

*The Southern Cross Journal*  
*May – June 2007*



**NEWSLETTER OF THE SOUTHERN CROSS GLIDING CLUB**

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*The President's Thermal*

Well it has been a hectic time for your President. With Bryan Hayhow gone from the Treasurer role, I have been trying to juggle both positions. I have to say I am not doing either of these well. I am making sure that the bills are being paid, but not a lot more.

Thanks to Peter Hewitt's recent plea, I have had one offer for relief that may start in July time frame at earliest.

We have also just received rent increases of 50% and 25% for the Hangar and Clubhouse. I have to get the process of negotiation as well as making sure that our lease requirements are met underway. This is another time-consuming battle to start.

On a positive note, the Planning Night gave the Committee some guidance on how the Club should proceed. I will be setting the agenda of next Committee meeting around more Strategic Planning for the Club. The outcome I would like to see soon is a 3 year plan that is balanced and achievable for the Club. I hope to publish the results of the Planning Meeting when Martin Feeg can get the notes out for us to digest.

Winter is coming upon us. The days will get shorter but we still have some great soaring opportunities at Camden over winter. The Club could certainly do with some more flying so take advantage of our great club assets and great weather to progress.

Be careful and enjoy your flying

### ***Congratulations to:***

Richard Frawley who went Solo on Wednesday 2<sup>nd</sup> May. Richard had two solo flights in the K-13 on the same day.

Congratulations also to Laura Bramwell on 'graduating' to the Junior. For those who don't know her, Laura is fifteen years old. Quite an achievement!



Steve Bourke has also been checked out successfully on the Junior. Finally, Bruce Ogden and Bernie Baer are both now Jantar jockeys.

### ***Coming events***

Ridge soaring camp. Don is away at present. On his return he will give dates for the camp. Bunyan wave camp is on from September 1 - 9 this year.

The NSW state comps are on in Lake Keepit this year from 10<sup>th</sup> -18<sup>th</sup> November.

The Narromine Cup will be held on the following week, from 18<sup>th</sup> – 24<sup>th</sup> November, and Derek has circulated an e-mail as follows:

As in previous years, the committee and instructors' panel is keen to encourage members to participate in these events. We have 4 single seaters and the DG available for interested members. If you haven't entered a competition before don't let this hold you back. The people at both events are friendly and supportive of new faces.

For the comp. Two members may share the same aircraft. The points awarded for the days you don't fly are proportional to those earned on the days you do fly. The DG1000 can be entered as a club aircraft, with different pilots each day, or with a named pilot, with other club members flying as required. This is an excellent opportunity for club members who have not flown in a competition before to experience the thrill of comp flying while under the care of an experienced comp pilot.

If you are interested in attending either of these events, please reply, with the probable dates, the aircraft you would prefer to fly, and whether you can tow a glider to (or from ) either event. We will coordinate the replies, and, in the event of more pilots than aircraft being available, if we are unable to resolve this by negotiation, then names will be drawn out of a hat.

One of the reasons that we are asking for expressions of interest at this stage is to enable leave and accommodation to be booked in advance!!

Derek has said that he would like the DG1000 for the duration of the comp, and will be happy to accommodate club members on a cost share basis for any day of the comp. He can tow to and from Keepit. Martin is planning to do some cross-country training in the DG at Narromine. Contact him if you are interested.

**And Martin added the following:** There are several good reason for entering competitions:

1. For the aspiring pilot it is a good forum to **check his performance** against the others, and with some effort he will undoubtedly improve.
2. Generally, no matter how experienced you are, it is a very intense time and the **learning curve is very steep**. This is not just my own finding, but an opinion widely shared.
3. **Competition is fun**, it is a gathering of like-minded people. Flying with your mates is much more rewarding than stooing around by yourself. Quite often there is some entertainment by the organiser and definitely a lot of bantering and joking in the evening with old and new friends.
4. Everything revolves around soaring. Weather, task setting and launch is presented to you on a "golden plate", just enjoy it. This allows for **unimpeded enjoyment**.

On a slightly different note for the focused pilot; as noted above **I will be available for coaching**. The latest rules do allow mentor-student teams and I am happy to do this. Secondly I am happy to help getting you started with preflight briefing and advice as well as with post flight analysis.

