



Soaring AUSTRALIA

October 2004



**Flying to
Rottneet Island**



**African
Adventures**



**Celebrating
75 Years of Gliding**

October 2004

- | | | | |
|----|--|----|--|
| 1 | Sailplanes 1965-2000 | 27 | Call me insane if you want! |
| 2 | Flying the Eta with
Hans Werner Grosse | 28 | The Avifiber Canard 2FL |
| 4 | From the Adriatic
to the Alps | 30 | Here We Are Again Then |
| 8 | Celebrating 75 Years
of Gliding | 31 | Letters to the Editors |
| 10 | Love Affair With an Ugly Lady:
The Piper Pawnee
– Part One | 32 | The Grampians Finally Deliver
– A Memorable Wave Flight |
| 12 | Flying to Rottnest Island
– Doing it legally, doing
it safely | 33 | Book Review:
The Leading Edge |
| 16 | White Mountain Soaring:
Hilton Cup 2004 | 34 | Obituary Paul A Schweizer |
| 18 | What needs to be done... | 35 | New Zealand Initiative
to Help Australian Clubs |
| 19 | GFA News
GFA Badges & Certificates | 36 | HGFA General
Manager's Report |
| 20 | African Adventures | 37 | A New Wing? |
| 23 | HGFA News
HGFA Editor's Choice | 38 | Ein Rückblick (A look
back in time): Wally Wolf |
| 24 | Women's Pre-World
Gliding Championships
– Training Competition | 40 | Multicom & NAS 2b |
| | | 41 | The Turning Point |
| | | 42 | Soaring Calendar |
| | | 44 | Contact Addresses |
| | | 46 | Classifieds |

Chasing the rainbow at Sunnyside

Photo: Jiri Stipek

Soaring AUSTRALIA



Official publication of the Gliding Federation of Australia (GFA) and the Hang Gliding Federation of Australia (HGFA).

EDITORIAL CONTRIBUTIONS

Contributions for the combined magazine should be sent to the appropriate sub-editor:

GLIDING

Editorial contributions to: GFA sub-editor Anne Elliott, PO Box 189, Narramine NSW 2821, ph/fax: 02 6889 1229, email: <annell@hwy.com.au>.

HANG GLIDING, PARAGLIDING & MICROLIGHTS

Editorial contributions and display advertising bookings to: HGFA sub-editor Richard Lockhart, c/o Blackheath Post Office, Blackheath NSW 2785, ph: 0418 130354, email: <soaring.australia@hgfa.asn.au>.

NOTICE TO READERS AND CONTRIBUTORS

Contributions are always needed. Articles, photographs and illustrations are all welcome although the editors and the GFA and HGFA Board reserve the right to edit or delete contributions where necessary. Articles of unknown origin will not be published. All contributions should be accompanied by the contributor's name, address and membership number for verification purposes.

Photographs should be printed on glossy paper either in black and white or colour. Captions and photographer's name are needed.

DEADLINE FOR 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.

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.

Views expressed in this magazine are not necessarily those of the GFA, HGFA nor the editors'. They are strictly the views of the contributor. Any GFA officer quoting his title will be responsible for submitting an official article.

Copyright in this publication is vested in the GFA/HGFA. Copyright in articles and other contributions is vested in each of the authors in respect of their contribution.

ALL OTHER MATTERS, SUBSCRIPTIONS, CHANGES OF ADDRESS, ETC

The Gliding Federation of Australia ACN 008 560 263 & GFA Sales: 130 Wirraway Road, Essendon Airport VIC 3041, ph: 03 9379 7411, fax: 03 9379 5519, email: <AdminOfficer@gfa.org.au>, web: [www.gfa.org.au].

Hang Gliding Federation of Australia & HGFA Sales: PO Box 157, Hallidays Point NSW 2430, ph: 02 6559 2713, fax: 02 6559 3830, email: <office@hgfa.asn.au>, web: [www.hgfa.asn.au].



The Gliding Federation of Australia and the Hang Gliding Federation of Australia are members of the Fédération Aéronautique Internationale (FAI) through the Australian Sport Aviation Confederation (ASAC).

CREDITS

Cover: Flying the Eta with Hans Werner Grosse
Photo: Bernard Eckey
Design: Suzy Gneist
Printing: Pirion Printing, Canberra ACT
Mailing: Pirion Printing, Canberra ACT

CLASSIFIEDS AND ADVERTISING

Display advertising rates and specifications are available on request from GFA and HGFA advertising contacts. Advertisements may be submitted in high resolution (300dpi at 100% ad size) digital TIF or EPS formats. Please avoid sending low resolution JPG or GIF files, these do not achieve good printing results.

GLIDING

GFA advertising and classified bookings to: Angel Administration – Fiona Rowe, PO Box 1163, Penrith NSW 2751, ph: 0407 593192, fax: 02 4739 0185, email: <frowe@optusnet.com.au>. All GFA advertisements to be paid prior to publication. GFA classifieds are charged at \$16.50 for the first four lines, \$4.40 for every line thereafter plus GST.

HANG GLIDING, PARAGLIDING & MICROLIGHTS

HGFA advertising bookings to: Richard Lockhart, c/o Blackheath Post Office, Blackheath NSW 2785, ph: 0418 130 354, email: <soaring.australia@hgfa.asn.au> or fax: 02 6559 3830. HGFA member classifieds are free, rates apply to commercial advertisers. Classifieds to be delivered to the HGFA office for membership verification/payment by email, fax, post or phone (details see previous column).

The publisher cannot ensure that the information/advertisements contained in this publication comply with the Trade Practices Act 1974 (Cth), and the responsibility for such compliance must therefore be upon those who submitted the information/advertisements for publication. The publishers take no responsibility for any product advertised. The publishers reserve the right to refuse or withdraw any advertisement at their discretion. While every care is taken with material published, no liability is accepted for errors or delays in production.

FOR CONTRIBUTIONS TO HGFA WEBSITE USE EMAIL ADDRESS AS FOLLOWS:

CATEGORY	EMAIL ADDRESS	DESCRIPTION
Club News	clubnews@hgfa.asn.au	Information is forwarded to Soaring Australia and the maintainers of the HGFA website.
Competition News	compnews@hgfa.asn.au	Information is forwarded to Soaring Australia and the maintainers of the HGFA website.
Articles, advertisements	soaring.australia@hgfa.asn.au	Soaring Australia only content and other content

SAILPLANES 1965-2000

AN EXTRACT FROM THE NEW BOOK SAILPLANES 1965-2000 BY MARTIN SIMONS. THIS WORK IS THE THIRD VOLUME OF THE 'SAILPLANES' SERIES, PUBLISHED AS BEFORE BY EQIP IN GERMANY.

THE ETA

Many years ago, the English designer and manufacturer of sailplanes, Fred Slingsby, remarked, "*There is no substitute for span.*" This was true then and remains so. No substitute has been found for span. The Eta project began when six well-known sailplane pilots, Bruno Gantenbrink, Hans Werner Grosse, Jan Kruger, Hartmut Lodes, Umberto Manticato, and Erwin Muller met and decided to combine financial resources to develop the world's best cross-country sailplane. The Greek letter Eta symbolises efficiency so this was to be the name. After preliminary discussions the design bureau Flugtechnik & Leichtbau, headed by Dr Reiner Kickert in Braunschweig, was established. Studies began at once, in co-operation with the Institute of Design Aerodynamics of the DLR in Braunschweig.

Extensive computer work guided the general layout and size of the aircraft. It was assumed that much of the distance in cross-country flying would be covered by 'dolphin soaring', gliding straight at high speed most of the time, pulling up to fly slowly and gain height without circling in areas of weak lift. Circling would be done in selected large and strong thermals. To circle in weak thermals wastes time, but when a strong upcurrent is found, circling to climb rapidly remains important. The inter-thermal glide airspeed can be much greater and a higher average speed results. Dolphin soaring, then, is regarded as a means of crossing the distance between strong thermals as efficiently as possible.

By the end of 1997 the basic design was settled. The Eta was to be a two-seater with self-launching ability. New wing and tail profiles were designed by Horstmann & Quast, and wind tunnel tested. The wing span, greater than any previous sailplane, was to be 30.9 metres and the aspect ratio 51.33, figures never reached before. (Kronfeld's unsuccessful, wooden, Austria of 1931 had been 30m span, aspect ratio 25.7.1) The mean wing chord was about the same as that of many existing 15m sailplanes but with twice the lateral extension. In more recent times, only the SB-10 had approached this span, with the 29m wing tips fitted. The maximum take off mass would be about 920kg, wing loading variable between 37.4 and 51.3kg/m².

The wing was in six sections, with winglets. To improve aileron control, a slight 'chord skip' was introduced. This ensured that the wing tips would not stall in a turn, even though there was to be no wing twist or wash-out. The small penalty in vortex drag, caused by the departure from the ideal elliptical lift distribution, was considered unimportant and would be negligible at high airspeeds.

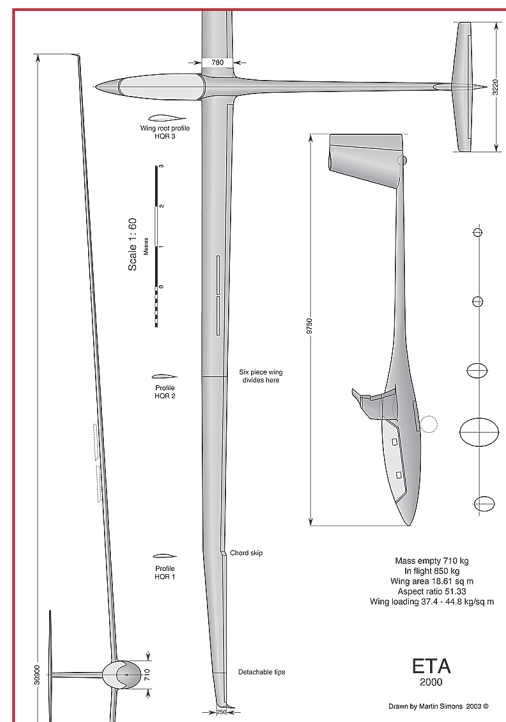
Construction was carried out by subcontractors, who kept in close touch throughout. The fuselage, wing spar flanges and final assembly were carried out by Walter Binder Flugmotorenbau, at Ostheim/Rhön. The wing was built at Schmidt & Schatz, of Rosswalden, and the controls by Wolf-Hirth GmbH at Kirchheim Teck.

The main spar flanges were made from pre-impregnated high tensile carbon fibres. For the wing skins, to increase torsional stiffness, high-modulus carbon fibre fabric laid diagonally would be necessary, despite the cost. The necessary milled moulds for wing, fuselage and tail were prepared. Segments of the proposed structure were made and tested for loading and fatigue life. By mid-1999, a complete wing segment, 11m long, was tested to destruction. Before failure it bent into the shape of a quarter circle.

In July 2000 the prototype was completed and submitted to ground vibration tests. The first flight was successfully carried out on 31 July at Cochstedt near Magdeburg. After some minor adjustments Hans Werner Grosse, a prime mover of the project, took delivery of the first Eta. He flew it immediately and expressed himself delighted. By late 2003 he had flown the Eta for a total more than 600 hours and had completed many cross-country flights, including two 1,000km triangles within Germany.

As to be expected with such an extraordinary venture, there have been difficulties. The prototype fuselage was heavier than expected. The entire tail and tail boom of Hans Werner Grosse's Eta have been replaced with a lighter, and somewhat smaller, unit from an ASW 22. This, at the time of writing, has been flown and has been found very satisfactory. Later models were made lighter.

Another Eta, however, has been unfortunate. While undergoing tests to satisfy the rigid rules of the German Airworthiness Authority, Walter Binder, as test pilot, attempted to force the Eta into a spin. It



would not spin, but rolled violently over, semi inverted, to enter a spiral dive. The speed built up very quickly, well beyond the calculated limit. Application of rudder to bring it out of the spiral caused the tail to twist off. Binder and his co-pilot were able to get out of the cockpit in time to use their parachutes. Clearly, to fly such an aircraft requires a great deal of care and extreme manoeuvres, including spins, and spiral dives, are not to be attempted.

A total of six of the Eta, including the one destroyed, had been built and flown by the time of publication. One was flown, by a Polish pilot, in the 2003 World Open Class Championships at Leszno. It placed second. The cost being so great, currently in the region of Eu 800,000, it seems unlikely that the Eta will ever be produced in large numbers or that it will become a common sight at ordinary gliding clubs. It represents a pinnacle of achievement reached at the end of the twentieth century. It remains to be seen what the outcome will be. New absolute world records seem very likely. If the Eta proves in practice to be outstandingly good in competitions, it may in the long run not help the 'Open Class' sailplane. If only a few wealthy pilots can afford to compete at this level, the number of entries is likely to be small.



Flying the Eta with Hans Werner Grosse

Bernard Eckey

BEFORE DEPARTING FOR GERMANY I THOUGHT IT MIGHT BE A GOOD IDEA TO SEND AN EMAIL TO HANS WERNER GROSSE TO ASK HIM WHETHER HE WOULD BE INTERESTED IN HAVING A LOOK AT THE MANUSCRIPT OF MY NEW BOOK ON ADVANCED SOARING. THE PROMPT REPLY WAS SHORT AND TO THE POINT. "YES, I WOULD LIKE TO SEE THAT. REGARDS HWG"

Within a day or so of my arrival in Germany I rang Hans Werner. Before the conversation was over I had an invitation for a back seat ride in his pride and joy – the new Open Class Eta glider. "Just contact me again when you think the weather is good enough for a reasonable cross-country flight" he said and quickly added: "It's up to you. I can show you a bit of northern Germany but if you prefer we could go for a trip around Berlin." I was delighted. My annual trip to Germany was off to a very good start.

Due to some other commitments and a spell of unsuitable weather some weeks went by which prompted me to give Hans Werner a quick courtesy call. "The present rotten weather is due to a large upper level trough" he said "but the weekend is looking promising. Why don't you give me another call on Friday morning? We can then decide whether we go flying on Saturday or Sunday."

My alarm clock went off at 5:00am. During the four-hour trip to the northern tip of Germany cloud base came down steadily and the occasional light drizzle did nothing to brighten my spirits. Hans Werner, now 82 years of age, enjoys remarkable physical and mental health. He recognised my concern and said: "Don't worry; I just obtained the latest weather information. The clouds will break up by early afternoon. In the meantime we can go for a quick tour of the historic city of Lübeck and drop in at my place to study the latest satellite images."

The rest of the morning passed quickly while we admired some 500-year-old buildings in the city of Lübeck. With some pride Hans Werner showed me a medieval building which he was able to purchase after it sustained severe fire damage. Due to its location right

next to his retail business he decided to save it from the bulldozer and restore it to its former glory. Although this proved rather costly, finding some 500-year old murals under several layers of paint was an unexpected bonus.

I was introduced to his charming wife Karin and learned over lunch that Hans Werner built his business from next to nothing after returning from active air force service after the war. Fulfilling his ambitions in aviation certainly reflects decades of dedication not only to gliding but even more so to his business.

Not the slightest weather improvements were evident while we drove back to the airport. We inspected the club fleet and I was amazed to learn that the club owns more two-seaters than single-seaters: two ASK21 trainers, two Duo Discus and – believe it or not – an ASH25.

We walked across to Hans Werner's private hangar where he pointed out the numerous extensions over the years. Originally built for his ASW12 the hangar needed the first extension for the ASW 17 and another one for the ASW22/ASH25. Another five metres has now been added on for his latest acquisition – the 31m wingspan ETA. (Please refer to Martin Simons description of the aircraft from his newly-released book) It is the prototype and already features a series of modifications, which includes the fitting of taller winglets and an ASH25 tail boom with fin and tail plane. No wonder the fuselage looks remarkably similar to an ASH25 although the extremely high aspect ratio wings give the aircraft an unmistakable appearance. After a number of changes to the control system Hans Werner is now pleased with the glider and its handling characteristics.

At around 3:00pm vague signs of convection became visible in the distance but despite of the fact that it was mid-summer in Germany the thermometer was struggling to reach 15°C. We lined up parallel to the main runway, climbed into the glider and started the engine soon after a Ryanair Boeing 737 touched down. Our liquid cooled 65hp engine had no problem with the 920kg glider and provided a climb rate of just over 2m/s. To my surprise Hans Werner turned the engine off at only 1,200ft agl while heading for some darker spots under a rather solid cloud cover. The long wings bent beautifully under the heavy load and provided a remarkably smooth ride, but the cold off shore winds were continuously feeding moist air into the region. Not even a hint of thermal activity was evident and therefore the engine came out again. This time it was not retracted until we reached cloud base at approximately 2,700ft. The following glide at best L/D brought us to the edge of the thick cloud band and small patches of sunlit ground.

The first thermal of the day never averaged more than two knots but Hans Werner took it to cloud base while making radio contact with other glider pilots operating in better conditions further south. Well south of the city of Hamburg we joined up with an 18m glider and decided on a turn point towards the Netherlands. Large pools of water on the ground reminded us of recent heavy rainfalls but Hans Werner rejected a number of average thermals and continued to cruise under a weak cloud street until we were down to 900ft. Only then he accepted a broken thermal and worked it all the way to cloud base. Back at 4,000ft he admitted that it might be a better tactic to stay a bit higher on such a tricky day and dropped a hint that it would soon be my turn to fly the Eta. After rounding our turnpoint he found the first four-knot thermal of the day and handed control to me at the top of the climb.

With a tailwind component and steadily improving conditions I had surprisingly little problem remaining within a few hundred feet of cloudbase. With Hans Werner in charge of navigation I was soon beginning to enjoy myself and found the Eta just as pleasant to fly as my ASH25. Even at rather steep angles of bank the glider remains quite docile despite its very high dry wing loading of 52kg/m². Several attempts to provoke it into an incipient spin with a generous dose of back stick proved unsuccessful. In my opinion the Eta does not demand special piloting skills.

After almost three hours of flying the wing leading edge turned rather black. With the bug wipers left behind in the hangar we had little choice but to fly the big bird home with a performance well below the advertised 70:1. Life can sometimes be very tough indeed!

On final glide it became apparent that we had managed to squeeze the absolute maximum out of the day. At around 7:00pm thermals became too weak and narrow and only gliders with just over half our wing loading were still able to climb. Hans Werner got back on the controls and although he was trying his hardest he could only maintain 1,200ft, just south of the airport. He commented that his prototype machine turned out heavier than expected and he believes that after retrofitting the more refined control system of Eta No. 2 and 3 the rate of roll will be further improved.

A Boeing 737 was taxiing for take off. Trying not to inconvenience the crew Hans Werner elected to extend the engine for a climb back to 3,000ft. This gave us the chance of an extensive airborne inspection of the city of Lübeck. My aerial photos of this beautiful historic city will always remind me of a memorable flight with a true gentleman and great soaring pilot.


What did I learn? Well, my first lesson started even before getting anywhere near the glider. Hans Werner's thorough analysis of humidity, temperature and various gliding forecasts (including a half-hourly evaluation of satellite images) enabled him to predict the time-frame for thermal activity with remarkable accuracy. This allowed

October 2004



us to complete a 300km flight on a day when the far majority of glider pilots down under wouldn't even open the hangar doors.

Hans Werner himself can best pass on the second lesson. His motto is: *"If in doubt climb straight ahead."* This was religiously implemented throughout the flight. A thermal is taken only as a last resort. He is a true master of extracting the energy in cruise by intercepting as many thermals as possible. No doubt, this is one of the major reasons for setting as many as 50 world gliding records throughout his long career.

The third lesson came courtesy of a telephone conversation the next day. Hans Werner reported that we were, on that day, the only crew who had completed a cross-country flight in this part of Germany. We had flown almost 300km in four hours. When I asked him what suggestions he can make in regards to my flying, the gentleman emerged once more. Only after some generally encouraging remarks and positive feedback on my flying he suggested that a little less elevator input in cruise would enable the glider to extract the energy more efficiently. Thank you Hans Werner, I promise to work on that one. 



WinPilot

Cables & Connection Kits
Mountain High Oxygen Systems
Garmin, Emtac, Transplant GPS
PDA Mounts

www.craggyaero.com

FROM THE ADRIATIC TO THE ALPS

Mike Annear

I COULD TELL LOOKING THROUGH THE PLANE CABIN WINDOW APPROACHING ZÜRICH AIRPORT THAT THE WEATHER WASN'T GOING TO BE ANY BETTER HERE THAN THE REST OF EUROPE WE HAD JUST FLOWN OVER ON THE WAY FROM SINGAPORE. IT WAS PISSING DOWN.

I got my flying gear together, went through customs and met Marc in the public area. "You're not quite so lucky with the weather this time..." Marc pointed out. "Looks like it's going to be pretty bad for at least a week."

Marc Schmidlin is a seasoned Swiss pilot. I had first flown with Marc in Western Australia in 1994, and then again on my first trip to Switzerland in 1995. The weather on that first overseas trip had been fantastic, and again two years ago when we had another cranking season flying in Switzerland and France.

It wasn't to be the case this year.

Later that day we picked up West Aussie pilot Dave Humphrey from the airport and went back to Marc's place in Winterthur to

discuss the situation over a beer and a large map of Europe.

