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December 2005



Glory Days



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Gliding Championships**



**Fire, Water, Air
– Vertigo 2005**



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| • Sportavia National Fly In/Out | |
| Fun weekend for all pilots run in conjunction with Tocumwal town festival | 25 Feb 06 |

HANG GLIDING CALENDAR 05/06*

- | | | |
|----------------------------------------------------|---------------------------|----------------|
| • XC Tour | (Aerotow Moyes Dragonfly) | 10 - 18 Dec 05 |
| • Sportavia Top Gun Challenge | | 16 - 19 Jan 06 |
| • Sportavia International Hang Gliding Competition | | 21 - 28 Jan 06 |
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* Hang gliding will be operating out of the aerodrome or a paddock close by.

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Seppi Salvenmoser.....	Bavarian Open - Austria
Martin Harri.....	Swiss Open
Brett Hazlett.....	Canadian Nationals
Gerolf Heinrichs.....	Pre-Europeans - Croatia
Olli Barthelmes.....	German Open
Corinna Schwiengershausen.....	German Open - Women's
Gerolf Heinrichs.....	Nordic Open - Norway
Nils Henden.....	Norwegian National Champion
David Seib.....	Spanish Open
Jon Durand Jnr.....	Big Spring Open - USA
Gustavo Saldanha (Guga).....	Brazilian Nationals - Brasilia
Jon Durand Jnr.....	Canungra Classic - Australia



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Photo: Courtesy Airborne

Soaring AUSTRALIA



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This magazine is a joint publication by the GFA and the HGFA and each association contributes 50% to the production cost and is allocated 50% of the content pages of each issue.

Contributions are always needed. Articles, photos and illustrations are all welcome although the editors and the GFA and HGFA Board reserve the right to edit or delete contributions where necessary. Materials of unknown origin won't be published.

All contributions should be accompanied by the contributor's name, address and membership number for verification purposes.

Photographs should be printed on gloss paper either in black and white or colour or submitted on CD. Drawings, maps, cartoons, Diagrams, etc., should be in black ink on white paper. Lettering may be pencilled lightly but clearly on the drawing, for typesetting.

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News, Letters to the Editor, New Products, Events Calendar entries

HGFA members should send the above editorial items to the HGFA Sub-editor, Richard Lockhart, as text in the body of an email to <soaring.australia@hgfa.asn.au>.

Classifieds

HGFA members should submit classifieds (secondhand gear for sale) to the HGFA Office <office@hgfa.asn.au>. See HGFA Classifieds section at rear of this magazine for more details.

Club Executive and Member Updates

HGFA members should send changes of address, etc, details (whether for Club Executives or individual members) to the HGFA Office <office@hgfa.asn.au>.

Display Advertising

HGFA commercial operators wishing to place a display advert should email the Graphic Designer, Suzy Gneist <gm_design@bigpond.com>, to receive a booking form and detailed instructions.

HGFA WEBSITE CONTRIBUTIONS

Email Club News to <clubnews@hgfa.asn.au>, Email Comp News to <compnews@hgfa.asn.au>. The information is forwarded to Soaring Australia and the maintainers of the HGFA website.

DEADLINE FOR ALL CONTRIBUTIONS:

25th of each month, five weeks prior to publication. Photos and materials will be returned after publication only if a stamped, self-addressed envelope is supplied. Otherwise, photographs, whether published or not, will be filed and may be used subsequently in further publications.

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OUR NEW BABY – A pilots report on the DG 303

Martin Feeg

SHE IS A NICE LITTLE CUTIE AND DOES NOT MAKE
A MESS. YOU DON'T EVEN HAVE TO CHANGE NAPPIES!

On Thursday night Bryan's SMS read "CoA approved. Can you test fly on weekend?" Finally, the long-awaited moment for the Southern Cross Gliding Club had come. Five weeks ago I was asked whether I would be willing to test fly the new baby. So I sat back, read the manual, consulted the Zacher-Program and made a 'cheat sheet'. Friday night I mentally rehearsed the various details of ground checks and in-flight checks again. Saturday morning at the field a bit more excitement than usual, as those who turned up quickly became aware that "something was in the air", well not yet. A thorough check satisfied me.

It took no time to feel comfortable in the roomy cockpit; all controls and instruments are well positioned, I really felt at home.

The DG 303 was hooked up and off we went. With me being a rather light frame (with parachute, just six kilograms above GFA minimum) she lifted off very early. Although she danced a bit (probably excitement at finally being in service) it was no problem to show her which way to go. We found with other pilots that there is a slight tendency to balloon if the pilot is less than 10kg above the minimum. As soon as I had released I became even more aware how quiet she is. Still 50kt indicated and not a whisper. Of course I was anxious to find out about the undercarriage (as this is a well-known shortcoming of most DG models) but I was surprised very positively. It takes

only a firm will to travel it to its retracted position; the lever locks in without any problem. Release is even easier, just unlocked the undercarriage travelled of its own accord forward and locked with a thud like magic. Rock solid!

Trying as if it became stuck in mid-travel proved it was just as easy to get it back into the extended position. All you would do is to check visually and with a bit a tug parallel to the cockpit wall that it is really locked and you won't have a belly landing.

Putting her through slow speed, stalls and spins, combined with all the various possibilities, she behaved so beautifully, I would have proposed if I wasn't married already. No viciousness, and hardly possible to force her into a full spin, that's a pattern we love for a good club aircraft. And numerous other comrades since then failed to get her into a full spin. She is almost un-spinable. Straight and banked flight at various speeds, as well with hands off, made me feel like I was sitting in a train. Trim operation covered the full speed range up to 145kt.

Thermalling was just as easy. Once stationary, all that was necessary was a tiny hint of top rudder to glue the jaw string into position and the usual suggestion of stick necessary to compensate for the turbulence. The roll rate is magnificent; it took only six seconds to make her go from 45° to 45°.

The airbrakes proved very powerful; unfortunately I was running out of altitude and couldn't test every detail. But, it appears about 10kt descents are possible and with an IAS of more than 55kt she shows you the attitude to maintain speed with a distinct pitch forward. Please let her do it and don't bleed off the speed by enforcing the previous horizon picture.

About time to land, deliberately I chose a rather high final to check my previous findings on the airbrakes. With three-quarter



airbrakes the descent was steep and offered very good visibility of the landing spot. On time rounding out and carefully putting the airbrakes back to about one-third allowed for a nice flare and a smooth landing.

Finally, interest was drawn to the wheel brake which proved even more powerful than on the sister ship DG 1000. Folks, be careful or she will lift the tail. Not lady-like behaviour!

There is one thing I have not been able to check out so far. The manual talks about an eight-knot crosswind maximum on landing and take-off. This seems very little to me, as usually the tugs are limiting and a Pawnee is rated with 12kt. But this might soon be sorted out as DG and GFA have been approached about this already.

The DG 303, as we have got it, is a great club aircraft. With her forgiving behaviour and being almost impossible to spin she is ideal for single-seat conversion. Yet on the other hand she has enough performance to do well in serious cross-country or in competition.

MY RECOMMENDATIONS:

- For your first flight I would suggest to put in weights so that the overall cockpit load is at least 75kg, this will help to prevent her taking off unexpectedly soon.
 - Have the trim full forward.
 - Check the bottom cushion for being placed behind the rim around the control column: It is a parallelogram and the whole lot travels, it doesn't pivot. Don't have a cushion restricting the control column. Maybe some Velcro wouldn't be a bad idea to keep it in its place while entering the cockpit.
- Have fun!



Photos: Courtesy Martin Feeg



TOLKIEN AND GLIDING

Rob Crawford

BEING A SMALL BUSINESS OWNER (VERY LITTLE FREE TIME FOR FLYING) AND ONLY GETTING TO THE CLUB ABOUT ONE DAY A MONTH, I BEGAN LOOKING FOR SOMETHING I COULD DO AWAY FROM THE CLUB THAT WOULD CONTRIBUTE TO ITS OPERATION.

As an early solo pilot I don't have experienced flying skills to offer but while doing my roster as duty pilot I saw a trial using a cut-open plastic ball to protect the Tost rings. Since the local Shire had upgraded the main Narrogin runway and paved the surface with asphalt, the number of Tost rings that wore down to being unusable increased dramatically. Even though the ball typically only lasted for about two days of flying, it proved the concept of a sliding cover on the rope that protected the rings during landing was an idea with promise. I researched the availability of suitable plastic balls from toy suppliers but found that the balls were difficult to procure.

I started discussing the idea of making our own tow ring cover with the club's Technical Officer, rope master and tug master (and a few others) and we came up with a conical design. More discussion with a polyurethane moulder helped to refine the detail. After producing a plug and a mould we had the first prototype.

Installed on the tow rope, the cover slides freely along the rope but is retained by the shackle fastening the rings to the spliced eye at the end of the rope. From the first take-offs, the cover slid slowly along the rope to gently rest against the glider, typically reaching there as the glider and tug became airborne. The forgiving nature of polyurethane means that the glider is in no danger of damage. The cover moved back over the rings after release and protected the rings (and shackle) during the landing and roll-out.

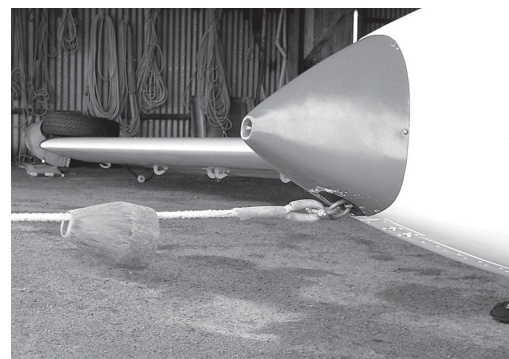
During the first month (at around 100 tows) a split was noted at the side of the opening where the rope passes through. The prototype cone was used 'till it failed after 437 tows and just over four months. The majority of these tows were on bitumen or gravel runways at Narrogin with the last 48 in 100 to 150mm high grass at the Stirling Ranges. The grass applied a great deal of friction on the cone, eventually opening up

the split and pulling the cover off over the rings. During this time, there was NO wear or even a scratch on the rings! Given that we should have expected to replace one or even two sets of Tost rings during this period and the relatively low cost of the cover, the savings to be had are obvious.

A new design has beefed up the rope opening and, combined with the incredible abrasion/wear resistance of the polyurethane, has provided a cover that is expected to last considerably longer. Given that the club typically replaced four sets of rings and a few more shackles each year we're looking forward to saving some money. I should point out that the standard rope configuration has spliced eyes at each end with clear PVC sleeved over it, a metal weak-link at the tow plane end and genuine Tost rings both attached to the rope eyes with shackles. As the rope wears (more to the rear end) it's reversed to get maximum use.

Now called the 'Ring Saver' (very Tolkien – thanks Bryan), it is available for sale at \$54.95 inclusive of GST. An interesting side effect of the 'Ring Saver' has been that on a number of occasions it has landed on the wire boundary fence but has bounced over! Normally the bare rings would wrap around the wire and tear the rope apart.

Should you be interested in purchasing



a 'Ring Saver', please contact Hilmer Geissler on (08) 9291 8949.



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Gary Crowley, VMFG

IT'S 2025, SUMMER TIME, AND ACROSS AUSTRALIA ON SELDOM-VISITED AIRFIELDS SIT DUST-COVERED SAILPLANES, COATED WITH COBWEBS AND RARELY EVER SEEING THE LIGHT OF DAY.



Cadets look over VMFG's Grob 109B during their annual parade at Point Cook, Victoria

Photos: Courtesy Gary Crowley

The doors of their infrequently opened hangars rattle on their track whenever there is a breeze and, just occasionally, elderly pilots in their late 70s haul out one or two for some local soaring. Weary and tired by late afternoon they pack up to return a few weeks later... perhaps.

That vision is something none of us want to believe will ever happen after this present generation of 'baby boomer' pilots is no longer active – and perhaps it won't after all!

Enter Carter, Carter and Carter...

The only time most of us encounter a family name in triplicate is when circumstances place us in the hands of the legal fraternity. So a completely different scenario is invariably welcome.

Stewart Carter resides in Melbourne's south-eastern suburbs and is an active member of the Gliding Club of Victoria (GCV), based at Benalla. Just as interested in aviation are his two sons, Ewyn and Alex. Long ago both boys joined the nearby Australian Air Force Cadets (AAFC) unit, No 417 Squadron based at the Melbourne suburb of Brighton. The elder brother, Ewyn, has risen to the rank of Flight Sergeant, no mean feat in itself.

Late in 2004 the flying bug really kicked in and both boys became GCV members also. Keen and unstoppable, their next step was to enroll in one of the weeklong training courses that GCV has conducted for many years. By course end, not one, but both boys were off solo. That's truly an incredible feat for a teenager. No previous experience as a pilot under training and, in all likelihood, nothing more than a few passenger flights before starting.

Come April this year it was time to select a cadet to receive the Bindley Award, the annual trophy presented for the 'Best Achievement in Gliding' over the year. After consultation with the trophy's patron, George Bindley, it was decided to jointly confer it on both Ewyn and Alex.

So, on 15 May in front of 1,500 cadets and in the presence of Air Vice-Marshall Dunlop, the Reviewing Officer, not to mention proud family members, Ewyn and Alex



VMFG President John Fawcett with Alex and Ewyn Carter and VMFG's Brian Coulton

received the awards during the AAFC annual parade at Point Cook.

And there are other impressive cadets out there too! Take Cameron Maxwell by way of example. This young man hails from the Geelong area, is a member of No 428 Squadron, and is undergoing pilot training at VMFG. Cameron has over 100km to travel for each gliding lesson and since he doesn't have a licence yet it's mum and dad who provide transport.

With only a dozen launches in his log-book he had the misfortune to fracture an arm. Undaunted, Cameron returned to flying the very moment his recovered arm allowed him to control the aircraft properly, but fate intervened. By a huge stroke of bad luck an ankle injury was next vested on Cameron. Nothing keeps him down however, for as soon as he could 'limp' respectably he was back in the cockpit. Surely, by any measure, that's dedication!

Which brings us back to 2025 and those dusty sailplanes. No chance! It isn't going to happen: the Carters and Maxwells of this world will see to that, gliding is in good hands.

In conclusion, some adults are overdue for recognition too. From the Australian Air Force Cadets there is Squadron Leader Nigel Cooke and Sergeant Joe Sant who never cease to encourage young people into gliding. Last, but by no means least, there is Brian Coulton, the VMFG's tireless Grob 109 'driver' who has become an important part of air experience gliding for Victorian cadets.



GLIDING FEDERATION OF AUSTRALIA Airworthiness Inspection FORM 2 AND C OF A NOTICE

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- ☐ The C of A requires renewal. A cheque for \$33* is enclosed for renewal and the existing C of A document is returned
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Competitions and Insurance

Tim Shirley

Most pilots who have been involved with the gliding competition scene or who are owners of gliders will know that the insurance requirements have changed considerably over the last few years.

In the old days, we were free to decide our own level of insurance – the risk was ours and we decided whether the risk was worth the premium. Perhaps unfortunately, those days are past.

This is not the GFA's fault, or a choice GFA made. Rather it is a change that has occurred across the board in society. We will all have an opinion about whether it is a good thing – but good or bad we cannot ignore it.

One of the concerns that the GFA Sports Committee had was to ensure the protection of Competition officials from the possibility of litigation arising from accidents during a competition. Although there has never been such a case in gliding in Australia, there have been cases in other sports. The GFA consulted OAMPS – the most experienced glider insurance broker – and arranged for special cover to be available to competition pilots

which would give protection to officials when the glider was being flown in a competition.

This involved a requirement for the competition to operate to certain basic standards, which were set in consultation between Sports Committee and the insurers. As a result we now have a concept of "endorsed" competitions. The endorsement is done by the Sports Committee. Organisers need to request the endorsement from the Chair of Sports Committee (Rob Moore) or the Chair of NCC (myself), which will be provided by email.

The requirements for endorsement are:

- *Competition Director to be approved by CSC or delegate*
- *Safety Officer to be approved by RTO/Ops*
- *CD and Safety Officer to be different people in Nationals and State competitions*
- *Insurance to include the General Competition Endorsement on all policies, and a minimum of \$1M third party liability cover for all pilots.*
- *All pilots are required to have an FAI Competitors' Licence.*

This applies to all major competitions – Nationals, State competitions and other events whose scope goes beyond a normal



Canberra Gliding Club Vice-president Stuart Ferguson presents Tim Shirley with his W P Iggliden award on behalf of GFA at the club's annual general meeting
Photo: Courtesy Stuart Ferguson

club operation. Club regattas do not need this endorsement because they are run under the control of a club operation and are therefore protected under insurance which covers instructors.

While we would probably all prefer that it wasn't necessary, this endorsement process is a fact of life. The requirements are not excessive – in fact most gliders already carry the necessary insurance and most pilots who compete at this level hold FAI Competitors' Licences.

If you have any questions about this, you can contact Rob Moore at <robcoll@adam.com.au> or myself at <tshirley@bigpond.net.au>.



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The **LS10** continues to impress by winning or placing highly in every contest it has entered. And this was just the prototype! Production will commence soon. Contact us regarding delivery options.

ATACAMA DESERT – Beach to Cloudbase

Andrew Morgan

THE ATACAMA DESERT HAS A LEGEND – OF STRONG THERMALS CRANKING UP OFF THE BEACH WHICH CAN TAKE YOU TO CLOUDBASE. OR SO THE LEGEND WAS TOLD BY MARCELLO, A PARAGLIDING INSTRUCTOR IN SANTIAGO, CHILE. SUCH A STORY SHOULD BE GAUGED WITH SUSPICION AND CONTEMPT! “BEACH TO CLOUDBASE, I DON’T THINK SO!” BUT MARCELLO PERSISTED. “YOU MUST GO TO THE ATACAMA DESERT TO A PLACE CALLED IQIQUE, WHERE YOU LAUNCH AT THE BEACH AND FLY TO CLOUDBASE.”

The Atacama Desert flanks the western side of South America. Skirting alongside the Andean mountain range, it begins above Santiago in Chile and reaches several thousand kilometres north to Ecuador. It is one of the driest, most mongrel places on Earth, where not even a blowfly, blade of grass, nor solitary cacti dare exist. The sanity of going there is debatable. Its vastness is tiring and endless, with sandy flats going on forever. It is extremely isolated. Its few inhabitants survive on oasis soaks and rivers which cross Andean mountain passes and head west to provide life giving irrigation waters. In Iquique (pronounced i- kick- i), mining and fishing keep the population going.



Flying from the city launch
Photo: Andrew Morgan

Early on my first morning in Iquique, I find myself scanning the waterfront for these so-called thermals. I find a group of black vultures just off the surf, and yes, they are turning and actually going up! I meet up with Phil Maltry, a Swiss born instructor, who owns the landing field and lodge facilities. I am taken to the top cliff launch site, 500m elevation, where a procession of tandem flights launch and scoot along the ridge. I launch and assess the air for thermals, scouting along the ridge for about seven kilometres before coming back to fly over the city high rises and land on ‘la playa’ (Spanish for beach).

In the afternoon I travel about 15km south of town with a pilot named Aroldo to a place called Palabookie. Here the mountains are close to the ocean; over eons, deep, golden desert sand has covered almost all their sides. A group of students groundhandle their gliders on a nearby sand dune off the beach. Aroldo announced, “We are here.” “What, you mean at the landing ground?”

“No, this is launch and landing ground. Same thing. Launch at sand dune and go to cloud!”

It all looked like a bit of a joke, but I got ready anyway. Looking over at the nearby water I set my vario to – let’s see, five metres elevation should do it.

I launch easily, turn and skim the sand dune and manage to go up... one whole metre! But, I slowly creep up to 100m, from where I can sneak over onto the mountain base. I slowly begin to snake my way up its sandy sides, maintaining a safe distance

Iquique city with Palabookie in the background
Photo: Haroldo Horta

between me and it, just in case any rogue thermals want to smack me onto its side.

It wasn’t long before I met up with the legend. Shunting its way through, the thermal was a beautiful and smooth 4m/s up. The legend in all its glory took me all the way up to cloudbase over 1,000m above.

Beach to cloudbase, it was all true.

I bumped about cloudbase for a couple of hours and I headed up the coast for a few kilometres. When the wind is quite straight you can go 40km along the coast. This is when you take it all in. The mountain and landscape is shaded in tones of Mother Earth. As the sun tries to meet the horizon



Launching at Palabookie
Photo: Haroldo Horta



Flying over Atacama Desert

Photo: Haroldo Horta

the mountain hues soften to pastel shades. The thermals loose their strength. Now is the time to become as close to a bird as is possible. I land along the sandy slope, take some photos and re-launch into the calm air. I skim along the surface hugging the mountain side and snake my way along like a side-winder snake. I fly until dark.

I spent five months travelling and paragliding the mountains of South America. There are potentially thousands of launch

sites and some magnificent flying. However, big mountains have big friends also called mountains; these get in your road when you are trying to do some serious long distance cross-country flying. What you need is a single mountain in an open savannahland... Manilla. I flew in five countries in South America but never saw a site anywhere as good as Manilla for cross-country flying. Well done guys, for winning the 2007 World



Students groundhandling at Palabookie
Photo: Haroldo Horta



Simply land anywhere for a photo, then take off again...
Photo: Andrew Morgan

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GRADIENT



CANUNGRA

Tim Hewatt

OVERSUBSCRIBED MONTHS BEFORE IT STARTED, YEARS OF BRILLIANT ORGANISATION AT THE CANUNGRA CUP HAVE MADE IT THE HIGHLIGHT OF THE AUSSIE PARAGLIDING COMPETITION CIRCUIT. ALTHOUGH CHALLENGING WEATHER THIS YEAR, AS ALWAYS IT WAS A WELL ORGANISED AND GOOD FUN COMPETITION.

The Canungra Cup is a FAI Cat 2 comp and opener to the long hot summer of Aussie comps. It kicks off the first of the big three AAA comps (Canungra, Killarney and Bright) that count for the Aussie ladder. With spots on the Worlds 2007 team now in play, competition is getting serious.

The Canungra Cup also saw the introduction to the Aussie comp scene of the Mac Para girls for the first time – a long overdue addition to Australian paragliding competi-



Six times Aussie champ, Fred Gungl, doesn't cope after four days of bad weather

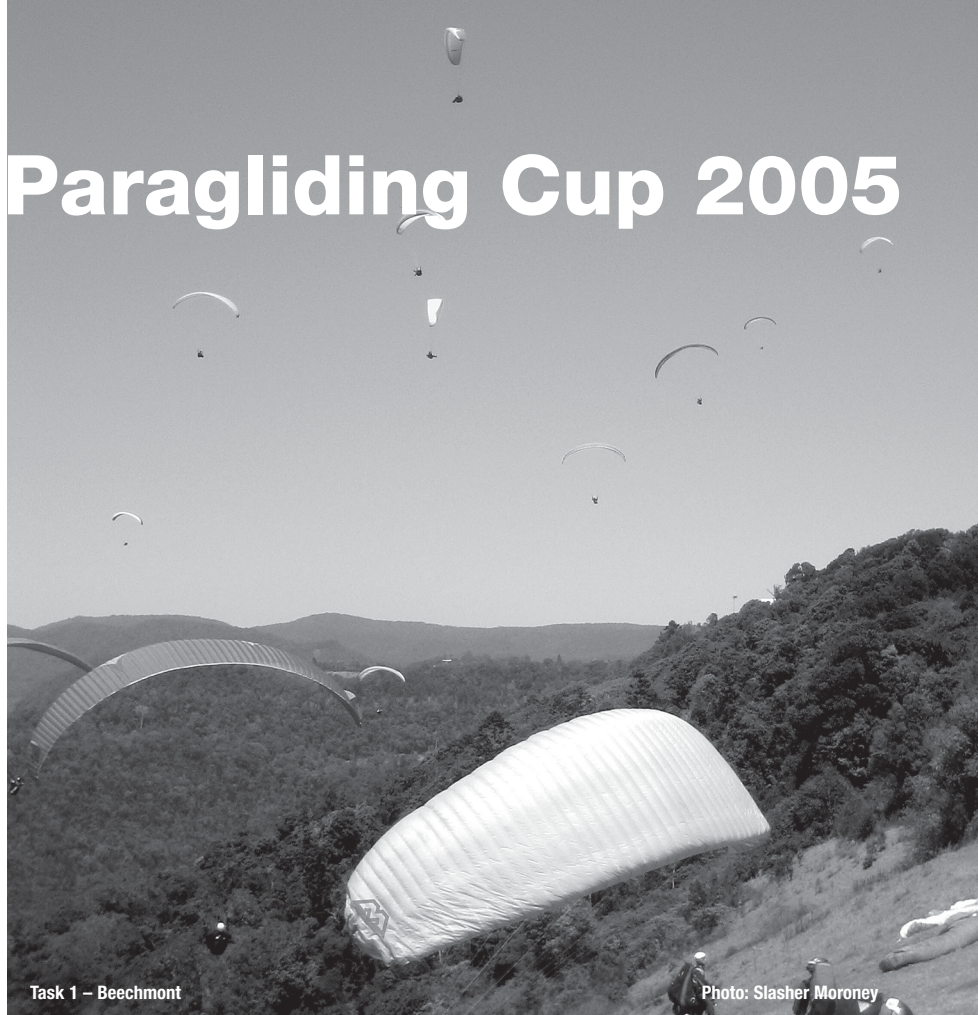
Photo: Slasher Moroney



Vivienne Williams – winner in the Women's category

Photo: Sue Wheelhouse

Paragliding Cup 2005



Task 1 – Beechmont

Photo: Slasher Moroney

tions and brings our local comps into line with world standards.

Task 1: Beechmont to Moogerah

Distance: 64.3km – Five in Goal

James 'The Gull' Lawson finished the last task of last season in Bright by blitzing the field and taking the 1,000 points. He was back and repeated the feat, clearly winning the first task and showing that he is a serious contender for the Aussie team. He was followed in by Andrew Horschner two minutes later, then Rhett 'Mac' Rockman third with his new wing just freshly out of the plastic.

Task 2 was attempted the next day but cancelled in the air as lower end gliders were pushed over the back of Mt Tamborine. Paul Skinner put on an impressive cascade display that ended with his boots just above the trees. Several gliders put down on the road not making the Tambo bomb-out.

Task 2: Mt Tamborine to Boonah

Distance: 44.9km – None in Goal

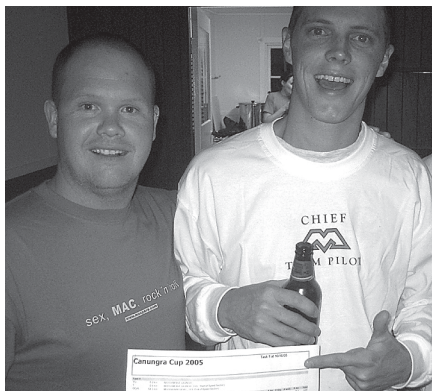
The day started with uncertainty on the winds, as a south-east change was working its way up the coast and storms were forecast. Mt Tambo was decided on, and the initial



Task 2 – Mt Tambourine

Photo: Slasher Moroney

December 2005



Brett Robinson with 1000 point day winner, James 'The Gull' Lawson
Photo: Slasher Moroney



1,000 point day winners Rhett and James
Photo: Slasher Moroney

gaggle were mostly dumped into the bomb-out, including Horchner, Murphy and Craig Donnell. On relaunching, the back of the pack was chased by the change, a bit of a seabreeze and a huge cloud.

With gust fronts starting to hit and it hailing in Canungra, the task was stopped at 1:28pm. Gusts were coming through at around 20kt and this made for some interesting landings. Goal was Boonah, with some pilots making it easily and very fast after not hearing the stopped task call.

Shane Hill was the furthest on course before the stopped task call on his Gin Boomerang 4, winning the day while drifting downwind under his reserve. He landed safely with the only damage being to his reserve. Second was Craig Collins, demonstrating that his form slump isn't terminal. Rod Merrigan from WA was an impressive third.