Lastly wouldn't it be great if we get a great host out to the competition. Astir, Jantar, DG303, DG1000 as club aircraft, plus Dave & JJ with Mosquito, Dion with ASH25, Jay and his LS6, Mike with DG100, Peter with his DG400, Richard with his new Shark, me with my good old Ventus. Any other private aircraft joining in?

So, you don't have any more excuse for saying – "Oh, I didn't know!"

Cheers

Martin

### *Winter Theory 2007 (June/ July)*

**Dates:** Sat. 30th (sessions 1-3), June  
Sat. 7th (sessions 4-6),  
Sat. 14th (sessions 7-8) of July 2007

**Times:** First session 8.30 - 11.00, lunch break,  
Second session 12.00 - 13.30, coffee/ cake break,  
Third session 15.00 - 17.30, dinner (from 18.30) and open discussion

**Venue:** SCGC Clubhouse, Camden, Camden airfield

**Dinner** will consist of a starter type, mains with salad and desert with coffee/ tea. The contribution will be not more than \$10 per person. Everything is prepared fresh on the day.

**Handouts** will be provided on the day, a gold coin contribution would be appreciated.

#### **Programme:**

1. Meteorology I Weather systems and their impact on soaring
2. The phases of a flight Climb – Finding lift and entry, Climbing, Leaving the climb, Cruise, Final glide, Height bands
- 3a. Preparation for a cross country flight
- 3b. Competition flying (general advice)
4. Meteorology II (Information on weather) Where can I get the forecast info? What do I need? Interpretation of charts and summaries? Practical on interpreting temp traces
5. High altitude flying and oxygen Reasons, Advantages, Dangers

6. Airspace (Wayne Hadkin, retired controller) Rules and regulations, Phraseology requesting clearance, Visit of a control centre (probably following Sunday - to be confirmed)

7a. Rigging and De-rigging an aircraft

7b. Trailer towing Some hints to make it really easy, with hands on if requested.

8. Official Observer What is it good for? How much do I have to study?

Practical approach

9a. Stepping stone technique (a technique for safety and confidence in xc-flying)

9b. Outlanding (basic theory and practice with the aid of slides)

### *The APEC meeting*

As most of you will have seen in the numerous e-mails on this subject, our operations at Camden may have to cease between August 30<sup>th</sup> and September 10<sup>th</sup>. The APEC leaders are ostensibly going to be here on business, not on holiday, so in my opinion, the meeting should be held in Canberra.

Dave is seeking an exemption for our activities, so we'll have to wait to see whether this is granted. Meantime, ideas are being circulated by e-mail for our operations to be temporarily transferred to Goulburn or possibly Bathurst, should this be necessary. If and when a decision is made our members will, of course, be notified.

### *IUJ is back*

Our IS 28, IUJ is back in service looking very smart with its fresh paint job. Michael and his team have done a great job, as they usually do, and I think it would be appropriate to thank Peter Chegwidden for the part he played in this, and other work on our fleet.



*Peter is seen here working on IUJ at Camden Sailplanes.*

*I suggested to him that, as he is a QANTAS man, IUJ in its red and white livery would be more suitable for him than CQB with its green and gold paintwork. Perhaps a swap could be arranged. For some reason he didn't seem inclined to follow this up.*

### *From our Aircraft Maintenance Officer:*

A couple of points re IUJ: Reports have been made that the undercarriage was difficult or impossible to lower from the front cockpit. On May 1<sup>st</sup> Camden Sailplanes jacked the glider up and found that the undercarriage could be raised and lowered smoothly and without difficulty. However, if a downward load was placed on the handle when pressing the button, the operating rod would flex downwards and bind on the structure beneath it. Difficulty would then be experienced in moving the handle rearwards to lower the undercarriage.

This was checked in the air on 11<sup>th</sup> May, the undercarriage being cycled a few times no difficulty was found provided care was taken, as outlined above, to give a straight pull back, without downward pressure.

Another problem with IUJ has been the jamming of the rudder pedal adjustment control in the front cockpit. Camden Sailplanes have twice recently been called to un-jam it. The problem appears to be due

to the pilot winding the control wheel to its limit and then, as resistance is felt, trying to move it further by brute force.