Marc, Dave and I have been on a heap of flying trips together, to the Nullabor, Esperance, Albany, Margaret River, inland wheatbelt WA, the Murchison, Carnarvon and Pilbara regions of north-west Australia. We were now well and truly in Marc's paragliding domain. He had already been watching the weather for a few days, and explained the complexities of Alpine forecasting to us "flatlanders". There was a "swamp" condition settling over Switzerland... a slow-moving, rain-saturated low pressure system.

We decided to make a run for it... Head as far south as we could go to escape the rapidly worsening weather... Marc poked his finger at the map – Croatia! he exclaimed.

The next day we crammed three paragliders and a ton of camping gear into Marc's little Hyundai and started off through the rain towards Austria.

We made it as far as Italy that day and found a camping ground for the evening. The next day we slipped through the tip of Slovenia into Croatia – a three country driving day – very strange for an ex-West Aussie where it takes a full day just to drive to the SA border.

It was mid-afternoon when we were lucky enough to spot the English word "Paragliding" on a small sign on the side of road... and then spot two paragliders high up, way off in the distance. After a few directions from a local, we eventually found the landing area and got to speak to a tandem pilot and his passenger. They showed us on a map how to get up to the take-off, but the wind was well off by the time we drove up the mountain... foiled by the weather again!

We decided not to hang around. Instead we followed the local pilots' instructions of how to get to a town called "Omisi", south



Tandem glider climbing out over Kobarid, Slovenia

of the city of Split on the Croatian coast. We found a camping area on the beach that evening which, in the morning light of the next day, proved to be possibly the best para-waiting spot I have ever seen. Warm clear ocean water and matching scenery. The port town of Omisi itself is at the base of a 600m high range, the last couple of hundred sheer cliff, featuring a spectacular castle.

We found a small adventure sports shop, run by a local paragliding instructor, Bruno, and his Aussie girlfriend, Tania. They were extremely helpful and pointed out how to get up to the take-off, halfway up the cliff.

Walking back to get the car, we discovered that the tiny town also has the best "Valet Parking" in Croatia... when our car-plus-gear disappeared much to our horror that afternoon. It turned out to be in a police lot about 150m from where we left it, and the local police were happy to accept what seems to be a common form of "donation to the Croatian economy".



Paying the police... "Omisi" on the Croatian coast

Again, the weather wasn't playing ball, so we retired for the afternoon and tried again the next day.

Background: Marc Schmidlin gets high over Kobarid in Slovenia



Mike Annear flying above Omisi on the Croatian coast



Dave Humphrey setting up above the town of Omis on the Croatian coast

It was strong! Dave managed to pull off a good launch and headed skyward. By the time I got a few cameras organised and set up it was too strong to get a safe launch, so Marc and I sat it out at the owner's house, which also doubled as a clubhouse and pub. Some local pilots turned up, and after a while we could all launch in the still pretty breezy conditions. "Silly lift" had come in... a house-brick could easily stay up without circling.

The scenery was breathtaking, the mountains, castle, and village of Omis all lit up by the mid-afternoon Adriatic sun.

Landing was a bit less romantic; you have to make a very clear decision whether you will cross the bay and try for the beach (a bit crowded, rotoed and small) or keep going and cross the river as well (with less rotor) to get to the larger official landing area.

Dave and Marc opted for the "scenic route" on the beach. I landed (with a cold sweat) on the upwind side of the river after flying through the severe sink we had been warned about. Dave also managed to land near a bikini-clad journalist, complete with tape recorder, outside a beach bar on the end of a sand spit.

By the time I had got a lift back through town (with a local pilot) to the south side of the river, Dave had also made friends with the local publican, who, after organising a lift for Marc to retrieve his car, shared a beer with us before donning a life jacket and leaving for his home on a jet ski... a hard life in Croatia.

The next day we headed down to Makarska, and drove up to the 1,700m peak. The road barriers still showed the scars of the recent war in the country, pocked by dozens of bullet holes. There are also still many unexploded land mines in Croatia; most are marked by signs and streamers, but it still pays to be very careful off the beaten track.

Marc's daily internet research had highlighted a tiny island called Vis in the middle

of the Adriatic. We found the phone number for the local flying contact, and arrived in Split just in time to catch the car ferry for the two hour voyage. Arriving at the island we learnt that the local pilot/tour operator, Pino, had a shop on the other end of the island in the beautiful fishing village of Komiza.

After a 15-minute drive we were in the middle of the village and Pino rang around and organised some accommodation for us in a converted fishing depot on the ocean-front. It was brilliant. We spent the next day checking out the island, but unfortunately the thunderstorm that rolled in put an end to our plans of doing any flying.

Our collective flying experience had formed a general "plan" that if the weather was crap for flying, we wouldn't hang around waiting for it to get better, we would just move on. This turned out to be very successful, supported by Marc's uncanny weather prediction skills. "The plan" now called for us to head back to the mainland, to a place called Tribali, where we managed to get another great day cruising around at cloudbase. It's a big, long ridge site, about five kilometres inland facing into the afternoon sun; the thermals were fantastic in the light seabreeze.



Photos: Marc Schmidlin, Dave Humphrey, Mike Annear



Again, the local pilots were fantastic, and we were relieved to hear that the pilot of a glider that Dave and I had spotted halfway down the cliff face was okay, although he couldn't recall what had caused his crash. I'd had a few good sized tucks up at cloudbase, so it might have been pretty messy if you were lower down close to the rock wall.

Back in the car... and up to Kobarid in north-west Slovenia, where we had three days of outstanding thermalling. One German pilot was a bit too keen, and decided not to wait for the cloud to clear on take-off. He launched straight into it and disappeared within seconds in the grey soup. A few minutes later we could hear the sound of glider lines swishing through the air, going over our heads and behind the ridge. The next day we caught up with "Blowback Boy" – our parataxi driver! – looking very sheepish and feeling lucky he had a safe landing in the valley behind the ridge.

Kobarid is really tuned to paragliding. For about 10 bucks one of three parataxis will pick you up at your hotel and drive you one hour up to the take off, then pick you up wherever you land, and take you back to your hotel. The "Local Knowledge" from some



Flugschule Appenzell instructor Adi launching a tandem in very strong conditions at Hoher Kasten, overlooking Appenzell, Switzerland

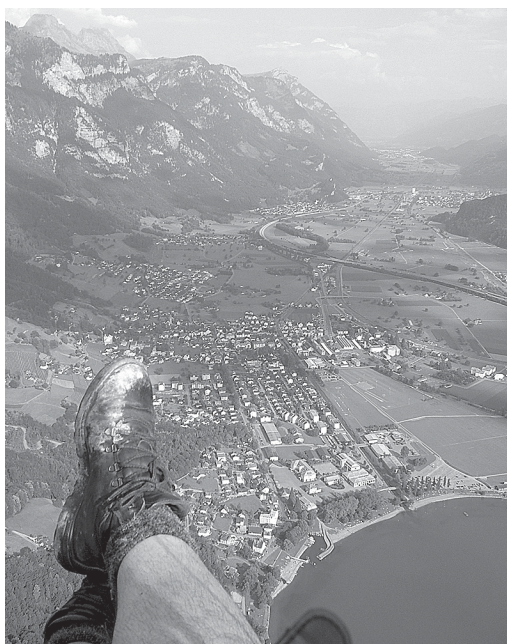
Left: Unknown pilot chucking it around over Walenstadt in Switzerland



Mike Annear taking off from La Saleve in France, overlooking Geneva in Switzerland



Mike Annear flying from La Saleve in France



Mike Annear flying over Walenstadt in Switzerland

parataxi drivers is good, but as demonstrated by “Blowback Boy”, always use your own “warning bell” filter when taking advice.

On the third day Dave took the more unusual option of flying into Italy, landing in someone’s yard, then finding a Canadian woman who organised a lift with a German pilot back to Kobarid.

Westerndorf, Austria, was Marc’s next prediction. It’s only a tiny training hill, but was on the way to Walenstaad in Switzerland where Marc and Dave were booked in for a SIV course. We stayed in a guest house that evening, again a good choice as another huge thunderstorm rolled through.

The next day was ruined by Föhn (south-east wind) so we spent the day looking at castles and had a scenic sleddie the following day.

A quick drive through Liechtenstein and we were back in Marc’s stomping ground in Switzerland. We had a nice evening flight, with background music provided by the Swiss Army mortars on the live firing range only 100m behind the take-off.

We pitched camp at the end of a large lake near the town of Walenstaad. The evening wasn’t quite so comfortable in the tents as another huge thunderstorm roared up the lake. It was a long night, and we must have all looked pretty rough when we turned up at a local pub for the SIV course morning theory session.

Dave and Marc were flying the full course, but I learnt a lot from just listening to Marc’s English translations for Dave. Adi, the instructor from “Flugschule Appenzell”, ran Dave and Marc through the routines they were going to fly that day, and answered any of Dave’s questions in English.

We all went up to the take-off, which was by now covered with soldiers again, and the guys went through their paces flying off over the lake and doing spins, etc. I had a calmer afternoon and just did some scenic flying on the mountain range that I had wanted to fly since working in the area last year.

We were still dogged by crappy weather and decided to go and visit Dave’s friend, Hedy, and fly her local mountain, Riggi, near Schwyz. Hedy had a bad crash a few months ago in the US and was still recovering from some nasty spinal injuries.

We got a fly in at Riggi. I personally had to get over my fear of Alpinig off very short take-offs in no wind, but the flight was worth it.

Hedy’s family put on a BBQ for us, and we camped out in the hayshed after drinking some pretty fiery clear homebrew.

Marc’s forecasting kicked in again, and we headed down to France, arriving at one of my favourite flying places, La Saleve over-

looking Geneva. We had a great flight in the morning, then headed back to Switzerland and another of my favourite sites, near Appenzell.



The Rega Rescue helicopter lands outside our Cafe in Appenzell in Switzerland

I’d really been hoping Dave would get a good flight there, and we were granted a great day, silly lift until late in the evening. Marc and I had had enough and went off to find a restaurant, while Dave jumped back in the cable car and headed back up the mountain for “just one more flight”, later managing to find, and land at, the restaurant where we were having dinner just before dark.

Dave’s dinner was disturbed a few minutes later by the REGA (Swiss Rescue) chopper landing in front of the restaurant and then flying off to rescue a paraglider pilot snagged in the cable car lines. The cables can be really hard to spot, especially late in the evening... ALWAYS ask about cables if you are flying in Switzerland! The farmers often put up “temporary” cables to transport farm equipment, etc, so ask the local pilots if any new cables have gone up recently.

Day two of the SIV course was next, so we were back at the pub in Walenstaad the next morning, running through the theory of the day’s manoeuvres. Feeling very “flown out” I took the very easy option of filming Dave and Marc’s SIV manoeuvres, stalls and SATs with instructor Adi, from the shores of the lake.

This trip taught me a hell of a lot. I had only ever seen very good summers in Europe, including working in England last year during their “heatwave”. I had no idea European weather is so dynamic. As Marc explained Föhn, “*this weather phenomenon comes in two versions: Föhn (wind from the south, bad weather on the southern Alps) and Nordföhn (the same, but wind from the north)*”. Whatever direction, Föhn can and does kill paraglider pilots.

Then there’s Bise, a cool and usually dry north-east wind in Switzerland. It gives good flying at Alpstein (Ebenalp, Appenzell) but makes it very rough in the main Alps.



Mike Annear taking off near Walenstadt in Switzerland



Mike Annear flying above Eben Alp near Appenzell

Maestral is the Croatian answer to WA's "Fremantle Doctor". This north-westerly seabreeze should not be confused with Mistral, which blows in France and is a true nightmare if one tries to fly the south coast of France.

Other Croatian winds are Bura (a gusty north-east wind, often quite strong, making flying in Croatia impossible) and Jugo (blows from the south-east). Because this weather pattern is often associated with humid air and thunderstorms it's more suitable for kite surfing than flying.

I had heard the term Föhn before, but not Maestral, Mistral, Jugo, Bise, and Bura... all weather conditions you should know about before you hit the European slopes. Find yourself a good guide! Like Marc (or Eric Metrot from WA if you are going to France) – not just a package deal.

All in all, it was a great trip. We met some fantastic pilots from some well organised and friendly clubs, and flew fantastic sites even the parawaiting was awesome! Thanks Dave and Marc – another brilliant flying trip!



Mike Annear flying from Tribali in Croatia

October 2004

Fly from Forster (NSW)

Access 20 sites within approximately one hour's drive.

BEACH HOUSE AVAILABLE FOR RENT

Overlooking beautiful One Mile Beach.
Clean, bright, colourful, with all mod cons.
Sleeps six people, with huge yard and plenty of parking.

SPECIAL PRICE for pilots and families
at \$100 per night, minimum of four nights,
plus \$70 cleaning fee. (Normally rented
to holidaymakers for \$1,400 per week.)

For bookings and info contact [www.jklrealestate.com]

Ph: 02 6554 8717

Local pilot available as guide, contact:
Chris Rodgers (02 6555 5178) for maps,
video production, hazard awareness and
access roads. (Fee applies)

Tandems available from High Adventure,
one hour's drive away, ph: 0419 844 961.



Celebrating 75 Years of Gliding

Spiro Mallia – President, Geelong Gliding Club

THERE WE WERE ON THE BELMONT COMMON IN
GEELONG, MEMBERS OF THE FIRST GLIDING CLUB IN

AUSTRALIA, RIGGING A PRIMARY GLIDER FOR THE FIRST TIME AND WONDERING WHAT IT WOULD BE
LIKE TO CONTROL IT IN A “GROUND SLIDE”, ONE OF THE EARLY TRAINING EXERCISES.

As the wet grass squelched underfoot and the cold wind bit, we were wondering even more why anyone would have chosen to start a gliding club in winter. But that happened in 1929 when slope soaring was the only real possibility for most pilots and this was 18 July 2004, and we were there to



Alan Patching (VMFG), John Buchanan (GGC Hon Life Member), Greg Jackson



Lloyd Bungey, Ian Davies, daughter Sarah and partner Veronica Graf



Ian Grant (VSA President), Bob Hall (GFA President), Henk Meertens (GFA Executive Officer) Photos: Helen Miller

generate publicity for the 75th anniversary of gliding as an organised sport by making a symbolic return to Geelong, coincidentally on the last remaining truly “common” patch of ground that had been used as an aerodrome, near the location of the club’s hangar of the late 1950s.

As well as the primary, which had been kindly loaned by the Australian Gliding Museum, we rigged our DG300 for static display and set up an information stand. There was a flyover by gliders on tow in the early afternoon, which originated from nearby Grovedale and our base in Bacchus Marsh, and also involved members of the Victorian Motorless Flight Group.

Leading was the 67-year-old Golden Eagle, the oldest airworthy glider in Australia, piloted by Alan Patching, towed from Grovedale by an Auster flown by its owner and Geelong member Jeff McDonald. Next, from Bacchus Marsh, 45km away, a Mark IV Kookaburra GNZ previously owned by Geelong Gliding Club during 1964 to ’73 crewed by one of its present owners Caleb White of VMFG and GGC instructor Wayne Mackley, was towed by our Super Cub piloted by Frank Williams, and the ultra-modern VMFG Duo Discus with John Fawcett and Ian Robinson aboard was towed by our Pawnee, flown by Ken McAnally.

Publicity was gained through Geelong Advertiser stories run before and after the event, and an interview of Alan Patching by the ABC’s Warwick Hadfield subsequently aired on the Radio National program “The Sports Factor”. Thanks are due to the GFA Executive for supporting the event.

With that event over, attention was refocused on the club’s celebrations, which were held at Bacchus Marsh on 7 August. An extensive display was mounted in one of the hangars covering the club’s history. This

consisted of photographs, documents, memorabilia (including the rudder from the club’s original 1929 Zoegling-type primary glider), and moving images transferred to DVD. Some glider types previously owned by the club (Kingfisher, Kookaburra, Boomerang, Libelle) were also on display and/or flown. Launching was provided by the club’s “Hercules” winch as well as aerotow, and some members past and present took advantage of the former, either in the club’s ASK13 or in the Kooka GNZ, again kindly made available by Caleb White.

A feature of the day was the attendance of many past members from diverse parts of Victoria, New South Wales and Queensland, but the highlight, in terms of arrivals, was that of former club member Flight Lieutenant Chris Tulk piloting an RAAF Roulette PC9. Chris, recently one of the



As it used to be – Chris Tulk with GGC Instructor Ian Hardy Photo: Jarek Mosiejewski



Caleb White, Wayne Mackley and tug pilot Frank Williams with Kookaburra GNZ Photo: Alan Dean



Still goes up well! – GNZ in full climb at Bacchus Marsh on 7 August

Photo: Spiro Mallia

Roulettes, now trains instructors, and the club is grateful for the special consideration accorded to it by the Royal Australian Air Force in granting permission for his presence at the celebrations.

The celebrations were completed with a dinner in the Bacchus Marsh Shire Hall which was enjoyed by around 165 people. Bob Hall, GFA President, Henk Meertens, Executive Officer, Ian Grant, VSA President, John Fawcett and Peter Buskens, respectively Presidents of co-resident Bacchus Marsh gliding clubs VMFG and Beaufort were there, as were many friends from other gliding clubs. Distinguished club members present included five of the 12 people whose outstanding leadership and service has been recognised with Honorary Life Membership – David Rees, Doug Vanstan, Laurie Harrison, John Buchanan and John Ashford, Australian representatives at world gliding competitions – Rolf Buelter and Terry Cubley, winners at national competitions – Haidyn and Russell Dunn, and Terry

Cubley, and holders of GFA and club offices. It was a great night!

The Geelong Gliding Club is proud of its origins as the first such club in Australia, having been founded by Percy Pratt, who achieved many firsts in Australian gliding. After initial success in the 1930s, there was a period of abeyance until the club was revived in 1954 through the initiative of a small group led by Bob Muller, then also GFA secretary. It flew at the Belmont Common and Little River, but began operating at Bacchus Marsh as early as 1961.

By 1965 it, and the two other clubs there, now had built a shared hangar, followed by a shared clubhouse in 1972, various workshops, and another much larger shared hangar in 1985. The club today is well placed to meet the needs of its 80 flying members, with a fleet of five single-seat and three two-seat gliders, and two tow planes. The success of the club is testimony to the voluntary effort and financial support of past and present members.



Spiro Mallia and John Buchanan connect Primary elevator controls, Belmont Common

Photo: Bill Johnston



Getting a bite to eat. Laurie Harrison (Hon Life Member), Kevin McGowan, Bernie Gittins (1960s secretary), David Rees (Hon Life Member)
Photo: Jarek Mosiejewski



Jeff McDonald phoning in at Grovedale

Photo: Ian Patching



Ross Birch balances the Primary in the breeze, Belmont Common

Photo: Greg O'Sullivan



Maurice Little (Grampians Soaring Club), Peter Carr (Secretary 1954 and later President)

Photo: Helen Miller



Rowan Beggs-French rides high as Peter Cockroft (Swan Hill GC), Mark Simpson, Chris Tulk, Rolf Buelter, Greg O'Sullivan put away the PC9
Photo: Jarek Mosiejewski

Love Affair With an Ugly Lady: THE PIPER PAWNEE – PART ONE



David Francis
(Canberra Gliding Club)

(Those of us who use aerotow to get our gliders airborne sometimes take for granted our long-suffering 'tuggies', and rarely hear the story from the front end of the tow rope. It's worth remembering that they, too, are required to have gliding experience, giving them a good perspective on the whole operation. David's article starts with an anatomy of one of the more commonly used tow planes – Sub-ed.)

Behind the firewall is a compartment housing the battery and its regulator, and above it sits a fibreglass 143-litre fuel tank. It sits high, the fuel being gravity fed to the carburettor. No auxiliary fuel pump is needed. The fuel capacity is small to maximise the cargo weight, which is a disadvantage for ferry flights. The tank has interesting safety features. It is designed such that, in the event of a crash, the fuselage will crumple, and the tank will break loose and be flung forward, intact. Fuel tank exit lines have cut-off valves to prevent fuel spillage.

The fuel gauge is external. A red marker sitting on a float is visible in an inverted plastic bowl which sits on the top fuselage skin in direct view from the cockpit.

Aft of the battery/fuel bay sits the cargo hopper. In our tug, the hopper has been removed to save weight. The top loading hopper hatch is handy for getting access to the back of the instrument panel and for topping up the hydraulic reservoirs on the brake pedals.

The cockpit sits high to provide good visibility, and is wide and deep. The instrument panel is topped by an aluminium roll to absorb the pilots head in the event of an accident. A cable-cutting blade runs up the centre of windshield. Even though it sits right in the centre of the pilot's vision, I have never ever actually seen it in my field of view when airborne. The human eye is a wonderfully adaptive tool, and the brain helps by filtering out the irrelevant.

Entry is via a bottom-hinged transparent window/hatch, of which there is one on each side of the cockpit. The hatches should be kept closed during flight, but if one comes open inadvertently there is no effect on aircraft handling. As the aircraft approaches the stall, the open hatch often floats upwards and acts as a very obvious stall warning. The 'canopy'

Our Pawnee is an old friend. I have been flying her for just on 20 years as a glider tug. This means hundreds, if not thousands, of six-minute flights. It's a tough life – long climbs at full power and low speed, a rapid descent, landing and off again. We fly all year, from hot, dry weather to dodging snow showers in the Monaro district, and this old plane does it reliably and well. Here is a picture of what this work-horse is like.

The Pawnee is a Piper design from the early '60s. The Type Certificate is now held by Latinoamericana De Aviacion SA in Argentina, who have held it since 1998. They have been producing Pawnees under licence for many years.