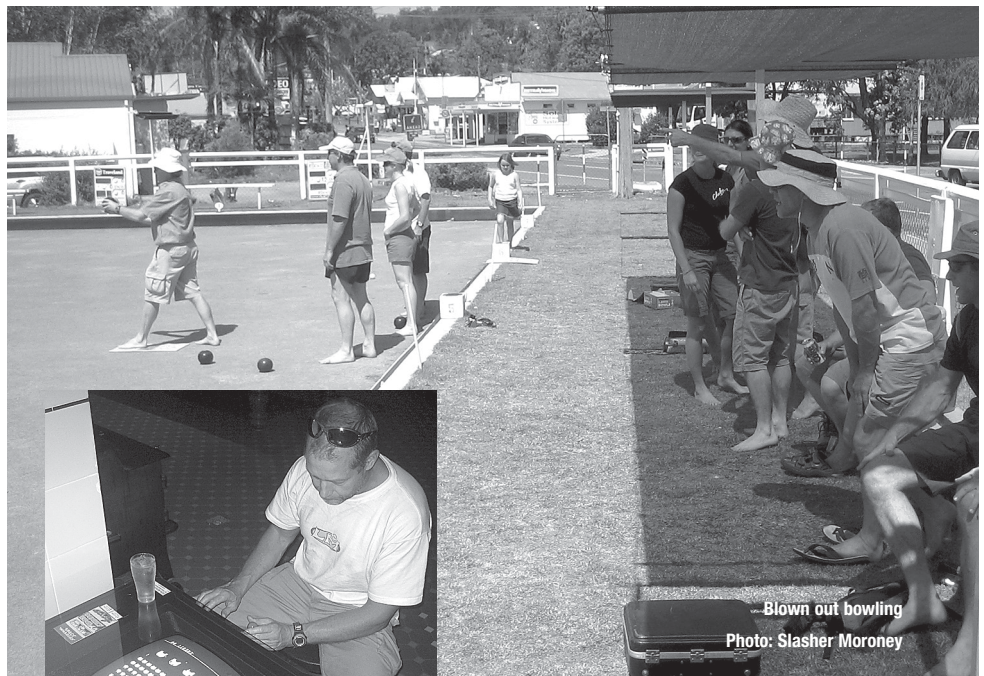
Task 3 Beechmont to Moogerah Distance: 64.3km – Eight in Goal

Slows climbs out of launch resulted in 30 pilots being dumped in the bomb-out. The task was a race start with the cylinder 8km out from launch. Another 15 pilots were on the ground before the start.

Rhett Rockman blew away the competition on his shiny new Mac Para Magus 4 with a final glide speed bar race into goal, covering the 64.3km in two hours and 20 minutes. The top six pilots were over the line all within three minutes of each other. Second was Fred Gunzl, third Craig Collins.

Overall

Enda Murphy showed his flying hasn't suffered, being the overall winner and flying December 2005



Crannie attempts to recapture his youth
Photo: Slasher Moroney

Brandon O'Donnell and launch director Adam Nienkemper was excellent, and the team put in a huge effort to make the best of the conditions – a great competition regardless of the weather.

For more photos, track logs and results have a look at [\[www.macpara.com.au\]](http://www.macpara.com.au).



Winner takes all – Enda Murphy

Photo: Brett Robinson



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TEAM SA

– The South Australians Are Coming

Terry Cubley

THE FIRST OF SIX COACHING WEEKENDS PLANNED FOR SOUTH AUSTRALIAN PILOTS WAS HELD AT WAIKERIE ON THE 24/25 SEPTEMBER THIS YEAR. WAIKERIE WAS SELECTED FOR THE FIRST EVENT AS IT IS THE BEST SITE TO FLY EARLY IN THE SEASON – A LITTLE FURTHER INLAND, AND THE CROPS ARE USUALLY A LITTLE LOWER AT THIS TIME OF YEAR THAN THE MORE COASTAL SITES (WHICH PROVED TO BE A SENSIBLE DECISION).

Many years ago Waikerie used to host Orange Week at this time of year, and could be relied upon to provide some interesting conditions for the start of the soaring season. The conditions are never super strong but over an eight day period you could expect five to six interesting days, usually with cumulus in the 4 to 7,000ft range. Of course, holding a coaching course over just one weekend meant that there was a greater chance of having poor weather. As luck would have it ...! You should have been here on Thursday, we had Cumulus at 8,000ft!

A good turn up of pilots with people from Waikerie, Adelaide University Gliding Club, Adelaide Soaring Club, Barossa, Balaclava and Air Cadets Gliding Club, about 14 gliders and 25 pilots. This included a large number of junior pilots, many of whom are planning on to compete in the Leeton Junior Nationals. South Australia should have six to seven juniors competing at Leeton, with many others already considering 2006. This growth in junior participation is the best indication that gliding in South Australia is on the way up again.

Sporting coaches Terry Cubley, David Conway and Bernard Eckey managed most of the weekend, with other coaches providing great support on the ground. The day followed the Glide Fast format with lectures, weather and task briefing, flying and then debriefing.

The Thursday before looked great, with temperatures in the mid-20s and nice cumulus around Adelaide. But then the weather forecast for the weekend started to look bad – a trough coming through on the Saturday afternoon with a band of rain, and rain on Sunday becoming showers later in the day. It didn't look good.

Friday evening saw quite a few people arriving, with the Adelaide University crew rigging the Bergfalke and various other gliders by torchlight. It's marvellous the energy and enthusiasm of youth, and we were to see

this enthusiasm all weekend.

Saturday morning we awoke to a grey sky, looking even darker to the west. In the distance there was some lower level cu which was also approaching, so maybe there was some hope. Cathy Conway volunteered to do the weather briefing and retired to the computer to get the latest information.

The first lecture of the day focused on the goals and aspirations for the different pilots. Basically, four options were proposed:

- *Regularly fly cross-country in a range of weather conditions*
- *Complete FAI certificates and badges (50/300/500)*
- *OLC, long distance flying*
- *Racing – competition flying*

All pilots had an interest in the first two categories, with seven also interested in distance flying and OLC, and nine keen for racing and competition flying.

There was discussion on the skills needed for each of these aspirations, and luckily we identified that the skills were fairly common. At least this meant we could all work on the same basic skills to achieve the different focus.

The proposal for the day (assuming that we could fly) was for a 90km task, twice around if you felt confident. The rules were:

- *Rule 1 - get around*
- *Stay above 2,500ft,*
- *Use as few thermals as possible*
- *Cruising speed = 65 to 75kt (depending on glider)*

This meant that people needed to extend their glide as much as possible via streeting, and use the maximum height band available. The aim of the no-landing rule was to try and avoid crops and possibly soft paddocks.

Cathy did us proud: Her weather forecast was much better than expected. Looking out of the window the low level cumulus had arrived, probably about 3,000ft, although still a lot of mid-level cloud keeping the

temperature lower than predicted.

The AUGC winch arrived – it was great to see the mixed operations at Waikerie aerodrome again. Launching was split fairly evenly between the two methods, but it worked out well with no conflict whatsoever.

The conditions were far from ideal. I flew with Cozzie (Kathryn Kosiowicz) in the Twin Astir and it was just a difficult day. After a lot of grovelling we finally reached cloudbase at 3,400ft and so headed down track towards the first turn at Maggea. The glides were good under the cu, but with no definite climbs. Staying above 2,500ft was problematic. Eighteen kilometres south we decided to return to Waikerie. A couple of half-knot climbs got us back to final glide and we managed an almost straight-in approach. Not a great coaching experience.

My second flight was with Lyn Ritchie, and as we climbed away from 800ft it certainly felt like a repeat performance.

A few people had remained airborne during this time and were enjoying the challenge of gaggle flying in difficult conditions.

Lyn and I headed to the west where the sunlight was breaking through and the cu was looking better. A climb to 3,800ft gave us confidence to head south on track. Ten kilometres out we met up with the Horner being flown by Peter Paine from Waikerie Gliding Club. Together we kept heading south, getting some great glides under the weak streets, over 50:1 in the Twin. We met up with a gaggle of Tom Wilksch and Jade Palmer. Looking out to the west I started to feel uncomfortable, heavy overcast again and the cu were deteriorating. It was time to go home.

The turnpoint at Maggea was only eight kilometres away and David Conway and Sarah Allen were talking about a climb at the turn. A couple of cu at the turnpoint looked reasonable so Lyn and I decided to go to the turn and fly home from there.

We arrived at the turn at approximately

2,200ft and of course the cu didn't work. Looking north it was apparent that we were in trouble, the overcast had moved in and the cu were just fading away. The others headed off towards the east to the next turnpoint only 20km away – still racing. We went with them to the first cu but again no lift so we decided that we would try and glide north, back towards Waikerie. If we were lucky one of the last cu might work for us. It didn't.

We landed in a large crop paddock and taxied onto the track heading for the shed. Peter in the Hornet followed us in about five minutes later. Surprisingly, I was able to get a phone connection back to Waikerie with my Optus mobile, whilst Lyn Ritchie couldn't get any connection with her Telstra CDMA.

The other four kept going towards Wunkar and all landed in the one paddock, except for Sarah who managed to get a weak climb and glide back towards Waikerie before finding her own paddock.

Locked gates, de-rigging a Twin Astir, aerotow retrieves, and a misplaced crew all added to the interest of the day. All were back at the airfield by 7:30pm to enjoy a great meal by the Hudsons from Waikerie.

The debriefing was good fun. All had great stories about their experiences, despite



Briefing

Photo: Courtesy Terry Cubley


the weather being less than cooperative. The major learning was about gaggle flying, and techniques that people were using to make this as safe as possible. A lot of talk about the varying conditions and picking up changes to the weather, the awareness of the impact of sunlight on the thermals, and techniques to stay in the better conditions.

Sunday we awoke to consistent drizzly rain and low grey cloud. Not much hope for a flying day.

To give the weather as great a chance as possible we held a couple of lectures, with a focus on gaggle flying, including some tactics

to cope with gaggles in a competition environment, and a second lecture on decisionmaking.

Finally, at 1pm we admitted defeat and set about preparing to leave. As fate would have it, the local gliders that had to go into the hangar were in their trailers and had to be rigged. The visiting gliders that had to go were tied down and had to be de-rigged. Someone suggested a glider swap!

Further coaching weekends will be held in March, April and May next year to really take advantage of the relatively long season in South Australia. 



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LAUNCHING BY WIRE

Part 2: The Winch Driver's Technique

Allan Ash

THE DESIGN OF LAUNCHING WINCHES HAS IMPROVED A LOT SINCE THE EARLY DAYS
OF BOLTING A DRUM OF WIRE ONTO A JACKED-UP WHEEL OF AN OLD JALOPY!

Some winches today are professionally designed and built, while even those built by club members have usually been designed by people with a lot of mechanical knowledge. The result is that winch launching today is a lot safer and more reliable than it was 50 years ago.

The basic design, however, remains the same. A powerful engine drives one or two drums through a gearbox and the launching wire is reeled onto the drum(s) through guide rollers and are fitted with a brake and some form of emergency cutting device.

The winch driver is usually housed in a cabin that provides shelter from the sun, rain and cold wind as well as from the wild lashings of a broken launch wire. It was not always so.

Driving the winch is relatively simple, being similar to driving a car. While some winches have an automatic clutch, the majority have a hand-operated clutch, which is easier to move smoothly than the usual foot-operated clutch.

The process of launching is straightforward and can be learned quickly if proper instruction and supervision are provided.

A winch needs a daily inspection, just as an aircraft does. Moving parts must be kept greased or oiled and free from obstruction. The battery should be in good condition and sufficiently charged. The fuel tank should hold enough for a day's operation or checked after a specified number of launches. The oil level in the engine should also be checked.

Ideally, the launching wire should be fully laid out and carefully checked for wear and potential breaks. This takes time, but less than the time to untangle and repair a broken wire, not to mention the possibility of a broken aircraft.

In a well-run club, the inspection of the winch and wire can be done while the aircraft are being removed from the hangar, rigged and Df'd.

The operation of the winch needs to be firm and smooth to provide a smooth, safe launch for the sailplane. Sudden or jerky movements of the throttle should be avoided.

Before the first launch of the day, the winch engine should be thoroughly warmed up. At the "take up slack" signal, the driver should engage the appropriate gear (depending on the weight of the aircraft, the wind strength and the power of the engine) and start winding in the wire very slowly. When the "all out" signal is received the throttle should be opened and the clutch smoothly operated. In the early stage of the launch, the winch driver should be alert for any sudden "stop" signal from the launching site.

It is essential that the sailplane be given plenty of power for take off. There is nothing worse for a pilot than a soggy, uncertain take-off.

As soon as the sailplane is safely in the air, the throttle setting should quickly be adjusted to the appropriate setting to provide a smooth, steady climb at the sailplane's best climbing speed. This will vary, depending on the design of the aircraft. If the speed is too fast or too slow the pilot should signal appropriately and the winch driver should alter the throttle setting. Once again, it is important that this be done smoothly. Remember also that the wind speed usually increases with altitude and, except in calm conditions, the winch speed can be gradually reduced as the aircraft gets higher.

When the sailplane is climbing at its correct speed, the launching cable should have a slight downward bow. If the cable is too straight, it usually means the launching speed is too high. If the wire bows too much, the speed is too slow. Getting the correct bow in the cable is a matter of practice and is likely to vary somewhat with different aircraft, usually depending on their weight.

When the sailplane reaches the top of the launch, and is no longer climbing, the pilot will release, hopefully after lowering the

nose of the aircraft a little first. If the cable is released under tension it is likely to spring downwards suddenly, sometimes causing the wire to wrap itself around parts of the winch.

If the winch driver considers that the pilot is hanging on too long and is likely to carry the wire too close to the winch, the throttle should be closed rapidly and fully so that the pilot is clearly aware that the power has been cut off.

As the cable falls, it is retarded somewhat by the drogue parachute that should be fitted some eight metres from the tow rings at the sailplane end.

When the winch driver sees the drogue open, he should apply enough power to drag the chute downwards. This keeps a tension on the wire and ensures that it will continue to wind correctly onto the drum. It also ensures that the wire does not become tangled as it falls.

As soon as the drogue hits the ground, the throttle should be closed and the drum brake applied. This prevents the drogue being dragged over the ground and possibly damaged.

When the retrieving vehicle picks up the drogue end of the wire, the drum brake should be released. As the retrieve begins, the driver should maintain just enough brake pressure to prevent the drum from free-wheeling and thus pay out the cable too quickly, causing tangles. The brake pressure should not be too much as this causes excessive wear on the brake shoes and also requires the retrieve vehicle to use extra fuel to pull the wire.

When the retrieve vehicle reaches the launching point it should be slowed gradually to alert the winch driver to be ready to apply full brake when the cable stops moving. This prevents the drum over-running and creating excess slack and possible tangles.



Next issue – Car towing.

GFA Annual General Meeting

THE GLIDING FEDERATION OF AUSTRALIA HELD ITS ANNUAL GENERAL MEETING/ANNUAL BOARD MEETING ON THE WEEKEND OF THE 17TH AND 18TH SEPTEMBER AT THE MELBOURNE AIRPORT CONVENTION CENTRE. THE FORMAT THIS YEAR WAS DIFFERENT IN THAT AN ANNUAL BOARD MEETING WAS HELD RATHER THAN THE COUNCIL MEETING, AND THAT A GLIDING SEMINAR WAS ORGANISED FOR THE SATURDAY AFTERNOON, WITH A NUMBER OF GUEST SPEAKERS.

ANNUAL GENERAL MEETING

The general business was pretty straightforward, with the new Articles of Association being passed. This changes the governance from a large Council to a more compact Board structure. Part One of the GFA Manual of Standard Procedures is being edited at present to explain in detail how this will work.

The AGM finished at lunchtime.

SEMINAR

Meanwhile people were busy rigging gliders and setting up displays for the seminar, which was well attended by approximately 50 people. Ian Grant, who initiated and organised the seminar introduced the guest speakers which included Terry Delore, who spoke about his record breaking wave flights in South America with Steve Fawcett; Peter Temple, who spoke about his experiences at Vernon, France, for the World Club Class Competitions, with amazing graphical representations of the area using Google Earth; John Welsh who spoke about the new FLARM system; Rob Glenn from CASA and Wayne Cottier from OAMPS who spoke about insurance.

The seminar was very well received and made for a very interesting weekend which was enjoyed by all. Similar events will be organised for future AGM/ABMs.

Following the seminar a dinner was held which was also very well attended. The dinner was interspersed with the GFA awards and trophies, the VSA 'Living Treasures' awards, and culminated with the awarding of GFA Life Membership to Henk Meertens. Well done Henk!

Next morning the meeting continued including the nomination of officers and

elections. Bob Hall stood down as President after many years of tireless effort, and threatened to do more gliding! Daryl Connell is our new President; David Conway remains Vice-president; and Beryl Hartley remains Treasurer.

FINANCIAL

The core business of the GFA continued with little change this year. The main points were:

- *The insurance premium for all policies showed changes with some small savings.*
- *The contract with CASA remained unchanged, with a 10% increase in funding to compensate for the rise in CPI in the last few years.*
- *GFA Income was less than the previous year.*
- *Emphasis was placed on improvement in the web-based business of the GFA and updating the office database.*
- *Increased funds were supplied to both the Junior and Women International gliding teams.*
- *There was some considerable cost increase in the establishment of the new section of Marketing and Development as Ian Grant established this new department within the regions.*
- *Funding was supplied to the Vintage Gliding Association of Australia for participation in the international vintage gliding event.*
- *A three-year rolling financial plan is to be developed in conjunction with the existing business plan to meet the changing demands and business practices of the GFA.*
- *The move to the increased use of electronic financial transactions and the possibilities associated with the web will demand some increased financial support in the short term.*
- *In the last financial year, with no increases in fees, the outcome for a balanced budget is satisfactory.*



Beryl Hartley congratulates Henk Meertens on his GFA Life Membership



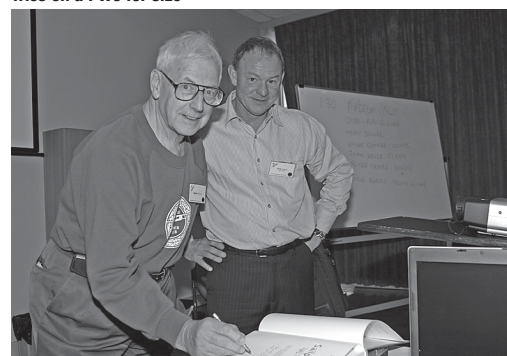
Ian Patching presents Bob Hall with a photo display from the Avalon Airshow



Fred Foord, GFA Trophy's Officer, stands guard



GFA Secretariat Office Manager Marcia Kavanagh Tries on a PW6 for size



Martin Simons signs his book for Terry Delore in appreciation for his presentation

Photos: David Conway

Short Flight, Great Memories

John Green

DRIVING HUNDREDS OF KILOMETRES FOR A 30-SECOND FLIGHT MIGHT NOT SEEM THE MOST SUCCESSFUL OF HANG GLIDING TRIPS, BUT I REMEMBER IT AS ONE OF THE BEST HANG GLIDING TRIPS I'VE EVER DONE. I GUESS SOMETIMES IT'S ALL ABOUT THE PEOPLE YOU MEET...

Two seconds into my 30-second flight

As this is a hang gliding story I'll tell you about the flight first. It won't take long. There I was standing in my glider on the 100ft high Conway Beach coastal site, looking out towards the Whitsunday Islands and sussing out the nuances of the 8 to 10kt slightly crossed breeze. Nice take-off, one pass which took me down to all of 40ft, leaving just enough time to set up a landing on the expanse of low-tide-exposed beach. Total time airborne, 30 seconds.

I was packing up on the beach, going through all the usual clichés in an effort to ward off disappointment – *A safe flight's a good flight, Better to be on the ground wishing you were in the air than in the air wishing you were on the ground, It's not so much the length that counts as what you did with it* – when I was approached by a friendly looking guy

with a huge kite draped over his shoulder and a three-wheeled buggy in tow. *"Good flight?"* he asked.

"A safe flight's a good flight," I replied half-heartedly.

He smiled from beneath his moustache. *"I didn't bring my paraglider today, but the conditions are spot on for some kite-buggying. I've got extra gear, want to have a go?"* *"You're a pilot, too?"* was my first question, ears pricking up at the word paraglider. Followed quickly by my second question, *"What's kite-buggying?"*

It's not often you get along with a stranger so well that you feel like friends right from the word go. I don't know whether it was Ian's generosity in lending me gear, or our shared interest in free-flight which initiated the friendship, but one thing's for

sure, a couple of hours of muddy good fun sure helped to cement it! We were caked head to toe by the end of the afternoon, having whizzed up and down the damp expanse of Conway Beach, a foot from the sand, dragged at up to 40km/h by the large and powerful kites. Though Ian clearly won the 'who can get most muddy' competition (looking like he'd just stepped out of a WWI trench) his partner Julie wasn't far behind. Laughing at the sight of ourselves, they were kind enough to offer me a shower and bed for the night back at their house. Sure beats camping.

If I thought that was the extent of Ian and Julie's generosity, I was much mistaken. Not only were they more than happy for me to stay with them while I waited for the hang gliding weather to improve, but Ian was watching the weather with an even better plan in mind. Turns out his day job is skippering for Whitsunday Rent-a-Yacht, one of the well-known Whitsundays yacht companies. *"Want to come out for a two day sail around the islands with Julie and me and a few others, on a \$500,000 catamaran?"* he asked when the weather cleared. *"You're kidding?"* He wasn't.

Next day saw us heading out of Shute Harbour and into the Whitsundays under full sail. Sunshine, open blue water, deserted islands, white beaches, wind in your hair, the whole bit. What an experience! The same wind that had been preventing me from a decent fly at Conway Beach was now sending us and our catamaran scudding across the waves. I forgave it instantly. *"See that gap in the islands off to starboard?"* Ian asked as he handed over the wheel of the (\$500,000) Seawind 1200, *"that's Unsafe Passage. Take us through it. Watch out for Surprise Rock on the*



Kite-buggying on Conway Beach



You haven't had a good day if you're not caked in mud by the end of it

other side. Call me if you need anything.”
“Unsafe Passage? Surprise Rock? You’re kidding?” He wasn’t.

I’d never been on a yacht before, let alone sailed one, but my luck seemed to be running well so I took the helm and gave it a go. Batten down those hatches, hoist the main sail, look alive everyone – Captain John is at the helm.

We survived Unsafe Passage.

I managed to miss Surprise Rock.

And we had two awesome days of fantastic weather and amazing snorkelling on the reef, including, at one point, swimming with a huge sea turtle. If anyone is thinking of heading to the Whitsundays, I’d highly recommend a day or two out with Whitsunday Rent-a-Yacht (phone: 1800 075 000, email <rentayacht@bareboat.com.au>, web [www.rentayacht.com.au]). Ask for Ian as your skipper and you can talk flying as you go. He’ll even let you drive.

I ended up staying with Ian and Julie for a week and we all had a ball together. Just

goes to show, sometimes strangers are just friends you haven’t met yet.




Heading off on a Whitsundays cruise



Sheltering in an island harbour for the night

Photos: James Lock



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Merry Christmas!

The HGFA Office staff and magazine staff wish all our members a very Merry Christmas.

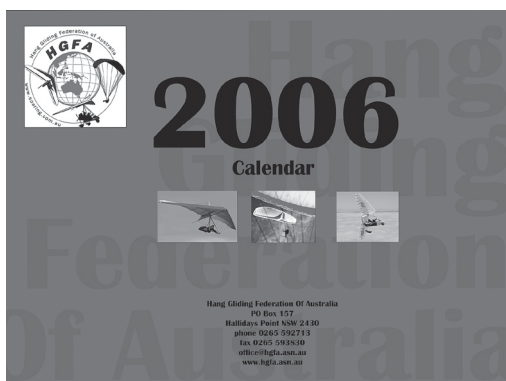
The HGFA Office will be closing for Christmas at noon on Friday 23 December and will re-open on Wednesday 4 January 2006. All paperwork received by Monday 19 December will be processed before the break.

Have fun, fly safely, drive carefully, and don't eat too much.

Operations at Non-towered Aerodromes – Update for Ultralights

Ultralights with a maximum speed of 55kt do not have to give way to all other aircraft. The new procedures for operations at non-towered aerodromes are not changing the current regulations with regard to Rules of the Air and Right of Way. The current priorities that ultralights and all other aircraft have when in the circuit remain unchanged and aircraft on straight-in approaches are still required to give way to aircraft already established in the circuit.

Ultralights with a maximum speed of 55kt are those ultralights that are not capable of more than 55kt calibrated airspeed at full power in level flight. Ultralights in the <55kt circuit speed category are generally small and difficult to see. However, they are highly manoeuvrable and as such are in the best position to prevent a conflict arising in the circuit by giving way. It does not mean that an ultralight with <55kt circuit speed has any less right to use the airspace or the runway than any other aircraft, and it does not mean that these aircraft have a lower priority for runway use at an aerodrome.



HGFA Calendar – Out Now!

Available now, HGFA's new 28 page, full colour glossy, month to a page calendar filled with all the Australian HGFA competition dates and of course great Australian photographs of the sport you love! For the home or the office, a great Christmas gift idea for yourself or a friend at only \$17.60 plus postage. Contact the HGFA Office now.

HGFA Office, ph: 02 6559 2713, fax: 02 6559 3830, email: <office@hgfa.asn.au>.

NEW PRODUCTS

New From Mac Para – The Muse 2

Mac Para's latest release has passed DHV 1 testing and is now in Australia. The Muse 2 has everything that you need to discover a safe dimension of flying. It was designed to be easy to launch, very stable and a super-safe glider. It has finely tuned handling for pilots who need DHV 1 safety and who want to enjoy relaxed flying. The Muse 2 is the ideal glider for beginners to the sport and also those more experienced pilots looking for the easy life. Alpine Paragliding are using a couple in the school, so if you would like a test fly let us know. [macpara.com.au]

Advance Release New Epsilon 5 DHV 1-2

With the runaway success of the Sigma 6 intermediate, Advance of Switzerland have just released the much anticipated Epsilon 5 after over a year of constant development, dozens of prototypes and multiple consumer field test days.

Certified DHV 1-2 in all sizes the new glider is a mid range entry level glider and not a "hot to handle" 1-2 despite its top end performance. The design is, as always from Advance, entirely new and not just a re-work of a previous model or de-tuned higher wing. As with the Sigma 6, Advance has produced a glider that has class leading performance, handling and passive safety in the tradition of the now legendary Epsilon series.

It comes in four new colour schemes with full custom colours as an option. There are four sizes for pilot all-up weights from 55 to 130kg with good overlaps so that everyone can find a size to suit. Like its DHV 2 stable mate, the smaller two sizes have shorter risers thereby making it easier for those pilots to ground handle and do Big Ears.

The D risers also have a handy speed vs performance scale called "SPI" (Speed Performance Indicator) printed on them for use with the highly efficient and easy to push accelerator system. This feature is carried down from the Sigma 6 and takes the guess work out of speed bar position and effect.

Production, materials and finish quality are recognised as being the highest in the industry from wing right down to the ruck-sac and included accessories. The Epsilon 5 comes with a comprehensive manual which even details acro manoeuvres suitability. There are two ruck-sac sizes to choose from.

With a glide angle of 8.7 at a higher trim speed of 38km/h and a polar that provides high speed glides unheard of in this class, most current DHV 2s (!) have been surpassed by its release. The Epsilon 5 is ideally suited to confident ex-school pilots, those moving up from a DHV 1 and recreational "weekend" pilots who desire the latest in the category.

For more information and test flights contact the importer: Manilla Paragliding, Godfrey Wenness, ph: 02 67856545, email: <skygodfrey@aol.com>. For info on the web see [www.advance.ch].

New DHV 2-3 Nova "Tycoon"

Quote from the designer, Hannes Papesh:

"We wanted to give back the so called high performance wings their legitimacy. During the last years the intermediate wings caught up to the high rated ones. Now the Tycoon is again a big margin ahead. Some were talking about stagnation in the performance development of paragliders. The Tycoon is setting new standards. Since we are developing serial high performance wings (from the CXC, Phantom, Sphinx, over the Xyon, Vertex, Argon to the Radon) the Tycoon is offering the biggest step forward in performance! Our new computer simulation methods (CFD) made it possible to raise performance to never before considered heights. The Tycoon is the wing with the highest aspect ratio we have ever built (including comp protos). But despite its very impressive tech data, the safety is surprisingly good. As usual in our latest wings, we didn't change the computer optimised trim to reach the certification, so the performance of the real wing realised the forecasts of the computer model."