The upper surface of the left aileron was punctured recently while rotating the glider during ground handling. The aileron came into contact with the tractor roll bar. Not major damage, but the repair still has to be paid for. During ground handling or towing we mustn't forget how long those wings are!

Also on the subject of maintenance, Richard Shemtob recently found that the Jantar's main-wheel tyre pressure was low, however he was unable to attach the pump connector to the inner tube valve in order to inflate it. Richard left a note in the glider to this effect, and subsequently mentioned it to Geoff Croy. Geoff commented that he had had the same experience, but found that by deflating the tyre the inner tube valve became loose and this enabled him to attach the pump connector.

## *Safety matters*

For some light reading I have been looking at the UK accident and incident reports. No one has invented any new accident of late, but they have been regularly repeating the old ones, which at least shows consistency. It's a pity that we don't have regular reports in Australia as I'm sure that lessons are learnt from them. On this basis the following notes may be of interest, particularly to our newer members.

***DI and rigging.*** In one case, a hotelier coupling for one airbrake wasn't connected properly, resulting in only one brake opening, but the glider landed successfully (no mention of the pre-take off check). In another case the tailplane wasn't properly attached. Again no accident resulted. These emphasise the importance of verification by a second person when rigging a glider.

***Ground handling.*** A glider was being towed in a congested area when its wing struck another glider. Difficult sometimes to judge clearance when driving the towing vehicle, so in these circumstances someone is needed at each wing tip to check that all is well.

***Pre take-off.*** There were three reports of pilots being distracted while carrying out their checks. In two of these the canopy was left unlocked at take off, with fairly predictable results. In the third one, the pilot omitted to trim forward for take off. We should all keep firmly in mind that the pilot must not be distracted by the ground crew while preparing to take off.

One other case of failure to prepare properly for flight was more serious. During the launch of a K21, which was being flown solo, the rear canopy opened and shattered. The pilot landed safely, but it was then found that the rear seat harness had not been secured and there was a parachute lying on the back seat. On a solo flight in a two seater perhaps our CHAOTIC should include 'harness back and front secure.' In another potentially serious instance a pilot left unsecured ballast on the cockpit floor, which the next pilot didn't notice (ABCD?). The ballast weights moved during take off, restricting control movement. A successful landing was fortunately made, but it is a reminder of a less happy outcome, reported a few months ago, when a passenger placed his camera on the floor and it jammed the control column.

***Aerotow.*** The tug took the glider upwind in reducing visibility. After release the pilot couldn't locate the airfield and made a precautionary landing, without damage. The glider pilot had 514 P1 hours!

***Pre landing.*** After a flight in cold conditions the pilot was unable to open the airbrakes. He side-slipped to a successful touchdown. Icing was suspected. Not likely to happen to us, but we should all be capable of side-slipping should the need arise.

***Out-landings.*** There were several cases of gliders out-landing on cross country flights and having to ground loop to avoid going through fences. In all the cases reported damage, sometimes serious, had occurred, however there were no injuries. It appears likely that had any of these gliders gone through a fence someone would have been seriously hurt, so to that extent the ground looping paid off. There may have been other cases, not reported, where ground looping didn't result in damage.

There were several landing mishaps reported, the problem in one being due to a strong cross wind which caused the glider to weathercock on the ground run and collide with a winch. The damage was minor in this instance. Keeping the tail firmly on the ground during the ground run is likely to reduce the chance of this happening, but also planning a touch down point well clear of obstructions is a worthwhile precaution.

There were numerous accidents and incidents involving winch launching, so even experienced pilots who are going for a winch launching conversion need to watch, listen and learn.

## ***Once upon a Cu-nim***

by *Olaf Michalak*

*John Jurotte came across this article in an old copy of the Club Journal. I think it is well worth reprinting here as there are some important lessons to be learned from it. – Ed.*

The scene is Camden airfield in NSW on 15th November, 1970. The aircraft, an ASW-15. The time is early afternoon, and the occasion an intended hangar flight that turned into the most frightening experience of my flying career. It went something like this ...

I was rostered for instructor duty, and had spent a normal morning in the back seat of our K-13. In the early afternoon a front was noticed approaching from SSW, and the CFI and I decided it might be time to cease operations by hangar-flying our aircraft.