THE PLANE

The Pawnee is an agricultural aircraft, designed to spread fertiliser or, more commonly, spray chemicals on crops. Like any other agricultural device it is simple, practical – and dead ugly.

Through reverse engineering, some design aims can be deduced. The prime one is to uplift a heavy load, transport it a short distance, and safely and accurately spread it on a paddock. Implicit is an ability to minimise transit times by being able to use unimproved paddock airstrips close to the destination crop. A taildragger configuration was

chosen to cope with rough strips; and finally, operations in agricultural areas imply a simple design that is easy to maintain.

There are various versions of the Pawnee, with engines in the range of 150 to 260hp. This article concentrates on the 235hp version.

Controllability and stability have been tailored to crop dusting, with its mix of low runs across the crop and steep-procedure turn to reverse the run. As a result, the plane is very stable in pitch to avoid altitude errors across the crop, and has powerful ailerons with a marginal roll stability to facilitate quick turns at the end of each run.

THE FUSELAGE

To carry a big load, the designer started with a big engine: in our case, a Lycoming 0540 (referring to a total swept volume of 540 cubic inches in six cylinders – that's 1.5 litres per cylinder!) of 235hp. For simplicity, it turns a fixed-pitch aluminium, two-bladed prop. The nose cowl is fibreglass, and blunt – aerodynamic efficiency was clearly not a design priority! The cooling air intakes are oversized, creating excess cooling drag. The cowl aft of the nose bowl is aluminium. The top cowls are hinged and easily opened for good access to the cylinders and top accessories. The bottom cowl is a single piece and can be removed with a screwdriver, lots of time, and patience.

is a steel tube frame with perspex windscreen and side hatches, perspex rear quarter windows, and aluminium roof and back. Visibility is excellent in every direction but up.

The instrument panel is a minimal VFR affair with a single line of flight instruments across the panel. The engine instruments are in a low sub-panel that looks like an afterthought, and probably was. The radios are suspended under the panel, and rock, roll and shake with aircraft motion. Like any plane built for real pilots, there is a control stick in between the pilot's legs for the right hand, and a throttle quadrant for the left hand.

The configuration of (moving aft) fuel tank, hopper, then cockpit is designed to place the cargo hopper on the centre of gravity. This means that there is no trim change as the cargo is dropped over the paddock at low level. With the fuel tank forward of the centre of gravity, fuel consumption necessitates a gradual nose-up trim change throughout the flight. This is only noticeable on cross-country ferry flights.

The fuselage is steel framed, with aluminium panels from the nose cowl aft to the leading edge of the cockpit, while the aft fuselage is fabric-covered. Just about all the aluminium side panels are removable for maintenance access. Most are secured by a motley collection of different types of quick-release fasteners. I suspect that as each fastener failed, every maintainer replaced it with either his personal preference of fastener, or (more likely) the first fastener he could find in the bin. Commonality does not seem to be a factor of interest.

The undercarriage is a steel-tube frame affair, with a combination of shock absorbers and bungee cords to provide suspension. If the bungees fail, the main undercarriage leg will sag into wire safety cables that prevent the legs retracting outwards up into the wing with attendant damage. A failed bungee results in a plane that taxis with a drunken lean towards the failed leg.

WINGS AND TAIL

The tail-feathers are fabric-covered and braced by streamlined wires. The fabric-covered wings are aluminium-framed with aluminium leading edges. The wing tips are braced with a wooden frame designed to take wingtip knocks and be easily replaced. The struts run from the top of the hopper down to the top of the wing. These struts can collect water, and are therefore subject to 500-hourly X-ray inspections to keep track of any corrosion at the low point where strut meets wing. The ailerons are frise-type and cover about two thirds of the wing span. These provide a high degree of roll control-

lability. The flaps are short-span Fowler type, operated by a mechanical linkage from a handle at the left side of the pilot seat. Some Pawnees have wing tanks, but not this one.

The entire airframe is designed for maintainability in remote locations around the world. If the steel-tube fuselage frame bends, breaks or corrodes, you simply cut it out and weld a sleeve on. Skin repairs require nothing more sophisticated than a needle and thread. This basic pre-war technology is ideal for primitive areas like the Monaro!

FLYING THE UGLY ONE

Let's go and do some towing. The pre-flight inspection is straightforward. The main things to look for are fabric tears on the wing undersurfaces and rear fuselage, any loose bits in the undercarriage and brakes, and any looseness in control surfaces and flaps. Flaps are the most vulnerable surfaces, being quite low when extended and prone to cracking if subjected to overspeed.

The single fuel drain-point is low on the firewall and accessed by putting your arm up the cowl exit. As you cannot see it you find it by feel, and your arm is certain to collect a nice smear of black oil as a bonus.

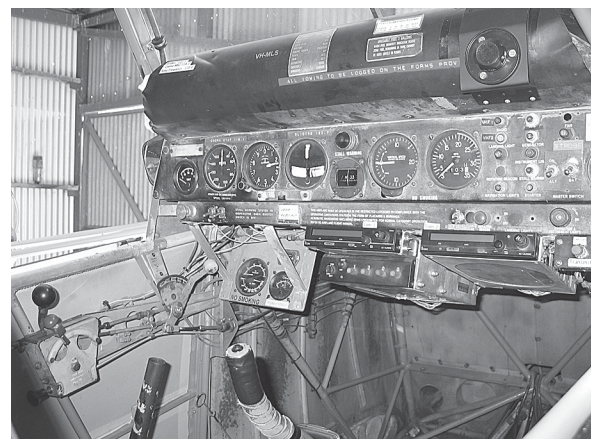
THE OFFICE

Climbing into the cockpit is reasonably easy. Open the hatch, push the stick away, feed one leg in, straddle the sill, point your rear-end at the seat and let gravity take over. You will arrive in an untidy heap with one foot outside. Retrieve it and sit up.


Mr Piper, I am sure, employed a gorilla to design the seating arrangements of this plane. The seat is an uncomfortable upright chair. The stick is about 75cm long and feels like a sub-calibre telephone pole. Being long means that a lot of hand movement provides a small control input. The rudder pedals are situated along the aircraft sides, which are wide apart, so the pilot's feet are outboard of the hips. Sitting there with legs wide is reminiscent of sitting on the porcelain throne. In absentminded moments, reaching for throttle is half-expected to provide one of those little white squares of paper.

The seat is very low in the cockpit, providing minimal forward visibility; I am of average height and have at least 20cm of headroom. I sit on a 10cm block of foam to get an adequate view, and still have excess headroom; however, this stretches the leg reach to the pedals, and makes the sitting stance even more ungainly. At this elevated altitude, the view over the nose is not bad at all.

The throttle quadrant sits readily for the left hand, although there is no armrest to support the elbow. We have an after-market cowl flap fitted with its lever just in front of



the throttle, and operating in the same sense – that is, push forward for take-off and pull back for descent, to open and close respectively. Just in front of the flap lever is a bigger lever for rope release. Pull it aft, and the glider is on its own.

The seatbelt is a four-point affair, which is unexpected. An agricultural plane does high-risk work, and a fifth point on a harness is essential to prevent 'submarining' in the event of a sudden stop. Submarining is the tendency for the occupant to slide out under and forward of the seat belt and impale oneself on the stick, prior to using your chin to arrest your travel by hooking it over the lap-belt. 

Next installment: an insight into aerotowing.



LAKE KEEPIT

TAMWORTH NSW

- ★ Training 365 days a year
- ★ Good glider availability
- ★ Bulk flying discounts
- ★ Private owners welcome
- ★ Extended gliding season
– 300km in July!

Contact:

PO Box S152

TAMWORTH SOUTH 2340

Ph: (02) 6769 7514

Fax: (02) 6769 7640

Email: keepitsoaring@bigpond.com

www.users.bigpond.com/keepitsoaring



FLYING TO ROTTNEST ISLAND

– Doing it legally, doing it safely

Mark Wild

THE MISSION: TO PICK A WINDOW OF ONE AND A HALF HOURS, SEVEN DAYS IN ADVANCE, WHILST ORGANISING OVER 30 PEOPLE, FIVE PARAMOTORS, TWO SUPPORT BOATS AND TWO NEWS CREWS WITH CHOPPERS, AS WELL AS ARRANGING PERMITS AND A WINDOW TO LAND IN, ALL IN ORDER TO GET FIVE PARAMOTOR PILOTS FLYING OVER TO ROTTNEST ISLAND SAFELY. SIMPLE.



The flight to Rottnest Island was the goal; making it happen was the event. Although I'm telling the story, it's not just my story. I was happy to be part of the great event, and would like to thank everyone else who was involved – club members, non-club members, a paragliding school, dedicated pilots, wives, girlfriends and friends.

Rottnest Island is a little holiday island about 18km off the coast of Perth, Western Australia. It's like our little Greek island near home. Transport to the island is by ferry, small aircraft or personal boat. The island is a nature reserve and has a lot of heavy restrictions on what you can and cannot do. Most days it is full of tourists and holiday-makers. The only transport is by pushbike or one local bus. It's basically a fun little party island/resort with wonderful beaches and spectacular coral reefs.

Arranging a paramotor crossing to Rottnest was a challenging task, due to so many variables that all had to go our way to make it happen. The odds were against us.

We had been talking about this flight for over two years. Every time I flew up or down the coast, I would always look at the island and think, just a quick left turn and I would be there. If only it was that easy. If only there wasn't an airport on the island and if only it wasn't an A Class Reserve. If we were going to do it, it had to be done properly, so that there could be others who could also enjoy the experience, rather than having it be a once off event that would get it banned for everyone.

We decided the predictable weather of autumn or early spring would be best. Not likely to get rain, not likely to be hot enough to generate too much seabreeze. The forecasts are fairly predictable regarding swell and wind strength, though wind direction isn't always correct.

Although only a little 18km flight, some major requirements had to be perfect to make it a reality.

We needed at least seven days for all the last minute arrangements. The weather did not have to be perfect for seven days, just the

day chosen, seven days in advance. I have to give big thanks to the new [www.seabreeze.com.au] seven-day graph, which really helped. Winds were one thing which everyone looked at, but the swell was also an important factor in case things went wrong and we had a water ditching. We needed a swell as small as possible, as boat retrieval could be dangerous for the boat crew, pilot(s) and boat.

It was important to work out the minimum requirements needed:

Arranging the support boats:

We needed at least two boats. The speed we'd be flying was 37km/h plus tailwind, so our speed could be up to 50+km/h. One boat could not keep up, so we had to have a second boat halfway across. Also, if more than one pilot had to ditch, there was no way one boat could get to both pilots in a reasonable time. The boats had to have diving equipment on board and divers able to use it. We couldn't have a motor and glider floating under the surface of the water as a hazard to sea traffic.

Ground crew at take-off:

We had cars and equipment which we didn't want to leave behind at the take-off site. We also needed a hand laying out gliders and starting motors, as well as taking photos, video and all the other stuff involved.

Ground crew at Rottnest:

The landing area was small and with a south-east wind (expected) we'd be landing in rotor. So a ground wind indicator was very important. Our approach would be in rotor for the last 50ft, so we needed the area to be clear of any hazards.

Permits:

Rottnest Island is an A Class Reserve – red tape heaven. Resist it and you will get nowhere; work with it and you can make it work for you.



We planned to do the event in March and started preparation months before. First thing was to decide who was going. The normal crew of paramotor pilots all put up their hands, which was great to see. Although all the motors are run fairly regularly, we decided on a group test flight three weeks prior to put everything through its paces. I have one of the smallest tanks, five litres, and I normally do about 60km to a tank (about an hour's flight). The tandem motor flew for three hours that day without a problem. The Rottneest flight would only be 18km, which we estimated would take us about 20 minutes.

When we were all happy with the equipment we were running, it was time to start the permit process and pick a day.

I applied for a permit and was given a 16-page application form that had to be submitted 12 months in advance... bugger! Everything was put on hold until we worked out how to get round this.

It was time to get a little creative. Reading through the 16 page application form, it seemed designed to give the Rottneest Island Board a good idea of what you were trying to do, so they could work out all the possible rules they might need to apply, so that anyone looking in from the outside could see they had covered every angle. This is their job, and it's there for a purpose.

There were two obstacles we needed to get over. One was the Aerodrome, so we attacked that first.

I contacted the Rottneest Airport Manager. He was puzzled at first, as he'd never heard of paramotors and didn't know we could fly without being attached to a boat, let alone get into his airspace. He had not given a permit for this type of craft before, so he was not too clear on what had to be done, or what we were asking. He got me all the correct contacts that I needed to go through for the Rottneest Island Board, which was the second obstacle we needed to get over.

I set up a website with photos of us paramotoring, taking off and landing on the coast, which I submitted to the Airport Manager. After a few more conversations, he offered to open a window for us to come in at 2,000ft, and would do what he could with the Rottneest Board. Obstacle one over – we could get there, but not land yet...

Now the Rotto Board. Same thing, they didn't know what a paramotor was and had not given any permits for these things to come to the island before, so it was all new ground we were working on. I gave them the website, talked them through how safe it was and all the general blurb we say.

This helped in getting round the 12-month permit thing. I made the necessary Official Appeal, with every possible



scenario covered, and it made us look like we were

a very organised group of people that had done this kind of thing hundreds of times before. In the submittal, it also covered everything that the Board needed to do, so hopefully it only needed a rubber stamp. Easier to say 'yes' than to have to justify a 'no'. The only two people that needed to do anything were the Airport Manager and the Event Co-ordinator. I had already got both these people excited about the flight and they were on our side.

In the Appeal I put in all the pilot's qualifications: Chief Flying Instructor, Apprentice Instructor, Club President (who was unable to fly due to work commitments), three Safety Officers, all advanced pilots. This stuff looks good on paper if the Board had to justify it later on.

Everything was on standby waiting for the permit...

I received the permit by fax on Monday afternoon, so it was all systems go, five days prior to the event.

I read through all the points they had given us to abide by. The landing area they gave us was the south side of the army jetty. Bugger – an hour walk, and we couldn't use the bus as we had fuel. I got back to them, to see if I could push it a bit closer. I was pushing for the south side of the last jetty, in front of the last units. This went back to the Board and was only permitted if I had

capable ground crew which could determine if the conditions were acceptable and that no other parties were using the beach. They must be able to crowd control and keep all members of the public well away from any harm. This was probably the only thing the Rottneest Island Board felt nervous about; they emphasised we were not allowed to get any closer.

I advised them that we would be filming the event. Next problem, no commercial operation can operate on Rotto without a proper permit. We got around this as news/TV filming is exempt from the permits. Just had to advise them that our filming was for club and personal use, not for sale or any business operations. Sorry Colin, you did a brilliant job editing the DVD, but we cannot sell it.

The date chosen was based on wind, swell, weather, support boats, ground crew Perth and ground crew Rotto. Everything was going too smoothly, now that everything was going our way. The weather was getting better. Nothing goes this smoothly!

We held a safety meeting for all pilots and leading ground crew, to sit down and look at the flight and every possible emergency scenario we could think of.

For the take off the plan was to check the conditions with a quick test flight: I would do a circuit then land. Then we would get the tandem up and then the rest of us would go, go, go. We would all fly over in a group if we could.

We talked about water ditching, what we would have to do and how to do it, if it happened. The tandem ditching was given the most attention; we looked at the harness set up, the straps and so on, until everyone was happy with what we were doing. Although the tandem ditching scenario was given the greatest attention, it was the tandem motor that everyone thought would be the most reliable, as it was only 15 hours old and could carry over three hours of fuel. We were able to arrange inflatable life vests for every pilot, smoke flares and life vests for each motor, so no one would drown.

We discussed the possibility of landing on one of the rescue boats. One was 54ft and the other 44ft. Two big boats. This at first seemed a good idea, until we started to walk through every part of the approach, landing and dropping of the glider. I was very impressed with how we took a simple idea, which we all at first thought was a good idea, but ended up seeing it to be a really, really, bad idea. The relative speeds of boat and pilot, as well as swell motion, all serve to complicate such a landing attempt, not to mention the high chance of injury from paraglider lines to those trying to



retrieve the collapsing wing without it touching the water and being dragged in. Clearly landing in the water was the safest option, following all the procedures practiced at the safety meeting.

We also headed out to the groundhandling paddock with the ground crew to practise launching the tandem. They ran and ran and ran until everyone was completely happy with what was going on. Better to work out the bugs before the event, rather than on the day with all the cameras on.

We then gave the motors a tough going over. All bolts, nuts, setting. Everything checked. Motors run and re-tuned. Plugs checked, mounts checked, nothing was missed.

As the event was looking like it was going ahead, we contacted the TV crews to see if they were interested in covering the event. Time for some free advertising on prime time television. The same thing, they didn't know what paramotors were, so back to the website... Channel 7 and Channel 10 were very keen to cover it.

This then produced another potential safety problem, of there being two choppers in close vicinity to flying paramotor pilots. I contacted both chopper pilots to advise them not to get too close and not to fly up wind, in front, or above us. But there were advantages to having them around: I asked that if we had a problem, could they mark the downed pilot(s) and watch over them. Their comment was, *"No problem, we'll have the cameras on them all the way down."* Great... I think? So now we had two support boats, two dive crew and two choppers – not bad for an 18km paramotor flight.

Thursday night, the night before, all systems go. Contact all the pilots, ground crew, the Airport Manager as agreed and both TV Channels. Not much sleep that night and a lot of nerves.

With all the meticulous planning done you'd think things would go smoothly, wouldn't you? No such luck...

Got up. All the cars were packed. The plan was to meet at the Fremantle Ferry Terminal. Morning calls started coming in as planned. First problem, there were two ferry terminals in Fremantle. One on the river and one on the North Mole. Everyone corrected. Next was a request for a bit of a detour to look at one of the take-off sites. It was 7:20am and the meeting time was 7:30am. We were 10 minutes away from the meeting place. I refused the request, because it would have made us late for the first briefing. Stick to the plan, stick to the plan, or it will all go downhill fast.

We all got to the Ferry Terminal to find out that the first boat departed from the "C Shed" Terminal, which was the other termi-

nal. The Rotto ground crew raced off down there to get on the boat. If they could not get on that boat, then they would not be at Rotto for the landing, and we could not hang around for them to catch the next ferry as our Airspace window closed at 10:30am.

Called the Airport Manager and gave him the final all clear and that it was going to happen. He then raised the appropriate NOTAMs as agreed and advised of our window 0900 hours to 1030 hours and everything was now happening to plan again.

The wind was north-east, which meant that we would use the Cottesloe take-off. I received a call from Channel 10, saying that they wanted to do some interviews and film the set-up. They had permission to land at the South Fremantle take-off and could not land at Cottesloe. Nooooo... This was the first decision that was not based around safety, but everyone agreed it had to be done, as we were too close. We could still take off in a north-easterly at the South Fremantle site, it just meant that we were flying slightly into the wind on the run to Rotto.

The Rotto ground crew called to say they were on the ferry and on the way to Rotto. The second rescue boat was on their way to the halfway position. The first rescue boat was just getting ready to leave. We were busy setting up, warming up the motors, mixing fuels, double checking everything, doing the interviews with Channel 10 and getting all the photos in. I have to say, the interviewing before the event was quite nervy, as there were a thousand things going through my head at the time, let alone the questions being asked and thinking of the correct answers.

The Red Bull girls turned up to give us the wings we needed to fly. For some reason some of our ground crew were more interested in talking to the Red Bull girls than in helping the pilots prepare. Come on boys, back to the mission...

I set up for the check flight. I have taken off from this site many times before, but never in a north-easterly direction. It was rougher than expected, until I got 50ft above the ground. I turned and landed as planned. I gave the other pilots a quick briefing and it was all go, go, go.

The Channel 10 chopper took off and we started the tandem take off procedure. Warmed up the motor again and set up. On the first attempt the glider pitched too far back, which resulted in the risers pushing the top of the cage onto the prop. Bugger, broken prop! We quickly fitted a new prop and set them up again. After a quick inflation, they were off and climbing very well. I don't think they even made one step before they were airborne. It turned out that the



tandem had the easiest take off and greatest climb rate, as it had a better power to weight ratio than the rest of us.

Adam was next to go. He inflated while I was getting into my harness. A bit of a run and he was up, but then returned to land? He must have had a problem. I inflated and got off quickly, joining the tandem which had been flying for about 15 minutes. I heard on the radio that Gordon's decompressor had started to leak and he was fixing it. Ewan's starter cord had snapped while starting his motor. Bugger, bugger, bugger, it's all going downhill! I headed out towards the tandem. Then the tandem made a Mayday call. He announced that the motor had seized and he was heading back for the coast. I relayed his messages to the support boats and got the rescue procedures under way. The first rescue boat, which was now half-way across to Rottneest, had to turn around

October 2004

and head for the tandem. This was probably the furthest point possible from us. The tandem announced that they were not going to make the shore and were prepared for a water landing. I watched Laura, the tandem passenger, jump out and the glider land clear of both the pilot and motor. Textbook water landing, as per our Safety Meeting. The Channel 7 chopper conveniently placed itself near the tandem pilot, spotting the position for the rescue boat. A quick check, the Channel 10 chopper was filming some dolphins and missed the ditching – he wasn't going to be a happy chappy.