Contact Active Flight for a test flight: Active Flight, Fred Gungl, ph: 0428 854455, email: [www.activeflight.com.au].

2006 Calendar

Thirteen beautiful photos from the world's finest free flying photographers, including Jérôme Maupoint, Andy Busslinger and John Heiney. Skyscapes from the Dolomites, Australia's flatlands, the USA, Africa and beyond. Keep yourself fuelled through 2006 with this inspirational large-format calendar.

New for 2006: Space to write in your appointments! Airmailed with a stiff board.

Stockists: Moyes Delta Gliders, 1144 Botany Road, Botany NSW 2019. Ph: 02 93164644, [www.moyes.com.au].

FAI NEWS

Attention Film Makers!

The DHV (German Hang Gliding and Paragliding Association) Film Award 2006 will be conducted at Free Flight 2006 – the chance to show us your latest ideas on the fascination of free-flying with para- and hang gliders.

Drama, documentary, cartoon or music video – your imagination can show us how you view the skies!

An independent jury will choose the best of the films and videos for presentation at Free Flight 2006, and reward them with prizes totalling €3,000.

First place will be awarded with €1,000, the winners of five other categories will receive €400

each, and the winner of the audience prize will receive a special material prize.

Application forms can be downloaded from our website [www.dhv.de/typo/DHV_Film_Award.2429.0.html]. The closing date for entries is 7 March 2006.

Important! Participants must guarantee that their entries do not infringe any copyrights, and that the DHV will not be liable for any claims from third parties. Should GEMA licensed music be used in productions, the participant must ensure that the appropriate broadcast fees have been paid.

DHV: Postfach 88, D-83701 Gmund, Germany, ph: +49 8022 9675 62, fax: +49 8022 9675 69, email: <pr@dhv.de>, web: [www.dhv.de].

Benedikt Liebermeister,
Public Relations Manager, DHV

FAI Young Artists Contest 2006

The 2006 FAI Young Artists Contest invites young people to express in art work the theme "Air Sports and Nature in Harmony".

Every year, national member organisations of the Fédération Aéronautique Internationale (FAI) are invited to hold a national aviation art contest for youngsters and to submit a selection of nine art works to an international jury conducted by the FAI Aviation & Space Education Commission (CIEA) [www.fai.org/education/].

During its last annual meeting in Paris, CIEA Delegates decided to invite youngsters to work on this new theme, dealing with the connection between nature and air.

Closing date for the competition is 18 April 2006. Rules and guidelines can be found at [www.fai.org/education/contests/artists/rules2006.asp].

World Pilot Ranking Scheme

Paragliding

Christian Maurer (SUI) leads, but Torsten Siegel (GER) moves up into 2nd, ahead of Christian Biasi (ITA) in 3rd. That leaves Bruce Goldsmith (GBR) in 4th now. Borja Rodriguez (ESP) holds on to 5th, two points clear of Toni Caniglia (SUI) who is tied in 6th with Paul Schmit (BEL). Tomas Brauner (CZE) drops two places to 8th and there is a three-way tie for 9th place between Jean-Marc Caron (FRA), Jin Oh Kim (KOR) and David Ohlidal (CZE).

In the nations rankings Italy lead one point ahead of Switzerland, with France taking the 3rd slot.

Paragliding Accuracy

Jaka Gorenc (SLO) leads from Matjaz Sluga (SLO) with Matej Goste (SLO) 3rd, and Dusan Gorenc (SLO) is equal 4th with Frank Unuk (SLO). The first non-Slovenian, Nick Simmons (UK) is in 6th, Matjaz Feraric (SLO) stays 7th, Andy Shaw (UK) is in 8th, fellow Brit Andy Webster (UK) 9th, and Zoran Petrovic (SCG) 10th.

In the nations rankings Slovenia lead, GBR is 2nd and Serbia and Montenegro 3rd.

Hang Gliding (Class 1)

The top 6 stay the same as the previous quarter: Oleg Bondarchuk (UKR) still leads, with Mario Alonzi (FRA) 2nd, Gerolf Heinrichs (AUT) 3rd, Johnny Durand Jnr 4th, Oliver Barthelmes (GER) 5th and Attila Bertok (HUN) 6th. Due to competitions being dropped by other pilots, Kevin Carter (USA) gains four places to 7th, followed by Raymond Caux (FRA) who rises one place to 8th. Robert Reisinger (AUT) stays 9th while Brett Hazlett (CAN) drops another three places to be equal 10th with David Seib (AUS) jumping eight places.

France stay in top place, followed by Austria and Australia.

Class 5

Primoz Gricar (SLO) stays in 1st place, 55 points ahead of Jaques Bott (FRA) in 2nd, who is himself nearly 30 points ahead of 3rd place Toni Raumauf (AUT). Johann Posch (AUT) also gains a place to be 4th while Alex Ploner (ITA) continues his slide to 5th. Juergen Bummer (GER) climbs two places to 6th while David Chaumet (FRA) and Walter Geppert (AUT) each drop a place to 7th and 8th. Christian Ciech (ITA) and Ralf Miederhoff (GER) keep their places to complete the top 10.

In the nations ranking Austria have a commanding lead from Italy, and Germany remain 3rd.

Class 2

Manfred Ruhmer (AUT) is in 1st place, with Brian Porter (USA) in 2nd and Bob Baier (GER) 3rd.

Full details of all the above rankings can be found on the FAI website: [www.fai.org/hang_gliding/rankings/].

FAI Centenary Celebrations in Paris

On the occasion of the FAI Annual General Conference, the Aero-Club de France invited "aviation heroes" to Paris to celebrate the Centenary of FAI.

The event started on Wednesday 12 October at the "Hôtel de Ville de Paris" with the FAI Awards Ceremony for medals and diplomas awarded by FAI for the year 2004.

Attended by delegates from all over the world, the two-day FAI Annual General Conference closed with the official celebration of the FAI Centenary on Friday

14 October, exactly 100 years after the foundation of FAI. Some of the greatest living aviators attended this "High Flyers' Night" at the Senate (Palais de Luxembourg) – personalities like Buzz Aldrin, Steve Fossett, Bertrand Piccard, Catherine Maunoury, Svetlana Kapanina and Valery Poliakov.

The Aero-Club de France was the very first National aero-club. Founded in 1898 to "encourage aerial navigation", the Aero-Club de France was responsible for the creation of FAI in 1905. In 1909, the Aero-Club de France issued the

first pilots' licenses to Santos Dumont, Louis Blériot and the Wright Brothers. Since then, the AéCF has evolved to suit changing circumstances, but still maintains many of its initial roles. On the occasion of the FAI Centenary, the President of the Aero-Club de France, Jean-François Georges, wished to "pay tribute to the great achievers" in each air sport discipline.

FAI President Pierre Portmann, elected in 2004 and a long-standing French resident, was very pleased to be celebrating the FAI Centenary in Paris: *"The history of FAI consists mainly of colourful and independent characters who pushed forward the limits of what can be done in the air. It's a great privilege for us to be the heirs of these exceptional men and women who marked the history of FAI. The "dream of Icarus" is still alive, and our job is to perpetuate this dream into the future."*



Teaching Soaring to Post Solo Students

Bernard Eckey

LAST MONTH WE LOOKED AT IMPARTING BASIC SOARING SKILLS TO PRE-SOLO STUDENTS AND THE RESULTING BENEFITS FOR THE GLIDING MOVEMENT. ALTHOUGH THIS MONTH'S ARTICLE IS MAINLY INTENDED FOR SELF-STUDY PURPOSES IT MIGHT ALSO ASSIST OUR INSTRUCTORS WITH POST SOLO TRAINING AND THE PREPARATION OF NEW PILOTS FOR THEIR "SILVER C" CERTIFICATE.

The fact that a student became a solo pilot must not stop us from providing ongoing assistance. On the contrary, our help is required more than ever to lift the skill level to a point where they can fully enjoy our beautiful sport and become strong supporters of it. Some new pilots realise that going solo is only the very first step and not much more than a license to learn. These pilots have the right attitude and usually learn quite a lot by experimenting with different soaring techniques. Only occasional flights with a coach or instructor are required in order to iron out a few weaknesses and to ensure that they are kept on a steep learning curve.

But then there is another group – far bigger in my experience. They feel that after making it to solo status the time has come to relax. In cases like that, instructors and coaches need to be especially vigilant. Gliding just doesn't work that way and without ongoing training these members are likely to quit sooner rather than later.

What can we do to prevent members from dropping out and how can we maintain their interest?

Well, every new solo pilot has different goals and ambitions but it might be best to work on two fronts. First and foremost our help with the polishing of soaring skills is needed and, just as importantly, we need to provide ongoing challenges. The obvious ones are the "B" and "C" certificates followed by the "Silver C" but even that is hardly enough to keep our "Satisfaction Now" generation happy. Ongoing excitement is what the majority of new recruits are looking for and if we want to arrest the decline in member-

ship we are well advised to provide it. Regular cross-country flights in a two-seater, wave flights with an experienced pilot or training camps away from the home airfield are well suited to provide the necessary thrills. Without presenting excitement and new challenges our new pilots get bored quickly and the risk of losing the same members we have invested so much effort and time into is ever present.

Sorry for digressing, back to soaring training now. Thermal centring is usually the biggest hurdle for a new solo pilot and at least as difficult as coming to grips with take offs and landings. But before we can practise thermal centring we must find lift and the best way of doing just that is to teach students how to maximise their chances. Directing him or her towards a likely thermal source and suggesting locating the glider slightly downwind of a thermal trigger doesn't guarantee a thermal but it increases the chances of finding one considerably. If it does work we have a practical demonstration of the theory discussed during prior lectures and/or briefings and we have made a step in the right direction. If it doesn't work in the first location, just try the same tactics elsewhere.

Having found a thermal, decisions need to be made. A turn needs to be initiated, but the problem is one of timing. Sometimes we need to roll into the turn very soon after we feel the surge but on other occasions we should wait for a few seconds. Apart from our entry speed, the size of the thermal plays an important role. Usually a swift turn is the right cause of action at low altitude but when high it is almost always best to delay the turn for a while. Experience counts for a lot and as time goes by it becomes much easier to get it right. Just as important as the correct timing of the turn is the decision whether to turn right or left. The instruments can not help here. If our eyes are glued to the variometer, chances of turning towards the core are 50% at best and the chances of turning into sink are the same. With a very

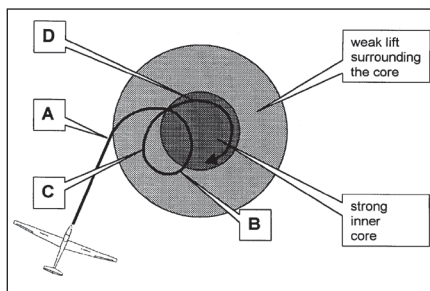
light touch on the controls and by looking outside we will often notice a slowly lifting wing while closing in on the core. This is never as dramatic as illustrated below but it can be a useful indicator. Obviously the rising wing is travelling through more buoyant air providing a good indication in regards to direction of turn.

By simply banking towards the lifting wing and doing the exact opposite of what our glider wants to do, chances of striking the best part of the lift are increased and the risk of going through the heavy sink normally found nearby are much reduced. However, doing the exact opposite of what our glider wants to do means that we must be able to thermal to the right and to the left. If we, like many other glider pilots, have fallen into the habit of thermalling in the same direction all the time, there is no need to worry. It is a common problem but can easily be corrected without involving instructors or coaches. We simply must gather all our willpower and force ourselves to practice using the turn direction we least prefer. Within a few weeks we will lose our preference towards a particular direction of turn.

Different instructors favour different thermal centring methods but **increasing the angle of bank as the lift decreases and decreasing the angle of bank as the lift increases** is a relatively simple and recommended procedure for beginners. In combination with the golden rule of never flying through the same patch of bad air twice, it will improve the average rate of climb considerably. Of course, experience counts for a lot and as time goes by it will become second nature. The sketch below illustrates the thermal centering process but what looks easy on paper is much harder to implement in practice. This holds especially true on days with narrow and broken lift when re-centering might be necessary continually.



Lifting of wing by thermal (not to scale)



Thermal centring by varying angle of bank

A-B Turning into lift

B-C Steeper angle of bank due to weakening lift

C-D Shallower angle of bank due to increasing lift

D Maintain normal angle of bank while in steady lift

Centring a thermal by varying the angle of bank is only advisable when just slightly displaced from the core. However, if part of the turn is in sink more drastic measures have to be taken and a short term levelling of the wings is called for although this is rarely necessary for more than two seconds. A speed of 50kt is equivalent to 26m/s which means that levelling the wings for two seconds theoretically shifts our position by 50m. However, the distance covered while rolling out of and back into the turn can easily account for the same distance again. Therefore, a two second levelling of the wing results in a position change of approximately 100m. As instructors we must insist on repeating the exercise until a relatively even rate of climb is achieved. A good sign of closing in on the core is when the air becomes smooth or the amount of turbulence decreases markedly. Now we reap the rewards of all the hard work. Control responsiveness improves, the average rate of climb usually doubles and the smooth laminar airflow reduces the airflow noise level. Suddenly thermalling becomes much easier and less tiring.

We are not looking for speedy thermal centring during pre-solo training. All that matters is that students keep making the necessary corrections and succeed in moving the glider closer to the core. Speeding up the process falls under the heading *Advanced Soaring*.

Another problem area seems to be the angle of bank. New solo pilots usually circle much too shallow and as a result they often fly around the thermal or work the very weak lift at its outer fringes. Thermals are always strongest at their centres and the optimum



Schempp-Hirth Sailplanes

Winning made easy

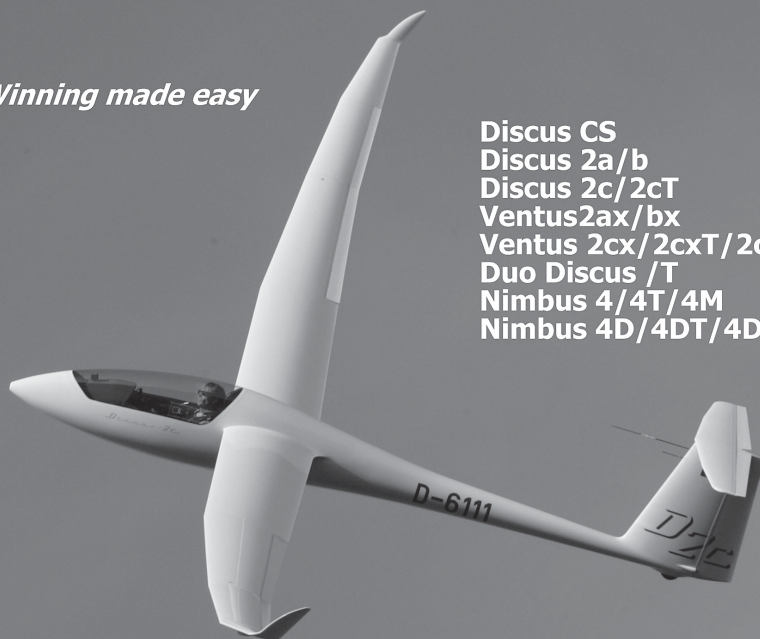


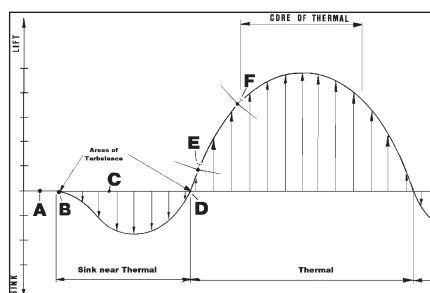
Photo P. Selinger

Discus CS
Discus 2a/b
Discus 2c/2cT
Ventus2ax/bx
Ventus 2cx/2cxT/2cxM
Duo Discus /T
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Nimbus 4D/4DT/4DM

Chris Kiehn

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<http://members.ozemail.com.au/~fibremites>

bank angle is the one which maximises the glider's climb rate. Although the following graph is too simplistic and not entirely representative of what is happening in the real world, it is useful to highlight the problem.



Let us assume we are approaching our thermal from left to right. At first we fly through neutral air with our total energy variometer showing the sink rate applicable to the current airspeed (Point A).

Next we notice some slight turbulence (Point B) and soon afterwards we experience an increased rate of sink (Point C).

Flying along and arriving at Point D we again feel some turbulence. More often than not it is more pronounced than at Point B and the graph shows why. The friction between sinking and rising air is the culprit. On entering the lift we have to make decisions. Not only do we have to decide when to turn but also what angle of bank to use.

A small and comfortable angle of bank will result in a radius of turn which is more often than not too large to stay in lift. At best it puts us near Point E. It means that we will

not only circle in very weak lift but also get dangerously close to heavy sink.

A major increase in the angle of bank is the answer because the much smaller radius of turn is moving us closer to the core (Point F). There we can take advantage of lift at least twice as strong as near point E. Furthermore, we would still be in weak lift after momentarily losing the core and re-centring becomes possible by simple variations in the angle of bank.

Unfortunately, the tighter the turn the higher the rate of sink becomes. Just by way of an example, a glider's sink rate might be 1.5kt at a comfortable bank angle but at a steeper angle of bank a significant increase in the rate of sink to approximately 4kt occurs.

We can now do some simple arithmetic. *Point E – Flying through Point E we might get 1.5kt of lift. However, as our gliders sink rate is also 1.5kt there is at best zero sink for us at this angle of bank.*

Point F – If we thermal steeper and manage to fly near Point F we will find lift of 5kt.

By subtracting our higher rate of sink (4kt) we still go up at a rate of 1kt.

This example serves to show that pilots prepared to bank steeper will climb away while others find themselves back on the ground rather quickly.

At the end of this article a word or two on thermalling etiquette and proper approach procedures into occupied thermals. This seems to be a persistent problem because a lot of new pilots hardly ever get the opportunity to fly in close proximity of other gliders. Many



small gliding clubs only have a fleet of a few gliders and their instructors seldom get the opportunity to teach proper thermal joining procedures. No wonder new pilots are reluctant to get close to another aircraft and feel very uneasy if they are joined by another glider at roughly the same level.

So what are pilots supposed to do when joining a circling glider? From a distance we can aim directly at the centre of the circle made by the established glider. The second step is to establish the direction of turn because for very good reason the rules clearly state that the first glider in the thermal determines the direction of turn. While getting closer an

extra good lookout becomes crucial because there is every chance that several gliders are attracted to this particular thermal. Remember, other gliders might be difficult to see especially if they are below the horizon and blend into the background. This is not the time for looking at instruments. A thorough visual search above and below the horizon is of prime importance as the sun could obscure another glider until it moves into a position of better visibility.

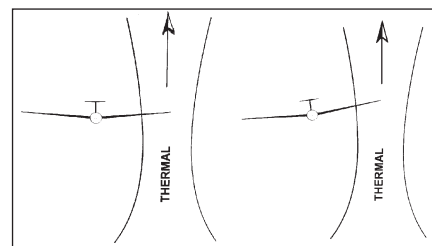
Judge your entry into an occupied thermal in such a way that you position yourself roughly opposite the established glider. This is, of course, easier said than done especially if your entry speed is rather high. Pilots are well advised to slow down well before they arrive at the thermal. On no account cut inside of another glider in front of you. Slotting in must be done without causing the pilot of the established glider the slightest bit of concern. As everything else this needs to be practised but it can be accomplished by minor speed variations and/or moving away from the circle until well clear of the established glider.

When sharing a thermal with another glider avoid following this aircraft in its blind spot. Apart from being very unnerving to the leading pilot it is also far from ideal if we want to maximise our rate of climb. Only if we stay roughly opposite each other will we be able to use the other glider as an indicator of the strongest pockets of lift.

Another method of enhancing safety is to use the radio in order to alert circling pilots about the imminent approach of another glider. If no acknowledgement is received promptly it would be prudent to adopt an extremely cautious approach and attempt to establish contact via a friendly wave from the cockpit. If there is still no response it must be assumed that the pilot concerned is unaware of your presence. Talk to the pilot and, if necessary, talk to the CFI.

To sum it up, for the majority of new solo pilots thermalling presents the biggest hurdle. Seeing their more seasoned fellow pilots climb away but being unable to do more than extended circuits is very disheartening indeed. If junior pilots are quitting we are well advised to ask ourselves whether we have done enough soaring training. No doubt, all drop outs were quite enthusiastic at some stage and have put some of their hard earned money on the table to join our ranks. They had every intention of becoming glider pilots but have thrown the towel half way through their training or soon after going solo.

I know, we are always quick to rattle off a convenient list of reasons but are we really hitting the nail on the head or are we falling



into the same old trap of blaming others for our own failures and our own shortcomings?

Questions immediately coming to mind are:

- *Are we showing our students what the sport is really all about or is our training primarily consisting of take-offs and landings?*
- *Is pilot training primarily aimed at going solo or is it focusing on the bigger picture?*
- *Are we putting enough effort into theoretical training?*
- *Are we showing newcomers what possibilities exist in gliding and do we let them experience the full spectrum of our marvellous sport?*

I'm sure there are cases where the answer is "yes", but if we find that the answer to any of these questions is "maybe" it might be a good idea to look more closely at ourselves and our approach to training. Experience suggests that new recruits are dropping out soon after realising that their expectations are not fully met. In too many cases they have only done circuits, something that tends to get very boring after only a few weeks. It certainly fails to excite the majority of new aviators.

The world is changing rapidly – and with it the expectations of newcomers to the sport. In today's society the focus is on efficiency and successful outcomes and the gliding movement is well advised to embrace exactly the same strategy. Unless we manage to train newcomers efficiently and get them on the road to success quickly we will continue to see high numbers of glider pilots turn their back on gliding. A reasonable ratio of soaring flights to circuits is crucial for pilot satisfaction and if extended circuits are becoming the norm instructors and/or coaches might have to provide more post solo training. Legally, coaches can only step into this role when the new pilot has completed the "C certificate" and therefore the pressure is once more on our instructors to avoid new pilots falling through the cracks. Retaining only a small percentage of drop-outs means that gliding would experience real growth again.

In the next and final article of this series we will look at teaching advanced soaring. See you then.



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GFA Soaring Australia Front Cover

GFA Marketing & Development Department

THE GFA MARKETING & DEVELOPMENT COMMITTEE
IS PLEASED TO ANNOUNCE THAT THE WINNER OF THE
GFA 'BEST GLIDING FRONT COVER PHOTOGRAPH' COMPETITION
FOR SOARING AUSTRALIA APPEARED
IN THE JUNE 2005 ISSUE.

The photograph of Boomerang VH-GQZ, flown by Derek Eilers, was taken by Justine Thompson on Saturday 26 March at Stonefield airfield, South Australia. She was in the front seat of Bergfalke 4 VH-GZQ. The Bergy was being flown by Anthony Smith from the back seat.

Justine was practicing with her new Nikon D70 which had been purchased just over a week before. She was using a 24 to 120mm lens with vibration reduction (36 to 180mm equivalent).

Justine and Anthony's flight was 107 minutes and they took nearly 500 photos in that time.

They flew with a number of aircraft including ES-59 Arrow VH-GNF, Blarik VH-GJX, Bergfalke 4 VH-GZM, PIK 20D VH-WVA, Std Libelle VH-GTX, Grob 109 VH-GUD.

For her efforts Justine (and her pilot Anthony) receives a \$250 cash prize.

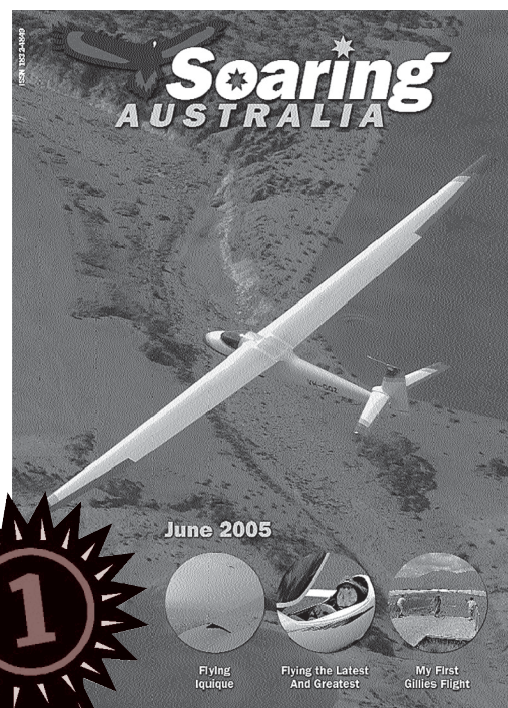
Remember that \$150 will be paid for every gliding photograph selected for the front cover, as well as the annual cash prize for the best cover photograph.

Trials are underway selling the magazine in various newsagents and other outlets around the country, so we need high quality front covers more than ever.

We are also looking at preparing a 'Gliding Australia' calendar so we will need photographs for that as well.

Guidelines for front covers:

- these need to be eye-catching, colourful, dynamic, and show our pilots having fun
- high quality photos are essential; 35mm slides or digital images >5 Megapixels
- submit digital images (in order or preference) in RAW, TIFF or high quality JPEG on CD
- use a polarising filter for best effect when



Winning cover photo taken by Justine Thompson

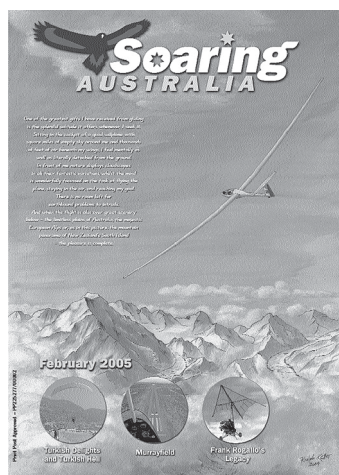
photographing gliders against a sky background

- make sure photographs are taken safely and in accordance with the rules and regulations
- include all details including photographer, camera equipment, subject, aircraft, etc

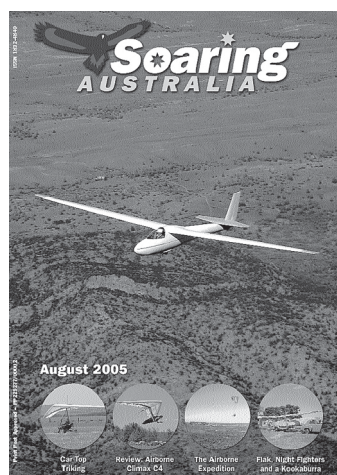
A big thank-you to everyone who took the time and effort to submit photographs and please keep up the good work!

Runners Up:

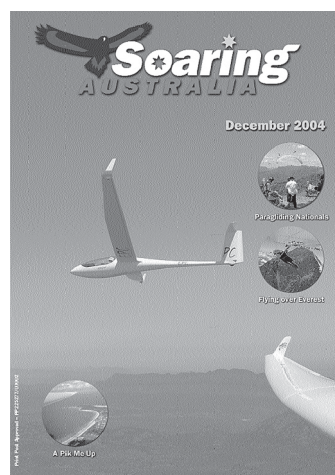
February 2005 – Ralph Keller
August 2005 – Justine Thompson
April 2005 – Justine Thompson
December 2004 – Matthew Colwell



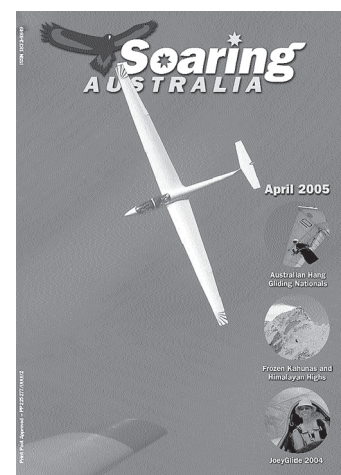
Runner-up February 2005
by Ralph Keller



Runner-up August 2005
by Justine Thompson



Runner-up December 2004
by Matthew Colwell



Runner-up April 2005
by Justine Thompson



GLORY DAYS – PART ONE

Simon Plint

MY EARLIEST RECOLLECTION OF THE MORNING GLORY WAS PROBABLY AN ARTICLE IN SKYSAILOR (NOW SOARING AUSTRALIA) PUBLISHED AFTER THE FIRST NON-POWERED HANG GLIDER PILOTS FLEW IT. THAT WAS 10 YEARS AGO WHEN CMAC, AL GILES, BILLO AND PK MADE THEIR FIRST PILGRIMAGE TO BURKETOWN.

