later a front will arrive early.

Suddenly a task to Benalla seems viable but it’s not something I’ve planned and there is only the possibility of a 1250km Distance to Goal task if I start north of Kingaroy and finish west of Benalla. Two days, Friday 2<sup>nd</sup> and Saturday 3<sup>rd</sup> both look viable with Saturday looking the better of the two choices but I’ve been to enough competitions where a really great day is forecast after a really great day only to see

the task overset and competitors fail to make it home. So even though I was struggling with having a go on the 2<sup>nd</sup> January, and possibly out-landing a long way from home only to be in the trailer the next day. I decided I was going to fly regardless.

The morning of the flight had arrived and an updated forecast now shows a patch of completely dead air on track south of Goondiwindi, and I mean down to the ground dead for a distance too far to penetrate in the best of gliders and certainly not from a forecast 5,000' cloud base. I'm thinking (hoping) the forecast is not as bad as indicated and perhaps there will be the possibility to get through. At least I'm going to have a look.

Now I'm heading south over forested country following the cloud streets as best I can and getting a little tailwind to help. I pull up a high resolution satellite image and see there is a huge mass of cloud on course which appears to extend for hundreds of kilometres down my track line even though there is no hint of it as yet in the sky ahead.

Somewhere north of Goondiwindi I see it. Towering cumulonimbus with anvils and tops above 30,000' at a guess? Maybe there is a hole. I've come this far so might as well get up close and have a look.

At Goondiwindi the decision is obvious.



There is heavy rain as far as I can see in each direction with stratus at ground level. The task is over and I will be returning to Kingaroy but while I'm looking at this devastating mass an outflow front forms and I think what the heck, I might as well enjoy the ride for a while before turning back. I'm 270km down track and have averaged 120kph to this point, what a pity it has all fallen apart. I hit the outflow at 2,500', climb to around 5,000' in 7kts, turned west and start running the front.



What happens next is truly amazing. For the next 37 minutes I travel from Goondiwindi to St. George, a distance of 155km, gain 300 feet without turning and average 227kph, but the fun is just beginning. I now started to see the edge of the thunderstorm system with sunshine and cumulus to the west. Because I had managed to start an hour ahead of schedule in Kingaroy and the limited planning had me nearly two hours ahead of schedule at Goondiwindi, just maybe there was still a chance if I could get around the ever expanding outflow.



Following the outflow as it curved south I continued running the edge. It seemed to me as if the whole of the centre of NSW was flowing out to the west and as I looked east I could see the sky was completely washed out whilst to the west good cumulus had formed with some larger developments even further out. The next 450km was covered at 177kph with 10% circling. I was now way ahead of schedule even if I was

150km right of track, and I still hadn't reached the best part of the sky.

It's 1353 Queensland time; I'm 740km into the task and crossing the road between Nyngan and Cobar. The larger cumulus that I referred to earlier have now made their origins clear. They were just a few of the clouds in a trough system which now lies across my path. There are heavy showers mixed in with lighter showers and lightning, and on the other side is where I am anticipating the best weather of the flight. I can actually see a huge red dust devil sitting about 50km away (it was big) but again I'm faced with an agonising choice.

Just to the left of my course line I have two heavy showers with a black and ragged cumulus base between the gap, and to my right I have light rain with the beautiful sky and that dust devil beckoning beyond. If I try and shoot the gap and it closes, there is a very real chance I could be washed out of the sky and if I take the safer route I will be low before I connect again or worse. I decided to shoot for the gap and that black ragged cloud. If this didn't work it could be a show stopper...



At 8,000' I was under the cloud and started climbing in 5-6kts, and by 10,000' this was up to 11kts and as I rolled out and headed between the showers at 120kts I was still going up with the netto showing in excess of 14kts. I was seriously thinking I would have to pull the brakes at Vne to avoid being sucked into the bottom of this monster when the cloud base suddenly rose and I entered light rain.



I was on the southern side of the front and the 15,000' cloud base had finally arrived, so why was I down around 6,000' and feeling uncomfortably warm? It was taking a bit of time for the weather to get organised again near the trough so the air was rough and broken and the climb rate was not what I was expecting. Eventually I just had to make the decision to stop and even though I was looking for much better 6kts took me back to over 11,000' and the next climb was 8.4kts under a couple of open class gliders that I suspect were flying from Corowa (it actually turned out to be Pam and Geritt Kurstjens), to the high point of 14,800'. It's 1521 and 930km into the flight just passing Hillston.



Again I have a look at the satellite imagery and I can see that Victoria has no significant cumulus so I suspect I will be flying into the blue, but for now the clouds are here to enjoy. An hour later I leave 13,000' and head off into a blue sky. I'm 1100km into the task and averaging 135kph.

It's a long slow flight and common sense tells me the day shouldn't just finish even at 6.15pm in Victoria. I'm still well below final glide and having visions of a landing short of my declared goal. I can't believe the flight would end like this!

There is one small cumulus well left of my track near Yarrawonga but it's been there for a long time so I think it will be gone before I get there and continue on track. There is someone ploughing just across the river in Victoria and there appears to be a dust devil lifting off.

The cloud at Yarrawonga has recycled as the previous one drifts off downwind and decays. I wish I had gone there!

At 6,000' over the ploughing I find 4kts, not brilliant, but I'm so far ahead of schedule that I still have more than 2 hours to complete the flight and I take it to over 10,000'. I'm now 1220km into the task with an L/D of 21:1 to the finish.

I take one more climb on the way and cross the declared finish line at 11,000' at 7.10pm. Last light will be 8.08pm so the rest of the flight is gravy. I fly around 60km to the south then turn for Benalla. With 4,000' over the top of Benalla I take one final glide to Wangaratta with the intention of starting the motor to finish the flight. At 1,000agl over the airfield I arm the motor and push the extend lever forward. There is a slight noise and then the fail to extend warning sounds. The engine has not come

out!

I pull the extend lever back and hear a slight thump indicating that the engine had moved up a little before being commanded back into it's housing. I move the lever forward again, and this time I assist the extension with a slight push forward on the stick. I see the engine come into view and after a short protest at my attempts to get it started it comes to life and I motor back towards Benalla climbing slowly into the setting sun.

Once comfortably within reach of the airfield, the motor is retracted and the air is perfectly still as I enter downwind. There is a slight re-arrangement of the spare water bottles in order to be able to extend the gear and flaps then to use the airbrake.

I've got full brakes out as I'm deliberately high on down wind and the slight re-arrangement of obstructions in the cockpit has meant that I have taken my hand off the airbrake lever. Turning base the brakes are being eased away when I notice I have the black flap lever in my hand and not the blue airbrake handle. This is a potentially deadly error.

It's a poignant moment, as I aware that a local club member named David Scott, had been fatally injured earlier in the day after a suspected low level stall and loss of control whilst out-landing his Nimbus 2.

At then end of the flight, it's an unbelievable mix of emotions and as Tim Shirley greets me and takes a copy of my logger files it's difficult to comprehend what has actually been achieved.

Thank you to everyone that has sent emails, SMS's and Skype messages. Your support and congratulations have been overwhelming. Also thank you to Peter and Jan Brown in Benalla for accommodating me and being gracious hosts for the few days I am staying.

David

Achieved on the flight;

Distance to Goal	1253km
3 Turn-point Distance	1285km
Free Distance	1309km
Free 3 Turn-point Distance	1532km
OLC Distance	1580km