The plan was, if someone ditched, keep going. Don't hang around as you cannot help, all you will do is waste fuel. I was heading towards Rotto thinking that I was the only one. Watching the tandem go down really gave me the willies. I thought about canning the event and heading back to land, but decided it was now, or never, so I headed out to Rotto. Ten minutes later I heard on the radio that Gordon, Ewan and Adam had got into the air and were on their way. They confirmed that Jules and Laura were okay and that Rescue Boat One had just arrived – not bad, 15 minutes after the call. Great, back on track. I was about 10 minutes in front of the three airborne pilots and about halfway across. I didn't think it was a good idea to hang around there and wait for them, or back tracking to meet up. Once I got within gliding distance of the island I hung around for a bit, but didn't like the idea of sitting in front of an airport. Also, our permit stated that the flight would be as short as possible – no sightseeing or messing around – so I headed down towards the Rotto Ground Crew who were eagerly waiting at our landing zone. The ground crew advised that it was a nil wind landing and the beach was clear to land. I tried to hang around while the film crew got set up, but I was running out of time. I got down just before the Channel 10 crew got there... bugger. Gordon, Ewan and then Adam landed 10 minutes later. What a flight!

Later we stripped the tandem motor down for a bit of a post-mortem to work out why it seized. The motor appeared to be assembled incorrectly with the alignment of the crank too close to one of the sidewalls of the casing giving next to no clearance. When the motor got hot the crank would expand and start rubbing on the case, causing extra heat, which eventually caused the total destruction of the motor. A crank should never be able to get anywhere near the case under any condition. Unfortunately it only showed itself over water. The motor has been accepted under warranty and has been replaced with apologies.

The paramotor event to Rottneest Island was not a one-man band with followers. It was an event which a lot of people had a hand in making happen, from the ground crews to the company that supplied the life jackets and support boats. So, from one of the pilots that was able to make the enjoyable flight (which was the easiest part of the event) I would like to thank everyone that helped out with it. You all made it a fantastic day and it was a day for all of us, not just the four pilots that crossed.

A positive side of the water landing was that it made the event more "newsworthy". It wasn't just a quick end of news, feel good story. It was a Friday night headline, more free publicity for the sport. It also showed that all the safety plans we set up worked like clockwork.

A last point when dealing with red tape – always thank officials for their efforts, because you might want to do it again. A few words can go a long way. The Rottneest Island Board will be doing an article in their next magazine. Channel 10 is doing a documentary on the flight and paramotoring for a kid's show. All good free advertising for the sport. Also, the Rottneest Island Board has welcomed us to re-run the event whenever we would like to. So now it has been done legally and correctly, we have successfully opened Rottneest Island up to all future pilots wanting to do the same thing in years to come. All our club asks is just please go through all the procedures to do it legally, so it leaves the door open for the next generation of pilots.



WHITE MOUNTAIN SOARING: Hilton Cup 2004



Mal with Barron Hilton at the medal ceremony

Mal Williams

AS I WRITE THIS STORY IN MID-AUGUST 2004, IT IS COLD AND WINDY OUTSIDE – ABOUT WHAT YOU WOULD EXPECT IN CANBERRA IN THE MIDDLE OF WINTER. BUT ONLY SEVEN WEEKS AGO, I WAS ENJOYING DAYTIME TEMPERATURES OF

AROUND 38 DEGREES, LIFT OF UP TO 13KT, CLOUDBASE UP TO 19,000FT, AND THE UNSURPASSED LUXURY THAT IS PART AND PARCEL OF THE BARRON HILTON SOARING CUP. AND BEST OF ALL, THE AIRFARES, ACCOMMODATION, FOOD, BOOZE, GLIDER HIRE, AEROTOWS, HELICOPTER RIDES AND JUST ABOUT EVERYTHING ELSE WERE PROVIDED GRATIS AS PART OF THE WINNERS PACKAGE.

The Hilton Cup competition is described in detail on the GFA website, but in a nutshell it is a global, decentralised gliding competition run on a bi-annual basis, with the winner of each region, plus a guest, being invited to attend a five day camp at the Flying M ranch in Nevada. The soaring conditions are superb, the camaraderie excellent, and because the selection is handicapped even pilots on a budget have a realistic chance of winning. In my case I flew a 30-year-old, 19m Jantar (one of two prototypes imported for the 1974 world comps at Waikerie) with fairly basic instrumentation, and was able to set the winning distance of 843km. Interestingly, many of the other winners in attendance had flown winning flights of over 1,000km, including the Kiwi and the winner of the Americas south region

(one Steve Fosset, multi-millionaire and first person to fly solo around the world in a balloon). The competition in those regions is extremely intense, and I don't for the life of me understand why this isn't the case in Australia. Hopefully this article will inspire more Australian pilots to have a go – the rewards are well worth it.

I must admit to having a mild panic attack when I found out that I had been declared winner of the Australia/Africa region, with only about seven weeks to go before the event started. I was supposed to be hosting an international conference in Canberra during the same week, and had only just returned from two weeks leave. Fortunately I was able to convince my boss that he should let me go. It took some time to make contact with the organisers; but when I did, they told me

to organise flights for myself and my wife Kaylene and send them the bill. Luckily we were able to get flights on dates that suited us, and we departed for Los Angeles on 14 June. We spent two nights in LA to acclimatise, then a night in the Reno Hilton, before joining up with the other winners at Reno airport at around 11:30pm on the 17th. We then had a two hour bus trip to the ranch, followed by welcome drinks and nibbles, before retiring to the luxury caravans that had been brought in for the duration of the camp.

Day one of the camp was hectic, with FAA licensing, safety and operational briefings, and then the obligatory site check. After my check ride I took a launch in a Glasflugel 304 and had an enjoyable few hours local-soaring to get familiar with the local landmarks and soaring conditions. I also learnt that shorts and T-shirt wasn't suitable gliding attire at the Flying M – it was 38°C on the ground but with the thermals topping out at around 19,000ft, it was well below freezing level. At one stage I was so cold that I started shivering violently. The aerotow launches were also interesting, with the combination of high temperatures, high elevation (field elevation of 5,000ft) and water ballast making for some long ground rolls and slow climbs.

Of course, all of those minor irritants faded away once the glider was off tow. The soaring conditions were outstanding. I flew the full six days (including the check-out/



Discus dumping water after a long flight

Photos: Mal Williams

practice day) and each day got to at least 17,500ft. The scenery was nothing short of spectacular, ranging from desert around the ranch to the snow-capped Sierra Nevada mountain range, Yosemite National Park, and various large lakes. We had comprehensive met and safety briefings at the start of each day, so by the time we headed out to the launch area (in the chauffeur-driven GM Suburbans provided expressly for that purpose) we had a very good idea what to expect from the day.

Once out at the launch point, the main task was to become familiar with the allocated glider (glider allocation was done on a ballot system so that everyone got a chance to fly one of the more popular gliders). For me, this was not a trivial task. Most of my flying has been in the Jantar, so every day was a conversion to a new type. In my case, I flew an SZD 55, a Discus, Duo Discus, ASW-20 and DG-300. I soon found that a 15m glider with full ballast handles VERY differently to the Jantar. The ground crew, mainly comprising staff from High Country Soaring at Minden, did an excellent job preparing the gliders, including refilling the oxygen, adding water ballast and installing batteries. When you were ready to go it was a case of strapping into the glider at the tie-down point, calling for crew, and waiting for them to push you a few metres forward onto the runway ready to launch. I don't think I ever got comfortable with the concept of gliders rolling past the tie-down area with less than 10m clearance during take-off and landing – far too close for comfort if something goes wrong.

My personal achievements at the camp were relatively modest – I was more interested in having fun than in trying to break speed or distance records. My longest flight was about 650km, followed by 522km and three flights of around 450km. Some of the other pilots were much more focused on long distance, with a total of six flights in excess of 1,000km. John Coutts, the current 15m world champion, flew a 1,000km triangle on one day, and on the final day Frenchman Denis Flament flew 1,300km. Former world champion Bruno Gantenbrink flew a 250km leg with just one turn – and that was only to be sociable because he passed another glider in a thermal! I had one outlanding on the trip: After being cut off from the ranch during final glide, I was caught in a microburst about 50km north. Luckily I was able to land safely at Yerrington aerodrome after several anxious moments. Mind you, it was almost worth outlanding in order to experience the retrieve. Picture this: Barron's Hughes 500 helicopter in formation with the tug, appearing out of a background of

October 2004



Balloonist's view of the tie-down area



Duo Discus at Boundary Peak. Note the ice around the underwing dump valve

storm clouds. The helicopter lands next to the glider, the wing runner helps push the glider back onto the strip, the tug taxis up, the rope is hooked on, and I am airborne again within minutes. Cool!

In conclusion, an invitation to the Flying M has to be one of the best rewards out there for any glider pilot. The competition is handicapped, so if you are a cross-country rated pilot capable of flying at least 400km, you are eligible to compete and you may be pleasantly surprised to find that you are competitive. The rules are similar to those for an FAI Badge flight – you need an official observer, an approved logger or barograph, and the flight has to be declared in

advance and has to be a triangle. You might also find that your spouse is much more accepting of your trips to the airfield if they think there is a chance of a free overseas holiday at the end of the season! Just on that note, there are plenty of activities available for your guest to participate in. Kaylene took a helicopter flight, a couple of low-level canyon runs in the Stearman, an extended sightseeing flight over Yosemite National Park in a Cessna 180, a balloon flight, a trip to Bodie ghost town, plus lots of swimming and lazing around. She also came on a 450km flight with me in a Duo Discus, which was a fabulous experience for both of us.



What needs to be done...

Bruce Taylor – GFA National Coach

AS I SIT HERE TYPING THE SKY IS SPOTTED WITH CUMULUS, AND BY THE TIME YOU READ THIS THE SOARING AND COMPETITION SEASON WILL BE UPON US. WE ARE TRULY FORTUNATE HERE IN AUSTRALIA – JUST ASK ANY OF OUR INTERNATIONAL TEAMS THAT VENTURED TO SCANDINAVIA OR GERMANY OVER THE WINTER PERIOD IF YOU SHOULD NEED CONFIRMATION OF THAT. WE ENJOY WEATHER THAT IS AS GOOD AS YOU MAY FIND ANYWHERE, SO POLISH UP YOUR GLIDER AND BE GONE WITH YOU...

Things are happening in the gliding scene here. For the first time we will send an Aussie team to the Women's Worlds, and the first Junior Nationals is planned for later this year. We aim to promote cross-country soaring to more and more pilots, those who may have been flying for years, and those who have just worked through their solo training. We want selected club instructors to undergo a refresher cross-country course so that they may help push these fledglings out into the

world beyond the circuit area. And we will be helping to put the finishing touches on our very best international representatives, so that they might fly our flag in the big competitions.

Our direction is not simply towards comps. We want everyone involved with gliding to safely challenge themselves and feel a greater sense of achievement after their day's flying, whether that be to find themselves more than one glide from home, or to add 20 points to their daily score at the

World Championships. The more content we are with our personal achievement, the more we will want to come back and do it again.

I have been fortunate enough to be chosen as your national coach. While a part of my job will be to organise other coaches and coaching events, I will be spending much time sitting in the back seat, and visiting clubs to make contact and drum up some interest. I'm looking forward to it. Amongst all of that I will be at every competition that I can manage this summer, so I hope to run into a healthy percentage of you over that period.

Those who don't know me will find that I am not a great teacher of theory and numbers. I believe that the best cross-country pilots have nurtured an understanding of feel and intuition. They don't need the best technology in their cockpit, more often they demand simplicity, and take an acute interest in what is going on outside. The decisions that keep you safe and improve your cross-country performance are always made with plenty of time and an awareness of what is happening all around you. That is the word I will be spreading amongst all the non-believers!

Each month I will attempt to pass on some helpful techniques, and I will occasionally throw in an idea about where our competition scene is headed. We have an active and motivated team of drivers amongst the Sports Committee and coaches, and I hope we manage to drag the whole movement up and away from the home airfield, all the way to the podium. We need plenty of support for our new Women's and Junior's teams too, and I am sure that we all will be behind them.

Next month, I will present some ideas about thermals and how to find the good ones. Till then, keep your eyes open.



OAMPS Insurance Brokers Ltd

ABN 34 005 543 920

Let us set a better course for your GFA Glider insurance

OAMPS Aviation

Australia's Aviation

Insurance Specialist

ACN 005 543 920

PO Box 2481

North Parramatta

NSW 1750

Fax: (02) 8838 5770

Email: aviation@oamps.com.au

GFA Glider insurance packages are the only option approved and initiated by the GFA for the benefit of members.

Why pay more than you need to?

Call OAMPS Aviation now

(02) 8838 5760



A PROFESSIONAL REGISTERED INSURANCE BROKER

Australian Team Manager/Coach

A team manager/coach is required for the Australian team attending the Junior World Gliding Championships to be held in August 2005 at Husbands, Bodsworth in the United Kingdom.

If interested or if you require further information, please contact Peter Trotter, Chairman, Team Selection, 5 Atriplex Court, Roxby Downs, SA 5725, email <gliderpilots@bigpond.com> or mobile 0417 888040 before 31 October 2004.

Tasman Trophy Australian Representative

A pilot is required to represent Australia at the Tasman Trophy to be contested at the Club Class Nationals in Waikerie in January 2005. If interested or if you require further information, please contact Peter Trotter, Chairman, Team Selection, 5 Atriplex Court, Roxby Downs, SA 5725, email <gliderpilots@bigpond.com> or mobile 0417 888040 before 15 October 2004.

Schleicher shipping a factory demonstrator to Australia

In order to introduce the latest Standard Class glider to pilots "downunder" Schleicher will dispatch an ASW 28-18E to Australia for evaluation. The aircraft will arrive at the end of October and is scheduled to leave for another country in February 2005. The ASW 28 is available for hire by suitably qualified pilots on a daily or weekly basis. Special arrangements can be made for competitions or for pilots requiring the aircraft for longer periods of time.

The aircraft features a sustainer engine and 15m or 18m wingspan. A joint at approximately half wingspan allows pilots to exchange the outer wing panel within minutes and with little physical effort. Best L/D is 45:1 with 15m wingspan and 48:1 in 18m configuration.

Although gliders with sustainer engines are not uncommon these days complicated engine operation have in the past excluded such aircraft from normal club use. Fortunately this is a thing of the past with the really simple engine operation of the ASW 28-18E.

Proper starting and retracting of the engine comes courtesy of a single lever integrated into the left cockpit wall. It dictates the correct operating sequence and enables even first time users of "turbos" to operate the engine without effort, stress or risk of damage. No longer is there a chance of "finger trouble" which in the past has proved a major issue with more complex and more demanding systems.

Best of all, the docile characteristics of the ASW 28 are maintained even while the engine is extended. The 20hp engine allows a moderate climb rate of 1m/s and will get the pilot home even if thermals die a fair distance away from home.



It is envisaged to base the factory demonstrator at major gliding centres in Australia for a few weeks at a time. Interested parties can apply by stating the preferred timeframe and the estimated utilisation. International visitors will have the opportunity to test the ASW 28-18-E at Tocumwal in December 2004 or January 2005.

For further details or bookings please ring 08 84492871 or 0412 981204.

National Coaching Available at Narromine Cup

20-27 November 2004

Martin Feeg, an experienced competition pilot and coach, will be offering coaching at the Narromine Cup. The format will be a combination of two-seater flying and lead-and-follow, with lectures, briefings and post-flight analysis. You do not need any qualifications, other than to be keen. There are a limited number of places available. To secure a place, send a reservation fee of \$150 to the GFA Secretariat.

For more information contact Martin Feeg by email <XCCLoudBase@aol.com> or ph: 0423 044403.

GFA AIRWORTHINESS DIRECTIVES

GFA AD 608 (Issue 1)

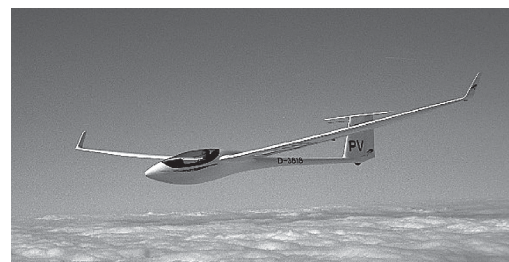
Type affected: GROB ASTIR CS. Type Cert 306.

Serial numbers 1001 up to 1536

Subject: Horizontal stabiliser – Inspection of vertical attachment spherical locking ball

GFA AD 609 (Issue 1)

Type affected: SZD-50-3 Puchacz, all serial numbers



Subject: Inspection of turnbuckle in the rudder control system

GFA AD 610 (Issue 1)

Type affected: DG-800B, serial numbers: all up to 8-321 (Solo and MidWest engines) DG-500M, all serial numbers; DG-500MB, serial numbers: all up to 5E243

Subject: Fuel leakage from power plant primer valve

GFA AD 611 (Issue 1)

Type affected: K-7 and K-2 all serial numbers

Subject: In-flight failure of wing structure

GFA AD 612 (Issue 1)

Type affected: DG-1000S all serial numbers

Subject: Incorrect mounting of horizontal stabiliser

GFA AD 613 (Issue 1)

Type affected: PW-6U, serial numbers: 78.02.07 to 78.02.10 and 78.03.01 to 78.03.03

Subject: Inspection of push rod ends installed in aileron spoiler and elevator drives.

GFA AD 614 (Issue 1)

Type affected: DG-100 all serial numbers, DG-200 all serial numbers, DG-300 all serial numbers, DG-400 all serial numbers, DG-600 and DG-600M all serial numbers. DG-500 and DG-500M all serial numbers up to 5E23

Subject: Failure of rudder lower mounting bearing

GFA AD 615 (Issue 1)

Type affected: DG-800B serial numbers: All up to 8-260 except 8-247 and 8-258. DG-505MB serial numbers: All up to 5E220B15 except 5E190BS

Subject: Failure of starter ring gear plate attachment bolts

GFA AD 260 (Issue 2)

Type affected: Twin Astir all serial numbers

Subject: Flight controls – elevator control horn

GFA Badges & Certificates

FAI BADGE CLAIMS

August 2004

A CERTIFICATE

Horton, Graham Paul	11002	Wagga Wagga GC
Wilksch, Thomas C	11003	Adelaide Uni
Tyler, Mark Adrian	11007	Adelaide Uni

B CERTIFICATE

Sawell, Ian William	10752	Lake Keepit GC
Harford, Alan Vincent F	11004	Caboolture GC

A AND B CERTIFICATE

Allen, Sarah	11000	Adelaide Uni
--------------	-------	--------------

A, B AND C CERTIFICATE

Tilbrook, Jaimie Richard	11001	Canberra GC
Nakahara, Yoshitaka	11005	Orana SC
Yoshiyama, Akihiro	11006	Orana SC

C CERTIFICATE

Clarke, Caroline	10978	Qld Air TC
------------------	-------	------------

DIAMOND DISTANCE

Codling, Michael Thomas	Darling Downs SC
-------------------------	------------------

DIAMOND GOAL

Codling, Michael Thomas	Darling Downs SC
-------------------------	------------------

AFRICAN ADVENTURES

James Pearce

AFTER OUR SUCCESSFUL AUSTRALIAN ADVENTURE IT WASN'T LONG BEFORE JOHN CRESSWELL AND MYSELF WERE THINKING ABOUT A FOLLOW-UP TRIP. OUR INITIAL IDEA WAS LONDON TO CAPE TOWN, BUT WITH GWII, PERSONAL CONSTRAINTS AND VARIOUS OTHER FACTORS WE ULTIMATELY



Flying over Zambezi

DECIDED AGAINST IT. AFTER MUCH SOUL SEARCHING WE DECIDED ON A CIRCUITOUS ROUTE WITHIN AFRICA. WE PLANNED TO START FROM CAPE TOWN, INITIALLY TRAVELLING UP THE WEST COAST THROUGH NAMIBIA, THEN TRAVELLING EAST THROUGH BOTSWANA, ZAMBIA AND TANZANIA, BEFORE TRACKING SOUTH THROUGH MOZAMBIQUE AND BACK TO CAPE TOWN, BUT THE BEST LAID PLANS...

We arrived in Cape Town 20 October expecting our aircraft to already be 'in country'. Somehow a 19-day sailing took over a month. Still, there are worse places in the world to be kicking your heels... Lesson No.1 – Africa time. *"The sooner you get used to it the easier things will be,"* a fellow triker told us. The other piece of advice was: *"One thing at a time, always*

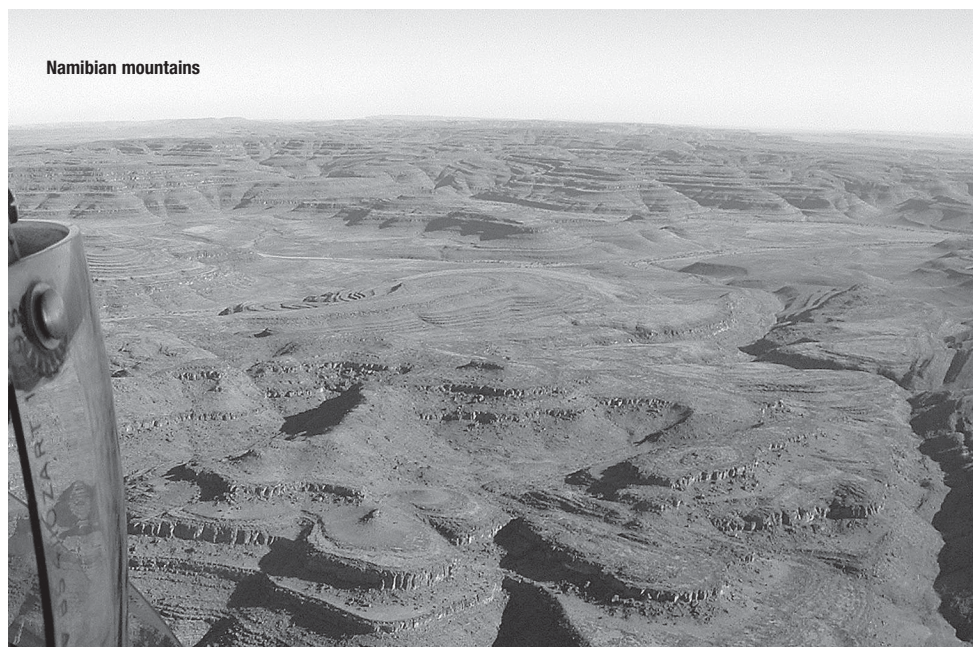
smile and don't swear in front of an official." On a number of occasions we struggled with this!