Road Train
Photo: Jason Hunter

I saw my first picture of a Morning Glory on a website called Dropbears.com. The pages at [www.dropbears.com/brough/] had been authored by a powered sailplane pilot who had been flying the wave since 1989. This site is an excellent source of information and images of the Morning Glory and a lot more.

My interest and subsequent reading of all the Morning Glory pages at Dropbears was the result of finding out that Billo and Al were organising a 2005 expedition to Burketown in memory of CMac. Apparently there was a spare seat. As it turned out this was all part of Billo's cunning plan to get me to drive his second car and to video the event. I had been singled out as having some sort of a knack with a video camera and an editing suite after the success of the Dalby DVD.

I just had to convince my wife and family of the value of this once in a lifetime experience. This was not going to be easy since there was no guarantee that the Morning Glory would even come in and JOD's itinerary was going to see us travel some 8,000km. This alone would cost a fortune in petrol.

To my delight and the envy of my work mates my wife, Tanya, was very understanding.

She would have to run the house and look after the kids for four weeks without me. She does that anyway, come to think of it.

None of us wanted to think about the fact that we may not even see a Morning Glory; we all had to sign on knowing that our trip could be Morning Glory-less. At least we would get to see parts of Australia that most people don't. We were to drive from Newcastle (NSW) to Hawker (SA), and from there we would get on the Birdsville Track to take us through to Queensland then up to Burketown, our final destination in the tropical north of Australia...

Jason arrived to pick me up at 6am and my sleepy family watched in amazement through the front window as we managed to fit all my gear into an already overloaded Subaru. This was Billo's second car that he had bought for the trip to tow his Buzzard trike. In the weeks leading up to our departure Billo put in a lot of work so that we would be able to have two trikes in Burketown and thus have the best chance of getting on the wave.

We made our way to Rutherford to fuel up, zero the trip odometers and take a group shot. We nicknamed Billo's Subaru Christine because she had a mind of her own and communicated to us with beeps and flashes when we left a door open or the keys in the ignition. Billo had his Hilux and was towing the XTC 582 on the trailer he built. His passengers were Greg and Young Shane. JOD was in his Subaru with Al Giles (Dr Death), aircon and a fridge. I was with Jason in Billo's Subaru and as the others wheeled away from the servo Jason got on the radio to request a jump-start as our battery was dead. Was this an indication of our readiness to face the harsh centre of Australia?

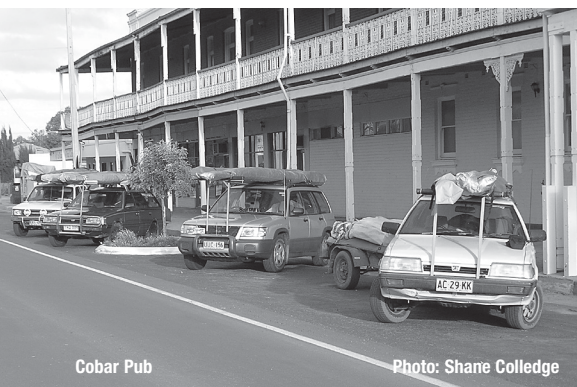
I took a photo of Jason and Al jump-starting the car. Little did I know that was to be the last I saw of my camera until Burketown – the car was packed so tight it wasn't till then that I was able to find the bag into which I had placed it.

The day started off drizzly, then cleared to blue skies. We made our way west in high spirits. Jason and I needed another jump start in Merriwa, and by Gilgandra Jason had had enough and found an auto electrician who installed a new battery. Billo missed the turn to Gilgandra but caught up with us in Nyngan after visiting Dubbo. It was quite a distance between Merriwa and Nyngan, and as we speed across the plains under beautiful cloud streets I was impressed by the thought of Scott Barrett's flight from Denman to Nyngan, a valley record of 340km.

Selmsey and Shane had left the day before to do a flooring job in Moree. Shane worked as a labourer to cover his petrol costs for the trip. We found them in the pub with the longest veranda in Cobar. Come to think of it, we always found Selmsey in a pub. We stocked up with beer and food and headed out of town to make camp half way between Cobar and Wilcania in a rest stop.

The next day we awoke to a beautiful moonset and sunrise before making our way to Broken Hill. The McDonalds billboard on the outskirts of town was an indication that even though we had travelled so far we still hadn't got far enough. We stopped to get petrol and Selmsey made his way to the wreckers to find a radiator; he'd had enough of driving with the heater on to keep the engine cool.

Broken Hill was the point at which we headed south towards SA. The roads were



Cobar Pub

Photo: Shane Colledge

getting longer and straighter and the scenery on each side more sparse. Flat for as far as you could see. We turned north at Peterborough while Selmsey and Shane headed to Port Augusta to continue the search for a radiator having come up with nothing in Broken Hill.

At Hawker we got petrol and more supplies and turned our noses up at the expensive fly nets you put over your hat, before heading into the National Park at Wilpena Pound.

We shared a campsite at Arkaroola with two or three busloads of school kids. The showers were hot but there was a line up and quite a wait as each kid thought he was back home. This concept was compounded by the fact that back at the buses there was a large screen set up with a DVD playing. Right. We had a nice fire and cook up, but still a ways to go to really get away from it.

Come morning and Billo gave us all joy flights over the Pound until the thermals picked up. Then we made our way towards Lyndhurst, but not before returning to Hawker and buying up all the fly nets. No one told me about the flies. Unbelievable.

The convoy had split up with JOD and Selmsey taking the more scenic route while we followed Billo on the bitumen. We were all to meet for a pie at Copley, but the others couldn't wait for us and left a message with one of the local kids whom we ignored as he ran down the street waving at us as we passed through the sleepy town at sunset.

We found the others in Lyndhurst, in the pub. This was to be the point at which Billo would start flying the XTC 582 over the dirt roads, but he didn't communicate this very well to the others and since they did not want to stay in Lyndhurst and Billo did not want to break up the group we made our way to Marree on the dirt.

JOD and AI stayed in the Marree pub while the rest of us camped by the old railway line at the end of town. Jason and Billo were getting quite good now at cooking a



Selmsey turbo towing

Photo: JOD

"mash-up" in the Trangias. I was suffering from a head cold and Jason was getting over a sore throat so it was an early night. Besides, I was to be first passenger in the trike flying the Birdsville Track the next day.

G-forces pressed me back into the seat as Billo increased the throttle and pushed the bar out to bank the trike up and around as we left the dirt road below and circled back over the guys at camp. We buzzed the pub and started up the Birdsville Track. Unfortunately Billo had mixed emotions as we made our way through the beautiful morning air. Here we were in this incredible setting, but the XTC 582 had taken a beating on the dirt road in spite of the beer cartons we had taped onto the spats. There were chips in the fibreglass and dints in the rear stays and in the Rotax radiator.

The view below us was like a moonscape with the polished red stones of the Stony Desert creating a mirage effect. I was still suffering from the head cold and could not stop my nose from running. Once the sponge microphone cover was saturated, snot started to whip up inside the full face helmet in the eddy currents.

We were heading for Cooper's Creek to pick up the next passenger. I assumed that Billo would have loaded the waypoints into his GPS, but when we landed at a homestead and he waved his GPS at the owner saying, "I have a GPS so I know exactly where I am... lost", I knew that he hadn't. We had landed at a homestead called Etaduna and we were treated to cups of tea and as much vegemite toast as we could eat. They had a broadband internet connection and Billo was able to get a weather report before we launched again. We circled up above the homestead while the men went back to work and the kids waved



Somewhere on the Birdsville Track. If there's a hill we'll fly it

Photo: JOD



The hot pool at Mungerannie

Photo: JOD



Billo and Young Shane

Photo: Jason Hunter

goodbye. Billo made the comment over the radio that his windscreen needed a wipe. He'd put my helmet on by mistake and I prayed that he did not get my cold as this could jeopardise the towing in Burketown.

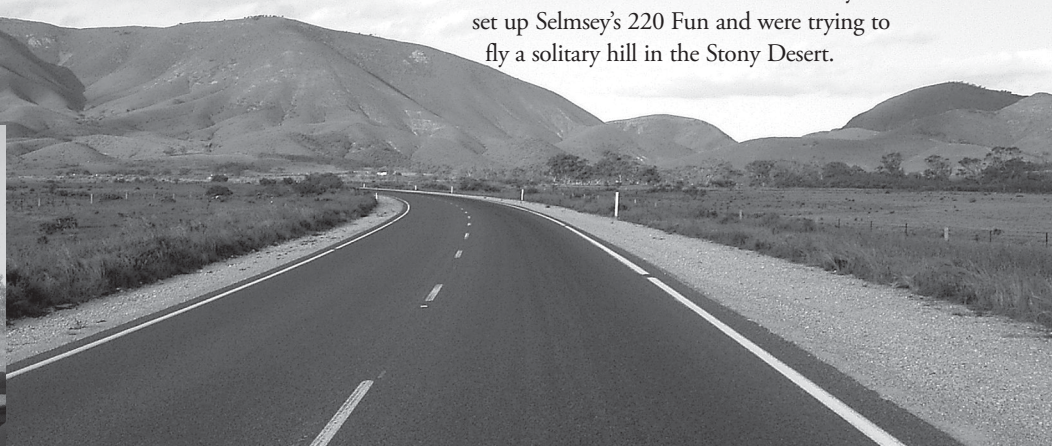
The going was rougher now and the XTC 582 was starting to burn more fuel. We'd missed Coopers Creek and the last radio contact we'd had with the others was to hear that they had set up Selmsey's 220 Fun and were trying to fly a solitary hill in the Stony Desert.



Make sure you get off the road and stop for road trains

Photo: Glenn Selmes

December 2005



Flinders Ranges

Photo: Glenn Selmes

Soaring Australia 23



Birdsville Pub
Photo: Jason Hunter



Billo in the XTC582 over the Birdsville Track
Photo: Glenn Selmes

We pushed on until we saw an airstrip where we landed again. This time it was glasses of cold water. It was so dry. We were at Mulka and Billo refused their kind offers of fuel as he knew that landowners round here did not have much to spare. Anyway, we weren't far from the Mungaranie Pub.

We landed at Mungaranie and taxied up the road to the petrol bowsers to fill up. It was my shout at the bar and I can tell you the first two stubbies did not even touch the sides and the egg and bacon roll was the best I think I've ever had. The others soon arrived but the track had taken its toll and we set about fixing the damage to trailers and cars. After that we grabbed some beers and jumped in the natural hot spring pool before heading off to find a campsite and a place for Billo to land.

That night we built a big fire and JOD invited us to dine in his billion star restaurant. The chef's special was jaffles, and, thanks to JOD and Splint's efficiency, everyone had an elegant sufficiency in quick time. The night sky was amazing as we watched satellites speed through the Milky Way. This was to be the first night that I rolled out a swag instead of a tent and slept by the fire. We were far enough away from the city now.

Day five of our trip so far and it was Jason's turn in the trike. I filmed the XTC 582 as Billo warmed the oil in the orange glow of a rising sun, then as he took off and climbed and banked in a 180° turn to fly across the setting moon.

I now had Christine to myself and we headed up the track with Greg and Shane in the Hilux not far behind. Although there were patches of water on the track it was pretty dry and not really a problem to drive on, but I would not do it in the wet. I was able to get some good footage of the other cars on the track and Selmsy found a sand hill to

soar. We found the trike parked under a tree in the centre of Birdsville with two sleepy heads lying in its shade. We were all dry so we hit the Birdsville pub. More good tasting beer and a bar full of hats stuck to the rafters.

Shane was next in the trike and flew with Billo to a private airstrip just short of Bedourie. Billo was not happy to leave the trike there and so Shane joined the ground crew and we set off to find a suitable landing for Billo, who took off into the afternoon sun. As the light faded the dust from JOD's car ahead seemed to suddenly lie flat on the ground like a fog as the katabatic conditions took effect. Billo was on the radio complaining about heavy sink while Al was trying to find a patch of road that did not have a SWER line running next to it. He found one, a flat stretch of road between two crests in the road with sand hills on either side. We parked cars on the crests at each end and lit the road with our headlights. The drone of the XTC 582's Rotax overhead broke the eerie quiet we were listening to as we manned our stations. We were all concerned for Billo's safety as night landings can be dangerous. I watched as the lights from Christine blinked. Not because we'd left the door open but because Billo had just guided the trike over her roof-top and onto the road for a perfect landing. He rolled the trike off to the side of the road and that was our camp for the night.

Next morning Billo was up with the cockatoos and flying away against another sunrise and moon set. We met him at Boulia where we put the trike back on the trailer. It would be bitumen from here to Gregory Downs, just 120km short of Burketown. We camped in another rest stop just past Mt Isa, and as my sinuses started to clear Billo started blowing his nose and chanting the mantra, "*Splint must die!*"

Day seven was another long day of driving, but our reward was a swim in the river at Gregory Downs. A tranquil oasis and the first time some of us had washed in a week. I grabbed the esky from the car and dropped it on the riverbank.

Unfortunately we indulged for a little too long and by the time Billo was back in the air he only had enough light to make it to Brookdale, a homestead about 40km short of Burketown. Billo put the Cruze wing to sleep under the veranda and we picked him up and continued on to Burketown where Donny was waiting for us at the Burketown pub. He'd flown in two days before. We kept the celebrations brief, as tomorrow morning we would be up at 4am to fly the Morning Glory.

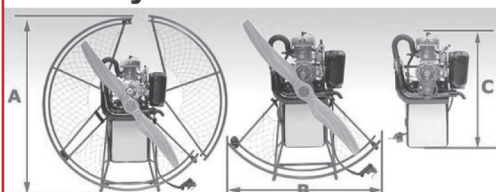
Glory Days continued next issue...

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World Pilot Ranking System (WPRS) for Paragliding

– A NEW SYSTEM

Godfrey Wenness

THE WPRS HAS BEEN AROUND FOR MANY YEARS NOW AND HAS BEEN THE SUBJECT OF MANY CALLS FOR ITS CALCULATIONS TO BE OVERHAULED DUE TO OBVIOUS GLARING FAULTS. HEEDING THIS, FAI/CIVL AGREED TO CHANGES PRESENTED BY OUR VERY OWN DELEGATE, STEWART DENNIS, THIS YEAR AT ITS ANNUAL PLENARY SESSIONS IN GUATEMALA. THE NEW SYSTEM WILL BE FAIRER AND MORE REPRESENTATIVE OF A PILOT'S ACTUAL WORLD RANKING. IT HAS BEEN IN OPERATION SINCE JUNE.

Why the change? Well, there were a number of major flaws with the old system...

The previous system suffered significantly due to the abrupt 18 month score cut off period such that each hemisphere's seasons, and therefore summer event period, would alternately double up compared to the other every six months. Thus, during one period a year, the southern pilots would have two summer seasons counting while the northern pilots only had one, and vice versa. It just so happened that most of the high level events occurred in the northern summer.

It was recognised also that major European events and PWCs with their higher pilot field quality were at a disadvantage when one considers the identical points scale was available for ones with lower quality/ranked pilots attending elsewhere. Hence the aberration that many pilots were, from time to time, actually placed in the top 10 or 20 in the world, when they clearly and realistically weren't.

The result was that the system produced rankings that swung wildly from season to season and some pilots have been high up or even occasionally at the top of the "World Rankings" purely by system default and not actual relative performance or merit. Many Australian pilots have been in this situation and some even blatantly advertise this rather hollow ranking to an unsuspecting public...

A simple averaging of the monthly or quarterly rankings over the applicable 18 month period gives a much clearer picture to such claims in the old system.

The new system elevates the points available for a Cat 2 competition from 67 to 80, closing the gap with Cat 1 competitions (Worlds and Euros) which get 100 points. It also uses a gradual event score decline rather than a sudden drop off at 18 months to iron out the seasonal fluctuations that have caused so many problems. The previous requirement to have 100 pilots entered to obtain 100% validity has been reduced to 80 pilots in a move to promote safety limits at smaller sites and recognise the fact that events can be of high quality without 100-plus pilots present.

The new system also takes into account pilot quality factors from the rankings and applies them to each event in the form of a points curve. Previously this was a straight line from 67 to 0 (1st gets 67 points, 2nd gets 66 points, etc) with pilots placed after 67th getting no points at all and thus no WPRS ranking. The new system also gives the last placed pilot a point so that they now can appear on the rankings.

Previously the 15th pilot in a PWC got 52 points – the same as 15th in a local Cat 2 event with only local and no top pilots present. Thus pilots who attended four valid local events and placed an average of 15th would have a WPRS ranking equal to a high



Current paragliding WPRS number 1- Christian Maurer of Switzerland

class pilot who came an average of 15th in the PWC – clearly not a reflection of their relative performance for a world ranking system to be based on.

The new system adjusts the points scale line to a floating curve so that a PWC (or any other) event with a high pilot quality factor (ie many high ranked pilots competing) would result in more points for those higher up. First place still gets a maximum of 80 points if the event was valid, regardless of pilot quality factor. Thus a PWC pilot in 15th place may now get 70 points, but 15th in a typical local event may only receive 50 points or less (equating to say 60th in a PWC).

The new system has already reduced the gross inaccuracies that plagued the previous one and is now providing a better picture of where pilots' rankings stand on the current world competition stage. Of course you still have to compete regularly to get and maintain a ranking ...



The WPRS info webpage can be found at [www.fai.org/hang_gliding/node/69].

Sub-ed note: For those wondering, the WPRS for hang gliding is very similar to the new paragliding WPRS detailed above. The changes to the paragliding system were modelled on the current hang gliding WPRS, with some slight formulae modifications.

OBITUARY – Frank G Irving

Alan Patching

THE GLIDING WORLD WAS SADDENED TO LEARN THAT FRANK IRVING HAD DIED IN AUGUST AFTER A PERIOD OF POOR HEALTH. HE WILL BE SORELY MISSED BY MANY BECAUSE WAS ALWAYS ABLE TO APPLY HIS MATHEMATICAL MIND TO ANY GLIDING PROBLEM AND PROVIDE EITHER A SOLUTION OR AN EXPLANATION.


He contributed a great deal to the understanding of Tug Upsets and other technical matters including Effect of CG position on cross-country speed, winch loadings, stability, etc.

Frank was an active member of the OSTIV Sailplane Development Panel and helped define the Standard Class. There was hardly an OSTIV Congress without a paper from him. He invented the first successful Total Energy Head and published full-scale

drawings in Sailplane and Gliding for everyone to make their own.

Frank will be remembered by many for his contribution to the very comprehensive manual – *The Soaring Pilot* – which made four editions and was reprinted in the USA as *The Complete Soaring Pilot's Handbook*. His last publication – *The Paths of Soaring Flight* – is concerned with matters which are fundamental to the understanding of soaring and while aimed at those who are mathema-

tically skilled provides answers that can be understood.

My association with Frank started in 1951 and continued with him as a member of the BGA Technical Committee, Professor of Aeronautics at Imperial College and the SDP. I was privileged to represent the GFA at the memorial service held at Lasham in September when over 100 pilots gathered to pay their respects for a colleague and friend who had contributed so much to the technical aspects of soaring flight. 

HAPPENED RECENTLY ON AN AIRFIELD

Martin Feeg

Just recently I was roaming the country and stopped at one of the typical, large Australian airfields; each tarmac runway about two kilometres long and as wide as a motorway, and on each side, grass safety strips wide enough to allow for three gliders to land abreast. In this circumstance the safety strip was also used for gliding operations but was recessed about 200m to the threshold of the tarmac; a large field with hip-high crop filled in the corner.

At this particular day a strong headwind with only a few gusts and a slight crosswind component from the grass towards the tarmac had blown all day. A student was coming in on final; we saw the descent getting steeper as the airbrakes were cracked and instantly it was obvious he wouldn't make it to the grass strip. But before anyone of us was able to get to a radio he brushed the crop and the aircraft was ground-looped by the vegetation. Some embarrassment was the only damage to man and equipment.

Close shave? Definitely, even though taking the limited experience into account.

Why? Well, first of all only the benign landscape saved the day. If it would have been something different the outcome could have become even fatal. Secondly, but more importantly, the pilot obviously had no back-ups. ALWAYS have an escape plan – options! We learn it right from the beginning, cable break, emergency landing, modified circuit... the lot.


In this case the answer would have been to close the airbrakes instead of keeping them at one-third; it might have been necessary to even lock them away. Next step, more speed helps to penetrate more sufficiently into wind; this could have turned it into a "normal" landing.

Obviously with two kilometres to land ahead, overshooting the touchdown point would have meant very little, but undershooting ended in the weeds. Options on starting the circuit have not been considered.

Talking of options, why not let yourself drift across to the tarmac, the wind condition (the crosswind component blowing towards the tarmac) would have been favourable. Again, even if the manoeuvre would have meant steering into wind it would have made for a safe landing.

Lastly, landing in crop or high grass is no drama, only you have to treat the top of the vegetation as the surface and flare out above it, then bleed away the speed with increasing angle of attack. Conduct an extreme tail landing to make the trailing edge of the wing brush through the tops, they will bleed the remaining energy very quickly and the aircraft will settle in nicely. Close the airbrakes slowly but surely all the way through, increasing the angle of attack, and have them closed when the vegetation tops drum against the trailing edge – to avoid damage to the airbrakes and an airbrake box full of harvest. With this manoeuvre the trailing edge will bend the vegetation and the wing is skimming over the tops. However, if vegetation is caught by the leading edge instead, it will fold over and grab tightly resulting in an uncontrollable situation.

So, once and again, it is all about options and taking the full repertoire into consideration.

Safe soaring. 

GFA Chief Executive Officer's Report



Coaching

I'm writing this "in the field" at Beverley, having attended the 'coach-the-coaches' weekend with Regional Technical Officer (RTO) – Sports

WA, James Cooper and RTO – Sports SA, Bernard Eckey.

Bernard's presentation of coaching lectures is always worthwhile, as our Croweater colleagues well know from the SAGA winter round of lectures. James and Bernard were also inducting some new West Australian coaches into the delights of lead and follow exercises. Rob Hanbury exhibited his Stemme10, a recent import into WA.

As usual, whenever you run a fixture like this, the weather turns out to be "challenging", and although the temperature trace promised 7,000ft, grovelling between 2,500 and 4,000ft in tight thermals was the norm. All the cockpits sported drinking straws set at angles of 45° with Bluetack to help followers get the optimum 45° bank angle/45kt established.

Tomorrow, the road show moves to Narrogin for the WA "GlideFast" week. A total of 12 WA pilots and gliders have enrolled.

Championships

- *The NSW State Competitions at Lake Keepit have had to close the entry list at 60 gliders.*
- *JoeyGlide (Junior Nationals) had over 30 entries at last count.*
- *Numbers for the Multi Class Nationals at Gawler, the WA State Championships at Narrogin, and the Club Class at Benalla are still to come.*

All the best to all competitors, keep it safe, and breakdowns permitting, my Hornet Mike Yankee and myself will be at Benalla in January.

There is hope that all this increased flying activity will be matched with an increase in membership. The Development Committee should be able to report the latest trends in membership in the next quarter.

OZFLARM Update

With the occurrence of this resurrection in competition flying, a GFA-supported trial of the anti-collision device OZFLARM has been confirmed for the Multi-class Nationals with the evaluation being carried out by the GFA Operations Panel and the Sports Committee.

Nigel Andrews, whose firm is making the technology under a commercial arrangement

with the Swiss FLARM organisation, has already sold almost his entire first production run of 100 units. Nigel will be offering OZFLARM units for hire at some other competitions at a reasonable price. I have been informed that the NSW State Championships have arranged some sponsorship from our insurers to equip the fleet plus the tugs.

OZFLARM is also a GPS track and altitude datalogger, but is not IGC approved as yet.

You can view the OZFLARM display near life-sized below:

This shows multiple targets: one outside one kilometre at 3 o'clock above, and one inside one kilometre at seven o'clock at the same height. There are audio signals



associated with the visual signals. If you wish to know more see the operations section of the GFA website at [www.gfa.org.au].

All pilots are reminded that devices such as this are only a supplemental aid to a good lookout. Kevin Olerhead, our Director of Operations, is reminding everyone in the recent round of Safety Seminars, that it is one thing to see another aircraft, but is separate task to avoid it.

ADS-B Implementation Group

For those two have been following this thread, Bob Hall has been busy producing another excellently researched paper for presentation to this group.

You can view the paper on the GFA website, it's called "Collision Avoidance Processes for Sport and Recreational Aviation and the Application of ADS-B". I can only strongly recommend that you read it for a good knowledge of the subject. The statistics of mid-air collisions in it alone make for sobering reading.

Keep that lookout scan going out there.

NAS 2c

The new procedures around un-towered aerodromes will have been in full swing for a couple of weeks by the time you read this. I would ask all pilots to give the procedures a fair go, but please give your considered feedback to your Chief Flying Instructor so that he/she can pass it up the line to the Operations Panel.

The RTO Operations WA, Kevin Saunders, and I attended the WA NAS 2c briefing in mid-October at the Royal Aero Club of WA at Jandakot by Mike Smith (the man in the DVD) from the Department of Transport and Regional Services (DOTARS). The briefing was very slick and informative, and had the news that there were to be no major changes to the education package at the last minute. You should all have had that confirmed by now.

Australia Security Identification Cards (ASICs)

Notification just received from CASA informs us that they have been approved to issue ASICs, making them a one-stop shop for Photo Pilot Licences and ASICs. Although this will have little effect on gliding operations, those members and tug pilots who are maintaining Private Pilots' Licences, should note new CASA licensing requirements effective from 31 December 2005. Check the CASA web site and by now you should have received a package from CASA explaining the changes.

November Board Meeting

The GFA Executive and Board met in Melbourne on November 11th and 12th, and some of my time in the last week has been taken up collating the Agenda.

By this time the minutes should be available on the GFA website, and by the numbers of issues raised, the meetings are scheduled to be pretty full on.

Find the minutes to important GFA meetings under the "Documents & Forms" sub menu on the left hand side of the GFA home page.

XO Blog

Due to some problems some members had with the original commercial blogging site, I have moved my blog to [http://arach.net.au/~jwelsh].

I hope you enjoy the mixture of GFA, general gliding and personal flying news, please send any feedback to my email address below.

Christmas Cheer

Compliments of the season to you and yours and may your thermals be high and strong.

Keep looking out and "Under 700ft, Land Safely".

GFA EXECUTIVE OFFICER

John Welsh

10 Merton Road, Roleystone WA 6111

Email: <EO@gfa.org.au>

Mobile: 041 794 5981 (CDMA)

Queensland State Gliding Championships

50 GLIDERS – 7 CONTEST DAYS OUT OF 7

Ralph Henderson

THESE WERE THE HEADLINES OF THIS YEAR'S JIMBOUR WINES QUEENSLAND STATE GLIDING CHAMPIONSHIPS, HELD AT MCCAFFREY FIELD AND ORGANISED BY THE DARLING DOWNS SOARING CLUB. THIS YEAR'S COMPETITION WAS MUCH MORE THAN THAT. RIGHT FROM DAY ONE, THE VIBE WAS GOOD AND EVERYTHING RAN SMOOTHLY. A GOOD OMEN WAS THE LAUNCH ON DAY ONE, WHICH WAS COMPLETED IN ONE HOUR AND TWO MINUTES DESPITE ONE TUG BEING DELAYED AT LAKE KEEPIT.

Competitors started arriving during the previous week. By the Thursday afternoon before the competition the marquee was up, the road in had been graded and the club facilities had never looked better.

A notable feature of the entry list was the strength of the 18m class, with the help of the 20m two-seaters, apparently at the expense of 15m class which only had eight competitors. Standard class was large enough to justify a League 2 and the 18m gliders were combined with the four open class gliders to make an open handicap class as well as an un-handicapped 18m class.

Many competitors chose to camp on the field and make the most of the club bar and meals. This contributed considerably to the excellent camaraderie amongst pilots and helped to make it all worthwhile for the host club. The "compact" nature of the DDSC facilities kept everyone together and talking to each other.