The line squall in question looked about fifteen miles wide and was obviously major. But feeling it safe to do so, I requested an aerotow to 2000 ft and released in 400 fpm lift that increased rapidly to 600 fpm. This kind of opportunity is hard to resist at Camden, and I quickly wound up the ASW-15 to 4000 ft, our upper limit, in full view of the airfield.

To the east I could see Campbelltown basking in sunshine about 10 miles away. To the south, however, things looked dark and ominous. I slowly flew due east over Camden town, meeting the Southern Cross Longwing at about 3500 ft along the way. With sunshine ahead and other aircraft about, I suppose I was lulled into a false sense of security.

I cruised happily, enjoying myself, and then remembered that this was a hangar flight. I turned 180 to head for home, but when I did so - surprise, surprise. Camden airfield had vanished beneath a big black cloud, though the town immediately next to it was still in view.

Now came the big error. Knowing well where the airfield was, I lowered my undercart and pulled airbrake, figuring to lose enough height to crawl quickly underneath the cloud and thus get home. Mother Nature must have been laughing at me - Like come in, sucker. At this time I'd been in the air about a quarter of an hour, the next 45 minutes were to make it the longest hour of my life.

Heading into the soup at a sink rate of about 1000 fpm, visibility suddenly reduced and my descent abruptly stopped. First there was no sink, followed quickly by sensational lift. My rate-of-climb, which read to 2000 fpm, was hard over the stop. So far I'd been visual, but in next to no time I was at 6000 ft and flying completely blind. I attempted a quick 180, not sure whether it was successful or not.

The aircraft was being badly buffeted now, making compass-reading impossible, and the turn must have gone wrong because I remained in the clag.

The ASW-15 was fitted for VFR flight only, and when visual reference disappeared I experienced pure horror. With an effort I tried to stay calm and continue to think, forcing myself to develop quickly a rough procedure for flying IFR. First I looked at my feet and hands to make sure the controls were central. Then I tried to hold the speed at 60 knots. Finally I tried to keep the ball somewhere near the middle. I repeated this crude drill, knowing it was my only hope.

### **ZERO VISIBILITY**

Visibility was now so bad that I could barely see the Wing-roots - the tips had vanished some time ago. It was raining furiously. Two major thoughts began chasing through my mind; 1, I have no oxygen or warm clothing; 2, I'm now in controlled airspace that's full of airliners.

At about 8000 ft, severe lightning and thunder began flashing and booming all around me. An additional and alarming noise was heard. Opening the side vent, I found it to be hail - hail the size of golf

balls, I thanked heaven I was flying a fibre-glass ship, because I'm sure a conventional type would have ended as a skeleton.

For what seemed ages, in gusts that I thought must snap my harness, I followed my impromptu IFR routine, refining it a little so that my eyes scanned sequentially from the top of the instrument panel down - check airspeed, check ball, check stick, check feet; then back to airspeed again. Over and over, in the clamor and turbulence, I repeated this pattern. I stalled several times but managed to recover, and somehow the ball stayed roughly central and the speed between 50 and 80 knots. I thanked my lucky stars for a stable aeroplane.

### *CANOPY LEAKS*

It was very dark while all this was going on, I felt very much alone and conscious of each minute crawling by. Then suddenly, at about 10,000 ft, the darkness changed and began to grow lighter. I wondered if I would come out of the top of the cu-nim. But now the aircraft stopped climbing (remember, I'd had the wheel down and full airbrake all this time), and began to descend. I was still without visual reference, and also quite wet because of canopy leaks. But I was now going down very fast into the grey void, and man, I loved seeing that altimeter winding down.

But a new and frightening thought now occurred to me: where the devil am I, and what if cloudbase is at zot feet?

When my altimeter read 3000 ft, I closed the brakes but left the gear down. I decided to keep flying at about 60 knots and see what happened. The sink rate slowed to 200 fpm, and I cracked the brakes again for a slightly faster descent. My clear-view panel was closed, to keep rain out.

I broke cloud flying straight and level with some 1000 ft on the altimeter, but guessed I was closer to only 500 ft above the terrain. Directly ahead of me was the ocean. Below was hilly tiger country. Slightly to the left, a few miles away, I caught a glimpse of several buildings. I quickly estimated a 25 knot wind judging from drift. And I just had time to make out two small paddocks on my right when the canopy suddenly fogged over completely. Wiping it and opening the vent didn't help - it was exterior fogging.