On 25 October our wives arrived and still no trikes. Finally three days later they were ready for collection. Elation at them being undamaged was swiftly replaced with frustration, as it took us three hours to secure them on to a pick-up and trailer.

They were secure in the loosest sense of the word, as the wings were placed on top of each other and a trike wider than the truck meant that one wheel was supported on a plank of wood! Nonetheless all was well and we had the aircraft rigged by the end of the day. The late arrival of the trikes meant we were under pressure to get the trip under way, as we had to deliver our wives to Victoria Falls in less than three weeks. In some ways the loss of fettling time cost us in terms of niggly problems over the first week or two.

Our first flight up the West Coast of South Africa proved to be a bit of a highlight with numerous sightings of whales. Our first day ended at a coastal town named Hondeklipbaai, where we landed on a dirt road and before we knew it were surrounded by hundreds of children. It was all too scary with a live propeller, but then we said we wanted adventure! When we came to a stop by the fuel pump in town it was soon evident it hadn't been used in years. It turned out to be a great overnight stay, and we learned that a few months previously Mike Blythe had stayed in the same guesthouse.

The next morning, with some trepidation, we continued north towards the Namibian border. We were anxious because if we land-



Namibian mountains

ed in the diamond mining area we were traversing we probably wouldn't get our clothes back let alone our aircraft, and we hadn't found a strictly legitimate way of crossing into Namibia without tracking 600km inland. However, we had a cunning plan. Just short of the border, by dodging the signposts, we managed to land on the road and then taxied as close as we dared to the border post. We then walked to get our passports stamped before continuing across No Mans Land to Namibia. After some coaxing the officials stamped our passports and also let us walk back to South Africa. Our diligent guards then stopped all traffic whilst we took off. Welcome to Namibia!

Tracking north through Namibia we flew over remote mountains, sand dunes and anything else inhospitable you care to mention. In contrast, we received fabulous hospitality wherever we stopped. We had certainly arrived in Africa with lots of bush flying and impromptu road landings. Often the only way to get fuel was to taxi into the local petrol station. Our scariest Namibian moment was taking off from a dirt track in a village 5,000ft up where engine failure would have had us in the graveyard we had climbed out over.

All too soon the Namibian experience was over and with flight plans filed and arrangements in place we were ready to cross into Botswana. The previous sentence makes it all sound so simple, but believe me it wasn't! A four mile taxi to town came in to it somewhere. Making hand signals and driving round roundabouts in a trike were certainly novel experiences. Our arrival in Botswana took the airport by surprise as the flight plan never made it and their radio was broken. This turned out to be fortuitous as we were advised that we would have been denied permission to land if the airport had

known about us. We were confused as all seemed to be smiles and our passports were stamped without delay. All became clear the next morning when we were not allowed to take off. It turned out we didn't have the necessary permissions. A frantic morning of phone calls to Overflight (our permission agency in the UK) and the matter was resolved. The following day we were airborne again.

We struggled with strong headwinds across Botswana; I managed to get a tank of contaminated fuel and we had numerous other minor incidents: not quite the experience that had been hoped for. On the plus side our last stop in Botswana at Kasane was very relaxed and we spotted lots of game.

Next stop Zambia, but not so fast guys! We were just in the process of getting exit stamps in our passports when our clearance agent in the UK called and told us to stay exactly where we were. *'Zambia are not happy!'* An hour later and all was well, we were on our way. The flight along the Zambezi River to Livingstone was one the most scenic we'd had for ages and you could see the spray from Victoria Falls some five miles away. Sadly, this was the point at which our wives were to leave us, so we took a couple of days off to relax and sightsee before they left. They were replaced with fuel cans to increase our range across Zambia and Mozambique!

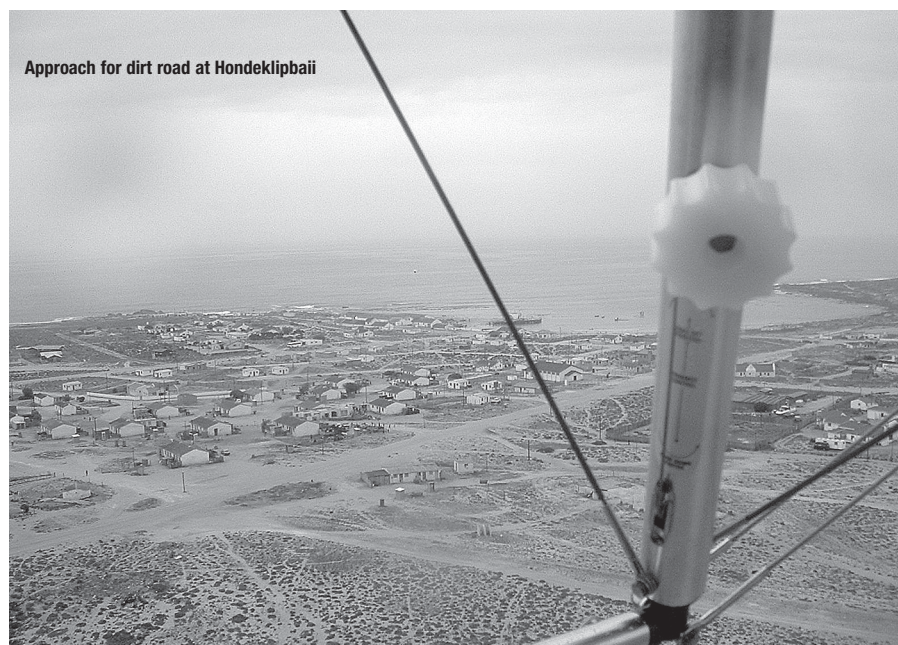
Flight plans and military clearance were required for every flight through Zambia, but we had no real problems, even when landing at a few remote strips where the obligatory several hundred children materialised out of nowhere in seconds. The flying was very tiring but immensely rewarding. Something very un-European that we had to get used to was employing guards to look after our aircraft. These guys allegedly kept a 24 hour watch on our aircraft and this usu-



Victoria Falls



Sand dunes in Namibia

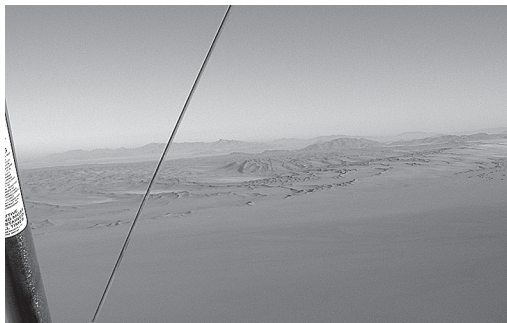


Approach for dirt road at Hondeklipbaai

ally cost us about £1 per day: protection money arguably, but nonetheless it gave us a little peace of mind. At Chipata, our exit point from Zambia, we met one of the most well read individuals I have come across in a long time. He was immensely entertaining and helped us while away some of the time we had due to bad weather.

Country number five, Malawi, where we had time to relax a bit, and where better than on the shore of Lake Malawi having cleared into the country through Lilongwe International. We couldn't believe it: our first stop after this and there was a trike parked up. After a couple of days relaxing we met a local GA pilot whom I took for a flight. It transpired that he managed a local bush camp. An invite couldn't be turned down, so the next day we went to visit, flying over hippos and elephant. Amazing stuff! All too soon it was time to move on, and with extra fuel capacity (120 litres) we headed for Mozambique. Across from Malawi to the Mozambique Coast was incredibly remote and inhospitable. The thought of engine problems was very sobering.

Having had the first tailwind in ages we made Quelimane, our first stop in Mozambique, in good time. Due to poor weather we stayed there for three days. The novelty of the place had certainly worn off by the



Top to bottom: Livingstone International airport, Namibia, and trikes parked at Orange River after border crossing from RSA

Photos: James Pearce

time we left! Our unscheduled stop in Quelimane had removed some of the slack in our program so we attempted to progress south at a fairly swift pace. While taxiing out for departure from Quelimane we went through a swarm of bees. We accelerated as fast as we could and luckily all was well. The anticipated northerly winds failed to materialise which didn't help our cause very much.

Heading south, the coastline was absolutely stunning: mile upon mile of golden sandy beaches. Mozambique proved to be very undeveloped but was certainly a highlight of our trip. Our exit point from Mozambique was Maputo, which proved a little hectic and tested my patience and negotiation skills to the limit. By the fourth visit to the same office to get my passport stamped I was getting a little annoyed. A small payment finally solved the problem. Having nearly been blown over when Nelson Mandela taxied past in his private jet we were finally on our way to Matsapha, Swaziland. After a horribly rough but speedy trip through the mountains we were in Swaziland. We made our trikes safe and prepared for a few days of land based touring. Immigration proved to be the most efficient we had

encountered and we were soon on our way. After a couple of days in this very pleasant country we headed back to the airport for our final border crossing back in to South Africa.

Having spent the usual hour preparing for flight I called the tower to request engine start which was promptly denied. Oops! Richard's Bay, the airfield in South Africa we had intended to fly to had recently had its international status removed. Several fruitless hours and many phone calls later we left the tower with little option but to plan on flying to Durban, some 300 miles south, on the following day. This plan would be fine as long as we didn't have a headwind.

The forecast on the following morning was good and with a more positive response from the tower this time we were on our way at 7:15am. Having set course, the prognosis was good. We were getting a groundspeed in excess of 80mph. Happy days!

Approximately 100 miles north of Durban this happy situation changed dramatically. The scattered clouds we had been flying above suddenly started becoming horribly solid and we were forced to descend and, you guessed it, there was a howling headwind at low level meaning we could no longer reach Durban. We were left with no choice but to divert to Richard's Bay. Following the previous day's conversations you can imagine the reception we received. Before we knew it we were being interrogated by customs, immigration and the border police. We spent the majority of the day being interrogated and completing statements before being issued with £1,000 fines. Ouch, what a way to encourage flight safety. Needless to say, at this stage the fines are unpaid and we have lodged an appeal. The weather on the following day was appalling and we remained grounded and despondent at our favourite stop so far!

The bad weather was short lived and we headed south towards Durban, electing to land at Cato Ridge, as we were now officially in South Africa. Cato Ridge was a stunning spot located in the 'Valley of a Thousand Hills'. However, when we landed, the instructor insisted we follow him somewhere that would suit us even better! A short flight and we were on the ground at Emoyeni. Hangarage was swiftly arranged and we had to walk nearly a hundred yards to the guest quarters. The proprietor swiftly convinced us that this was the place for a day off with a possible side trip to the Drakensburg mountains. Weather the following day proved to be inappropriate for mountain flying. However we made up for this by flying over local game reserves spotting rhinos and blue wildebeest.

As was often the case, it was time to move on too soon, and we tracked out towards the

coast again over some of the most inhospitable and beautiful terrain. A strong northeasterly was blowing when we reached the coast and even trimmed slowly we were travelling at close to 100mph over the Wild Coast. The scenery was absolutely awesome, with waterfalls tumbling over cliffs into the sea. Within an hour and a half the wind had died significantly, probably a good job as we were thinking of landing for a short break at Port St John's. This is one of the most strangely positioned airfields I have ever seen. Research failed to clarify why you would put an airstrip (tarmac of course) on top of a 1,500ft high outcrop. When we landed it was only 8:00am and very calm. Later in the day it must get very hectic. Over the next few days we continued to track down the coast before tracking inland to Oudtshoorn. We are indebted to all the Oudtshoorn club members for their fantastic hospitality.

We left them on the centenary of flight and had a fabulous flight back out of the mountains to the coast at Knysna. After a further stopover recommendation on our final few days to Cape Town we found ourselves landing at a vineyard with a gravel strip. The owner was incredibly friendly and it was, with regret, that we prepared for our final leg to Cape Town. Luckily, with the lighter loads we were now carrying, I found room for a couple of bottles of wine in the trike. Flying, being the unpredictable beast it is sometimes, saw as land an hour and a half later in a field some 50 miles from Cape Town due to badly deteriorating weather. Two hours later and the weather hadn't improved and we made a dash for a nearby airfield, further from Cape Town would you believe! It was to be another two days before the weather improved sufficiently for us to fly around the Cape of Good Hope and on to our final destination.

In summary we had an amazing trip with enough experiences to dine out on for months! We flew about 5,000 miles in just over 100 hours. The journey took us about seven-and-a-half weeks, and again the Mainair Blades behaved impeccably. We did not use any of the spares that Mainair Sports supplied us: not even an exhaust spring!

A video/DVD of our adventure is also available at a cost of \$40 with all profits to the Leukaemia Research Fund. Please send cheques payable to John Cresswell and SAE to 50 Oak Place, Mackenzie, Queensland 4156, Australia.

TRIP STATISTICS

101 hours
1187 litres of fuel used
48.87mph groundspeed
Airspeed average 60mph (estimate)
5,000 miles covered



HGFA Editor's Choice

This month sees an action packed issue taking us from the Swiss Alps to the African plains – thanks to those contributors roaming far and wide and sharing their experiences with us. Great also to hear from Rohan Holtkamp, one of the most respected members of the HGFA Board. Ned McIntosh and Brett Snellgove share their considerable technical expertise, while Taff takes us on another enjoyable flight of fancy.

But the cake (the \$100 cake) has to go to Mark Wild, who seems to have gone to extraordinary lengths – battling red tape, ocean swells and unexpected obstacle after unexpected obstacle – in order to grace us with a unique article...

Another \$100 up for grabs next month – deadline 25 October, send in your articles! Richard Lockhart, HGFA sub-editor, ph: 0418 130354, <flytation@iprimus.com.au>



NEW PRODUCTS

New Destination: De Aar Flight Park, South Africa

Around April/May last year, Des and Arnold Pansi left the Airwave factory in Stubai, Austria, to build a flight park in De Aar, South Africa. Des found a unique way to join the B&B (Potties B&B) to paragliding. Not only do local and international pilots stop over here when travelling through the country, but due to the terrain and weather conditions, this site has also become very popular amongst XC distance pilots. In fact, so far nine out of 12 months have already seen the 100km attempt easily achieved, and a few of these months have seen flights beyond 200km achieved and very close to 300km – not bad for a new site.

The other regular and non-flying guests are lured to the B&B by the tandem operation. As a guest staying at the B&B, you qualify for a discounted rate to go on a tandem flight to see this vast, wonderful, semi-desert region. The use of a winch facility, GPS, two-way radio and vario helped Des in winning the recent "Tourism" section of the TWIB 2004 awards (Technology for Women in Business). This is a local competition run by the Department of Trade and Industry. Des won her section after being singled out from 150 other ladies from across the entire country. Future plans for the business is the new school to train pilots, as well as a repair and maintenance shop to offer services checks. There are also two Cat 2 competitions in the pipeline, the first being the South African Winning Nationals, and the

other an International Ladies Distance Challenge. Both of these will take place back to back in December 2005.

A more recent event was the Team Distance Challenge, held at the end of September 2004. More info can be found at [www.pottiesbnb.co.za]. Des believes that the next world record is going to be set here... Don't miss out, maybe it will be you!

FAI NEWS

FAI Centenary in 2005

On 14 October 2005, the Fédération Aéronautique Internationale (FAI) will celebrate its first century of existence. The FAI was founded on 14 October 1905 in Paris, and its world headquarters was established in Lausanne, the Olympic Capital, in 1998. To mark its special connections with these cities, FAI will hold several events in 2005 in Paris and in Lausanne. But the centenary of FAI and air sports will of course also be celebrated in other parts of the world.

The provisional program for the FAI Centenary 2005 is at [www.fai.org/centenary]. As you will see when you click on the different events, some are still subject to confirmation. In addition, FAI Members, FAI Commissions, Event and Competition

Organisers still have the opportunity to submit proposals for other events and competitions to be associated with the FAI Centenary 2005. Therefore, the provisional program will be constantly revised in the forthcoming months, and we invite you to visit the webpage mentioned above at regular intervals. Some opportunities for sponsorship or partnership are still available to companies that may wish to be associated to the FAI Centenary 2005.

World Record Ratification

FAI has ratified the following Class O (Hang Gliders) record :

Claim number: 9629

Sub-class O-3 (Paragliders) – General

Type of record: Speed over an out-and-return course of 100km

Course/location: Drazgoska Gora (Slovenia)

Performance: 34.75km/h

Pilot: Gasper Prevc (Slovenia)

Paraglider: Gradient Avax RSE

Date: 3/7/2004

Previous record: 28.04km/h (24/1/1999, Howard Travers, UK)

FAI congratulates the pilot on his splendid achievement.



Women's Pre-World Gliding Championships – TRAINING COMPETITION

Lisa Trotter

THIS WAS MY FIRST COMPETITION OVERSEAS AND I FOUND THERE WAS PLENTY TO LEARN.

HERE ARE SOME OF MY THOUGHTS ON THE EXPERIENCE.



Photo: Keith Gateley

an enormous enthusiasm, pride and mutual respect among German glider pilots.

THE ORGANISATION

Aeroteam Klix are extremely experienced competition organisers. They run a competition with 120 gliders and 13 tugs every year. Our competition had 60 gliders and six tugs. In total, 55 people were involved in organising the event. It is not possible to fault the organisation. They made it easy, safe and enjoyable for all. With a large amount of meteorological data, they were able to set tasks challenging enough without having too many outland. There was a sniffer flight each day – even when it looked obvious. We were never launched when it was difficult to stay up.

Our only problems were related to not having information in English. All briefings and announcements were in German. We did not get the rules or information for registration in English until the first day of the competition. On a couple of days we were at a real disadvantage because we were on the front of the grid with only 30 minutes to launch after briefing and we still needed to have our English translation after

briefing. Next year English will be the official language.

The organisers made a special effort to help the Aussie team. The competition director said in a speech at the end of the competition that *“we came to the competition as pilots and he hoped that we would leave as friends”*. This was true – we did.

THE AUSSIE TEAM

The Aussie team included Lisa Turner and me as competitors, Cathy Conway as Team Manager, Keith Gately as crew for Turns, my crew – Sonja Fabig (week 1) and Mathias Wittig and his friend Gunnar Goldhahn (week 2). Steve Kittel also came along to offer his services and ended up helping me with rigging and de-rigging each day.

Lisa and I had a lot of support. Cathy was new to the job of team manager, but soon had the job in hand. I am sure she felt pulled in all directions at times. When I had problems on the grid, Cathy's calm, logical and intelligent approach was a lifesaver – all I could do was swear. Keith also came to my rescue on the grid a couple of times. My German crew, who I know from Benalla, were invaluable. Each day after briefing they

gave us a translation – we didn't manage to get all the jokes though. Steve Kittel was always there and was a great help with the rigging and de-rigging – he is now an expert in putting an LS4 together. Having Lisa Turner as a fellow team pilot was a comfort and a help.

PREPARATION

Even though I spent months thinking about what I needed for the competition and wrote numerous lists I was not well enough prepared. Lisa Turner and I even spent a week together in June to train and installed instruments as we would when overseas. I thought that I had backed up everything, but found when I got there that some of my assumptions about what would be in the glider were wrong and had to use my back-up cables for primary. I had cable problems on the grid on two days. One day I had no WinPilot and so had to use the M.A.P to find airspace. It was a major distraction. The only way to be sure to avoid this situation is to bring all instrumentation by two – a costly option.

COMPETITION STANDARD

The standard of the German women glider pilots was very high. Any of the women in the top five places could win the Women's Worlds. We did well on the first day and Lisa Turner did extremely well on another day. We were a little disadvantaged by flying lower performance gliders, but we were off the pace on some days and there is plenty we need to do to reach the standard of the pilots in the top five places.

We found that our thermalling and centering ability was equal or even better, but lost out significantly in our decision-making about where to fly. Bruce Taylor calls this “meteorological navigation”. This is where we think we should focus to improve our speed. We flew with the gaggle a few times and noticed that they fly slower and in a narrower height band.

THE LOCATION

The Women's Pre-Worlds was held in conjunction with the German Women's Nationals at Klix near Dresden. Klix is renowned as an excellent site for gliding competitions. The airfield is very large and surrounded by mostly flat very landable countryside.

THE EQUIPMENT

Lisa Turner and I both hired LS4s to fly in Standard Class. Our fellow competitors found this rather curious, since LS4s were competing in Club Class. We would have preferred to be flying LS8s or similar, but could not find two aircraft of this type because it was such a busy time of year for gliding competitions. To seriously have a go at team flying, we needed to have two of the same performance aircraft.