Tasksetting (clockwise from the left): scorer Mike Codling, pilot representative Jay Anderson, weather person Jenny Thompson, grid marshal Russell Bennett, task setter Shane McCaffrey, pilot representative Bob Flood, contest director Ralph Henderson, safety officer Charlie Downes

Practice Day: Saturday 17 September

Gale force winds – no flying. The Carnival of Flowers float parade in nearby Toowoomba was cancelled for the first time in 56 years because of the wind. Gliders were left in their trailers. This gave the organisers time to do last minute preparations and time for pilots

to register. By late Saturday afternoon the wind had started to ease and gliders were rigged in the hope of a good first contest day.

Overall, the competition weather was dominated by a relatively slow-moving high pressure system. Holding the competition before the summer solstice meant that the weather was more winter-like than usual, according to our New South Wales visitors.

With practice day having been blown out, it was straight into contest day one. The contest was officially opened by Councillor Peter Taylor, Mayor of Jondaryan Shire, a former club member and one of our neighbours.



Damon Byrne, Jimbour Wines Territory Manager, Lisa Trotter, Women's Champion, Ralph Henderson, Contest Director at the presentation dinner

Day 1: Sunday 18 September

Forecast weather: weak climbs, two to three knot average to 4,000qnh, blue, winds 240/15. NOAA trace indicated a poor day.

Tasks: AAT. Club Class – Jimbour, Brigalow; Standard and 15m Classes – Jandowae, Chinchilla; Open and 18m Classes – Jandowae North, Chinchilla.

Everyone marshalled efficiently under the guidance of Chief Marshall Russell Bennett and the launch got underway on time. A challenging blue day ensued, unfortunately a little too challenging for some with 13 landouts. We had decided to revert to a conventional finish line due to the air-space constraints around the airfield. Most pilots got the finish procedure right and

complied with the 200ft minimum finish height, unless landing straight in.

Monday morning and the wind had gone, but competitors were greeted by a frost when they got up. Most un-Queensland like weather for this time of year.



Briefing in the marquee

Day 2: Monday 19 September

Forecast weather: weak climbs, two-and-a-half to three-and-a-half knot average to 7,000qnh, blue, wind 250/ 5-10. NOAA trace indicated poor day.

Tasks: AAT. All classes – Brigalow, Kumbia, Kupunn.

A better day for most with only five landouts.

Day 3: Tuesday 20 September

Forecast weather: a shallow trough formed between two highs and gave some unstable conditions to produce a good day, average climbs up to eight knots to 8,000qnh, cu, strong day, winds 23/15. NOAA trace indicated good strong day.

Tasks: AATs. Club class – Kupunn, Jandowae, Chinchilla, all other classes – Kupunn, Jandowae, Miles.

For the first time, everyone got home, and the mood in the bar was noticeably happier. The kitchen crew had a night off and joined most competitors at the local Bowenville Hotel for a superb meal and to celebrate Shane McCaffrey's birthday.



Damon Byrne, Jimbour Wines Territory Manager, with Club Class placegetters Gary Stevenson (third), Phil Eldridge (second), Simon Holding (first), and Contest Director Ralph Henderson

Day 4: Wednesday 21 September

Forecast weather: Remnants of the small trough prevailed to give fairly unstable conditions. Average climbs up to eight knots to 8,000qnh, some cu, winds light and variable. NOAA trace indicated good day.

Tasks: AAT. All classes – Broadwater Lagoon, Bell, Warra.

A good day for most – that is those who kept within the airspace limits. Regrettably, despite a number of warnings, a handful of pilots strayed outside the allotted area or over the 7,000ft qnh limit. In accordance with the rules there was zero tolerance to such infringements and some well-placed pilots had their championship hopes dashed.

Day 5: Thursday 22 September

Forecast weather: Ridge up the coast, some cu, weak day again with hard-to-work thermals. Winds varied from southerlies on the ground to northerlies above 4,000ft. NOAA trace indicated convection to around 6,000ft. Some convergence worked over the Bunya mountains.

Tasks: AAT. All classes – Kupunn, Kumbia, Tara.

Temperatures were rising and the comp started to develop a more summery feel.



Fifty gliders on the grid

Day 6: Friday 23 September

Forecast weather: A high ridge produced hot yet stable conditions, nil to light winds. NOAA trace indicated some good conditions for a short time, with a late start.

Tasks: AAT. Club Class – Brigalow, Jandowae, Kupunn; Standard and 15m – Chinchilla, Tara; Open and 18m – Goombi, The Gums.

December 2005

It was back to the blue days. A reasonable day was forecast but failed to materialise. The day started late and produced difficult weak thermals. A couple of gliders didn't make it home while others used iron thermals to struggle home.

In the evening a pilots' meeting was held. A number of issues were debated, including finish lines, competition rules, and tasksetting. The greatest debate was on task setting with a strong debate on the merits of AATs versus speed tasks. This debate continued on in the bar for some time after the meeting ended.

Throughout all this everything ran smoothly. Efficient gridding, launching in under an hour every day and good start and finish procedures. Provisional scores were up after dinner each night and confirmed day winners were awarded their Jimbour Wines prizes next morning.



Some of the hard workers in the kitchen, Libby Matuszczak, Val Sundell, Narelle Hennessy

Day 7: 24 September

Forecast weather: The effect of the high ridge prevailed, late start, early finish, similar to the previous day. Climbs two to four knots average. Nil to light winds. NOAA trace indicated some fair to good conditions for a short time, with a later start than previous day.

Tasks: AAT. All classes – Kumbia, Jandowae, Macalister.

A good day forecast, but with a late start and the inevitable imperative to get people home reasonably early to allow final scoring. Conditions out on the strip were becoming hot dry and dusty, despite the daily watering.

As everyone landed back the mass de-rig began. After a very smooth week, Murphy's Law struck or maybe a bit of complacency. There were more "issues" on the last day than there had been on all the previous days put together. With dinner being served, decisions had to be made and then the presentation dinner began.

Day winner prizes were awarded first. Then Adam Woolley spoke on behalf of himself and David McManus, thanking everyone for their support for the Juniors World comps team. Queensland's GFA Board member, Rob Murphy then presented the GFA Wally Wallington Award to Lisa Trotter, a very worthy recipient.

The many club members who had helped during the week were thanked and rewarded by DDSC club president Jenny Thompson. Jimbour Wines Territory Manager Damon Byrne then presented the trophies.



Part of the organising team - Jeremy Thompson, Richard Hoskings, Shane McCaffrey, Robert Bradley, Graham Hennessy

The winners:

OPEN HANDICAP AND 18M CLASSES

Chris Woolley Ventus 2CXM

15M CLASS

Hank Kauffmann ASW20

STANDARD CLASS

Peter Trotter LS8

STANDARD CLASS LEAGUE 2

Craig Tuit Standard Libelle

CLUB CLASS

Simon Holding Standard Cirrus

Highest placed pilot in their 1st or 2nd State Championship

Graham Kohr Standard Cirrus

WOMEN'S CHAMPION

Lisa Trotter ASW20

For full results please go to the website [www.ddsc.org.au].

Special mention must be made of the club class winner, Simon Holding, who travelled all the way from Alice Springs to compete in the competition.

During the competition, pilots were reminded of the recent loss of one of our Queensland pilots, Paul White, in an accident near Dalby. To raise money for his two children a raffle had been run during the week. Later in the evening the winner was drawn and Graham Kohr picked up his second prize for the evening.

Over the course of the week, the raffle and other donations raised more than \$2,000 for Paul's family. While his family had known little of Paul's love of soaring, they were overwhelmed by the generosity shown by the gliding community, thank you all very much.

In the final analysis, it was a highly successful and safe competition. Thank you to all those who made it possible – the organisers, helpers, pilots, crews and tow pilots.



Photos: Courtesy Ralph Henderson

FIRE, WATER, AIR – Red Bull Vertigo 2005

Fredegar Tommek (translated by Daniela Battaglia)

WE ARE RIGHT IN THE MIDDLE OF AUGUST. WHILE THOUSANDS AND THOUSANDS OF TEENAGERS ARE ON THEIR PILGRIMAGE TO THE WORLD YOUTH DAY IN COLOGNE, GERMANY, THE ACRO COMMUNITY IS ON ITS WAY TO LAKE GENEVA IN SWITZERLAND. THE RED BULL VERTIGO, THE MOST EXCITING ACRO FLYING EVENT IN THE WORLD, TAKES PLACE HERE EVERY YEAR IN AUGUST.



The world's best acro pilots on one stage
Photos: Fredegar Tommek

Villeneuve is a small cosy town situated at the western end of Switzerland and right beside the French border. A supermarket and a service station as well as 4,259 inhabitants call this beautiful place between lake and mountains their home. Between foothills and the main crest of the Alps, it is the perfect place for a peaceful holiday... However, for six years now, during one prolonged weekend in August, this quiet and idyllic place is shaken. Drum 'n' bass rhythms as well as rock music can be heard, mobile homes from around the world clog the streets, and in every corner young people are talking to each other in a variety of languages. Everybody knows what is about to happen – the biggest paragliding and acro show the world has ever seen!

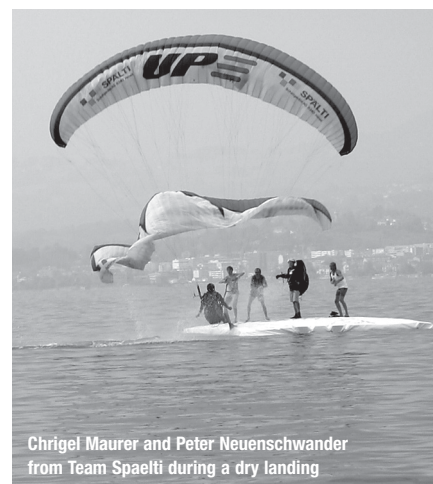
Throughout the competition, participants fly in three categories: single paragliding, single hang gliding and the most exciting discipline, "synchro-parapente". In a perfect flight the pilot shows a smooth succession of flying figures. Spiral, wing over and rhythmic SAT are part of the standard paragliding program and should be no problem for the pilots. But only "upper class pilots" are able to make the helicopter rotate as often as possible on the same spot and show the twister right afterwards. And only a couple of the world's best pilots are able to fly the infinity,

which earn them twice as many points as the easier manoeuvres.

The hang glider pilots fly loops, frills and wingovers – whistling is heard from the sky as pilots reach speeds up to 120km/h. Without the colourful smoke cartridges, which write the pilot's course in the sky, it would be almost impossible to follow their flights. A jury of four members tries to fulfil this task, assigning points depending on the difficulty of the manoeuvres. It's then possible to gain additional points during the landing with feats such as the "touch and go", where the pilot tries to touch the surface of the water with his wing or a body part before making the landing island.

The competition kicked off with the single paragliders. Among 49 pilots from 18 countries, two French pilots, Guillaume Chatain and Antoine Montant, took out first and third place, demonstrating extraordinary stunts. The German newcomer, Michael Knipping, was also in very good shape, demonstrating perfect landings on the island. He convinced jury and spectators alike, flying with his U-Turn "G-Force" after three valuation flights right into second place. Afterwards he explained that, "two beers less yesterday evening and maybe first place would have been possible..."

In the hang gliding discipline, Guido Gehrmann, member of the German national team, achieved an outstanding performance and left all other hang gliding acro pilots behind, winning the competition superiorly after three valuation flights. The friendly Lufthansa pilot, who is on vacation during the summer months, is happy for the change from his regular flying job that the Vertigo competition brings. But soon he will be bringing tourists again to their holiday destinations... entirely without looping the loop. Jon Gjerde (Norway) and Frédy Bircher (Switzerland), who won the Vertigo in the



Chrigel Maurer and Peter Neuenschwander from Team Spaelti during a dry landing



Not only XC-Crack: PWC Champion 2005
Chrigel Maurer

hang gliding discipline last year, followed in second and third place.

Twenty-one synchro teams entered the comp this year. The precision with which these teams, composed of two pilots, conduct their extremely difficult program (in just a few minutes and in a "working environment" of approximately 1,000m of altitude) is almost unbelievable. Once again, the Spanish Rodriguez brothers demonstrated utmost perfection. Known as the "SAT-



The Vertigo Organiser, Alain Zoller



Sometimes the synco teams seem to risk a crash, but it's perfect control!

Brothers" they are amongst the founders of this sport and fly always a level higher than everybody else. It is the sixth time they have competed in Villeneuve, and for the sixth time they could be found at the end of the contest none other than on the highest step of the podium. When the wings of Raul's and Felix's paragliders touch during the synchro spiral, thousands of visitors are breathless. While laughing and hugging each other on the boat during the lap of honour, everybody can feel that these two brothers live only for acro.

As the Vertigo started on Wednesday and Thursday with foreruns and training flights, the weather conditions were perfect. Unfortunately this changed on Friday when clouds clogged the sky and the competition had to be stopped repeatedly due to the rain pouring over Villeneuve. The temperature dropped incredibly and the spectators had to take off their sunglasses and get hold of umbrellas and raincoats. One pilot came up



Waiting for take off. Acro-Band making music



Hang gliders reach enormous speeds, up to 120km/h during an acro task



HG winner Guido Gehrmann "dropping the bomb"



Thousands of acro friends joining the three-day Vertigo event

with the idea of making a campfire on the take off field. The paramedics brought blankets, the "Acro Band" got their harmonicas and the "Human Beat Box" played, keeping the party atmosphere going. Pilots remained prepared and in a good mood, as did organiser Alain Zoller who promised better weather conditions for next year, when the Vertigo event will include the official World Championship and approximately 150 pilots are expected to participate. So pack your bathing suit, get some Swiss Francs together and see you there. World Championship Vertigo 2006, we are on our way!



The Renegades show must go on: Traffic Jam

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Our Very Own Gavin 'Crash' Zahner Reports...

I've always maintained that I crash a paraglider better than anybody I know, regular practice hones your skills. But I realise I'm a true amateur compared with professional acro pilots. Every year Villeneuve in Switzerland plays host to a grand display of just how silly one can be while hanging underneath (or above for that matter) a glider. What to this level of pilot are totally controlled manoeuvres look completely insane

to even seasoned pilots and makes for a stunning show. Add live music every night, displays from every manufacturer in the sport and enough sugar and caffeine drinks to fuel a nation, and Red Bull Vertigo becomes one of the biggest parties on the paragliding calendar. With no acro scene in Australia, Red Bull Vertigo is a show not to be missed.


This year the Red Bull formula got watered down a little by three days of nearly constant rain. In between the showers we got a few skydivers, two runs by the four-man 'Renegades' team, and one run of the solo paragliders. Not quite what the organisers were hoping for, but with Vertigo it's hard not to be impressed with the show, and you can always have another beer.

By far the skydiving highlight was a vintage directional round chute whose pilot found himself at the mercy of the westerly wind, drifted over town and landed on the highway. We also found out that a

skydiving chute can SAT.

On the paragliding front we got treated to an endless array of wing overs, SATs, dynamic SATs, loops, tumbles, helicos, mc twists, mistyflips, and some stunning splash downs. The landings, as always, were the highlight, being right in front of the crowd. Pilots get points for hitting the pontoon, but thankfully they also score for doing really silly stuff right before they land. Like ground spirals, or negative spins right into the lake. Antoine Boisselier, in his extra small Ozone 69, took the crowd points by coming out of a helico at 20m then turning straight into a ground spiral (or lake spiral) dipping his wingtip into the water, skipping his body off the surface at breakneck speed before surging up a couple of metres out of the spiral and landing square on the pontoon. The crowd went nuts. The 'Renegades' team managed two runs in their DHV 1 Ozone Atoms with hangovers and down planing and each time got the cheers for landing four gliders on the pontoon at once.

The weather this year was far less than perfect and we were saved only by the Red Bull beer tent. The comp might not have been valid for Acro World Cup points, but the crowd still got ooh'd and aah'd with every flight. In 2006 Vertigo is also followed by the first Acro World Championships, so it

will be a big year for acro flying. Now I just need to work on my helicos and my infinite tumbling and my ass choppers. 

Photos:
Gavin Zahner





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South Australia's Holy Grail of Hang Gliding

Peter Bolton

The Labour Day long weekend in October was the occasion for a mini-pilgrimage by the “chosen few” to the former Mecca of South Australian hang gliding – Mt Horrocks. At around 2,500ft asl, Mt Horrocks is twice the height of the regularly flown hills in South Australia. Situated in the South Flinders Ranges near Port Augusta, it is well situated for scenic, even spectacular, flying.

Since access was regained a few years ago, there has been a lack of impetus to get organised and fly the place. But in fact, the amount of organisation required to fly Mt Horrocks is not very large, because the site now offers the opportunity to either fly from the front after a lift up from the land owner, or drive right to the top, fly from there and top-land. Neither of these options requires a driver and both options are available to hang gliders and paragliders. However, it is further from Adelaide than various other inland sites, so more determination is required for most pilots.

The first day of our long weekend trip saw moderate north-west winds which were ideal for Illawarra Hill – a prolific cross-country site halfway to Mt Horrocks – so we flew there on the way up. By noon, the winds were too strong for the paragliders to continue, but the hang gliders “hung in there” and eventually started to get away. The first few to get away hit the inversion early on and did not get very high or far. Others, including me, launched later and got away, eventually being rewarded by topping out at over 4,000ft asl. Although not part of the state comps, Colin Hansen “won” the day, landing about level with the unofficial goal of Balaklava Gliding Club. I was about five kilometres behind, landing on the road to avoid landing in crops.

That evening, most of us drove to Melrose in the South Flinders for a meal and camped at Spear Creek – the foot of Mt Horrocks – that same night. It was quite a warm night, despite only being early spring time. The warm night should have triggered alarm bells, as it was probably a precursor of the next day's soaring conditions – stable.

However the next day at Mt Horrocks was special because we had such an interesting mix of pilots – roughly equal numbers of hang gliders and paragliders, the hang glider pilots including a few who last flew there nearly 20 years ago! That was when land-owner discontent lost us the site, but the new generation of owners allow us up there

(to the top only outside the fire ban season) as long as we pay them for the privilege of driving to South Australia's Holy Grail of hang gliding.

Conditions in the air in front of the hill soon got rough – probably due to the inversion. I wasn't feeling too well and went “looking for Hughie”, then flew into the best thermal of the day...

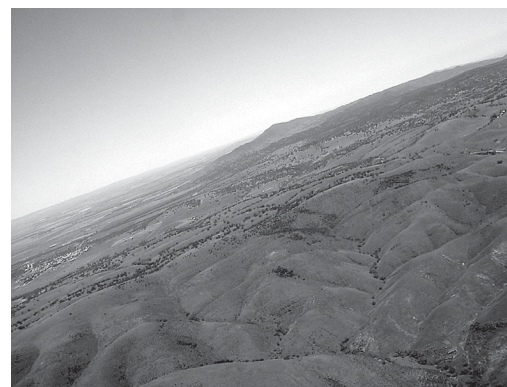
The first of the accompanying photos is looking back down on launch from about 800ft above it and to the south of it. If you look closely, you can see small white wings flying just in front of the WNW facing launch, towards the top left of the photo. Also near the top left of the photo can be seen a few of the buildings near the Spear Creek campground.

The second photo is of the first town over the back – Wilmington – where I landed on the oval. The hill in the distance to the right is Mt Remarkable, a local landmark. The land is a pleasant green at this time of year, unlike the yellow-brown of summer and autumn. Paul Kelley “won” the day, with a flight of about 40km to somewhere east of Melrose. Steve Blenkinsop was between him and I, as was Jeff with the day's best paragliding flight. Due to the inversion, maximum heights attained were only around the 4,000ft asl mark. So due to the high ground we were flying over, ground clearances weren't huge. But this was only early spring and things are yet to “hot up” (and dry out) in South Australia... Legend has it that 10 grand days were achieved here in the summers of yesteryear.

The last photo is of paraglider pilot, Jonno, launching. The water you can just see in the distance is at the northern tip of the St Vincent Gulf, near Pt Augusta. The Herde family, who own the land at launch and in front and run Spear Creek, are “on our side” and will take us up to their lower launch all year round (for a small fee). It would be good to see some flying visitors from interstate there occasionally. Most of us don't live very close by, so we're not there too often – yet...



Above launch



Flying over the back towards Wilmington



Jonno launches from Mt Horrocks

Photos: Courtesy Peter Bolton

For accommodation and access to the front of Mt Horrocks all year round, contact Spear Creek Caravan Park (Mark and Kylie Herde), phone: (08) 8643 6668, email <spearcreek@centralonline.com.au>, or see [www.users.centralonline.com.au/spearcreek/caravanpark.html]. I can be contacted on 0401 368736 or <pbolt@ozemail.com.au>.

Third Women's World Gliding Championships 2005

THE LESSONS OF FLYING IN EUROPE

Lisa Trotter

THE THIRD WOMEN'S WORLD GLIDING CHAMPIONSHIPS WERE HELD IN KLIX, GERMANY

FROM 30 JULY TO 13 AUGUST.

Peter and I arrived two weeks before this date: one week to recover from jet lag and another week for practise. It was hot when we arrived in Germany and our first few days of sightseeing were under well-formed cumulus clouds. This was the only good weather we were to see for the whole time we were there. The weather did not allow any practise days and we had only six competition days out of a possible 10. It was disappointing to find ourselves stuck on the ground for so many days after all the effort and expense of organising crew and gliders for three weeks. But, I have no regrets given the exceptional experience we did have despite the loss of competition days due to bad weather.

My main objective was to fly as well as I possibly could during the competition. Being the first World competition for me, I knew there would be plenty of learning along the way. Over the years, I have seen many Australian pilots head off overseas to international competitions and return as much faster pilots. The challenge of a very high standard of competition and the different flying conditions obviously can do a lot to accelerate progress in becoming a top competition pilot. Although I found the idea of this challenge a bit daunting, I decided that I wanted the opportunity to improve my flying. So, my other main objective was to significantly improve my cross-country performance as a result of the experience. I believe that I achieved both of my objectives.

I did everything I could to give myself the best possible chance of doing well. Preparation started more than a year in advance. Coaching from Brian Spreckley and Bruce Taylor was invaluable, especially the Squad Week held in March 2005 at Gulgong. The week with Brian Spreckley in 2003 helped me to focus on what I needed to do to improve my competition flying. The main learning was the need to develop a mature attitude to competition, not being too hard on yourself, respecting fellow pilots and keeping enjoyment central to the whole experience. The Squad Week gave me an opportunity to experiment with my flying and to talk openly in a non-competitive



Lisa Trotter

environment with fellow competition pilots. As a result of the week, I was able to identify in detail what I needed to work on. I also learnt a number of skills to work on the mental side of things.

Going to the Pre-Worlds, a couple of competitions in Australia and three months of training through April to June in Kingaroy improved my competition flying and currency. In hindsight, I think it would have been better to compete in an international competition just before the big event rather than the Pre-worlds. Of course it would be ideal to do both, but the money can only stretch so far. Most of our competitors had competed in a competition within two weeks before the Worlds. I hadn't competed for at least four months. This is one of the many disadvantages of being in the southern hemisphere. Apart from gaining competition currency, it is an advantage to be flying against your competitors so you can get with their pace.

I also put a big effort into mental preparation. It really paid off. I was very relaxed throughout the competition despite very difficult flying conditions. For three months leading up to the event I spent 30 minutes to an hour each day practising relaxation and visualisation. At the competition I spent 10 minutes a day on relaxation. It is easy to do, but takes some discipline to do each day. Visualisation is just like daydreaming – I imagined the first day, first launch and tasks in difficult conditions. When it all happened, I felt like I had been there before. I also stuck to some basic rules to protect myself from feeling bad. Look for the positive in everything, keep away from negative people and keep away from politics.

So, how did I go? I placed 12th and I believe with what I know now, I could place



in the top five. I had some good days, but a couple of not so good days that damaged my overall score. Except for the last day when I made a silly tactical error, I flew the best I possibly could.

Day 1 – 12th place, 190km, 405 points (753 winning score)

AAT 192km – 293km, 2:15 hours, 15km radius around two turnpoints, leg north about 90km, second leg SW about 60km and last leg south about 80km. Cumulus to 5,000ft, three to four knots rate of climb, wind 15kt from SSW. There was a lot of rain overnight.

Because of a large bank of cloud we could not launch at the planned time of 12:15 and ended up launching at 13:55. I started as soon as I could – 15:01 – after the gate opened at 14:55. I had good height at 5,000ft and was pleased with my start. I didn't see anyone else start. Apparently the Germans and the Brits started at the same time at the other end of the eight kilometre start line. I didn't see them until I was at the first turn point. I had had a good run up the first leg with the help of a tailwind and the second leg looked good. I joined the Brits higher than them and pushed on. I wish now that I had stayed with them. They took a slightly different track into the turn and got a bit of a jump on me. It was at this point that I should have backed off and stayed high to keep in contact with the clouds.

It wasn't until halfway down the second leg that I realised that the clouds were not working well even though they looked good – 'water sacks' they call them, maybe the same as a Kingaroy floater. I would have liked some company at this stage but no one was around. I nipped into the second sector and turned for home. I was desperate to get back up to cloudbase and was willing to take anything to get there at this stage. At 80km

out and still with a bit of height – 3,000ft – I knew I just needed to get to cloudbase and I would get home. By this stage it 16:30 and the clouds just were not connected to the ground anymore. The ground was wet and there was just not enough umph to keep a thermal going it seemed. I floated on between 2,000ft and 3,000ft for a long time looking for something and then found I was working a height band between 800ft and 1,400ft. I did this for about an hour and then 50km from home I put my lovely LS8 down on the ground on the nice soft green grass of an airfield and called my crew. Two lessons learnt. Be ready to back off very early even when it still looks good and stick with others a little more.

Day 2 – 8th place, 74.7km/h, 848 points

A racing task of 270km was set with the first leg of 88km heading north. Wind was 15kt from the west and cumulus to 4,000ft were predicted. As it turned out, the convection height was 3,300ft when the start gate was opened and didn't get higher than 3,600ft for most of the day.

To gaggle or not to gaggle – that is the question. Turns and I decided that our start window would be between 13:30 and 14:00 to make sure we were back before the day was likely to end around 17:00. The Brits started at 13:47 and Turns started with them. I was with the main gaggle and didn't see them go. By 13:55 I was wondering how much longer I should stay with the gaggle – only a half dozen had started. I could go now and not risk getting caught at the end of the day or I could stick with the gaggle and get an advantage by leaving a few minutes after them. I went for the low risk strategy and left at 13:57 and a few followed me. The main gaggle started 10 minutes later.

I kept well ahead of that gaggle and almost caught a couple in front on the first leg. The few who followed me through stayed with me most of the time and never led out. I made sure I had plenty of height going into the first turn because the second leg was into 15kt wind. It was streeting up the leg and I took the street to the north and others took the street to the south. It was on this leg that Gill Spreckley won the day. She gained a good 10 minutes on everyone else picking the good lift along the streets. I didn't pick the best streets and the gaggle caught me half way down the second leg.

Heading for the second turn the sky looked very soft and the cus were thinning out. I decided to stick with the gaggle – it was a fast moving gaggle. There was a lot of gear changing in this part of the task and I sat back to watch and learn. We had an interesting encounter with the German

Nationals' pilots who were on a task heading in the opposite direction to us! Some how we ended up in two overlapping gaggles going the opposite direction – girls one direction and boys the other – with the Eta in the middle of it all!

On the last leg I was tempted at times to push on when the gaggle was taking a few too many turns at the top of the thermal. But the risks are high and it is almost impossible to get away from a gaggle in this situation. The cus had thinned so there were not too many choices about where to go, so it was hard for me to do anything very different. I stayed with the gaggle to the finish. When to gaggle is an interesting question – do you start with the gaggle, do you stick with a gaggle en route?

Day 3 – 11th place, 70.7km/h, 606 points (691 winning points)

A fixed task of 188km was set. There seemed a chance that we would not be flying if moist air from the south moved in. It was predicted that the thermals would finish at 15:00. As it turned out, the high pressure influence kept the cloud at bay and allowed a window of four hours thermal activity.