### *APPROACHING BLIND*

Now I was faced with a tricky task - that of flying a right hand circuit blind (the vent is on the left), and doing a 25 knot cross-wind landing in an unfamiliar and too-small paddock with trees at each end. I prayed there wouldn't be powerlines, no hope of checking this in advance.

As it turned out, I was able to line up some sort of final glide out of the little vision I had. When it came to rounding out, however, I was to my horror a series of irrigation sprinklers laid out in the paddock. There was nowhere else to go and I plonked down between them, unfortunately damaging my port wing leading edge slightly on an unavoidable one. By the grace of fate the field was soft-ploughed and muddy - a carrot patch, would you believe - and it brought me to a pretty quick stop.

The property owner and his friend had been watching my antics from the next paddock. On meeting, the three of us were speechless for about five seconds, and then we all burst into hysterical laughter. You see, it had meanwhile started to pour in buckets, soaking us very thoroughly. But the laughter also meant relief that I was alive.

We dragged a tree-stump carefully over the port wingtip (no tie-down gear), then clumped off to the house to phone base. It turned out I had landed at Darkes Forest, about 35 miles from Camden and far too close to the ocean for comfort.

I am told there was a little concern by ATC at Mascot, and certainly a lot more at Camden. My flight obviously deserved a penalty, because flirting with cu-nims is pilot error in no uncertain terms. I am very glad to be around to work off that penalty, and want to thank everyone who spared me a kind thought during my unpleasant experience - particularly those who assisted in the retrieve.

It puzzles me still to understand how my improvised IFR technique could possibly keep me right-side-up for forty-five minutes in the wild, black centre of the storm. I have absolutely no ambition to try it again to see if the performance can be repeated. There's far too much horsepower in cu-nims for my liking, and I offer a heartfelt word of warning to others who may be tempted to try their luck - ***DON'T DO IT!***

Footnote: About 40 years ago a member of the club I flew with in the UK entered a cunim intentionally, hoping to break the UK height record. He had IFR instrumentation, and was qualified for cloud flying, but even so he had great difficulty maintaining control in the turbulence. From memory he did break the

record, but in the process the glider was suffered severe hail damage. It was obviously a very unwise thing to do, and without full instrumentation and blind flying experience it would probably have been disastrous.  
*Ed.*

### *Martin's report on NSW- RTO Ops meeting*

I attended the recent NSW-RTO-Ops meeting, my main contribution was informing the CFI's of the role of the coaches and my special role as head-coach for NSW. It was very well received that off-check pilots are no longer left in limbo, but have coaches to help them progress into cross-country soaring.

Later in the evening we had the Welcome Party for our new members. While I prepared Pizza-bread for starters and Coconut-Chilly-Prawn Pasta for mains (accompanied by a Caesar salad, the comrades watched "Gladiators of the Sky".

After my welcome address (on behalf of President Dave) and a few more slides everyone went home very happy. I am sure some can't await summer now.

Keep practicing hard on improving your cross-country skills - even marginal conditions are good training, and than let us enjoy eating up the kilometres once the sun is hot again.

### *Radio procedure*

It's a small point, but I note that when Camden is a CTAF/R some pilots still preface their radio calls, "All stations Camden." The current procedure is to call "Camden Traffic, ....."

### *That video clip;*

Many of you will have looked at the video to which Kevin Wilson drew our attention by e mail:

<http://www.youtube.com/watch?v=xCct8cDtyk&NR=1>

For those who haven't see it, the video shows a glider, which looks rather like a DG 1000, turning apparently from base leg to final, and entering a spin from which there was no chance of recovery. It was too low for a fully developed spin, so the glider wasn't as nose down as it would have been in that case, and thus there was more chance of the occupants surviving, though almost certainly suffering serious injury. Kevin commented that: "After seeing this video, all of you will be watching your airspeed... especially on final. It's a classic stall (right wing stalled first). Remember: Circuit speed is 1.5 x stall speed + 1/2 wind speed. Speak to an instructor if you don't fully understand this message."

Good advice, but it was followed up by e mails from Derek and from Mike Moore drawing attention to the wind sock, which indicated a fairly strong wind, perhaps as much as 15 knots. And from the direction of the sock it seems apparent that the glider was about to make a downwind landing.