Having only a couple of hours in an LS4, I was grateful to Frank Turner for lending me his LS4 to practise in for a week in June. It is an easy glider to fly and I found it similar to the LS8. The LS4s we ended up with were good gliders and had only a few small problems. We both had Cobra trailers - they are a delight and essential for rigging and de-rigging each day.

WEATHER

The conditions were different to what we experience at home, but apparently not typical of European weather. There were no really difficult low days - most days were 4,500 to 5,000ft. The biggest difference was how quickly the weather changed. The idea that you can just stop and wait for an overcast sky to clear and produce thermals with cu is new for me. On one day Lisa and I headed off after the first turnpoint under an overcast sky towards some spots of sun that soon disappeared. It wasn't long before we were on the ground. The pilots who got around that day waited for the sky to clear by parking under a cloud for half an hour or more.

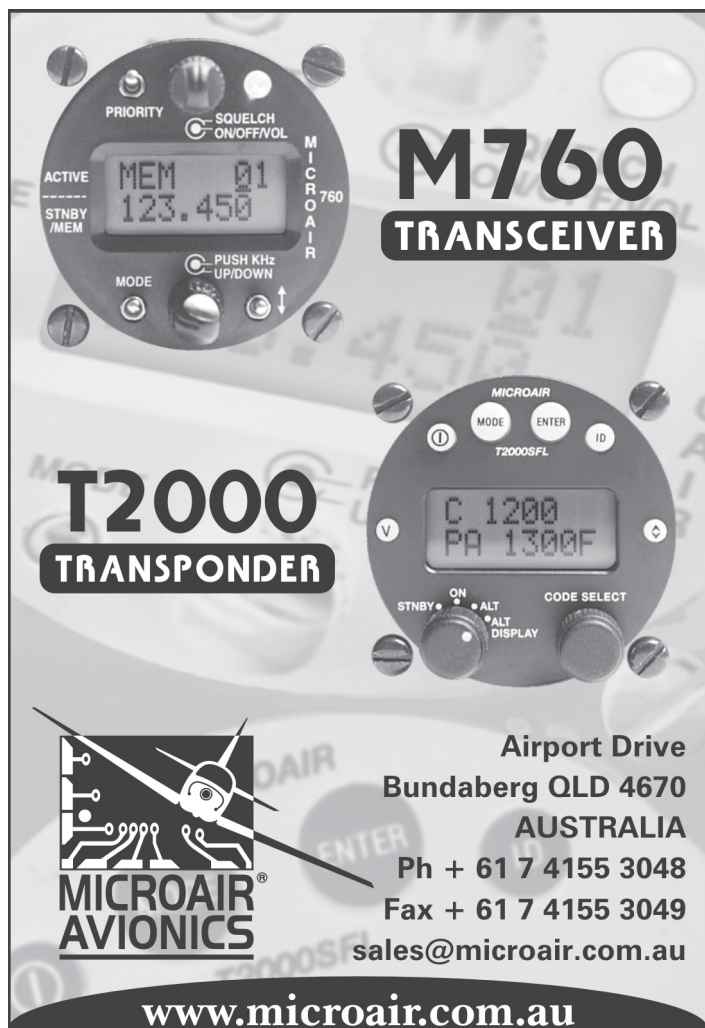
Picking a pathway under clouds ahead is also not so straightforward. The cycle of cumulus forming and deteriorating is so short that what would normally look like the best track to take for the next 40km or so soon looks not so good and a diversion is needed. Anticipating a good line of cu in this situation is something I need to learn more about. On the few occasions that I flew with others, I could see that they were tracking more according to the ground

features, such as a strip of forest, than the cloud patterns.

The days also end a little differently. Around 4:30, the then well established cumulus stay while the spaces between them become very large. This means that we had to get plenty of height before leaving and glide slowly enough to get to the next cloud high enough to be in contact with the lift. Once the day started to die, the lift down lower would weaken and almost disappear. We also needed to search a lot under the large cloud area to find the core.

GLIDING IN GERMANY

In Germany, gliding is considered a sport that most of the population understands. Not some obscure hobby - which seems to be a common view in Australia. There are gliders and gliding clubs everywhere. It is wonderful to look down on numerous gliding operations while zooming around a 300km task. There is no comparison with Australia. Germany has 30,000 glider pilots and about 400 clubs. Most of the pilots at the competition had club gliders rather than privately-owned or hired gliders. There is



**M760
TRANSCIVER**

**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

AVENTURA II – Two-Seat Amphibian Seaplane Kit

Serious Fun? You Betcha!



Anodised aluminium airframe, fibreglass hull, pre-sewn dacron or Stits wing covers.

Main wheels and tailwheel retract for water operations.

Amazing view out of the very roomy cockpit. Lots of luggage space.

Cruise at 70-80kt (faster with Stits wings), land at 50kt. Electric flaps standard.

Engine options 65-100hp. Call for further details and a demo flight on Lake Macquarie or other suitable location.



Aust. Agent: THERMGARD Pty Ltd • Phone 02 4970 5888.

28 William St., Bonnells Bay NSW 2264.

Email: <thermgard@hunterlink.net.au>

Contact: Dieter Stuempl

TEAM FLYING

One of the objectives that Lisa Turner and I had was to practise team flying. We knew that we were likely to be disadvantaged in the process of learning, but thought it was worth trying – the training competition being a good opportunity. About 50% of the field were team flying – especially those at the top.

Prior to arriving, we had flown a few tasks together at our training week in June. At the national coaching weeks with Martyn Wells and Brian Spreckly we learnt some techniques for team flying that helped our communication and ability to stay together. Reconciling the individual hunger or motivation to win and the need for cooperation is difficult and takes a lot of maturity. A good reminder in team flying is to recognise that your teammate's best interests are also your best interests.

Although there were a couple of communication failures, Lisa and I were open, honest and trusting of each other. By the end of the competition we were in the swing of working together. But, we need to practise more to make the team flying an advantage.

Even though we had improved our team flying significantly by the end of the competition, we still need to decide if we team fly well enough for it to be an advantage for us next year.

THE OPERATION

The Wilga gets you off the ground pretty quickly. It is easy to fly behind – in high tow of course. The pattern was to take us to a drop off point a little north of the field. We were asked to release only when they rocked their wings and not before. When they did rock their wings, you had to be watching and get off quickly – they did not hang around. On release, we had to turn to the north and move away from the drop off point. This worked very well – tugs and gliders were never mixed. The gaggles were busy but polite – although I did get sandwiched a couple of times. We were required to listen out on the competition frequency within 25km of the field and when in gaggles. We used our handheld radio for this and talked on our own frequency on the glider radio. Start gate procedures were similar to ours, but they used a 10km line rather than start points.

For the finish, direct landings were encouraged, but you could do a circuit if you wanted – few did. The last turn point was a control point five to 10km from the finish line which made you do a 90-degree turn from the last leg to go to the field. You can see the field 20km out, so it just feels like a long base and final leg. They asked us not to taxi off and to land as long as possible to allow following gliders to land behind. This worked well because the airfield was long and very wide.

NAVIGATION

It took about three days to get used to the look of the different terrain. Forget using towns – they look all the same. The features that were most useful were a combination of autobahn, groups of windmills, strips of forest, quarries, power stations, lakes and airfields. There are a lot of airfields – many of them very large concrete runways built by the Russians. At one airfield there is a huge dome that was built to house the construction of an airship. Lakes were also a good navigation point. Unlike Australia, the lakes on the ground are also on the map in the same place and the same shape.

AIRSPACE

Before the competition we had a lot of very helpful advice from Aussie pilots who have flown in Europe. They all said to watch out

for the airspace (including Martin Feeg). We knew not to go into airspace, but still managed to do this. We infringed airspace vertically by climbing up into it. It is easier than you might think to get caught out. We certainly learnt a lesson. The circumstances were that we were low and struggling to stay up. I had somehow managed to disable my WinPilot airspace warning and had not spent enough time pre-launch studying the map to familiarise myself with the airspace in relation to our track. Without a WinPilot warning and seeing other gliders above me, I figured we weren't in airspace – wrong. Non-competition gliders don't worry about airspace. After this we discussed airspace each day at our briefing.

WOMEN EVERYWHERE

It is the oddest feeling to see a grid of 60 gliders loaded with women surrounded by ever-helpful male crews. Really, it was inspirational to fly with so many very capable women pilots. Secret women's business was not so secret – but I won't go into that.

NEXT YEAR

Next year will no doubt be more serious and there will be more pilots of a higher standard. There might be more hype and pressure. Some things will be easier though – briefings will be in English, we will have accommodation closer to the airfield and we will have the benefit of the many lessons learned from the training competition this year.

WHY DO IT?

Competition flying that is challenging is hard. There is a lot of work and it is mentally and emotionally taxing. Going to an international competition has pushed me that little bit further. But, I am doing it because it will improve my flying and I want to represent Australia well. The foremost reason of course is because I really enjoy the flying. Every day I couldn't wait to get into the air for another adventure.

THE WEBSITE

Cathy Conway, Mark Newton and Steve Kittel did a great job of keeping people back in Oz posted on the happenings day by day. It is a big job to get the information to the website each day and Cathy was up to the wee hours of the morning on many occasions. Getting such positive feedback from people about the site and receiving emails of support was a great boost. You can find a link to the website on the GFA website.



GLIDING FEDERATION OF AUSTRALIA Airworthiness Inspection

FORM 2 AND C OF A NOTICE

- ☐ A form 2 inspection is due and a cheque for \$143* is enclosed
- ☐ The C of A requires renewal. A cheque for \$33* is enclosed for renewal and the existing C of A document is returned
- ☐ Initial registration package is required and a cheque for \$363* is enclosed

* Fees include GST

A) DOCUMENTATION REQUEST

- ☐ Please send me a change of certificate and owner document
- ☐ Please send me an application to register an aircraft form

Aircraft Type

Registration marks VH –

Address to which documents are to be sent is:

Name

Address

State..... Postcode

Forward to: GFA Airworthiness Secretariat,
130 Wirraway Road,
Essendon Airport VIC 3041

CALL ME INSANE IF YOU WANT!

Martin Feeg

PART 2 IS THE MEDIUM TERM PREPARATIONS. AND AS I CAN SEE, EVERYONE OUT THERE HAS DONE THE HOMEWORK. NEW CAR, GLEAMING GLIDER IN A FRESH WAX COAT AND AS YOUR GLIDER IS NOW MORE COMFY THAN YOUR BED YOU ARE SLEEPING IN THE GLIDER NOW...

Okay, okay, maybe you are right and I am insane or at least getting too quickly too far (eg: carried away).

Fact: winter is drawing to an end and it is now time to think about the medium-term preparations. That does not mean you forget about the long-term preparations all together.

As I said in the first article medium-term is covering a period of a few weeks down to a few days.

Fine tuning your schedule (business and private), keeping your fitness up and improving your soaring skills is one part. Just as important is watching the weather and its long-term development to have everything ready on the spot.

Additionally, you make sure that all your equipment is continuously in good order. If you find throughout your training (it's still the run up to the big flight) that anything should be altered, don't postpone it, get it sorted – NOW.

Probably weather and its development is the hinging point. No weather – no point in stressing the people around you. That's why you can be very relaxed in winter taking on duties others are asking you to do. And you should, to make up for the shortcomings in spring and summer. However, come spring and the duties should be completed as well as you being much more reluctant taking on new stuff. Best if you can refer to your generous efforts throughout winter, as your family is willing to give you a break.

If the weather is promising you should get the last bits organised, if it not favourable do whatever you postponed or catch up with family and work.

What are these last bits? Well, first of all your fitness. Stress is no supporter of good performance, so find out the causes and get them sorted. Secondly, your physical strength, a major effort (like heavy D'ing) might be contra productive, particularly if it is too close to the big event. Being deprived of sleep is another no-no. And don't forget your diet and alcohol consumption. Light, fibre-containing meals made out of low processed foods (lots of minerals and vitamins) are much better to keep you concentrating over the long task. As well, g-forces, sun and other foes are less effective if you are in good shape. For the same reason watch alcohol, it takes

at least a week for the penalty to be down to zero. Instead, take fluids in liberal amounts to improve the performance of your system. However, beer, coffee and tea alike drain more urine (fluid) than you drank, leading to dehydration – the opposite result.

While you have spare time, but the weather is not good enough for the really big task, you still have more to do than you imagine. Firstly, get your skills improved. Thermal together with others and try to out-climb them. Or team up and do a short task against your mate. Soon you will find out your strengths and your weaknesses. Work on your weaknesses and improve the strengths. On top of all this, stray into the near and far vicinity to learn your landscape inside out. Find out the fast spots and memorise them. As well, you should find the slow spots and avoid them. Outlanding spots are the next thing to memorise. The better you know all this, the more relaxed you will be when coming low.

Bad weather and your wife made you go to the club? No, you are not hanging around at the bar; you are off in the glider. Use the marginal conditions to improve your skills in such conditions. There might be a bad spot throughout the big task and these skills come in handy. Make a point of coming in to land last, squeeze every bit out of the day. Try to stay airborne with every fluff you can find and work. You will see this is stretching the final glide to eternity and the task you believe lost is suddenly achieved.

Or, the weather is even worse. Get your comrades and have a fun comp. Mark a landing line on your airfield, place a video camera next to it and make a point of landing soft. The aim of the comp? To land as soft as possible, behind the line and come to a standstill as close to the line as possible. Nothing will be risked; you only improve outlanding skills with the aid of healthy rivalry. At the end of the day the video footage is used to judge the landings – you will find there is a lot to talk about.

Or, get some cones from the local road service and create a task to manoeuvre a trailer back and forth. Better to improve the skills without pressure than in the middle of the night, with the thunderstorm approaching and your comrade still not found.

Generally speaking level two days are still training days. Your personal set tasks should vary a lot. Some should be short with highly specialised aims. Others should be longer, containing a broad range of aims.

The short(er) tasks could improve thermalling skills, thermalling skills in special condition, predicting thermal strength while flying towards a cloud, predicting the precise area of lift under the cloud, staying airborne in marginal condition (of course you are close to your airfield). Or you might as well use a 50 to 100km task with your airfield right in the centre to achieve special techniques. With these short tasks you should always be within glide range of the site, hence you can concentrate on other things, for example working a certain height band, racing yourself around the course a few times, building confidence in going around the turn-point first and then taking the thermal while you are on your downwind leg. The possibilities are endless and Helmut Reichmann provides about two dozen more suggestions in his cross-country book. Anyway, this book is still the bible for cross-country and plucking it from the board for re-reading is a very smart idea indeed.

The long tasks will give you a wide range of training, but the core issue is to bridge your way away from the site and back to it. The more you know about the specialities of the countryside and how lift relates in various conditions the easier it will be for you on your big task. As you know every stone and every tree you don't have to concentrate so much on particularities while gliding over those areas. Coming low you don't have to worry about finding an outlanding spot, because you know them all already – you could find them in your sleep. With those and other worries eased, the stress is reduced and therefore you are not getting drained as much.

Additionally, you might find resident thermals. They make a big improvement on your cruise speed flying the line of best energy.

Of course I don't have to tell you that evaluation software will help a lot to actually find out about your performance!

Yes we are athletes and training to performance takes a lot of time. But it is fun! Play it safe!



THE AVIFIBER CANARD 2FL

– the first foot launched composite rigid wing

Brett Snellgrove

THE CANARD 2FL IS A CANARD RIGID WING MODEL DEVELOPED IN THE LATE 1970'S AND EARLY 1980'S IN EUROPE BY AVIFIBER (DIPL. ING. HANS U. FARNER) AND WAS PROBABLY THE FIRST RIGID WING FOOT LAUNCHED HANG GLIDER EVER DEVELOPED. (A CANARD IS A SMALL WING-LIKE PROJECTION NEAR THE NOSE OF AN AIRCRAFT, ATTACHED IN ORDER TO CREATE EXTRA HORIZONTAL STABILITY.) MR FARNER WAS A UNIVERSITY PROFESSOR WHO BECAME INTERESTED IN APPLYING THE UNIQUE ADVANTAGES OF CANARD AIRCRAFT TO A FOOT LAUNCHED VEHICLE, JUST AS THE WRIGHT BROTHERS HAD DONE DECADES EARLIER.

The advantages of a canard are numerous. Firstly, having the stabilising surface ahead rather than behind the main wing dictates the canard surface flies at a positive (rather than negative) angle of attack, and contributes to (rather than detracts from) the total lift of the vehicle. Secondly, since the canard is ahead of the main wing, it is typical to design the canard to stall first, dropping before onset of main wing stall. As such, even with full canard deflection, the wing tends to oscillate in pitch rather than stall. Although accelerated stall can be achieved, it was this important safety feature that kept the Wrights alive when many earlier aviation pioneers, such as Otto Lilienthal, had stalled and died in resulting crashes.

Unfortunately, every aviation paradigm has its disadvantages, and the canard has several. Since the canard must stall first, the coefficient of lift of the main wing is restricted to a number lower than the canard. (If the canard was to continue flying after the main wing had stalled the angle of attack would continue to increase, carrying the nose even higher and further into the stall). As such the full lifting potential of the main wing is reduced, and landing speeds for canard aircraft are typically higher than traditional, tailed aircraft with similar wing areas. Furthermore, since the canard is forward of the main wing, the turbulence and tip wash generated by the canard can pass over the main wing at inopportune times.

Mr Farner attempted to resolve these issues with several innovations. Firstly, he placed the main wing considerably higher than the canard by mounting it on V-wing pylons, keeping it out of the canard wash. This had numerous advantages in creating

a very strong structure; the pylons provided additional wing area and by joining to the main wing reduced tip vortex. They also provided an ideal place to place airbrake spoilers allowing glide path control with sink rates of 0.6m/s (120ft/min) and positioned the centre of gravity well below the main wing for additional stability.

This low centre of gravity also allowed the use of weightshift for pitch control. At launch the pilot stood with the legs protruding through bomb bay type doors, which closed after launch to reduce drag; pilot weight was supported on shoulder straps. (Though reclined positions as shown in the diagrams were experimented with, the prone position was adopted for the few versions sold). After launch the pilot rotated prone on a stomach board that slid fore and aft 80cm (32 inches).

The concept was, that in using weight shift and a low centre of gravity, the positive angle of attack of the canard relative to the main wing (needed to prevent main wing stall) could be reduced to an absolute minimum, increasing efficiency and allowing for lower landing speeds. In flight the pilot could shift forward, lowering the angle of attack of the wing and the canard. Unlike traditional canard control, the canard on the 2FL was fixed in pitch but free to tilt (or roll) plus or minus five degrees on the glider's longitudinal axis. This allowed the canard to act like a rudder in the same manner as a bird's tail and control any adverse yaw generated by aileron action, eliminating the need for additional devices such as tip rudders.

Unfortunately it was this feature that eventually killed Mr Farner on a tragic test flight. On one occasion he slid forward and

apparently with the resulting nose down position and effect of gravity, lacked the arm strength to push back, or over-controlled the vehicle, (accounts vary) diving into the ground. This occurred after only a small number of 2FLs were sold. The business promoter (H. Bucher) decided to buy back all the gliders after the accident and then redesign and re-release the Canard as a motorised sailplane with traditional canard three-axis type control. Given the exceptional performance of the 2FL it is difficult to understand why the wing could not have simply been modified to eliminate the weightshift component, substituting traditional stick, three-axis type control and any slight theoretical performance deficit easily tolerated, retaining the foot launched capability. I imagine having a canard that both rolled to act as a rudder, and pitch the wing would be difficult to achieve, necessitating the need for additional devices to control adverse yaw as seen in tip rudders on the sailplane version in the photo.

In the 2FL, roll control was achieved by semi detached ailerons, which, when rigged for differential throw (travel up further than down), suffer less from adverse yaw and failure to provide effective control at angles approaching stall. It should not have been too difficult to incorporate spads as used in the Stalker to control adverse yaw without



Images supplied by the author

adding the weight and complexity of tip rudders used in the sailplane version. This would allow for a foot launched, stall proof glider with an LD in the vicinity of 30:1. Something that has yet to be achieved to this day.

At first glance the claim of 35:1 LD for the 2FL may seem excessive, but consider this, Farner had Lockheed as his client. The joined wing concept allowed an effective span of the main wing plus the pylons of around 65ft, without the tip drag induced by the vortices of bi-wings. The pilot was fully prone in flight and completely enclosed in a streamlined canopy and fuselage. Perhaps 35:1 was a stretch, but 30:1 sounds reasonable given the performance of the faired Swift.