Because everyone was concerned about the cloud moving in, there was no waiting to start. Everyone started within 10 minutes of each other at about 4,000ft. Thin cirrus had moved in by the time we had started. Turns and I were together which was helpful. By the time we reached the first turnpoint; everyone was together except for the two Brits who were the first to leave. The conditions had deteriorated and we were desperate to get height before rounding the first turn point because the second leg tracked over a large wet area. The best height we could get before rounding the turn was 2,500ft and we just had to go on. The Brits ahead were struggling low with one knot, so we were going to have to find some lift soon. Soon we were all down to 1,500ft over a swampy forest. The gaggle split and searched. This was how a gaggle can be very effective. Someone found some lift about two kilometres away but in the opposite direction to where we were going – so we all went backwards and climbed to the heady heights of over 3,000ft. It was hard work because every foot seemed to count and you had to stay in the core all the way to keep with the gaggle. The first leg of 72km had taken us 50 minutes and the second leg over the swamp of 43km took us 52 minutes. On the second leg I was wondering if anyone was going to make it home. But the cloud seemed to stop coming in and once past the wet area the thermals improved. The last leg of 68km took us 52 minutes. The gaggle had

split after we turned the second turn point and a group beat us in by four minutes after getting a good climb over the power station, which we missed. Very soon after we all landed the cloud came in thickly.

Day 4 – 5th place, 134km, 451 points (823 winning points)

AAT 188km – 525km, 1:50 hours. Cumulus to 3,500ft, two knots, likely overdevelopment, 15kt wind from the NW and good chance of streeting.

With likely overdevelopment I was keen to get going early. I was with a large gaggle at the start and we were in the perfect position to go, but they kept hanging around. As far as I knew, no one had left and I didn't want to go first. I decided it was too risky to wait, so left. The gaggle came six minutes after me. I found out later that the four Germans had gone 10 minutes before me. Ahead it looked good with a large cloud quite spread out in front of me. I took a few turns under it in not really good lift wondering if I was wasting my time there and then headed off towards the next cloud. All of a sudden it didn't look good, so I slowed up looking for anything to get my height back again. I was heading over one of the less than landable areas with a power station to my left, a quarry underneath me a forest in front of me and a built up area on my right. At 1,500ft I picked up a reasonable climb and could see the gaggle heading for me. I had good height on the gaggle, so I was able to shake them off over the next 30km or so.

I went to the end of the clouds at the furthest end of the first sector and then turned to go on a beautiful looking street running perfectly along the second leg. I met Turns at the street and we cruised along together for about 25km gaining height all the way. Then we came to the end of the street and the sky ahead was dead. Upper level cloud had come over and we could see dying remnants of cumulus ahead. We slowed to best L/D, dropped water and kept going. Down to 1,500ft we picked up one knot, but it was dying. Jill Spreckley joined us and came onto the Aussie frequency saying “*spread your wings girls, let's find something*”. We managed to find enough to stay airborne, but we were drifting away from our second sector. The second sector was 15km from us and we needed to get into the sector to turn and have the wind behind us. There were some gliders ahead and high from another competition so we headed over that way. Turns had got a little low and, unfortunately, just a little too low to get to the next bit of lift. I stayed with Jill who had a bit of height on me and we climbed as long as the thermal lasted to about 2,500ft and then had to continue. We both nipped



Klis, Germany

Photos: Courtesy Lisa Trotter



minutes as it turned out. I stuck to the policy of staying high even though it felt a bit slow and it paid off. Halfway down the second leg the cus went daggy and just wouldn't work. I cruised along under wisps just getting bubbles, but nothing to turn in. Getting a bit low I accepted a weak climb and a number of gliders joined me that I didn't know were around. The sky looked great ahead. The high level cloud had slipped away and the sky on last 40km of the task looked brilliant. I wasted a bit of time with a weak climb rather than pushing on into the good weather because of my stay high policy. I think I lost three or four minutes at this stage. I again took too much extra height on final glide, especially considering the sky looked so good ahead – this would have cost me a couple of minutes – and pushed the nose down for a fast final glide and finish.

Day 6 – 12th place, 69.6km/h, 230 points (470 winning points)

Fixed task of 170km. Cumulus to 4,500ft and 10kt from the west. Expected lift of four knots weakening to one to two knots at 14:00 and finishing at 16:00.

On this day I can't say that I did my best possible flight. I made a tactical error at the start that cost me dearly. After the start gate opened the cumulus were well formed and as high as they were likely to go at about 5,000ft. I was in the perfect position to start at cloud base at the right time in the cycle, but I chose to wait for the gaggle. I should have just gone and done a reasonably fast short task – just like home, but I hung on and by the time everyone was leaving I was down low. I just could not get back up to anywhere near cloudbase. The good part of the cycle had finished and I just had to go. I ended up leaving 1,500ft lower than cloud-base and flew around on my own until the last leg. On the last leg, the day was dying and there were only a few cumulus left in the sky. I had to slow down a lot. I saw a couple of gliders ahead just at the right place to get final glide. That's where I went and grabbed enough height to get home. I have learnt this lesson so many times – conditions over tactics for the start.

Learning to fly fast in slow weather

The area that I had the most to learn about was how to fly fast in bad weather. At first I thought my fellow competitors were very gutsy, but then realised that they are used to these conditions and while not a walk in the park, flying in very poor weather is a common cross-country flying experience for them. The weather that we experienced in Klis last year was good strong weather, so we didn't get a chance to practise in the difficult and changeable weather. The way we have to

think in Australia to go fast will certainly get you into trouble here or put you on the ground. The way you have to think in Europe to go fast would make you uncompetitive in Australia. Below are my observations about how to fly fast in the slow European weather.

Being low

We spent most of the time on nearly all our tasks below 4,000ft. Our working height band was usually been between 1,500ft and 3,500ft. Below 1,500ft there is a good chance that you will not be able to climb back up again even if you do manage to find a thermal. It takes a bit to get used to being so close to the ground and having to keep an eye out to avoid getting into a position where a safe outlanding is not possible. Power stations and windmills can look very big from 1,500ft. A large chateau surrounded by a mote was a pretty sight at 1,200ft on Day 4, but I would prefer to do my sightseeing from the ground.

Staying high

To fly fast at home you need to be disciplined about rejecting thermals that are not strong enough for the day or leaving a climb when the rate of climb drops back. At home I am always thinking of my height band and fly a speed and choose thermals accordingly. Height bands and being choosy about thermals goes out the window when you are most the time below 4,000ft and in weather that is rapidly changing. The objective is to stay high as much as possible, jumping from lift area to lift area. If the jump is too big, a diversion is required. We rarely divert more than 30 degrees off track at home. It is common in this weather to divert 90 degrees or even turn back to get height. Pushing on into a blue hole hoping to pick up a bit here and there to get you across does not work – you have to get the height before continuing.

Diverting

Diverting is a lot more than heading off track a bit to follow a street for a while. On one day I was with a small gaggle faced with a large wet area ahead that looked dead and we diverted 90 degrees and then turned back a few kilometres to finally find a climb that enabled us to get high enough to jump the damp patch (so named by the Brits). If I were on my own, I would have seriously been wondering if I was making a mistake by turning back. On another day when only three from our class made it back home, two had made a huge diversion to put themselves in a position on an AAT to avoid upper level cloud which the rest of us did not notice was forming until it was too late.

into the second sector and turned. All I wanted was enough lift to maintain height and wait for the cycle to turn good. I just kept going towards home at best L/D with the wind behind me and not a bump until I touched the ground. Jill landed about 10km further on. All but three of the field landed out. The two who got home managed it because they had left that little bit earlier, that made the difference, and the other one took a very different track and did a much smaller distance.

Day 5 – 5th place, 76.7km/h, 502 points (679 winning points)

Fixed task of 194km. Cumulus to 4,500ft and 10kt from the west. Covering clouds also known as 'killer clouds' expected to come in about 14:00. Expected lift of four knots weakening to one to two knots at 14:00 and finishing at 16:00.

At the time of take-off we could see the cloud starting to come in. A few minutes before the gate opened the Brits were in the perfect position to start and we were not much below them. They set themselves up to do a run into the start a minute before the gate opened and we followed a few minutes behind. All the other gliders were still climbing and at least 500 to 1,000ft below us, so we had a good gap on them. We caught up with the Brits pretty quickly. Some other gliders had left not long after us, but the Germans waited 15 minutes, which seemed extremely risky. It was slow on the first leg due to upper level cloud. After rounding the first turn point we headed for a large cloud and Turns and I chose to go to the western end of the cloud along with a few other gliders, the Brits and another glider went to the eastern end of the large cloud. I lost three to four minutes on them at this stage. They got a good climb and gained quite a lot on us at that point. Those three went on to place top three and came in 10 minutes ahead of me. This climb was the decisive climb.

Heading to the second turn the clouds looked okay but I was determined to stay high because conditions were deteriorating. Halfway down the second leg I picked up 1m/s that turned into 2m/s. I called Turns in, but she decided not to take it and looked for better – giving up this climb cost her 15

Changing gears

At home we look along the track a long way ahead – often 50km or more. Once the day has started, it stays much the same for the rest of the day unless a new air mass moves in, which is often marked by a change in clouds. There is usually warning that the thermal activity ahead is different. In Europe the weather is very unstable most of the time and changes rapidly with little warning. If the day is looking perfect at the time of launch there is reason to be concerned about overdevelopment. Sections of the task can overdevelop quickly before you have a chance to divert around the area. The sky can look great 10 to 20km ahead but be hard to stay up in where you are. The trick is to be thinking of changing gears all the time. You have to take every chance there is to push the nose down and increase the speed or to discard a weak climb for a promising looking climb ahead if you have the height and the confidence that you will not end up low. When the height is disappearing, you need to back off again, slow down, maybe take weak lift, search for bits of lift and maybe divert for a climb.

Parking

The ground in Europe is very, very wet, even at the end of summer. There is a lot of moisture in the air and as a result, there are cumulus clouds on most days. These cumulus sometimes turn out to be 'water sacks' that linger on well after the thermal has finished. If the heating is slowed or cut off by upper level cloud the cumulus quickly disappear, but quickly appear again if a bit of heating gets through. The day can look completely cactus with the lift almost completely gone within a short time – maybe 15 minutes – in the same amount of time the cumulus could be beginning to form again. When things start to look bleak, the objective is to stay alive for as long as possible waiting for a change. This might mean sitting in zero lift for 15 to 30 minutes. Continuing on is likely to lead to an outlanding. There is a bit of luck or possibly bad luck in all this, because you can be at the top or bottom of your height band when the weather makes it change with little warning. If you are at the bottom, it is a battle to keep from landing out. It is very rare in Australia to stop in zero or even very weak lift to wait for conditions to improve – once the day dies it is usually the end of the task and an attempt at getting maximum distance is made.

Picking the optimum time to start

The rapidly changing weather does have a cyclical pattern. It is not easy to pick this on task, but is quite observable pre-start. This is one of the key factors to consider when timing the start. Height, position and the gaggle

are major considerations, but it can be an advantage to head off at the start of an up cycle. In Australia, height, position and the gaggle are key considerations and the other is picking the latest time you can leave to get the greatest convection height at the start and the best part of the day on task. At home the convection height increases over time, with temperature, quite a lot. In Europe, there is little increase in convection height once the day is high enough to launch. The finish of thermal activity for the day can be rapid, so getting home before the thermals begin to die is a high priority, but leaving before the gaggle can put you in last place on the scoreboard. The best time to leave is not an easy decision to make.

Final Glide

At home I err on the conservative side for final glide and I am happy to burn off an extra 500ft in the last 15 to 10km. It is easy to lose 500ft with strong lift and sink and a final glide distance of 50 to 60km. In Europe there is not strong lift or sink and convection

height is so low that we pick up final glide quite close to home – about 30km out. Leaving the last climb with only 100ft or no extra height instead of 500ft saves a couple of minutes considering the time it takes to climb in weak lift and it is not very risky since there is not much sink around and the distance home is so short.

Why fly in Europe?

There is no question that Australia, as a general rule, has much better weather than Europe. But what is it that makes gliding interesting? My most memorable flights are of difficult days rather than the boomer days. Europe's weather has the disadvantage of keeping you on the ground more days than preferable, but it is very interesting weather to fly because of its instability and changeability. The main attraction of flying in Europe though has to be the opportunity to fly in a place where gliding is a BIG sport. There are a lot of glider pilots and a very high standard of competition. Best of all, there are a lot of women flying.



Pilot Profile

Name: Adam Woolley
Country: Australia
Age: 20
Class: Standard
Glider: LS8
Contest number: D4
Nicknames: Woolley, Woolley Pup, Pup, Wool dog, Woolley Dog
Club: Central Queensland Gliding Club, Australia



Adam Woolley

Winner of the Inaugural Junior Australian Gliding Nationals. Command Instrument Rated, Level 2 Independent Operators, and Passenger Carrying Certificate. 1,050 hours total aeronautical experience, 500 soaring hours. FAI A, B, C and Silver C.

Adam was born into soaring as a third-generation pilot to grandfather Allan and father, Chris Woolley, almost being delivered at a gliding championships.

At age of 10 months, his father propped him up into his LS-4. He went for his first flight at the age of four. Since his early years, Adam has been hooked on soaring – especially soaring cross-country and now competitions.

The 15th birthday finally came around and Adam went solo on the day, and soon

afterwards he achieved his Silver C. Now 20 years of age, Adam has won his first competition: the inaugural Junior Australian Gliding Nationals. He has now been given the chance to live his dream, representing Australia at the Junior World Gliding Championships in the UK in which he flew well with team mate, David McManus, achieving a 15th place out of 30!

Adam has a keen interest in hanging out with his mates and outdoor sports, including model flying, tennis, squash and golf. He also holds a Command Multi-Engine Instrument Rating.

Adam is an inspiration to all junior glider pilots – gliding is a challenging sport offering many opportunities to pilots young and older alike. To see what the Junior's are up to visit www.joeyglide.com



Microlight Cross-country Endorsement

Ken Gray

For every newly licensed pilot, the next exciting step is the Cross-country Endorsement. Midcoast Microlights, situated at Telegraph Point near Port Macquarie, recently ran its first ever group training course. I was one of six pilots who participated in this program, which was offered over two weekends. Each of us brought various levels of skill and areas of challenge to this course. Together we were able to support one another, combining theory and practical skill development with a fantastic social experience.

Enroute over Comboyne



Our "theory classroom"

found this emphasis very reassuring.

The routes that we were asked to plan and fly offered different challenges that brought home the theory particularly well. I liked the fact that although we learned and planned as a group, because of the different aircraft set-ups we each flew our routes independently. I found this useful as it allowed us to learn from one another's mistakes while still giving us the chance to solve problems as individuals.

Each of us found the course very challenging and rewarding. At the end of the course, we were asked to give feedback about our experiences. Each of us gave very positive evaluations, both about the content of the course, and also about completing the course as a group. Without exception, each pilot found the group approach to planning theory very positive. Even the flying was, in a sense, a group experience, as the same weather was affecting us all. It was very valuable to be able to debrief with one another upon landing, sharing our experiences, problems we encountered, and decisions we made. As one pilot said, *"For me I would have found doing the course alone a much more daunting prospect. I found it helpful having people learning the theory at a different pace because it meant that the instructor needed to come up with different ways to explain concepts. The more often things are explained the more ingrained they become."* Another pilot wrote, *"The group was very supportive of each other and this was tremendous. I certainly feel that doing the cross-country course in a group is the best way to approach the final and difficult phase of flight training. Knowing that you are being constantly monitored by your instructor from start to finish is a great comfort."*

Having flown in the Port Macquarie area for the past couple of years and now being able to explore the mid north coast further, I and the other pilots realise how fortunate we are to have such a fantastic area to fly in. If anybody is interested in learning to fly or doing their cross-country course, Port Macquarie offers an incredible range of choices and challenges. Thanks again to Mark White at Midcoast Microlights for choosing such a great area and offering such an excellent program.

We began with theory classes, conducted outside under a canopy of gum trees, shaded by a microlight wing. Our instructor, Pilot Examiner Mark White, covered meteorology, map reading, fuel calculations, route planning, the effects of wind, safety, radio procedures, aviation rules and regulations, use of a dead reckoning computer, practical flying and airmanship. Some of the theory was revision, with a particular emphasis on safety and planning. The group approach worked really well for everybody, as no one person had all the answers and everybody needed helped at one stage or another. Each of us had our own questions, and we all benefited from discussing and learning the answers to questions we may never have thought of on our own. One feature of the course that everyone appreciated was the HGFA approved syllabuses that Mark White has written for all stages of pilot training from beginner all the way through to instructor.

Just the fact that people asked questions and solved problems in different ways, helped all of us to get a better understanding. It was obvious that Mark enjoyed seeing such a diverse group of pilots achieve their aim. We had people from 30 to 70 years of age. We also had a range of microlights, including Outbacks, Wizard and Streak wing trikes.

After we had worked together to master the various planning phases, Mark set us the task of independently calculating our flight plans for our cross-country flights. Port

Macquarie offers a fantastic base for cross-country training, with coastal plains, mountains and ocean nearby. The ground we fly over can be beautiful flat dairy farms, through to rolling hills and even rugged mountain national parks – true "tiger country"!

Our first flight was north over Kempsey to Rose's Knob, then east to Eungai Rail, back to Kempsey Airport and return to Midcoast Base. It was a hazy day and each of us found that reading a VTC and flying over a turning mark was not as easy as we thought. It was a great learning experience and everybody was able to safely complete this phase. The debriefing afterwards gave us all plenty of homework for the upcoming longer flights!

Our next task was to fly to Gloucester via the Comboyne Plateau. This presented quite a challenge to each of us, not so much because the flight was particularly difficult, but because the weather (wind) would not let up. Twenty knot south-westerly winds made for a slow and bumpy flight, but the view was fantastic! Faced with these challenging conditions, each of us had to make our own decision how to proceed. Some of us completed the course as planned, making it to Gloucester and back. I flew to Taree, landed in a strong crosswind, and decided to fly back via the coast. Others turned back mid-flight.

Eventually everybody completed their flights over the next couple of days, resorting to Gam starts to get favourable winds. Mark made it very clear to us that "safety first" was paramount, emphasising to us that flight plans are just exactly that – "plans" – and that if at any point conditions changed and you as a pilot feel uncomfortable, then the right thing to do is change plans as necessary. This may mean you return to base, or land immediately, or deviate to an alternate plan. It was made clear that this was in no way a failure, but was in fact sensible airmanship. Everyone



The fleet rolls out



The 975 Hour Hang Bolt

Ned McIntosh

Several months ago I recall reading an article written by a microlight pilot extolling the virtues of replacing the hang bolt every 50 hours. Airborne recommend replacement or overhaul at this time interval, so these guys are doing the right thing.

However, 50 hours only for a hang bolt seemed rather a short life to me. Could I possibly find a hang bolt that had done a lot more hours, preferably several hundred, and never been replaced? How badly worn would it be and would the wear be measurable? Eventually I found just such a bolt. *"How many hours?"* I asked.

The owner thumbed through his logbook. *"About 975 as far as I can see,"* he replied. *"I'll take it,"* I said, handing over a brand new bolt by way of exchange, then hurrying back to the concealed, secret metallurgy lab attached to the privately-funded R&D section of the microlight hangar.

We sat the bolt on a table under a naked 100 watt bulb and examined it closely. It was just a darker colour and had lost its coat of cadmium plating. It also looked "polished"... and was that a trace of grease I could see?

The secret to long life for metal-to-metal working parts is lubrication. On my own hang bolts I use Remington Hinge And High-Pressure Grease. A smear on a fingertip, applied along the length of the bolt is all that is needed. If you refuse to buy yet another consumable for your trike then use a dab or two of gearbox oil. The main thing is to use a lubricant specifically rated for high-pressure use, because these lubricants are designed to remain "on-location" rather than being squeezed away from the areas where they are needed most. It soon emerged that the old bolt had indeed been well-greased by its owner.

I cleaned the residual grease off with methyl ethyl ketone (nasty stuff, handle with care and don't breathe the fumes!) and pondered how best to measure the worn areas

— and where they might actually be. It was then I hit the first snag: I had no idea what the as-new measurements of the old bolt were, so I had no zero-wear reference data. However, I did have access to a brand new, absolutely pristine hang bolt, which could be measured as far as uniformity along its length was concerned. Within certain limits we could make some deductions and inferences.

The next problem was just how much accuracy do we need, and how much is enough? Would accuracy to 0.001" be sufficient? (It's American hardware, so use Imperial units.)

A useful principle in precision engineering is to use vernier callipers for measuring lengths and a micrometer for measuring diameters. Since the diameter is what we were interested in, a micrometer seemed best.

Common or "garden variety" spindle-anvil micrometers resolve nicely down to 0.001". But I had a feeling this wouldn't be accurate

enough, and the actual areas I wanted to measure were, of necessity, rather small and not easily measured by the normal mic. I wanted resolution down to one ten thousandth of an inch (0.0001"). Why? Because I know how to get it.

To measure to 0.0001" you need a specialised micrometer called a Blade-Micrometer. It has two flat, precisely-ground and set carbide blades which are much thinner than the round spindle-and-anvil used on the usual style of mic, allowing access to very small areas such as O-ring grooves, keyways, cartridge extractor-grooves, etc. Besides these thin blades, it also has a vernier scale engraved on the sleeve which is lacking in the other style, and the vernier is the secret of the increased resolution. Naturally, the screw-thread of a blade-mic is cut to very fine tolerances. For all this refinement you expect to pay a premium, but "you only buy a good tool once — provided you don't lend it!" Figure 1 shows the hang bolt and the blade-micrometer beneath it.

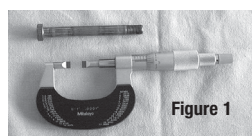


Figure 1

So, armed with the blade-mic and the two bolts, I set to work. First I measured the new bolt at six evenly spaced "stations" to get an idea just how near perfect a new bolt really is. Then I measured the old bolt at the same stations. Figure 2 is a shot of the technique used, in this instance one of the stations towards the centre.

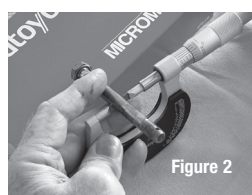


Figure 2

Logic says the area of maximum wear on a hang bolt will be at each end where the hang bracket actually touches it. That established the first and last stations; one a couple of millimetres under the bolt-head, the other immediately before the beginning of the threaded section (determined by measuring the total width of a hang bracket). The remaining four stations were evenly spaced between these two points, giving the following data:

Station	New	Used	Note
1	0.3730"	0.3711"	Head end
2	0.3729"	0.3723"	
3	0.3730"	0.3721"	
4	0.3727"	0.3720"	
5	0.3729"	0.3721"	
6	0.3731"	0.3705"	Thread end

Figure 3 shows a detail of the micrometer and how to read it. Scale 1 gives the tenths, with hundredths on the subscale.

Scale 2 gives thousandths. The vernier scale (3) is examined for the best fit against the scale graduations on the rotating sleeve (2) to get the fourth decimal place. In this case the reading is 0.3711", the measurement tabulated for the head-end of the bolt.

The used bolt shows some interesting figures. Stations 1 and 6 are the areas at each end of the bolt, where we expect maximum wear to occur because this is where the bolt and hang bracket physically contact each other. Sure enough, we see significant wear at each end relative to the middle four stations; 10/10,000" at one end and 16/10,000" at the other. In thousandths of an inch, this is 1 thou and 1.6 thou. The very thin blades allow us to measure this small, worn area with a high degree of accuracy, whereas the round spindle and anvil of a conventional mic would not do so as they cover too much area.

The remaining stations (2 through to 5) also show slight differences, although not as great as the two ends. Actually, the wear is more or less even at these four stations, and it's interesting to compare the figures against those of the new bolt for which the figures are all very close to each other, as we would expect.

I admit this is a flawed comparison because we don't know the original measurements of the old bolt before it was placed in service. For that reason I hesitate to compare the old bolt against the new one, but the wear along the length of the old bolt relative to itself is well delineated.

"Replacement or overhaul" every 50 hours says Airborne. In my book, if you removed a 50 hour bolt, did these measurements on it and found less than half a thou wear at the high-stress points either end, I'd clean it up, re-grease it and put it right back into service. Inspection, measurement, cleaning and a re-lube qualify as an overhaul as far as I'm concerned. We are talking "on-condition" rather than "time-expired" maintenance. It has a shear-strength of something like eight tonnes... you are never going to break this bolt!

Of course, if you run your hang bolt without any lubrication at all, it might well be on the way to showing the same wear as the seasoned veteran in just 50 hours. Replacement might be your only option.

If you can borrow a blade-mic, or know someone who can, then you may find the measurements interesting. If you're dead keen, a good engineering supplies company will get you a blade-mic for somewhere in the vicinity of \$250 to \$270 (which does buy a lot of hang bolts!). Purchase via the internet is an attractive option. Starrett and Mitutoyo are excellent brands, but there are others. I got mine for a completely different purpose, but once you own a tool, it is entirely your own initiative which applications you choose for it.

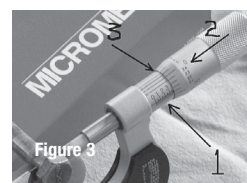


Figure 3

HGFA General Manager's Report

Annual General Meeting

The HGFA AGM was held in Melbourne 15 October. The minutes of this meeting are now available on the HGFA website.

Board Meeting and New Board

The last meeting of the current Board was held in Melbourne on the weekend 15/16 October. The election of the new Board for 2006 to 2008 has been finalised. The new Board will take their seats early in the new year.

Medicals

As you know, the requirement for medicals for Passenger Carrying Endorsements has been stepped up to be that of a Class 2 medical. When seeking a medical from your local DAME you will need to ensure the DAME understands this new requirement. The doctor will need to submit to CASA, on your behalf, the CASA Initial Medical Form. Unless the Initial Medical Form is supplied CASA will not recognise the medical. Renewal forms can only be submitted if the Initial Medical Form has been previously sent to CASA.

Calendar

A new HGFA calendar is now available. The calendar includes some stunning pictures taken by members of each of the HGFA disciplines. Included in the calendar are all competition dates. The calendar is available for sale individually, or at a discount rate of 15% for quantities of 10 to 20 copies, or at a discount rate of 20% for sale orders of 20 or more. Postage will be added accordingly for each of the sale types. Please contact the office for pricing and ordering details. Thanks goes to Kelli from the office for organising this great addition to the HGFA product suite.

New NSW Central Coast Club

The Central Coast Sky Surfers Club has recently been formed, holding their first meeting to establish their committee and mission statement. Javier Alvarez stands as President, Jeff Terry as Vice-president, Anthony Scurrah as Treasurer and Martin Haig as Secretary. Maderson Ford and Paul Cox are the designated club Safety Officers.

Tow Procedures Manual Update

Prior to any operations involving either ground or aerotowing please review the Tow Procedures Manual available at [www.hgfa.asn.au/resources/TowManualSep05.pdf].

Club Membership vs Site Fees

There is a growing number of locations around the country where formalised agreements with the local Councils are taking place regarding site access and protocols and local procedures. A common thread in all these agreements is the requirement for pilots flying the site to be current members of both the HGFA and the local club. Councils stipulate this requirement to ensure that clubs have the required controls over the activities on the site and expect that there is a passage of information through the club indoctrination process to shift responsibility of operations back onto the members that fly the site. Club membership constitutes a local contract

evidenced by a signature on the club member form and a club joining fee. Typically a member fee constitutes acknowledgement of the agreement to the club rules. There are sites in Australia that have a club member fee and a site fee, but presently these are few in number. Supporting the local club helps maintain the agreement to the site. Site fees assist the upkeep of site maintenance.

CAREFLIGHT and SES

Rescue services have attended several incidents over the last months and a good many others over the years, providing emergency evacuations to pilots in distressed situations. These services are always there for our immediate assistance but they come at a heavy price to the public purse. In recent phone communications with several of the services they have commented on their reliance on public donations to maintain the services they provide. I encourage all clubs and competitions to recognise this request and to look at providing some donation from the fees collected from pilots attending sites and events. Pilots wanting to make personal donations are also very welcome to do so.

Aviation Security Identification Card (ASIC)

December deadline ASICs become a mandatory requirement as of 1 January 2006 for any pilot wanting to land or take off from a secure airport. A media release in October indicated that CASA will send 35,000 pilots the necessary paper work for the application process. An alternative source of attaining the card is through Aviation ID Australia Pty Ltd, Merimbula, NSW 2548, phone (02) 6495 2881.