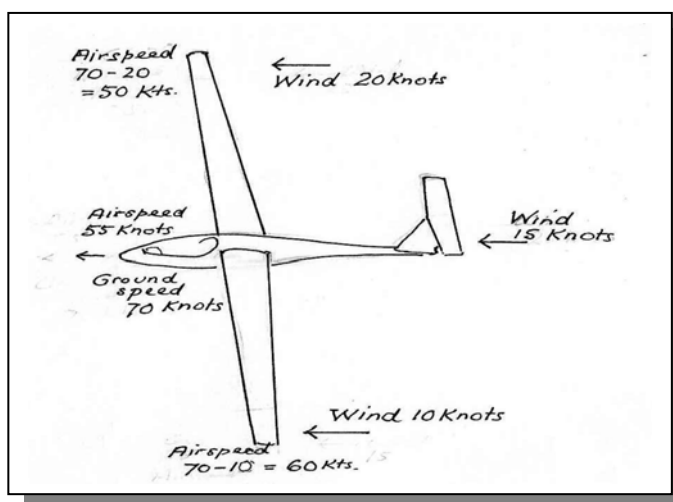
Was this likely to increase the risk of a stall/spin accident? There has been some controversy on the likelihood of this, so let's look at the situation. In a normal into-wind landing, *on a still day*, if the glider is on base and rolls into a turn, the angle of attack of the down-going wing will increase while that of the up-going wing will decrease. If you are flying slowly, the increased angle of attack, plus a decreased tip speed caused as the glider begins to turn may cause the inner wing to stall. At the same time the outer wing on will speed up and its angle of attack will decrease, so this wing will not stall. The result of a stalled inner wing, with increased drag is more yaw and roll, and if no correction is made, a spin entry quickly follows.

The risk is increased if there is a strong wind, and hence a marked wind gradient. In this case the down-going wing moves into slower moving air reducing the air speed at the wing tip, and the risk of this wing stalling is increased. This emphasises the need to allow for wind speed, and hence for the wind gradient, in determining our approach speed. Incidentally, if the wind is known to be gusting we should increase our speed further, by a half of the anticipated gust speed, to allow for possible lulls between gusts. Also a higher than normal approach over obstacles on the boundary is desirable.

But what if the glider is (very unwisely) making an approach to land with a tail wind. The *ground* speed on final will be the airspeed plus the wind speed. For example 55 knots airspeed + 15 knots wind speed = 70 knots groundspeed. As the glider banks to begin its turn onto final, the down-going wing will be moving

into slower moving air. It will still be travelling at 70 knots over the ground, but if the wind speed at the tip is 10 knots the air speed at the tip will be  $70-10=60$  knots, thus the risk of the tip stalling on the inner wing will actually decrease.

This may sound as though a downwind landing might be a good idea, but it certainly isn't. The additional ground speed means that the glider will have a much flatter approach angle, resulting in a long landing and a very fast touchdown. During the ensuing ground run, as the glider slows to the same speed as the surface wind there is no airflow over the wings and control surfaces, and in particular over the rudder, making the rudder ineffective, so directional control will be lost. If a cross-wind component is present there will be the risk that the glider will weathercock without control, risking collision with objects at the side of the runway.



*The effect of banking with a tailwind and a strong wind gradient*

Going back to the clip, one thing which might have been a factor in this accident is the apparent high speed when flying low and turning downwind. There have been reports in the past of pilots instinctively raising the nose of the aircraft in such a circumstance, without checking the ASI.

### *What a great gliding site we have.*

*(Sea breeze front. curse or blessing?)*

By Bill Pain

You have heard about “the glass is half full or half empty”. It is a matter of viewpoint and attitude. Something I have found that I can count on is this, whatever you put your attention to in life you get. Applied to soaring, when you have your attention on lift that is what you will get and that which you resist you also tend to get. So if you are flying around resisting sink, that is what you get. Ever noticed after a flight where you struggle to stay up and when you finally give up and set up your circuit you fly through nothing but lift?

In my experience of soaring it is fairly rare to have a flat day that is not soarable. The atmosphere has a tendency to go up and down endlessly seeking an equilibrium that is for ever being disturbed. Modern gliders these days have fantastic performance that can utilize this.