The specifications were as follows:

Span: 13.5m (44.4ft)

Wing area: 13m² (140ft²)

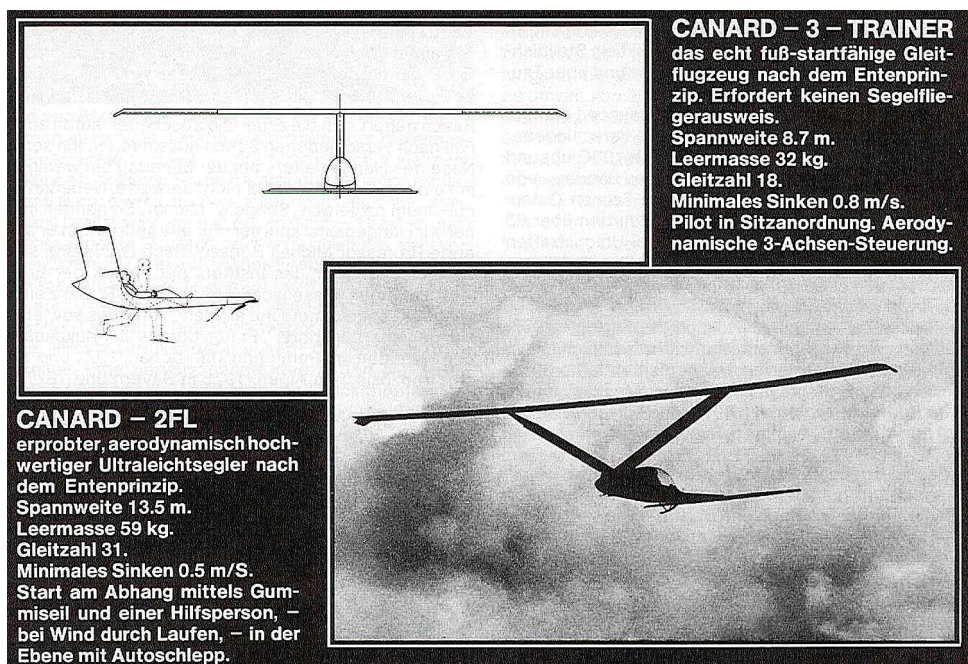
Length: 4.8m (15.8ft)

Weight: 110lb

Best LD: 35:1

Packed size: 4.8m (15.8ft)

The wing's construction was shell and spar with glass fibre resin laminations formed in female moulds; the core sections were Styrofoam. Future models were planned to



have Du Pont Kevlar construction, saving two-thirds of the listed 110lb weight stated for the prototypes. Transportation was in two separate 4.8m (15.8ft) sections for car top box or trailer.

Given the performance of the 2FL, modern rigid wings look a little less technically sophisticated, especially considering the concept is over twenty years old! With

modern materials and construction techniques, if ever there was a time to reintroduce this design it's now. I'm convinced with modern folding rib designs and composite materials the 2FL could be made significantly lighter and more easily transportable. I only wish I'd bought one when I had the chance...




CORINNA SCHWEGERSHAUSEN
WOMENS WORLD CHAMPION 2004
GREIFENBURG, AUSTRIA

GLIDER - LITESPEED S 3.5
TAKING CHAMPIONS TO HIGHER PLACES...

LITESPEED S

MOVES

MOYES

TAKING YOU PLACES

Moyes Delta Gliders Pty Ltd 1144 Botany Road Botany NSW 2019 T + 61 2 9316 4644 F + 61 2 9316 8488 Email moyes@moyes.com.au Web www.moyes.com.au



HERE WE ARE AGAIN THEN

Taff

"Here we are again then."

I do wish he wouldn't say that.

We've been flying together for the past god knows how many years, and you can bet your bottom dollar that every time we go out to fly, he starts the day off with the same line – *"Here we are again then."*

It's got so that I grit my teeth in anticipation of hearing it.

Oh, it's not his fault I grant you. Some people are naturally boring, born to it in fact, and in an aristocracy of bores Peter would be a prince. He's the sort of guy who you'd never even think of calling Pete. He's a natural bureaucrat, a born pen pusher, and a natural snore inducer. He's a nice guy, but by buggery he's boring.

He's an accountant – you'd not have guessed, would you? I've nothing against accountancy, someone has to do it. It's just that they tend to be of a kind. He's got his own practice, down in the town centre, called *"Clarke the Accountant,"* an almost, but not quite, witty name. He seems to make a healthy living, judging by the car he drives and the size of his house.

Always worth popping in to see him at the office; he's got a little darling manning the front desk, a little Asian girl known, enigmatically, only as Sue. Mind you, the price of copping an eyeful of Sue is having to have a conversation with Peter. The boredom of this is alleviated by Sue shuffling in with a tray of coffee and biscuits. She's a real looker, lovely figure, and she never seems to speak unless spoken to. This is in high contrast to Renee, Peter's wife, a brassy harridan who seems to have modelled herself on Sybil Fawty. The worse case scenario is popping into Peter's office when Sue is out, and Peter and Renee are having one of their never ending arguments. These normally revolve around money. To Renee, spending money is both a sport and a high art; to an accountant like Peter it's the ultimate sin.

Anyway, as I said we've been flying together for years, and Peter had become one of the club's fixtures. To be fair, he did do the club's books for free, and we always showed a healthy balance each year.

This trip we'd been planning for weeks; we'd been hoping to push out into the badlands, go looking for some real big cross-country mileage. The plan was we'd tow the winch out into open country, the border of the desert, get us winched up early in the day, and then head off as a gaggle. Flying as economically as we could, we'd try and push out

into no man's land, with the driver of the winch truck following us on radio and by sight. We wanted to clock up as many miles as we could, get some big distance flying done.

We were all amazed when Peter signed up for it. Normally nothing on Earth would tempt him out of his office on a working day, you couldn't crow bar him out. He even took a laptop out on the hills when we flew on a weekend so he could number crunch while waiting for the right conditions. But for this trip we'd agreed to drop everything and go, no matter what day of the week was suitable. If boring is his middle name, then methodical, pernickety, forward thinking, staid, unemotional, and others must also have been considered. So when we discussed the trip at the club's monthly meeting, and he said *"Count me in, it sounds fun,"* several of us choked on our beers. For him to even attend a meeting was rare.

So the plan was fixed. We'd chosen our launch site, miles from anywhere, with open desert fanning out all directions ahead. There were several dirt roads in the area, and our Range Rover could handle most of what the desert could throw at it. The plan was, as I said, to stick together as a gaggle, and to fly as a team, making all decisions on direction etc together. We all have good radios and GPS, we'd all have camelbaks, and we'd all be carrying a survival kit.

The plan was to wait for a good day's forecast, then drive to the site the night before in order to camp and get as early a start as possible. We'd all fixed it with work. Well, I'd fixed it with work; all the others are self-employed, giving truth to the statement that anyone self-employed has an idiot for a boss. There were four of us flying: Big Bob, who's the shortest guy in the club, Banksy, Peter and me. Banksy's wife, Helene, was going to do our winching, driving and retrieve. She's a good pilot herself, but didn't fancy pushing things the way we intended to.

It took weeks before a suitable forecast came, so all of us were hyped to the hilt when it actually arrived. They drove out in the RangeRover, while I got the wife to drop me after work. The winch was all set up when I got there; they'd thrown a few tents up and got a barbie going. We drank beers, poured over the maps, planned and anticipated, and drunk more beers. Funny thing happened at about 10:30 that night – Sue turns up, dressed for a change in jeans and a T-shirt, looking even more tasty than she does in her office suit. She came over to Peter and gave him a small sheaf of papers. She then smiled, and gave a sort of bowing nod, before driving off.

"Do you always let the staff use your posh car, Peter?" chipped in Big Bob. *"Only when they are delivering important papers,"* he replied. So we had a last beer and crashed out for the night, Peter staying up to study some of the papers Sue had delivered.

The morning was chilly, but the sky was clear and already with the sun coming up over the horizon the day was heating up. Banksy took off first, flew a few circles before landing. *"No thermals as of yet, but there is that nice soft breeze we were hoping for,"* was his verdict.

We waited. Peter had a bit of breakfast, but the rest of us were too hyped up to eat. Typical of him. At about 9:00am, a decent thermal scuffed up some dirt just close to us, and Banksy took off to see the score. He stayed up, and so the rest of us threw the kit on, and Helene winched us up.

Once we were all in the air and thermaling nicely, Bob led us off on the first of many hops between thermals. I'm sure Bob has got built-in infrared vision or something, he never fails to find a thermal. We soared and swept across the desert plain. Far below Helene tracked us, occasionally heading off in a different direction to us, to avoid obstacles on the ground. This was turning out to be even better than we thought.

We'd been in the air for a couple of hours, our conversation on the radios dropping to nothing as we concentrated on flying economically, when we got a call from Helene. *"I don't know if you buggers up there have noticed, but there's a range of hills, or bloody great dunes, ahead."* We looked to where she meant. A long range of dunes and sandstone bluffs some hundreds of feet high formed a solid block virtually to the horizon, and the wind was taking us straight down the middle of them. She chipped in again, *"I can get through them, but it's tricky terrain, so you'd best be careful."* *"Okay, babes,"* Banksy replied, *"we've thought about this. We knew we'd hit them eventually, so we're prepared. You drive carefully, keep an ear to the radio, we'll give you our GPS location when we're down."*

We were high enough to not have to worry about the hills, and some of them were generating boomers of thermals, so on we went. I was loving every second of the flying, it was close to perfection. Sweep across to a thermal, pull some tight 360's to find the core, and up we go like an elevator. Get to the top, circle for as long as it lasts, then follow Bob to the next one he's picked up on his radar. It had almost become hypnotic, but eventually the day started coming to an end, and each thermal was getting weaker.



We'd started thinking about landing when Banksy broke radio silence. "*Peter, where in the name of sodding hell do think you're off to?*" I looked over my shoulder. Peter, who had been holding his circle slightly higher and behind me, was heading off at a tangent from us. His voice broken and crackling came back, "*I jus.. wan.. to see if I c..n c...ch an...ther one.*" Banksy swore like a trooper, "*We agreed to stick together you...*" I won't say what he said; it wasn't very nice, and I couldn't imagine Peter's mother doing that.

Peter pushed on regardless, actually gaining height. We had already started to descend, Banksy was shouting instructions to Peter. These went along the lines of: "*Make sure you keep in radio contact, give us your position off the GPS, and don't go anywhere until we get to you.*" There's about eight words missing from that, but I think the meaning's the same.

The last thing I saw of Peter was his glider against the rapidly darkening sky, several kilometres away, still high.

We got down safely. Banksy got on the radio to Helene, gave her our position, and asked her to try getting Peter's position off him. The radio in the Range Rover is a powerful piece of kit, but even so we had enough problems getting her, with the high dunes blocking out everything. She got to us, but

hadn't had any luck getting hold of Peter.

We camped over night. In the morning, Helene went off to get the emergency services alerted. We winched up, but didn't head off cross-country. We just got as high as we could and circled the area. We were all pretty freaked out by then. The emergency van arrived later that arvo, and search and rescue went into full swing. We gave as detailed an explanation to the cops as we could, and included all we knew about where he had headed off to. The cop shook his head, "*Silly bugger's got himself lost in the biggest area of nothing south of Darwin.*"

They never found him. His glider was found a few days later, miles from where we had seen him last. His kit was found soon after. They did a search, it went on for a good couple of weeks in fact, but no trace of him was ever found. There was an inquiry, and a Coroner's Inquest. It cleared us of any blame I'm glad to say, and Peter was given an "open" verdict, not "death by misadventure," as they never found his body.


Several things emerged during the inquest. It would seem that Peter hadn't been as good at his work as we'd thought. Over the past six months or so a million and a half dollars worth of his clients' money had gone unaccounted for. He'd damn near bank-

rupted one business, and left others scratching for cash. Fortunately the club's books were all in order, and our cash still healthily in the black.

His house was re-mortgaged to the hilt, and that and all his worldly goods were taken into account at his bankruptcy hearing. Renee emerged from that looking ashen; not a cent in the world to her name. She ended up back living with her mother, a woman next to whom even Sybil Fawley would look an angel. Last we heard she'd been hitting the bottle quite hard.

The club instituted a new trophy last month, the "*Peter Clarke Memorial Trophy*". Everyone calls it the "*Boring Cup*" though. It's for the best long distance flight (one way).

Funny thing is, last Thursday was the first anniversary of the day he went missing. Me and Banksy and Big Bob and a few others did a flight in the desert in his memory. I think Bob was going for the cup, he got 230km in that day, all over friendly terrain though.

When I got home there was a postcard on the mat, with a Thai stamp on it. A lovely post card of a beach, with a pretty Thai girl in a bikini on it. She looked familiar somehow. And the only message on it was, "*Here we are again then.*" 

Letters to the Editors

Leave our logo alone

GFA members should be aware that the 'Change Agents', busy telling us what is wrong with the GFA and how to fix it, seem hell-bent on changing everything including trashing the present logo for "something more modern".

The GFA logo is an inspired design of John (Jack) Lilley who recently passed away. It is well known around the world by other gliding organisations and much admired for its striking simplicity and immediate message that we are a gliding organisation. The wavy lines are immediately recognised as to do with the weather (as seen every night on the TV 's synoptic charts) and the long wing aircraft is obviously a glider, can you think of a better message as to what we are about? If the GFA should change its name (another useless proposal) then the initials "GFA" can be replaced without wrecking the basic design.

Unless an organisation's logo is of poor design or no longer relevant to the organisation's activity, no useful purpose is served by changing it. A new logo will do nothing to solve any of the GFA's problems, will irritate the present members who are proud of it, and lose the international recognition it has.

We might live in an increasingly disposable society where everything has to be new and trendy but does this mean we should trash everything in sight!

GFA members should get to their councillors and executive VPs and tell them to ensure that the 'Change Agents' be instructed to "Leave our Logo alone" and to concentrate on things which will bring about a material improvement in the GFA's fortunes.

John Ashford, Melbourne

Perspective of a Novice

Having only gained my restricted licence in May I was unsure as to how to progress my paragliding. Sure I had a restricted licence – someone thought that I was capable of flying (I was not so sure!). The answer came in the form of a week in Bali on tour with Ted Jenkins (Alpine Paragliding instructor). I have come home with 20 hours flying, which was obtained under the careful supervision of Ted to ensure that I was safe and who helped me gain confidence and a great set of skills. I feel far more confident with progressing my paragliding having got over the difficulty of getting early hours up. Thanks Ted! I also had a

great time in Bali with a great group of people.
Jenny Bailey

Glue in 'Clio's Wings'

Geoff Richardson, the designer and builder of the Golden Eagle, has discussed with me the matter of the glue used to build the glider. Unfortunately I may be responsible for the error that has crept into Clio's answers. The facts are: Geoff made Casein for the previous glider from products bought from an engineering company which was producing NuGlue by the time he started the Eagle, following their examination of his glue samples. Then Nightingale Chemical Co produced GRASP, which was brownish in colour while NuGlue was white. I have been under the impression that all this happened with the building of the Golden Eagle!

Keith Meggs, President of the Australian Aviation Historical Society, is close to finishing a massive document on all aircraft designed and built in Australia, and he tells me that finding out about the truth on aviation matters is very difficult, and getting even harder as pioneers with first hand knowledge are getting scarce.

Allan Patching 

The Grampians Finally Deliver – A MEMORABLE WAVE FLIGHT

Geoff Vincent (Grampians Soaring Club)

FLYING GLIDERS FROM ARARAT AIRFIELD, VICTORIA DURING WINTER CAN BE A FRUSTRATING EXERCISE. THE AIRFIELD IS FAR ENOUGH SOUTH TO BE INFLUENCED BY COLD AIR FROM THE SOUTHERN OCEAN, YET IS SUFFICIENTLY FAR FROM THE SEA TO BE SPARED THE WORST OF THE WESTERLY WEATHER. OCCASIONALLY A GOOD THERMAL DAY POPS UP AND, VERY OCCASIONALLY, LEE WAVE TRIGGERED FROM THE GRAMPIANS MOUNTAINS ABOUT 30KM WEST OF THE FIELD CAN BE ENJOYED. HOWEVER, IT'S A HIT AND MISS SITUATION AND A SUCCESSFUL DIAMOND WAVE FLIGHT SEEMS TO COME ONLY WITH PERSEVERANCE, PREPARATION AND A HUGE SLICE OF GOOD LUCK.

The few days leading up to 19 May 2004 had seen a 1,028 millibar high pressure cell sitting over southern Australia and a succession of cold fronts, embedded in the westerly airstream, moving through the Western District of Victoria. By 19 May the fronts had slipped away to the south and the high had established a weak subsidence inversion at about 5,000ft. The wind was 240-270 degrees with speed increasing with height to 40kt at 12,000ft – all the classic ingredients for lee wave formation off the Grampians! The Leschen twins (Richard and Henry) and I had been closely monitoring the unfolding weather situation and, in our view, Wednesday 19 May was going to be it. Brian Wood, Grampians Soaring Club CFI and tug-master extraordinaire, had confirmed his availability for mid-week towing – so everything was set.

It was a 6:30am start from Melbourne. The day dawned cool and partly cloudy with a light westerly wind, and I arrived at Ararat airfield at 9:00 to find the twins' PIK 20B all ready to go. Richard soon launched took a high tow towards Moyston, but didn't find any substantial lift. He persevered with some weak wave near Mt Ararat and climbed from about 4,000ft to over 7,000ft, but finally decided to land and re-launch.

In the meantime, with my own PIK 20B ready for the fray, I took a long tow beyond Moyston and, in the absence of anything better, released at 7,600ft QNH into an area of zero sink east of Jallukar. I tiptoed around the fragmented tertiary roll clouds for half an hour looking for better air; then, after a low spot of 6,800ft, things started to improve. A Foehn gap had opened up near Noelhurst,

and I found consistent half- to one-knot climbs in front of the secondary roll cloud on the downwind edge. Progress was slow, so there was plenty of time to get the oxygen system operating as I approached 10,000ft. The climb petered out at 10,400ft (some 75 minutes after release) and I decided to push forward into the primary wave, a line of roll cloud being visible some four kilometres east of Mt William.

My hard-won height disappeared quickly (with some areas having 12 to 15kt sink) and the PIK was down to 8,000ft by the time we traversed the trough, battled the turbulence of the rotor and entered the primary wave some five minutes later. But it was worth it! From here on the lift was consistently better, averaging two to three knots but with some transient hot spots giving six to seven knots. The wave in the Mt William area took us from 8,000ft to 17,000ft, to be followed by an equally good area to the south and west of Lake Bellfield. The altimeter wound up and up as we explored the extent of the wave, finally reaching 23,370ft a kilometre west of Bellfield Settlement, some three and a half hours after release. The views were spectacular – wall-to-wall cloud as far as the eye could see, which I guessed was 200 to 250km. The gain of height, confirmed later from the logger, was 16,565ft (exceeding diamond height requirement by 160ft). The jet contrails looked a lot closer, too!

There was certainly more height available, but considering the need for airways clearance above FL245, the steadily dwindling oxygen reserves and the insidious effect of the cold (-30°C already) I decided to

commence the descent at that point. It seemed an appalling waste of energy to just pull full flaps and descend, so I flew at a safe speed (well below V_{NE} for the altitude) out to Lake Bolac, Streatham, Beaufort and Mt Chalicum wind farm, covering over 170km in the process. I knew my feet were getting cold at the top of the climb, but I didn't realise how much colder it would get inside when flying at 100kt rather than 45 to 50kt. I bloody-well froze, along with the Camelbak drinking water tube!

By this time the convective cloud cover (extending from 4,200 to 6,500ft) was more than 7/8, but still had sufficient holes for the PIK to be able to descend safely and make a welcome landing on Ararat's runway 30. Woodsy was still around, and looked quizzically at me as I solemnly placed a kiss on the glider's blue nose. "*She has to take much of the credit*", I explained. Woodsy wasn't too impressed, probably attributing my strange behaviour to the residual effects of hypoxia, hypothermia and advanced years!

NOW – THE KEY ELEMENTS

1. Perseverance:


Just keep at it! I'm fortunate to be essentially retired, so despite living in Melbourne and having a 450km round trip to the field, I'm prepared to give it a go at every opportunity. I'm also very fortunate to have an understanding wife, although it's taken 42 years of marriage to cultivate the current level of understanding!

2. Preparation:

Treat every flight as if it's going to deliver diamond height.

- *Never fly without your oxygen system installed and operational. Can you get the mask/cannula on and the system activated without taking both hands off the stick? Practice this and work out how to do it without hat and sunglasses getting in the way. Are valve, regulator and pressure gauge easily accessible and visible? I personally use a Mountain High EDS system as my primary supply with the original Avox adjustable-flow system as back-up.*
- *Always wear suitable warm clothing. Mine consists of Lycra tights (I was a competitive bike rider in a former life) under two-layer tracksuit pants. Thermal singlet with Bonds cotton long-sleeve vest, long-sleeve cotton shirt and fleecy track-suit top. Thick woollen socks over thin under-socks with well fitting walking boots, done up loosely. Woollen gloves and woollen hat (I use an old woollen Cinelli bike cap with a very short stiff peak and pull-down sides which cover the ears – it looks appalling but does the job). Make sure that you can access your apparatus if you need to relieve yourself during the flight – extra clothing can really complicate the process!*
- *Always carry your barograph (or preferably an IGC-approved GPS logger). Personally, I carry a Garmin 76MapS GPS for general navigation and a (borrowed) Filser LX 20 logger as back-up. It's essential for you to know where you are at all times. Just imagine being at 20,000ft and the cloud closing up below, depriving you of all visual ground references! It's also extremely valuable for 'post-mortem' analysis of your flights.*
- *Are your glider's essential mechanical control systems lubricated with low-temperature grease? No medals for discovering stiff or 'frozen' controls when you really need them. I really appreciate that the previous owner installed PTFE bushes in the aileron and flap drives in my PIK 20 – no problems at all with stiff controls under low-temperature conditions.*
- *Are your 'clear-view' plastic panels in place? Few things are more frustrating than experiencing internal canopy fogging/freezing simply for lack of foresight and preparation.*

3. Luck:

I think it was golfer Jack Nicklaus who coined the phrase, "*The more I practice the luckier I get.*" This message is patently true in gliding. The weather is beyond our control, and its vagaries are often beyond our comprehension, so even the best pilots will find themselves in unworkable situations from time to time. As the popular song says, "*Some days are diamonds, some days are stones.*" All I can say is – stick with it, and eventually it will all come together. When it does, it's a magic day. 