Safety Notices

1. Packed wing shows corrosion points

The following brief was received from a member regarding degradation to a stored microlight wing:
A Redback trike which had been stored for five months was checked for flight airworthiness prior to possible sale. The wing was originally packed and stowed correctly. When unpacking the Wizard 2 wing there was a presence of surface mildew on the upper, outer wing sections which quickly came off with a good wash. It was also discovered to have a 1 to 2mm hole in each cross-spar. It was originally suspected that electrolysis between the guy wires and the spars may have been the culprit, but the way the wing was stowed the corrosion points both occurred on different sections of each spar which is normally surrounded by Mylar wing fabric. The main dorsal spar appears to be okay and the guy wires have only nominal surface corrosion. Other than the corrosion points mentioned, the wing appears to be sound. There were no signs of stitching deterioration associated with this mildew presence that could be seen. The wing itself had been stored in a garage (1,500ft asl) and above ground height of 1 to 2ft to avoid surface dampness/condensation. The area does have a generally high humidity environment. The storage area in the garage, though dark, was reasonably well ventilated and not prone

to roof leaks.

2. Streak 3 and Cruze wings downtube knuckle stress corrosion cracking

Streak 3 and Cruze wing owners should note an update to the control frame downtube knuckle bulletin. The knuckles on Streak 3 and Cruze wing control frames have exhibited stress corrosion cracking. The service bulletin detailing an inspection program to ensure safe use is now available on the HGFA website [www.hgfa.asn.au/HGFA/SB-003.pdf] and on the Airborne website [www.airborne.com.au/images/aw_directives/SB-003.pdf]. A later issue of this service bulletin will detail the measures required to effect a long-term solution.

CASA Pilot Safety Workshop – Crash Scene Investigation

Over the course of the next financial year CASA will be running day-long CSI workshops which will teach pilots how to avoid weather emergencies, what to do if caught out in worsening weather and how to maximise chances of survival if a crash occurs. Aviation experts will take pilots step-by-step through a real life accident which was caused by deteriorating weather conditions. Pilots will be asked to investigate the causes of the accident, what the pilot of the doomed aircraft could have done to avoid the crash, and how pilots should prepare for emergencies. The workshops will be delivered by experts from the ATSB, AusSAR, Bureau of Meteorology, CASA and Aircservices. Seating is limited so registration is essential. Registration forms can be downloaded from [www.casa.gov.au/seminars/csi/csirego.pdf]. Workshop locations and times are as follows:

Location	Date	Venue
Sydney	29 April 2006	Bankstown Sports Club, 8 Greenfield Parade
Adelaide	20 May 2006	Glenelg Stamford Grand, Moseley Square
Perth	24 June 2006	Rendezvous Observation City, The Esplanade Scarborough Beach

(All sessions are from 10am to 4pm. Canberra and Melbourne workshops have been held during October and November 2005.)

Parachute Deployment DVD

Footage covering the parachute deployment workshop run in Sydney by Angelo Crapanzano from Metamorfosi has now been compiled on DVD along with some insightful footage gifted from Angelo's archive files. The DVD is a must-see/must-have information resource. It describes the differences between certain types of parachute, the means of deployment, and most importantly the care and packing of your parachute. Copies are available on request from the HGFA for a modest fee to cover the admin and postage cost. Many thanks go to Steve Hocking, John Clark, Bruce Wynn and of course Angelo for the production of this great resource.

Accident Reports

Number 1

Pilot: Weightshift microlight
Experience: 31.3 hrs
Aircraft type: Airborne Edge

Pilot injury: Minimal bruising
Aircraft damage: Write-off
Location: Cobden airstrip, VIC
Conditions: 21°C, light crosswinds
1 to 3kt, strong turbulence

Description:

The conditions during the flight were thermic between ground level and 500ft. Above 500ft was very smooth. Windspeed at ground level was 0 to 5kt variable. Pilot indicated that he had been flying locally for approximately 35 minutes and then decided to enter the circuit to land. Having experienced turbulence attempting to land the decision to go around was made until conditions were suitable on the second attempt. Approach airspeed was approximately 50 to 55kt descending into a southerly runway direction. At approximately 20ft the microlight suddenly descended, impacting the edge of the runway causing the front wheel to dig into soft damp ground and nosing over.

Comment:

Reports from one of the local pilots at the airfield since this incident indicate that on two other occasions similar accidents have occurred, one with a three-axis ultralight and another with a home-built Jabiru. Both these other incidents resulted in major damage to the respective aircraft.

Conclusion:

It may appear that this incident was due to thermal conditions, but as highlighted above this is not the first time this phenomena has caught pilots out at this airfield, indicating that the need to be vigilant with weather conditions is paramount. Deciding when and where not to fly is the decision made by all of us and therefore should not be taken for granted.

Number 2

Pilot: Intermediate
Experience: 100 hrs, 5 hrs last 90 days
Aircraft type: Paraglider
Pilot injury: None
Aircraft damage: Write-off
Location: Inland hill
Conditions: 20°C, 10-15kt crosswinds,
light thermals

Description:

Pilot launched and after a few minutes started gaining some altitude. Pilot noted other pilots gaining height and focused on following these, losing focus on the nearby powerline hazard. Pilot's glider collided with powerline running from top to bottom of hill, entangling the glider on a marker buoy positioned on the powerline. Pilot was suspended 7 to 8m below the powerline, approximately 150m in front of hill and 50m above ground. Rescue services were able to free the pilot some five hours later.

Comment:

Powerlines represent an ever present danger to our operations, whether near a launch or on landings. Pilots need to be very aware of such hazards at all times. The fact that the pilot in this instance had a UHF radio assisted greatly in the rescue, which was said to be one of the more difficult rescues SES members have had to attend. The pilot also happened to be a volunteer member of the SES and therefore had a good understanding and confidence in what the SES personnel were doing, which also

assisted in the rescue. There have been a number of incidents lately involving powerlines, which are now causing some concern to the power companies. Clubs managing sites with powerline hazards need to have an action plan and liaison with the power companies to manage the risk that these lines have at their site.

Number 3

Pilot: Intermediate
Experience: 250 hrs, 40 hrs last 90 days, 25 hrs on type
Aircraft type: Paraglider
Pilot injury: Nil
Aircraft damage: Minor puncture holes
Location: Inland
Conditions: 28°C, 10 to 25kt, strong turbulence
Description:

Pilot was flying high over valley with cu-nim clouds and general overdevelopment to the south and south-east of course line, gliding for about 20 minutes in a straight line with intermittent strong lift keeping altitude at about 1,400m. Pushed further into a blue hole passing through shear layers where winds came from different directions at different strengths, pushed by a strong gust front of 20kt. Glider fully deflated and reinflated partially whilst twisting up. Deflated a further two times, causing limited brake control. The recurring deflations/inflations caused the glider to twist, resulting in a spiral dive. With 200m remaining, pilot reached for reserve handle for reassurance but not intending to pull it out. Pilot released reserve handle thinking it was still in place and started trying to untwist the risers. Pilot felt a tug backwards as the reserve deployed. Pilot tried to pull the glider, unable to collapse it due to the twisted risers. Glider commenced flying again, but vertically downwards and fighting against the reserve resistance. Pilot tried pulling in the brake line to minimise the effect. Last look at vario before impact showed -6.9m/s. Pilot landed with a parachute roll unhurt.

Comment:

Severe weather conditions were experienced, but the pilot continued onward. The wing was an advanced type, but any wing in these conditions would likely have been difficult to handle. The twisted risers caused a situation where the glider was able to fly, albeit in a downward direction adding to the danger of the moment. A hook knife would have been the only other option to overcome the glider's influence in the descent had the brake lines not been able to be gathered in. The pilot had repacked the reserve only a few days before the incident, providing a quick and effective deployment.

Number 4

Pilot: Experienced
Experience: Instructor
Aircraft type: Weightshift microlight
Pilot injury: Nil

Aircraft damage: Wing keel, nose wheel, R/R wheel
Location: Inland
Conditions: 12°C, 10kt winds, light turbulence
Description:

The pilot intended doing a few circuits. Cloud cover lowered well clear of circuit height. Soon after take off low cloud moved in very quickly from the south-

west. The only option for the pilot was to climb through the cloud. Pilot watched instruments, being the VSI and altimeter. The climb rate was between 280 to 350ft at full power with the control bar in neutral. At around 1,800ft amsl the aircraft would not climb and was caught in severe sink. The VSI registered -800ft/m with the engine at full revs. When the altimeter registered 1,200ft amsl (approximately 1,500ft above the highest terrain feature in the area) the pilot deployed the ballistic parachute, bringing the aircraft and pilot down safely.

Comment:

The transition from Visual Flight Regulations (VFR) into Instrument Meteorological Conditions (IMC) is the most common killer of recreation pilots. A well documented anecdote of this exact scenario is '178 Seconds to Live'. VFR into IMC claims a life every 10 days world wide. Spatial disorientation is a very real hazard. Due to the importance of this message the following brief is included for your consideration:

Geography of airfield – The airfield is 200ft down the eastern side of a ridge that is 1,000ft amsl and runs to the south of the airfield and rises to the north-west. There are a number of radio masts around the airfield and to the south. To the north is a valley that runs to the east with a 1,000ft amsl ridge north of the valley.

Conditions – South-west wind at 5 to 10kt, broken cloud with base at 800ft amsl. Rotor cloud extending down to 700ft at times. Cloud tops to 2,000ft amsl with rain bearing stratus not far above that. Air was moist with visibility of 3,000m to the north and 5,000m to the east where there was broken cloud over the lower ground. Lower cloud was stratus with some cumulostratus showing light activity.

Visual keys – Cloud was rolling over the airfield on occasions. Ridge to the north was in cloud indicating that dew point was around 800ft amsl. Cloud was on the ridge to the south. All the visual signs were there to suggest to the pilot not to fly. Because the air was moist and dew point was at a height at or below the airfield suggested that the air at airfield height could develop into cloud at any time. The south-west airflow over the ridge with these conditions was most likely to extend rotor cloud below the airfield height. A quick look at an Airservices area forecast would have also confirmed cloud base, type of cloud and visibility. Although there was an indication of mild rotor at and below hill height, there was no indication of a rotor above the hill so the pilot who thought they were in sink was most probably disorientated and in a descending turn.

Christmas is on its way. I wish you all a very merry and joyous Christmas break with lots of great flying and safe landings.



HGFA GENERAL MANAGER

Chris Fogg

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Ph/fax: 02 4294 9300, mob: 0417 766356
Email <general.manager@hgfa.asn.au>

Soaring Calendar

AUSTRALIA

Junior Training Camp at Sportavia

26 November – 3 December 2005

Are you 25 years of age or less? Are you looking for another great opportunity to further your gliding career and boost your placing at this year's JoeyGlide '05? Are you looking for FUN and good times with fellow juniors? Camp Organiser Adam Woolley, junior team member. Go to [www.sportavia.com.au/Calendar.htm] or call Sportavia on 03 5874 2063 for further information.

Outback Shootout

28 November – 10 December 2005

This season's 'Shootout' is shaping up to be bigger and better. Defending their title, Team Tabart, Tony and Tracey are invited back to once again battle for the honours. Teams are encouraged to fly in a two seater, or a single as a team. You will be entering the glider for the comp, not the individual. Get your club to enter a team and share with a mate; or, yes, you can fly the whole comp yourself in one of our gliders. Go to [www.sportavia.com.au/Calendar.htm] or call Sportavia on 03 5874 2063 for further information.

Australian Junior Nationals (JoeyGlide '05)

3-10 December 2005

Leeton, NSW. See [www.JoeyGlide.com/JG2005/] for more details.

GFA National Coaching Program 2005/06

Can you think of a sport without coaching? If you want to make progress in your cross-country gliding, find a coach or participate in a coaching event. There are coaching events being held across Australia with something for everyone. Top Australian pilots will be coaching at these events – contact your RTO Sports to find out more. Peter Trotter is coordinating this GFA national coaching program. You can contact him directly to discuss what coaching might suit you <gliderpilots@bigpond.com> or 0417 888040.

4-10 December 2005

JoeyGlide, Leeton. Ph: Bruce Taylor 0428 787349, <brucetaylor10@bigpond.com.au> or Nick Gilbert 0419 412772, <CirrusC2@internode.on.net>.

11-16 December 2005

GlideFast Course, Benalla. Ph: John Switala, GCV 03 57621058, <john_switala@ptp.com.au>.

26-31 December 2005

SA Coaching Week, Waikerie. Ph: Bernard Eckey 08 84492871 or 0412 981204, <eckey@internode.on.net>.

4-11 February 2006

Horsham Week, Horsham. Ph: Peter Buskens 03 53671050, <pbuskens@melbpc.org.au> or Dave Wilson 03 98360683, <dwjcra@ozemail.com.au>.

GlideFast Coaching Course

11-16 December 2005

Gliding Club of Victoria. Peter and Lisa Trotter are offering coaching at Benalla in the month prior to the Club Class National Championships. To secure a place, send \$150 to GCV (PO Box , Benalla, Vic) with your name and email address. For more information contact John Switala <john_switala@ptp.com.au> or ph: GCV on 03 57621058.

Coaching Week at Waikerie

26-31 December 2005

SA Gliding Association is holding another coaching event at Waikerie just prior to the 2006 Multi Class Nationals at Gawler. This allows Nationals pilots to attend and take advantage of the excellent training conditions in the eastern part of the competition area. No course fees are charged, and to keep the

costs as low as possible, winch as well as aerotow launching will be provided. Almost 50 pilots attended last year's event, and there are early indications of a similar roll-up this year. First class catering by Rod Vandenbrink and a big New Year's Eve party on the last day. Campsites, dormitories, airconditioned rooms and family units are available, and can be booked online, as can gliders, on [www.waikerieglidingclub.com]. In order to accommodate all levels of experience, we offer a basic and an advanced course, and pilots can freely alternate between the two. A number of well-known coaches will be on hand to help participants achieve their goals. Theory lectures in the morning will be followed by practical flying in the afternoon and a debriefings in the evening. Highly reliable soaring conditions in the Riverland region make for easy cross-country flying, with speeds well above those usually achieved in other parts of the country. Most coaching will be conducted on a 'lead and follow' basis, but an opportunity for coaching flights in an ASH-25 and other two-seaters also exists. For further details ph: Bernard Eckey (RTO/S for SA/NT) 08 84492871 or <eckey@internode.on.net>.

Deni Towing Comp

27 December '05 – 1 January '06

Deniliquin/Conargo, NSW. The Deni comp lives on, slightly reincarnated. A fun comp, run with a similar philosophy as the Easter comp at Birchip (VIC) each year. Ground tow only, no appeals, lots of encouragement to new and less experienced pilots. Novelty prizes, lots of talking, eating, drinking, flying, drinking, eating, flying. "Fly Away Day" 2/1/06 – an opportunity to fly open distance, maybe trying to get to the party at Bright. GPS scoring, turnpoints for Kingpost and Open classes, straight line for Floater (keeping Tove's three classes idea). We hope for a reasonable turnout of 60 pilots, utilizing the many strips available at the Conargo comp paddock. If you are lamenting the end of the car towing comps at Christmas, grieve no more and get your entries in! Details available on the HGFA website (comp calendar page) and [www.xcflight.com]. Further inquiries phone Peter Lissenburg 03 5962 9371.

Australian Free Flight Festival

30 December 2005 – 3 January 2006

Bright, VIC. To promote all free-flying sports to the public and most of all have fun and learn more! The comp will be accuracy landing in the morning and open XC distance in the afternoon. You take off from any NE site, then just return your GPS to headquarters to verify your best flight of the day... The fifth day will be a demo/display fundraiser day and Masquerade. Get your best costume or most impressive ensembles together now! \$2,000 of cash to be won! Awesome trophies, daily and overall cash prizes for PG/HG categories, awesome flying and non-stop parties! Web info: [www.xcflight.com]. Email: <info@xcflight.com>. Ph: 0429 403606.

44th Multi-Class Championship

2-13 January 2006

Gawler Airfield, SA. Adelaide Soaring Club will be hosting this event. The competition will run two classes, the 15m Class and the Open class and all gliders will be handicapped according to the current Multi-class handicaps. However, if sufficient entries are received the 15m Class will be split into Standard and 15m Racing and the Open Class will be split into 18m and Open. Gawler Week will be held immediately prior to the event. There will be weather briefings and tasks set. All are welcome to attend and get some practice in before the start of the competition. For further details, see p17.

Bogong Cup

7-14 January 2006

Mt Beauty, VIC. AAA sanctioned comp, Cat 2 event. Registration and practice day 6 Jan. Strictly 70 pilots max. Minimum rating int with inland experience. Entry \$195 before 10 Dec 2005 (\$205 thereafter). Club, Open, Kingpost, Floater and Female categories. Also, the Joel Rebecchi award for most improved Australian pilot. The dynamic team of Carol Binder (Organiser) and Heather Mull (Director) will once again ensure heaps of fun, prizes (serious and novelty) and social events. GPS, radio, parachute and a passion for flying mandatory. Pilots must also have a current FAI Sporting Licence for WPRS scoring. GAP parameters: 5km, 50km, 90min, 25%. Web info: [www.xcflight.com]. Email: <info@xcflight.com>. Ph: 0429 403606.

Vintage Gliders Australia Annual Rally

7-15 January 2006

Bordertown, SA. It's on again! The 2005 Annual Rally was such a success, that we are doing it all again! If you missed out, don't make the same mistake twice! Next year's event should be bigger and better as more vintage gliders come into service, our membership grows and the Bordertown-Keith Gliding Club improvements make the site even more user friendly! Put the fun back into your soaring with interesting, affordable sailplanes, a great site and fun social flying – with optional tasks for the ambitious. Full information is available from Ian Patching on 03 94383510.

Sky High XC Cup

14-15 January & 4-5 March 2006

Mt Cole area, VIC. C sanctioned comp. The intention is to run a competition similar to Mystic Cup to actually get pilots flying XC at sites other than Mystic in Victoria. Contact Geoff Wong <geoff@zikzak.net>.

Corryong Cup

15-21 January 2006

Corryong, Vic. B sanctioned comp, practice day & rego 14 Jan. A relaxed, fun meet, aimed to foster the development of competition and cross-country flying skills. Maximum enjoyment at one of the sport's best venues - Mt Elliot. Open Class and Entry level tasks. 65 pilot limit, entry confirmed with payment. Enter online at [corryongcup.com]. Entry fee: \$110, includes comp T-shirt and Presentation Dinner. HQ: The Court House Hotel, Corryong. Intermediate rating and inland experience required. GAP parameters: 4km, 40km, 90min, 15%. Contact: Cameron 0407 418295.

Club Class Nationals 2006

16-27 January 2006

Benalla, VIC. This competition is being held during the prime soaring season. We hope this will guarantee some excellent weather for your tasks. Benalla has large areas of flat land to the north and foothills and alpine mountains to the south, so lots of variety for tasks or directions to fly. The airfield has a large, long and wide grass east/west (08-26) strip, as well as a sealed parallel power strip and two grass parallel runways for north/south (17-35). Two tie-down areas are available, one is adjacent to the runways and can accommodate approximately 20 aircraft. Further space is available in front of the club hangars. The clubhouse has a large room well suited for briefing and meals and is airconditioned, has a licensed bar and meals available for around \$10. The clubhouse has a number of PCs wired up to our network and broadband internet connection so you can download your emails fast. For those with wi-fi capability on their laptop or handheld will find connectivity in and around the clubhouse. The air-

field has limited camping with additional camping options at the town's caravan park. Motel/hotel accommodation is available around town, the closest is 500m from the clubhouse. The township of Benalla is close-by, about a nine-minute walk. There are many activities in the local region should the day not be flyable, including wineries and the nearby Milawa region is renowned for its good food. The nearby hills offer many trips, walks and sights. Melbourne City is just over two hours down the freeway offering its famous Victoria Market, fashion and food shops. The GCV welcomes all pilots and their crews and looks forward to a successful and safe comp.

Top Gun Apprentice Challenge **16-19 January 2006**

Sportavia, Tucumwal, NSW. Combined XC clinic and competition. Open to all pilots eager to learn about XC flying. Top rated international pilots (the "Top Guns") will be hosting XC competition clinics during the event. A number of Top Guns will each coach a team around the course each day with the scores being the sum of the scores of the learner pilots. Cost \$450, which includes all tows and all clinic sessions. Contact Tove Heaney <info@sportavia.com.au>.

Sportavia International Hang Gliding Championships

21-28 January 2006

Sportavia, Tucumwal, NSW. AAA aero competition. Open to all pilots (floaters to topless), but all pilots need an aerotow endorsement (even a Fun can be aerotowed). Entry fee \$200 plus \$400 for tows. Will be run at Sportavia or a paddock nearby. GAP parameters: 10km, 80km, 90min, 25%. Contact Tove Heaney <info@sportavia.com.au>.

Eucla Fly-in

23 January – 1 February 2006

Border Village, Eucla, WA/SA. The Goldfields Dust Devils are hosting a fly-in at Eucla. Static and winch towing available. Fun, flying and wild partying is what we're renowned for. An interstate friendly comp is possible if enough (Mexicans) cross the border. Come and join us at the world's best ridge soaring site. If anyone is interested and wants to know more, contact Muz 08 90215771, 0427 328 638, <muzel@optusnet.com.au>.

Killarney Classic

28 January – 4 February 2006

Killarney, QLD. AAA, FAI Cat 2 PG comp. Killarney is owned by pilot and comp host Andrew Horchner. Numerous launch sites offer some of the best XC flying in Australia. There has been an extraordinary response to the first AAA rated Cat 2 competition in Killarney this year, as we have been booked out with over 85 registrations. Accommodation limited so book as soon as you can. Information can be found on the competition website [www.fly-killarney.com.au]. Payment details are on the website as well. See you all at Killarney! Email enquiries to <afact@gil.com.au> and CC <wendymugridge@gil.com.au> or contact the organisers on 0427 807 516 (Andrew Horchner) or 0418 807 516 (Wendy Mugridge) for further information.

NSW HG State Titles

5-11 February 2006

Manilla, NSW. Please note the dates. The PG pre-Worlds will be held on this site later in the month, so this comp has moved forward to avoid a clash. Registration at Royal Hotel on Friday 4 Feb. This is a AA grade comp. GPS turnpoints and goal verification. Pilot requirements: int rating with inland experience. Entry fee \$120, includes T-shirt and presentation dinner. Contact Bill: 0412 423133, email <fly@nswhgstatetitles.com>, website [www.nswhgstatetitles.com].

Mac Para's Personalised XC Clinic

7-10 February 2006

Bright, Vic. This is a cross-country coaching program with Active Air's Enda Murphy. Enda is a multiple Australian paragliding champion and has represented Australia at the last five World Championships. Enda was the winner of the recent Canungra Cup and the winner of last year's Bright Open. Come and share his expert knowledge and years of flying experience. All course participants complete a questionnaire covering their flying experience, then the theory (using Alpine Paragliding's class rooms) and practical components of the coaching are customized to meet your needs. Areas to be covered include: equipment choice, preparation, setup (including GPS, radio and vario), understanding the weather, overview of flying XC in Bright, optimised thermalling, air to air XC coaching, post flight analysis, and more. Cost: \$350. Limited places, so to book your spot contact Mac Para at [www.macpara.com.au].

Bright 321 – Australian Paragliding Open

11-18 February 2006

Bright, VIC. The Bright 321 Australian PG Open will be held in and around the picturesque town of Bright. It will be a Category 2 event and has a AAA Australian sanction. Following the popularity of last year's event places will be increased to 120 this year. Cash prizes include \$3,000 1st, \$2,000 2nd, \$1,000 3rd. Entry fee \$220 (incl. GST). There is a \$20 discount for cash/cheque entry fees received before 1 January 2006. GAP parameters: 5km, 30km, 90min, 20%. Full details found at [www.bright321.net] or contact Geoff Wong <geoff@zikzak.net>.

Tucumwal Challenge

25-26 February 2006

Sportavia, Tucumwal, NSW. Fun national fly-in fly-out weekend for all pilots, run in conjunction with Tucumwal town festival. Mega parties and all sorts of activities, flying sports and other things. Contact Tove Heaney <info@sportavia.com.au>.

WA Soaring Championships

25 February – 6 March 2006

Wyalkatchem, WA. The Western Soarers invite all HG and PG pilots to compete in this event. The WA championships are always a lot of fun and are an ideal opportunity for Restricted pilots to gain experience in a supportive environment. Although there will be fierce competition amongst the champions, we also encourage those who just want to fly for the fun of soaring across WA's vast and beautiful wheatbelt. In several recent competitions new Restricted pilots have beaten the pants off some of the more seasoned (and relaxed) contenders. Scoring will use GPS and GAP 2000. Entry fee before 1 Feb: \$110 for WS members and \$120 for non-members. A late fee of +\$10 applies after 1 Feb. Entry fee includes presentation dinner. HGFA membership, parachute, helmet and appropriate tow endorsements are mandatory. For more information visit [www.westernsoarers.com] or contact Rolf <rolf@mactherapy.com>.

Manilla Pre-worlds 2006

Double Header

Kiwi Open

24 February – 2 March 2006

Manilla, NSW. FAI Cat 2 + NZL PG League round. Entry fee: \$140 (\$170 after 1 Jan), includes hill transport, 1x dinner, \$2,000 prizes, heaps of fun Kiwi pilots to fly and drink with, and all the usual things you would expect from a Manilla event

(big XC tasks). Register from 1 Oct via [www.manilla2007.com]. Max 150 pilots. Entry place allocation on 1 Nov if oversubscribed. See website for details. Organiser: Godfrey Wenness, ph: 02 67856545, <skygodfrey@aol.com>.

Manilla Pre-Worlds

5-11 March 2006

Manilla, NSW. FAI Cat 2. Entry fee: \$170 (\$190 after 1 Jan), includes hill transport, 2 x dinners, over \$5,000 in prizes, expert organisation and legendary Manilla tasks. A unique opportunity to fly with some of the world's best as they practise for the 2007 Worlds. Register from 1 Oct via [www.manilla2007.com]. Max 150 pilots. Entry place allocation on 1 Nov if oversubscribed. See website for details. Organiser: Godfrey Wenness, ph +61 (0)2 67856545, <skygodfrey@aol.com>.

Note: Free-flying at Mt Borah will be limited during the event period (generally launching is permitted after the bulk of comp pilots are on course.)

Flatter Than The Flatlands

14-17 April 2006 (Easter)

Birchip, VIC. HGpilots are invited to the 13th annual Flatter Than The Flatlands cross-country towing competition. The event will be conducted over the four-day Easter long weekend. Entry fee is \$75 and includes maps, daily prizes, presentation dinner, scoring, goal beers and lots of fun. After the flying each day, social events including a Red Faces competition, movie night and much more will be held with prizes awarded. Cameras not required, GPS recommended, parachute compulsory, lots of fun guaranteed. Entries only accepted from teams of five pilots. Entries open 8 February at 8pm. Entries accepted on first come basis. Places confirmed on comp website after full team payment received. Following success of previous events, get organised early. Twelve tow strips, two held in reserve for South Australian teams until 16 February. To enter, phone Ian Rees (03) 97621364.

[Note: GAP parameters, where listed in the above events, are: bomb-out distance (minimum scoring distance), nominal distance (minimum task length), nominal time (minimum expected winners time), and goal percentage (nominal percentage in goal).]