I recall having a flight with an instructor. The main objective was to do aerobatics. It was winter time but there was weak lift to be found. What struck me was the instructor's negative attitude to the possibilities of soaring. After performing a few aros I would start my search for lift. After encountering some zero sink, I'd start to turn and explore this parcel of air. The instructor would comment, “this is no good”- not sure what he was expecting in June - but I felt there was a good chance of finding some better cores amongst the zero and that is what we did, repeatedly in fact, climbing numerous times to then perform more aros. Each time the instructor chiming in that that would be it and we will probably have to land soon. So the corollary here is to make the most of the day, put your attention on the lift, do not resist the sink, it is a good sign actually, if there is sink then there has to be some lift.

Now back to the sea breeze after all that waffle. I often hear complaints that the sea breeze messes up a days flying. Of course this happens if you only think in terms of the airfield, taking the standard launch to 3000'. We have to think outside the box. You would be prepared to spend the extra \$15 to go to 4,500' over the Oaks if it meant having a great flight wouldn't you? The sea breeze I have decided is a blessing. It produces consistent lines of lift. Much of the year it is not overly aggressive and the return to the airfield is not difficult if you are high and not having to penetrate the lower level stronger winds. That is right. With a sea breeze, because it is a wedge of air pulled in by the inland convection the stronger wind is near the ground excluding low level wind gradient.

Nearly all my cross-country flights from Camden involve using the sea breeze. Because the cloud base differs dramatically from the maritime air to the inland air mass, spectacular views looking down on cumulus sometimes several thousand feet below may be gained. You do not get that very often out west.

Tips on contacting and using the sea breeze. Get off early enough before it reaches the airfield. Stay on the inland side of it. It rarely forms one long line along the coast, but pushes in finger like. Watch for the lower cloud base and stay inland. If you have the rating etc, move inland and get to the higher ceiling. Get with another experienced pilot/coach and take the DG 1000. If the sea breeze has already reached the airfield, take a high launch towards the Oaks. There is some great flying to be had here, and nearly all year round. What a great gliding site we have!

*[Well, Bill is a much more successful pilot than I am, so there must be something in his philosophy, but unfortunately it doesn't seem to work for me. Perhaps the chicken factor has to be taken into account. Ed]*

## *Gliding membership around the world*

'Gliding Kiwi' has published figures compiled for the International Gliding Commission which show the membership in countries around the world. According to these there were 111,482 glider pilots in 2006. The country with the greatest number, as in previous years, was Germany, with a total of 32,229.

Perhaps of greater interest is the relationship to the population of the country in question. The number per million population in the following countries works out as shown below (populations taken from Wikipedia).

	Total No.	Per Million.		Total No.	Per Million
Australia	2,444	122	Austria	3,481	419
Canada	1,101	43	Denmark	1,738	316
France	12,376	221	Germany	32,229	391
Netherlands	3,857	233	New Zealand	861	210
Poland	2,362	62	UK	8,079	134
USA	20,899	69			

These figures do not, of course, tell us how much flying takes place. The more northerly countries will obviously fly less in the winter, but the very long summer days probably balances this up to some degree.

## *Global warming*

When global warming or climate change is discussed on the TV they nearly always show the steam emerging from the cooling towers. Chimneys seldom appear – they are obviously not as photogenic. One would imagine that the cooling towers would be a good source of thermals and I wonder whether any of our members have experience of utilising them as a thermal source? If you have perhaps you'd let us know.

## *Next Issue*

Richard Sams recently purchased a box of old magazines and was both surprised and delighted that one of them contained an article about Southern Cross Gliding Club – the date 1962. This will be featured in our

next issue of the Journal. Perhaps we can also persuade Mark or Bernie to compare their experiences of hang gliding and our variety.

*Until then, best wishes for some good winter gliding.*

**FOR SALE**

**BORGELT B100 Vario/Nav-Computer**

- GPS installed
- Compass installed

**AIRPATH COMPASS**

**JOEY LOGGER**

**ALL WIRING LOOMS/CONNECTORS, ETC. as recently removed from glider**

**ASKING PRICE: \$1200 (total package, ex Camden, NSW)**

The equipment was last used in good working order, January 2007. The Joey logger requires re-calibration by original manufacturer.

**Contact: Werner von Euw 0416 153 777 or (02) 9451 9168**