OVERSEAS

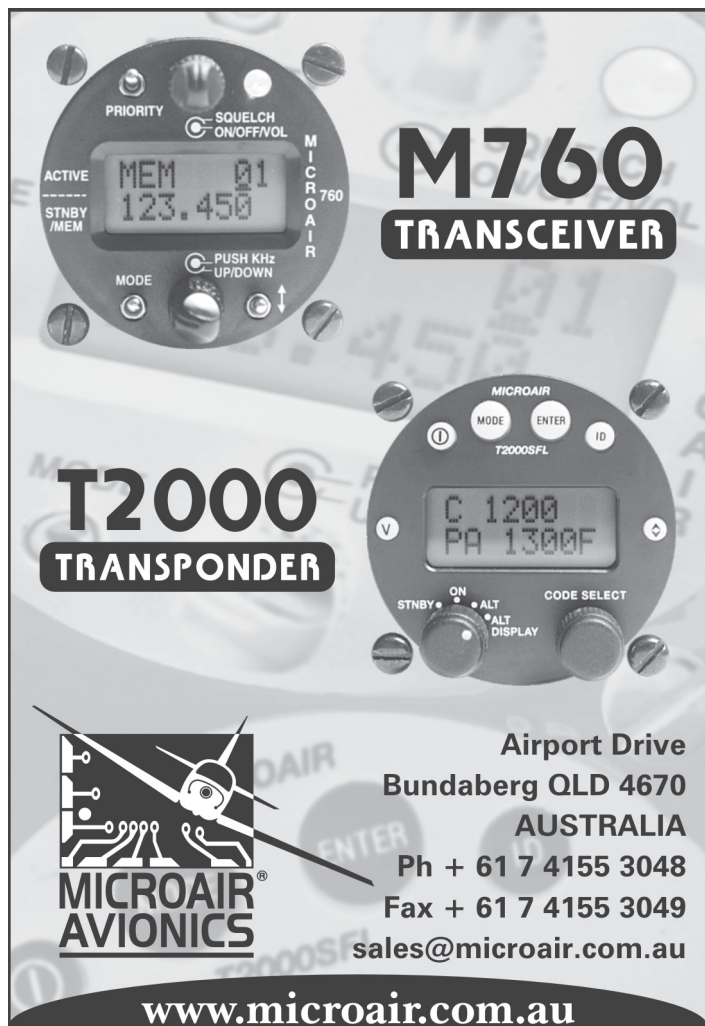
Soaring Wave Camp Patagonia 2005

November 2005 – January 2006

For the fourth year, Jean-Marie Clément and his team have prepared the next soaring wave camp in Patagonia, taking place at San Carlos de Bariloche, Argentina. Pilots of all skills and their families are invited to join them. The goal is to practice wave flight in ideal meteorological conditions, while discovering the natural marvels of the Austral world: glaciers falling into the sea with seals and sea lions swimming around, the sub-tropical falls of the north, watching whales nursing their calves, or walking amongst thousands of penguins. Not to mention local volcanoes, extraordinary both from the ground and air. Participants can be accompanied by mountain flight instructors while they make record attempts. Four world records and nine national records have been achieved during previous expeditions. Dates will be scheduled according to the availability of the gliders. This year the group has a container from Europe with room for one more glider. Bring your own glider, motorised or not (San Carlos de Bariloche has the only tug of the whole Patagonia region). Check [www.topfly.aero], where you will find general conditions for participation and narratives, photos and movies from previous expeditions. Contact: TopFly Via delle

continued next page ►

Soaring Calendar



M760 TRANSCEIVER

T2000 TRANSPONDER

MICROAIR AVIONICS

Airport Drive
Bundaberg QLD 4670
AUSTRALIA
Ph + 61 7 4155 3048
Fax + 61 7 4155 3049
sales@microair.com.au
www.microair.com.au

Forze Armate, 26, 20147 Milano (Italy)
<info@topfly.aero>, ph: +39-02-48705377; fax: +39-02-4870 5352;
Mob: +39-335-6049302.

Ladies Open Distance Comp

11-16 December 2005

De Aar, South Africa. This Cat 2 comp is not restricted to women only, but they do hold the upper hand! Every woman who enters the comp gets 4 nominations. These nominations can be used at her discretion; for every spot used (male pilot nominated), she gets 1/4 of her entry fee discounted, ie: 4 nominations = Ladies Free entry. Payment per nomination must be received by 10/12/05 for the entry and discounts to be valid. For international ladies, should you not have enough pilots coming with you, we can find local nominations for you and in return these local pilots on your "team" will assist you with local site knowledge. As this is a winching event there will be limited entry space available, so don't leave your planning too late. Contact us for more information: Des and Arnold ph/fax: +27 (53) 631-1555, web: [www.pottiesbnb.co.za].

Mauna Kea Thermal Clinic

27-31 December 2005

Mauna Kea, Hawaii. Achim Hagemann will be organising the 2005 Mauna Kea Thermal Clinic on the Big Island of Hawaii. Mauna Kea (13,796ft) has flying sites at various altitudes. Pilots flying here should expect big air, high altitude take offs and challenging XC flying. Mauna Kea

and the surrounding areas are still unexplored to a large extent. Our plan is to pioneer several peaks around Mauna Kea between 11,000ft and 13,000ft that have never been flown before. To register for the clinic contact: Paraglide Hawaii, PO Box 797, Mountain View, HI. 96771, USA; <tofly@excite.com> or ph 808 895 9772. Clinic requirements: int or better (nov with instructor sign off; bring everything you need for high altitude XC flying; food and gas money extra; cost \$275. Clinic includes: 4WD transportation, airport pick up, guide service, free camping, daily weather report.

IGC World Calendar 2007 and beyond

2007 WGC – Juniors, Bid selection 2005
2007 WGC – Women's, Bid selection 2005
2007 Alternative Events, Bid selection 2005
2008 WGC – 15m/18m/Open, Bid selection 05
2008 WGC – Std/Club/World, Bid selection 05
2009 WGC – Juniors, Bid selection 2006
2009 WGC – Women's, Bid selection 2006
2009 Alternative Events, Bid selection 2006
2010 WGC – 15m/18m/Open, Bid selection 07
2010 WGC – Std/Club/World, Bid selection 07
2011 WGC – Juniors, Bid selection 2008
2011 WGC – Women's, Bid selection 2008
2011 Alternative Events, Bid selection 2008
2012 WGC – 15m/18m/Open, Bid selection 09
2012 WGC – Std/Club/World, Bid selection 09
NOTE: Shown as running through 2014 for illustrative purposes only. Calendar and structure of the World Gliding Championships will continue on as shown after 2014 (until changed or modified by the IGC Plenum).

Letter to the Editors

Biennial Check Flights

I have been flying microlight aircraft for the past four years. My initial training was conducted with a very meticulous instructor who is based at Telegraph Point which is near Port Macquarie. Within the first year of flying I subsequently obtained my radio, passenger carrying, and cross-country endorsement.

I recently returned back to my flying school to undergo a check flight under the

new biennial check flight requirements.

It is surprising upon returning to the training environment after being away for such a period of time how easy it is to adopt a number of bad habits. I feel I walked away from the check flight a wiser and safer pilot with plenty of food for thought to assist me in the furtherance of my piloting safety skills.

We are all aware that the modern day microlight is an extremely safe aircraft, but as

with anything that flies we must practice what we can do with it, and know what we can't.

In reality, without this check flight system in place the person who we usually have in the back seat will seldom be able to give us any tips to assist us in the safe operation of the aircraft or appraise our ability.

The HGFA Board should be congratulated on this initiative and I am of the firm belief that it can only enhance the safety aspect of this wonderful sport.

David Logan

GFA Badges & Certificates

Claims to 31 October 2005

A BADGE

GREEN, Alastair	11134	VMFG
WALMSLEY, Hannah	11141	NSW Air TC
VIRGO, James Edward	11142	Gawler GC

A & B BADGE

THOMPSON, Mark K	11138	Caboollure
MOWBRAY, Michael S	11140	DDSC
DOHERTY, Terence N	11145	Bathurst GC
MORRIS, Glynn W	11146	Southern Cross GC

B BADGE

LUCAS, Noel Alfred	11052	Bathurst GC
DALMAZZO, Thomas J	10931	NSW Air TC

C BADGE

PRICE, Malcolm C	11117	Gympie GC
NIKSIC, Branko	11116	GCV
OSBORNE, Ashely	11027	Byron Bay Gliding

A, B & C BADGE

ROACHE, Ian Michael	11135	Lake Keepit SC
ELLETT, Sam Andrew	11136	GC of WA
LEAD, Richard F	11137	Bathurst GC
OGDEN, Damian Bruce	11139	Southern Cross GC
CRAWFORD, Robert W	10931	Narrogin GC
THOMPSON, Matthew	11143	Narromine GC
DILLENBECK, Christopher F	11144	Bathurst GC

DIAMOND C

JUDD, Brendan	7004/221	Tumbarumba GC
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Claims for all badges and certificates to:
FAI Certificates Officer Beryl Hartley
PO Box 275, Narromine NSW 2821
Ph: 02 6889 2733 (w), 02 6889 1250 (h)
Fax: 02 6889 2933,
Email <hartley@avionics.com.au>.

Decentralised Competition entries to:
Chris Stephens
PO Box W48 Wannassa ACT 2903
Ph: 02 6231 4121,
Email <poboxw48@dynamite.com.au>.



Classifieds

GFA

Single-seater Sailplanes

NOTICE TO ALL GFA ADVERTISERS

All advertisements and payment can be sent to:
The Gliding Federation of Australia Inc/Advertising
130 Wirraway Road, Essendon Airport VIC 3041
Ph: 03 9379 7411, Fax: 03 9379 5519
Email: <secretary@gfa.org.au>

Advertisements may be emailed in high resolution (300dpi at 100% size) using TIF or EPS formats. Photographs may be provided in either photo print or slides. Disk photographs are not suitable. Photographs, slides or disks may be returned. Please include a self-addressed and stamped envelope for the return of any promotional material. All GFA advertisements must be paid for prior to publication. (Payment by cheque, money order or credit card). Don't forget Classifieds deadline is the 25th of the month, for publication five weeks hence.

ASTIR CS, 2,100 hrs, basic instruments, B10, 360ch radio, new canopy, enclosed trailer, ground handling gear, GC, \$20,000 ono. Ph: Trevor 0419 577782.

ASTIR CS, 2,288 hrs, annual 2/06, basic instruments, good cond, \$15,000. Ph: Leigh Evans
07 41535781 or <levans@interworx.com.au>.

ASW 22 BLE, VH-GWP. Quite simply the fastest glider in Australia. Self-launching at max weight, brand new Cambridge panel with PDA, Winter basic instruments. Re-finished by Peter Holmes in 2008, latest winglets, excellent cond. throughout. All ground handling/ballasting equipment & Cobra trailer. I have something new coming & can't afford two! Ph: 02 67787345 or <bruce.taylor10@bigpond.com.au>.

DAMAGED Jantar Std 3, complete. Best offer. TRAILER, enclosed 8.5m. Electric brakes, Colorbond, Jantar fittings, fold down ramp. Offer Terra 10ch radio. Ph: 03 53521298.

DG-400, simply immaculate, very low hrs less than 400 TT & less than 80 engine. Cambridge GPS/LNAV, oxygen, covers, lift top trailer, tow-out gear, one man rigging, transponder, recent upper surface re-finish, EGT gauge, located Omarama NZ, much more. U\$65,000 neg. Contact: <jonludgater@yahoo.com.au>.

GLASFLUGEL MOSQUITO A, VH-GKV. 15m flapped glider. Very well maintained & in excellent cond. Delightful handling glider. Good for long distance flights. \$32,000. Ph: Ian 08 81721675.

LS-4a, VH-IID. Contest-ready, with Borgelt B50/B57 & Cambridge logger, long-life PA slim-pack parachute, tow-out gear, auger tie-downs, water ballast gear, clam-shell trailer. Paint excellent, 4,400 hrs. \$55,000. Also hangar space at Lake Keepit \$10,000. Ph: Garry Speight 02 67851880.

PW5 WORLD CLASS GLIDER, as new, owners retiring from the field due age. Ph: Bill Collings 02 62901338 or <blix@homemail.com.au>.

PW 5 Reg paid & some preparation done by Peter Carlson, Temora, \$31,000. New custom-built trailer requires lights \$9,000. I have three PW 5s purchased for disabled gliding association, but have had more hindrance than help & have decided to move on. Apologies to pilots I have promised to contact if I was selling, I moved & lost contact. Ph/fax: Alan Turner 03 5962 1812; 3/71 Newgrove Rd, Healesville, VIC 3777.

STD JANTAR 2, VH-UKU. Basic instruments, tow-out gear & enclosed trailer. Fitted with winglets & side opening canopy. 3,000 hr major inspection & mods recently completed by Tom Gilbert. Hangared at Lake Keepit. \$25,000. Ph: Stuart 0425 266380 or LKSC 02 67697514.

STD LIBELLE 201B. GCJ Good cond, 3,800 hrs. Basic instruments plus B40/averager dust covers. Tow out gear, low profile enclosed roll in trailer \$13,500. Ph: Ray 07 54635700.

Two-seater Sailplanes

ASK-21 refinished in Dulux 2K, ground handling equipment, one new canopy, Cambridge Nav & GPS/w rear screens, gap seals, 38:1, ideal XC trainer, factory spin-kit enabling identical spin characteristics irrespective of pilot weights, Lake Keepit, \$79,000. Ph: Michael 0427 108040 or <michael.shirley@bigpond.com>.

IS28B2, 3,350 hrs, VH-CQC. Fully overhauled. New: Mecaplex canopy, paint, fabric, Microair, EL vario, etc. A/C in as new cond, good open trailer. Ph: Bert Persson 07 32038856.

JANUS B SAILPLANE, c/w instrumentation. 18m span, 38:1 excellence. Fully re-finished by Luciani. Full details available on inquiry to VMFG John Fawcett 03 94847453 or Roger Druce 03 9439 8947, <rogrdruce@optusnet.com.au>.

PUCHACZ XJI. Bathurst SC is offering their Puchacz for sale due to a fleet upgrade. XJI is in excellent cond, always being well maintained. It has a fresh annual & is just completing a major upgrade incl. a 1,000 hr life extension at T&J Sailplanes. Ph: Brian Bailey 0409 302296 or <bcbailley@bigpond.com>.

TO ALLOW FOR FLEET UPGRADE, Waikerie GC offers for sale: Two Twin Astirs (IKO & IKU). Suit private owner. B20-21-24 system, Terra radio. Expressions of interest sought. One Hornet (GMU 4,230 hrs). B20-21-24 system, Microair radio, Mosquito canopy mod, c/w trailer, tow-out gear. \$24,000. Tenders sought for damaged LS-1 (GEB 2,640 hrs). Damage to undercarriage box & underside of forward fuselage. Some other minor superficial damage. Wing fairing mods, wings, stabiliser & rudder professionally re-finished. C/w instruments, radio, closed trailer, tow-out gear etc, as is – where is. Ph: John Hudson 08 82725929.

TWIN ASTIR, IKD, VG cond, one owner (NGC-WA) TTIS 6,552 hrs; incl. good closed trailer, Microair radio, Borgelt B-50 (two various front & back); oxygen, no gelcoat problems, new upholstery, fixed wheel & comfortable back seat; best value for \$ XC two-seater (1:38); \$49,000. Ph: Hilmer 08 92918949 or 0429 900016.

Self Launching/Motor Gliders

GROB 109B. 1984, excellent cond, maintained to professional standards, engine 700 hrs, airframe 1,550 hrs, ICOM & Dittel VHF radios, King 76A transponder, intercom, G meter, great fun machine! Price neg. Ph: Petar 0428 864425 or <pnovakov@bigpond.com>.

IS28M2, two-seater motorglider, VH-SSU, excellent cond. For more details ph: 03 52366290 or 03 52825143.

SF27 GEW (Scheibe, Germany) built 1969, 1,255 hrs. Four cyl. Hirth engine runs smoothly. Lots of extras. A/C was re-painted in 2001. Full panel, Becker radio. Encl. trailer, registered. Forced sale due to time constraints. \$32,000. Ph: Chris 0403 188686.

XIMANGO MOTOR GLIDER with 496 hrs in hangar waiting for an adventurer to take it around Australia. In fact room for two with camping gear. Reliable 912 power & possibly one of the cheapest mile for dollar fun aircraft you will ever own. Cruise at 95kt or switch off & glide for naught. Also I have a half-built project similar to Pic 20E, total \$145,000. Call for pics 02 99687311 or 0413 963438.

Instruments & Equipment

AUSTRALIAN MADE CANOPIES: Dimona H36, Grob 103, Libelle, IS28B2, LS & others. Rails, windows. Blue tint now available. Email: <aamoulds@optusnet.com.au>. Ph: Ian & Cecilia Linke 08 82513780.

CAMBRIDGE 302 vario or 302A logger, Microair or Xcom radio + a better boom mic, wingstands, airswitch, tyres, etc. <ianmcphie@aapt.net.au>, ph: 0428 847642, Box 657 Byron Bay 2481, [www.mrsoaring.com].

GFA News

Australian Gliding Index

Thanks to Ann Woolf there is now a downloadable and searchable index to the Australian Gliding magazine from 1951 to 2000 on the Waikerie Gliding Club's website <www.waikerieglidingclub.com.au>.



B50 with rear seat repeater. \$1,450. Email: <resanders@gmail.com>.

CAMBRIDGE flight computer systems – 302 vario/logger (\$3,500), 303 Nav Display (\$580) plus 302A flight loggers (\$1,320) all in stock. Great value for the best vario around.

TAPE – BOWSLW MAXI GAP TAPE. 36m x 1.0" rolls for \$15, 36m x 1.5" rolls for \$20. Very flexible & easy clean-up. Discounts for orders over 10 rolls. Contact: <brucetaylor10@bigpond.com.au>, ph: 02 67787345 or 0428 787349.

YASEU VXA150 VHF handheld transceiver \$485 while stocks last. Parachutes ATL 88/90 Short Pack \$1,925. ATL 88/92 Long Pack \$1,925. Airborne Avionics. Ph: 02 68892733. Fax: 02 68892933. Email: <hartley@avionics.com.au>.

General

CALENDARS – German Segelflug calendar (the original & best). Order from Mike Cleaver 0412 980886 or <wombat@netspeed.com.au>. \$50 each +\$5 per parcel posted to you. Junior desk calendar \$15 + \$3 if posted separately.

Gliding Publications

AIRBORNE MAGAZINE: Covering all facets of Australian & New Zealand modelling. The best value modelling magazine. Now \$60pa for six issues. Plans & other special books available. PO Box 30, Tullamarine, VIC 3043.

AUSTRALIAN HOMEBUILT SAILPLANE ASSOCIATION: James Garay, 3 Magnolia Ave, Kings Park VIC 3021. Ph: 03 93673694, [www.geocities.com/capecanaveral/hangar/3510].

FREE FLIGHT: Bi-monthly journal of the Soaring Association of Canada. A lively record of the Canadian soaring scene & relevant international news & articles. \$US26 for one year, \$47 for two years, \$65 for three years. 107-1025 Richmond Rd Ottawa, Ontario K2B 8G8 Canada, email: <sac@sac.ca>.

NZ GLIDING KIWI: Official magazine of Gliding New Zealand. Edited by John Roake. Read world-wide with a great reputation for being first with the news. A\$52 pa. Personal cheques or credit cards accepted. Write: NZ Gliding Kiwi, 79 Fifth Avenue, Tauranga, New Zealand. Email: <gk@johnroake.com>.

SAILPLANE & GLIDING: The only authoritative British magazine devoted entirely to gliding. 52 A4 pages of fascinating material & pictures with colour. Available from the British Gliding Association, Kimberley House, Vaughan Way, Leicester, England. Annual subscription for six copies £17.50.

SAILPLANE BUILDER: Monthly magazine of the Sailplane Homebuilders Association. \$US29 (airmail \$US46) to SHA, c/o Murry Rozansky, 23165 Smith Road, Chatsworth, CA 91311 USA.

SOARING: Official monthly journal of the Soaring Society of America Inc., PO Box 2100, Hobbs, NM 88241 USA. Foreign subscription rates (annually): \$US43 surface delivery; \$US68 premium delivery.

TECHNICAL SOARING/OSTIV: Quarterly publication of SSA containing OSTIV & other technical papers. C/O T U Delft, Fac Aerospace engineering, Kluyverweg 1, NL-2629 HS DELFT, The Netherlands.

Classifieds

Gliding Publications continued

VINTAGE TIMES: Official newsletter of Vintage Gliders Australia, edited by David & Jenne Goldsmith, PO Box 577, Gisborne VIC 3437, Membership \$15 pa.



HGFA

Classifieds are free of charge to HGFA members up to a maximum of 40 words. One classified per person per issue will be accepted. Classifieds are to be delivered to the HGFA office for membership verification/payment by email <office@hgfa.asn.au>, fax: 02 65593830 or post: PO Box 157, Hallidays Point NSW 2340. The deadline is 25th of the month, for publication five weeks hence. Submitted classifieds will run for one issue. For consecutive publication, re-submission of the classified must be made, no advance bookings. When submitting a classified remember to include your contact details (for prospective buyers), your HGFA membership number (for verification) and the State under which you would like the classified placed. (Note that the above does not apply to commercial operators. Instructors may place multiple classified entries, but will be charged at usual advertising rates.)

All aircraft should be suitable for the intended use; this includes the skill level required for the specific aircraft being reflective of the Pilot's actual Rating and experience. All members must adhere to the maintenance requirements as contained in section 9 of the Operations Manual and as provided by manufacturers. Second hand equipment should always be inspected by an independent person, an instructor wherever possible. Advice should be sort as to the cond, airworthiness and suitability of the aircraft. It should include examination of maintenance logs for the aircraft. It is unethical and a legally volatile situation for individuals to provide aircraft which are unsuitable for the skill level of the pilot, or aircraft that are unairworthy in any way.

Hang Gliders & Equipment

NEW SOUTH WALES

AIRBORNE STING 154 int, purple/yellow/white, fair cond, flown mostly inland, spare DT, batten profile, \$1,200 ono. Flytec 4005 vario, \$350 ono. Reserve 'chute, \$300 ono. Icom 40S UHF radio, \$300. Ph: Ian 0427 600102; <ian@dubbo.org>.

MOYES LITESPEED S4 adv, with carbon "Zoom" basebar, carbon outboard LE, carbon dive struts. Extremely nice handling glider & performs well too. Two seasons old, \$6,000 (well over \$10,000 new). Ph: Chris 02 98182426.

RADIO: Electrophone TX 4755 UHF FM radio, GC, battery needs replacing, c/w charger, \$100. Ph: Craig 02 65592704; <craigw@midcoast.com.au>.

ACT

GPS Garmin 12, brand new in box with manual, \$240. Ph: John (ACT or Bright) 0412 159472; <chappo252@hotmail.com>.

VICTORIA

AEROS PHANTOM rigid wing adv, superb cross-country machine, only 6 hrs total flying time, excellent cond, 19.5:1 glide, 127ft/min sink, 110km/h cruise, 41kg ready to fly. Incl. custom-made heavy duty cover & a full set of brand new spares. Launches, thermals & lands like a flex wing, cruises & glides like a sailplane, \$10,500 Ph: Rob Wenban (Melbourne) 0408 179940; <rwenban@connexus.net.au>.

AIRBORNE FUN 220 tandem, with 12" plastic wheels,

\$3,000 ono. Quantum QS550 tandem emergency parachute with bridle swivel (just repacked), GC, \$700 ono. Flytec 4005 vario with HG bracket, GC, \$400 ono. Ph: Steve 0428 570168; <eaglescl@bigpond.net.au>.

MOYES Matrix harness, black with silver trim, suits chest & hips 108cm, shoulder height 151cm, height 175cm, EC, \$1,700. Ph: Phil 0407 042634.

MOYES SONIC 190 int, with VG, under 50 hrs, manual, batten profile, \$2,000. Dynamic Flight Stealth 2 harness with chute (Conar 18), suits 185cm, 80-90kg, tow bridle & water bottle, \$900. Ph: Ken 0427 005396; <pearts@bigpond.com>.

QUEENSLAND

AIRBORNE Blade Race 153 adv, super light & fast, no aeros, GC, stand-out lightning bolt custom sail, this wing is sweet & unique! \$1,200 + freight. Also, MOYES SX 6 164 adv, nearly new! Crisp clean sail, heavy duty sidewires, flown less than 10 hrs, great Moyes solid handling & top sink rate/glide, \$2,300 + freight. Ph: Jules Makk 0411 101010; 07 33880053 (h). For photos email <julesm@asai.org.au>.

MOYES LITESPEED 5 adv, blue/red US, Zoom A-frame, \$4,000 ono. Moyes Litespeed 4 adv, grey/red/yellow US, \$4,500 ono. Moyes SX 6 adv, blue/white US, \$1,500 ono. Ph: 0408 883051; 0432 311295.

WESTERN AUSTRALIA

MOYES LITESPEED 3 adv, hardly used, top of the line Gallileo instruments plus harness, chute, etc. Owned by a legend (but I own it now). \$3,800 for the glider, \$1,500 for the instruments. Ph: Mole 08 93062171; 0417 941443.

Paragliders & Equipment

NEW SOUTH WALES

AS NEW: APCO Simba (L), Contour harness & stuff bag (10 hrs only). Alt/vario, spare Talon harness, Charly (2) reserve. All in EC. Moving to Darwin, \$2900 ono. Ph: Forrest 0412 273552; 02 94502674.

COMPLETE BEGINNER'S KIT: DHV 1 glider, rarely used altimeter, Icom radio, new Skyline harness, helmet & stuff bag, \$2,700. Ph: 0404 351230.

ADVANCE "PROGRESS" harness (latest version), navy blue, large, nearly new, suit XC/coastal pilot, \$600. Ph: 0407 932724; <ky.wittich@bigpond.com>.

HARNESS AIREA X-Side, very good cond, \$280. Ph: Stuart 02 64938542, <stuartbuck@dodo.com.au>.

TASMANIA

COMPLETE SETUP, suitable for the beginner: Nova Syntak (M) DHV 1-2, 10 hrs use, in perfect order. New Evo Harness (XL), with reserve. New Nova Lazer helmet (XL). New Uniden radio (UH-042+R). Used Digifly VL10 vario. \$5,000. Contact: <Erik.Fitzgibbon@dfat.gov.au>.

QUEENSLAND

APCO SIERRA 32 DHV 1-2, 90-110kg, 160 hrs, new lines (unopened) & porosity tested. Great beginner or coastal wing, VGC, \$1,300 ono. Ph: Pete 0418 724840.

MLR GPS, model SP 24XC "Free Flying Version" in perfect cond. New PG harness at secondhand price: Woody Valley Mix, one year old & never used. Email for photos & technical details <Santiago_aj@yahoo.com>. Ph: Santiago 07 38709119.

SOUTH AUSTRALIA

BACK PACK F2 Adventure engine with spare 4-blade propeller, \$2,600. Flight Design C5 Proto, 80-100kg, 80 hrs, \$200. Brauniger vario, 60 hrs, \$250. 2 x Quick folding bags, \$70 each. NEW Charlie reserve Evolution 2, 80-120kg, \$400. NEW 10 litre water ballast bag, \$40.

NEW paraglide bag, \$50 Ph: Franz Wallner 08 8398 0102; <wallner@chariot.net.au>.

FLIGHT DESIGN C5 Proto, 80-100kg, 80 hrs, \$200. 2 x quick folding bags, \$70 ea. NEW Charlie reserve Evolution 2, 80-120kg, \$400. NEW 10 litre water ballast bag, \$40. NEW paraglide bag, \$50. Ph: Franz Wallner 08 83980102; <wallner@chariot.net.au>.

Trikes & Equipment

NEW SOUTH WALES

OUTBACK 582 with Wizard wing, brand new, 0 hrs, still at Airborne factory. Oil injection, tundra tyres and after silencer included. Microair VHF radio with high quality Lynx headsets & helmets. Aircraft can be picked up at the Airborne factory or can be shipped worldwide. High quality new customised trailer incl. if required. Will knock \$3,000 off current replacement cost; that is a 3 grand saving on a brand new Outback! Call for details. Ph: Neville 0411 647655; <gone_walk@aboutshotmail.com>.

QUEENSLAND

AIRBORNE OUTBACK 582 T2-2240, with Wizard III wing, 250 hrs. Many extras incl. electric start, headsets, radio & GPS. Properly serviced & cared for, \$23,000. Airborne 912 trike (number 049) T2-6002 & wing, all white, brand new, 5 hrs only. Incl. ballistic parachute, Microair radio, 2 up trailer, \$59000. Ph: 0418 933339; <terryjohnmiller@yahoo.com.au>.

WESTERN AUSTRALIA

PORTABLE microlight hangar, great for travelling. Refer to [www.microlight.com.au/hangar.htm] for details. \$1,400 incl GST. Ph: Gordon 0419 942 645 or email <Gordon@microlight.com.au>.

MICROLIGHTS WANTED: Southwest Microlights in WA are looking for secondhand Airborne trikes, all models considered, good cond. or damaged. Ph: Brendan 08 97959092; 0408 949004; <brendan@southwestmicrolights.com>.

General

PARAGLIDER TESTING & REPAIRS

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