October 2004

Book Review: THE LEADING EDGE

BY DICK GEORGESON AND ANNA WILSON

Allan Ash



Dick Georgeson (left) with Ralph Court and Allan Ash (in the cockpit of a Slingsby Prefect) at Dunstable in 1949 Photo: Courtesy Allan Ash

Dick Georgeson achieved world recognition as a sailplane pilot during the 1960s and 70s by setting new national and international records in New Zealand.

I first got to know Dick in the 1949 when we were both low-time pilots and short-term members of the London gliding Club in Britain. Soon after returning to his homeland, he began making a mark as an explorer of the the unexplored standing wave that forms regularly over the South Island and often extends its power into the North Island.

Having now retired from active flying, Dick has written, in conjunction with Anna Wilson, a detailed and exciting account of his adventures in high altitude and long distance soaring in New Zealand. Beginning with his early youth in the Southern Alps of New Zealand and the influence of his family on his upbringing, Dick records his early flying experiences in Tiger Moths and his strong attraction for motorless flight.

Starting with a Slingsby Prefect medium performance sailplane, Dick began exploring the massive wave phenomenon but soon realised the limitations of such a modest aircraft. Moving on to more modern and advanced sailplanes he gives descriptions of such mounts as the Weihe, Skylark 2, Sky-


lark 4, Dart 15 and 17, SHK, Kestrel 19 and others, with personal notes on the handling and performances of many of them.

His descriptions of his wave flights and records include much information that would be valuable to other pilots attempting high altitude soaring. The accounts of his long distance flights and records highlight the need for meticulous planning and preparation.

There are interesting, and sometimes amusing, anecdotes about the author's involvement in national competitions and in world contests in Britain and the USA.

Throughout the book are woven interesting revelations of the development of the sport of soaring in New Zealand. The reader is also introduced to many of the pioneers and early pilots who shaped and nurtured the sport in that country.

The Leading Edge is a fascinating and readable account of one man's efforts to raise the level of soaring not only in New Zealand, but throughout the world. There is much that would entertain and inform any sailplane pilot.

The book is available on order from most leading bookshops, priced at \$39.95. The Australian wholesale agent is Dennis Jones and Associates of Melbourne. 

Obituary

PAUL A SCHWEIZER

Martin Simons

PAUL SCHWEIZER DIED ON WEDNESDAY 18 AUGUST THIS YEAR, AGED 92. HE HAD BEEN AILING FOR SOME TIME. IN THE LATE 1920S PAUL WAS ONE OF THREE BROTHERS LIVING IN THE VILLAGE OF PEEKSKILL, NEW YORK STATE. THEIR FATHER COMMUTED DAILY TO THE CITY WHERE HE OWNED A RESTAURANT ATTACHED TO THE FAMOUS CARNEGIE CONCERT HALL. THEIR MOTHER HAD DIED IN 1924.



Paul A Schweizer

The schoolboys were inspired by an article about soaring in the National Geographic Magazine of July 1929 and by news of duration flights by visiting German glider pilots at Cape Cod. Unknown to papa, they decided to design and build a primary glider. They

worked in a barn adjacent to the house. The SGP 1-1 was completed in June 1930. With this they taught themselves to fly.

In 1934 Ernie graduated in aeronautical engineering from New York University, followed by Paul in 1935. Their studies convinced them that the future lay with metal structures, and after some further wooden gliders had been built they established themselves as the Schweizer Metal Aircraft Company. Their all-metal SGU 1-6 won third prize in a design competition at the 1937 US National Championships held on Harris Hill, Elmira, in 'up-state' New York.

The Schweizer two-seat sailplane, SGS 2-8, flew successfully in 1938 and broke soaring

records. Two of these were built at Peekskill but in 1939, with support from the local Chamber of Commerce, they re-located to Elmira and re-incorporated as Schweizer Aircraft Corporation. Bill Schweizer joined them there later. Elmira liked to describe itself thereafter as the Soaring Capital of the USA.

Early in the Second World War the US Army launched a large glider pilot training programme. The 2-8 was adopted for military use and became the TG-2. Fifty-seven were built, followed by the TG-3, of which there were 114. After some years in an old mill in Elmira town, the firm was able in 1943 to build a large new factory adjacent to the airport, where they remain today. Not only glider production but an increasing amount of sub-contract work was undertaken for major aircraft manufacturers. This kept the firm alive during the difficult times ahead, especially in the immediate post-war period when their new sailplanes had to compete in the market place with exceedingly cheap ex-military gliders, many of them old Schweizer products.

Weather Station



Wind, rain, temperature, humidity, barometer, plus more...

Also available:
Windsocks and frames,
handheld weather meters.

Australian Agent
for Davis Instruments.

ECOWATCH
Unit 5, 17 Southfork Drive
Kilsyth VIC 3137
Phone: (03) 9761 7040 Fax: (03) 9761 7050
email: <davis@ecowatch.com.au>

Ask for your
FREE catalogue.



Schweizer's Soaring School



The 1-26 prototype on permanent display in the shopping mall nearest to the Schweizer factory

Paul had joined the nascent Soaring Society of America pre-war. He was an outstandingly successful soaring pilot, breaking several national records and representing his country in the 1952 and 1954 World Championships. His influence on the Association and on the development of soaring in the USA remained important over the following years. He became a director of the SSA in 1946, secretary in 1954 and president in 1957, continuing after his term of office as a director for several decades.

Paul Schweizer later became a member of the International Jury judging and test flying entrants for the Standard Class design competition held in conjunction with the World Soaring Championships.

The idea of a 'one design' type of soaring championship had occurred to the Schweizer boys long before when they observed 'one design' yacht racing off Long Island. The Schweizer 1-26, a small, inexpensive sailplane available either as a kit for home building or from the factory ready to fly, became highly successful after 1954. Annual championships were organised and a very successful 1-26 Association was formed. Production ended in 1980 when a total of 689 had been built. Paul continued to advocate the 'one design' idea which, with enthusiastic support also from the Italian Professor Piero Morelli, eventually resulted in the establishment of the International World Class soaring championships and the PW-5 sailplane.

Few Schweizer gliders were imported into Australia despite their being very suited to our rugged environment. The TG-3 imported by Fred Hoinville in 1948 is now under restoration at the Australian Gliding Museum, Harry Walton's 2-22 is still serviceable and has been flown at VGA Rallies.

October 2004

Single examples of the 1-26C, 1-34 and 1-35 were registered but have rarely been flown in recent times.

The Schweizer Soaring School still flourishes on the Elmira-Corning airport. Paul also was one of the founders of the National Soaring Museum at Harris Hill, Elmira. This, established in 1969, has expanded greatly and still grows. He remained a trustee of the Museum until his death.

The Schweizers remained faithful always to metal structures. Paul maintained that robust club sailplanes, quite adequate for badge flights and minor competitions, should still be built in metal. Sailplane production at Elmira ceased at last when imported sailplanes from Europe became dominant on the market and Schweizers were unable to meet the prices. Production of sailplanes ceased after 1987. The Company, now owned and managed by Paul's nephews, Leslie, Stewart and Paul Hardy Schweizer, now builds helicopters and other powered aircraft.

Paul is survived by his brother Bill and by Ginny, his wife, herself formerly a successful soaring pilot. They had no children. I met Paul several times at various World Championships and on visits to Elmira. In 1996-8 we collaborated successfully in the production of the book, *'Sailplanes by Schweizer'*, which gave an illustrated account of the many designs produced by the Company. Shortly before his death Paul completed his autobiography and had made arrangements for its publication. He was a great man, kind, thoughtful and optimistic. He will be very much missed by all soaring pilots in the USA and throughout the world.



New Zealand Initiative to Help Australian Clubs

A NEW OPPORTUNITY FOR AUSTRALIAN CLUBS TO RECRUIT MEMBERS IS BEING OFFERED BY SOUTHERN SOARING, OMARAMA, NEW ZEALAND THROUGH ITS LEARN TO FLY COURSES.

Peter Newport, the Commercial Director of Southern Soaring, Omarama, sees the benefits of providing ab initio training on an intensive block course.

"There is a new breed of glider pilot that many clubs are presently not catering to. These are the people who have limited time and limited patience. They are interested in gliding – but want, or need, to get to that magic flying moment as quickly as possible. Otherwise they lose interest and just drift off," he says.

Southern Soaring wants to develop a beneficial relationship with Australian gliding clubs as a way to help get new people into their system. It believes some new pilots will want to go the traditional club route and some will go for the fast track package.

"Neither path is right or wrong – I think it will be good to have the choices available. One of our first proposals is to pay an introduction fee to those Australian clubs which decide to send selected new members to Omarama. My belief is that we'll send clubs back a member for life" says Newport.

Grant Dodd, CFI for the Canterbury Gliding Club, New Zealand is equally excited about the idea. He believes that clubs have difficulty finding enough instructors resulting in students getting frustrated and leaving.

"The status quo is turning people away. We need to compete with other aviation activities and to do so, we must provide something that is time efficient, easy and available. We are all volunteers and it's difficult to offer a comprehensive training regime," he says.

For further information email <enquiries@soaring.co.nz>



HGFA General Manager's Report

From the outgoing Acting General Manager

Chris Fogg has been selected as the new HGFA General Manager and started on 23 August – just before the deadline for this issue of *Soaring Australia*, so this month's GM Report is a collaborative effort. Standing in for the past couple of months has been good, though with many long days and even then I feel there was more to do! So as Chris takes over, I'd ask you to bear in mind, if your individual request doesn't get the immediate and full attention that you think it deserves, remember that there are many competing demands on the GM's time, varying from important to urgent to both! Assist by developing your idea (or detailing your complaint) as much as you can – and make sure you refer to the Operations Manual. Fly safely, treat each other well, this will free up time for more productive work for the benefit of the whole membership.

See you in the air...



Stewart Dennis

From the new General Manager

Many thanks Stewart for the hand over and the support you have given me coming into this role. Stewart, like Damien and Craig before him, has given a great deal of dedication to the job, the sport and the administering organisation. I am honoured to have been chosen to fill this role as General Manager, but I heed well my predecessor's words when they warn of the workload and the struggle to find time to act in a proactive nature through the position.

I come recently from working as a project manager in the Superannuation Administration and core banking software industries implementing computer software systems into local and international businesses. Before this I spent 15 years chasing the winters working on the ski patrols of several international resorts, developing risk management procedures and rescue systems.

I started flying almost 12 years ago and have been involved in the sport administration side for a little over a year with the Stanwell Park Club. I realise that

I have much to learn in the capacity as General Manager for the HGFA, particularly with the new CASA Regulatory reforms impacting on our sport.

I believe that the sport of hang gliding has a special place of interest to all Australians, having been largely born through the ingenuity and developments of Australians such as Lawrence Hargraves, Bill Moyes and John Dickenson. It is my mission to embody the sport of hang gliding through its own history and cement its place in Australian heritage so that it can be practiced and accessed as a pastime and competition sport by all Australians.

I do not believe that this will be an easy task, however it can only be made easier by a demonstration of compliance to the regulations and responsibility to the public by all who take up the activity. The sport and site access is, as you are well aware, under threat only due to the practitioners of the sport. Your attitudes and behaviour are the basis of the perceptions held in the minds of those that look on and regulate us. I therefore look to you all to support your sites, your clubs and the HGFA in this ambition to register the sport of hang gliding in the Australian Heritage by flying safely, within the regs and with respect to the public and environment in which you practice your craft. I look forward to working for you and with you to achieve these aims.

New Regulations

As noted in the Operations Manual for many years, the Civil Aviation Regulations (CARs) and Civil Aviation Orders (CAOs) are being replaced by new Civil Aviation Safety Regulations (CASRs).

Why Are These Regulations Being Revised?

At present the rules are, *"All pilots and maintainers of all aircraft must do everything in the Regulations (all 600 pages of them) – except for a few exemptions."* In addition they must do all that is stated in the HGFA Operations Manual. This is seen as being complicated.

Following the reform the regulations will become, *"You just need to do these things"* – ie: about 30 to 40 pages of specific regulations plus what's in the Operations Manual. The basis of the reform is, *"Simple rules for simple aircraft."*

CASR to replace CAR & CAO's

This effectively means throwing out the CARs and CAO 95.8, 95.10 and 95.32, and replacing them with **CASR Part 103 and Part 149** (these are how the regulations will be referenced in future communications). The process is likely to take at least another year.

Part 103 will be about **operations**; **Part 149** will be about **RAAO's** (or Administering Organisations). RAAO is the acronym for "Recreational Aviation Administration Organisations" which includes HGFA, RAA (formally known as the AUF), GFA, ballooning, gyroplanes, etc.

The process has been going on for quite some time already, and can be tracked through the CASA website at the following URL (look for part 103): [<http://casa.gov.au/avreg/transition/parts/index.asp>].

The HGFA have representatives such as the General Manager, and sometimes one or two others, at consultative meetings to help shape the development of the new regulations.

Why Regulate?

Regulations conjure up a negative image of restrictions, but the importance of being well-incorporated into aviation law was underlined by a series of events in the Himachal Pradesh state of India recently. For those who haven't heard about the place, it's an excellent place for paragliding on the very first range of the Himalayas, with gently terraced flats/sloping land in front. It is flyable for hang gliders too, though there are few. Bir/Billing and Manali are the main sites. After a tandem paragliding fatality there, a judge BANNED paragliding in the whole state!

It has since been restored, though with conditions. I'm sure there are many places in the world where none of our aircraft have a proper legal standing – no equivalent of CAOs 95.8, 10 and 32 – so to meet the laws in force they would need to pass ALL of the same regulations as large powered aircraft!

AUF now RAA

The Australian Ultralight Federation is now Recreational Aviation Australia. So wherever you see AUF in the Ops Manual, read as RAA!

HGFA GENERAL MANAGER

Chris Fogg

PO Box 258, Helensburgh NSW 2508

Ph/fax: 02 4294 9300, mob: 0417 766356

Email <general.manager@hgfa.asn.au>



A NEW WING?

Rohan Holtkamp

SO YOU PLAN ON GETTING YOURSELF

A NEW (OR NEW FOR YOU) WING?

Hi, I'm Rohan Holtkamp, I have been an HGFA Board member for a while now, in fact I would have to look through the records to tell how long I have been on the Board. Over this time I have seen many keen pilots sacrifice their personal flying time and dedicate their energy to positions on the Board. Do they get paid for their time or effort? No. What then drives some of us pilots to step up to the plate and go in to bat for the members? Keep reading, this is still about your wing.

During many discussions around a paper strewn table, often whilst the weather looks great outside, I have observed that there must be a common thread that brings these pilots to the boardroom, and this same thread must drive the decision making. The conclusion I have drawn is that the common thread is the desire to encourage more people to sample the amazing positive life-changing experience of flying.

For some time now there have been concerns expressed from members and clubs to the Board that there are no airworthiness standards when it comes to the sale of used aircraft, more specifically, aircraft within the HGFA fostered disciplines. No one wishes that the amazing life-changing experience is an accident. History has shown us that the sale and flying of inappropriate or un-airworthy aircraft can lead to death, or at best, a sizeable chunk of resentment aimed at either the seller or the sports regulators.

How could the Board, General Manager or the HGFA office oversee the sale and test flying of all new and used aircraft that fall under the categories of CAO's 95.32, 95.10 and 95.8? Put simply, we don't have the member numbers to fund a system like the government has for motor vehicles. We do have an Operations Manual though, that details all the operational requirements for any persons involved in our sports. Requirements such as airworthiness and flight training when upgrading your wing are designed to improve your safety and the safety of members of the public.

The single largest problem in regards to safety in our sports is the fact that most of our pilots do not read our very own Operations Manual! Sure, it can be a little dry in places, as are most legal documents. This information has been developed over many years and you don't have to be a genius to read between the lines to guess how the recommendations came to be on paper. Our manual has been evolving throughout the existence of our sports, during which time many pilots have sacrificed a vast amount of time, and others their life, to provide us with information that can be simply picked up and read.

We already have maintenance and airworthy standards in our Operations Manual, so education of these standards is the best way to ensure that only airworthy wings change hands. Do your future health a favour, read the HGFA Operations Manual.

If you have a look in the classifieds section of *Soaring Australia* you will see a warning notice. This notice and this article is one of the ways the Board feels it can encourage more people to sample the amazing life-changing experience of flying and make it a positive one.

So before you next sell or buy a wing read section 9. The rest is up to you!

October 2004

Paragliding Headquarters
Equipment - Advice - Service

www.paraglidingheadquarters.com 0414 332737

Australian agent for
GRADIENT

2001 World Champion
2003 Australian Champion 2003&4 NZ Champion

gliders for pilots like you and me

Also good enough for:

CRAIG COLLINGS RON MCKENZIE BRIAN WEBB
and other pilots you'd like to catch up with.



Owners of **GRADIENT** gliders now have an unfair advantage: **ANY** damage to their wings can be fixed in Australia without affecting the warranty. A serious damage to a glider normally means losing the wing for 2 months or more and adding enormous transport costs to the repair bill. **GRADIENT** pilots can expect to be without their toy for 2 weeks at the most and pay much lower bill.

Our Certified Repair and Testing Centre in WA will also serve to other brands of paragliders. These repairs will be subject to availability of materials and the implications on warranty conditions will have to be considered in each individual case.

www.waparagliding.com 08 92952820

Paragliding Headquarters is also a sole Australian Agent for:

DIGIFLY - A world class aviation instruments
Vario FLYER with auto start recording - only \$445.00

CompeGPS - Flight analysis software
The latest version - only \$119.00

For details visit:
<http://www.paraglidingheadquarters.com/instruments.html>

We have anything what a serious paraglider pilot may ever need at competitive prices. Distributors of **GRADIENT** gliders anywhere in Australia. Some accessories may be available only from Paragliding Headquarters direct.

**FLIGHT INSTRUMENTS
RESCUE PARACHUTES
FLYING SUITS
HARNESSES
HELMETS
GLOVES
EPIRBs
GPS**



Also available from:

WA - WA Paragliding Academy - 08 92952820
NSW - Windworks Paragliding - 02 99139086
ACT - Michelago Paragliding - 0419 897005
QLD - Sunshine Coast Paragl. - 0438 107518
Vic - Alpine Paragliding - 03 57551753

EIN RÜCKBLICK (A look back in time): WALLY WOLF

Dianne Charge

WALLY RETIRED FROM THE ALBURY-COROWA GLIDING CLUB EARLIER THIS YEAR, AFTER A MEMBERSHIP SPANNING 29 YEARS. I WAS ALWAYS INTRIGUED BY THIS GENTLEMAN WHO OWNED THE GRUNAU BABY, AND DISCUSSIONS THAT I HAD WITH HIM OFTEN HINTED AT AN INTERESTING PAST. I APPROACHED HIM, AND REQUESTED THAT HE PUT DOWN SOME WORDS ABOUT HIS EARLY GLIDING EXPERIENCES. THIS IS WALLY'S STORY...

May, 2004. I have wanted to talk about how things were in the past. As I hang up the joystick (so to speak), inevitably one thinks back to how it all started.

It immediately became clear to me just how things have changed over nearly 60 years – although of course, boys still build their model aeroplanes, just as I did. I was interested in flying from a very early age, and actually started my working life at 16 with the German Air Force on airframes. As such I was automatically also a member of the

NSFK, the air cadets. We built our own training glider, with the government supplying the materials. Ours was an SG 38, the standard primary of the time. (SG stands for “*Schul Gleiter*”, and 38 the year of its design).

A minimum number of workshop hours was required before you became eligible for flight training. This was to ensure that every member was able to carry out simple on-field tasks, like mending torn fabric, rigging, ground handling, etc.

Thus I was very fortunate to have had training in metal and wood, which stood me in good stead later on.

At our very first gliding camp (The Einkorn) we started off with a static control co-ordination check. A primary was mounted on an elevated platform with a pivot at its CG, in an exposed, windy position. The task was to keep the primary into the wind, the nose on the horizon and the wings level.

We have to keep in mind that all early training was solo, from the very first slide at the bottom of the slope to the C Station at the very top. A budding pilot worked his way up the slope as his skill and aircraft handling improved.

I remember very vividly the first time the rumbling of the skid stopped and I realised that I was airborne. A mix of panic and exhilaration; an unforgettable feeling. It was the first highpoint in my training.

We worked as a team, all day long dragging the aircraft on its trolley up the slope for another go. The launches were done with a bungee: a rubber rope with a metal ring at midpoint and a shorter hemp rope at the ends. At the tail, a trap was anchored to the ground to hold the aircraft until the trap was triggered for take off. The bungee contained 400 strands of rubber, each of 1mm cross-section.

The launch crew was deployed in V formation holding the hemp rope, the ring engaged in the nose hook. It fell away as the aircraft moved past the launch crew. The pilot gave all the commands: take up slack, run, go.

The acceleration was quite sharp. You had to be very conscious not to pull back on the stick at the moment of release. To do so would stall the aircraft on its tail, with a stall and nose dive following. I have seen it happen: not recommended.

For such occasions the SG 38 had a very simple but effective crash damping device to protect the pilot: a mild steel ring, oval in shape, approximately 100 by 50mm. The narrow dimension was bridged by a calibrated, notched metal strip. It connected the harness to the aircraft. On impact the strip broke, the ring expanded and lessened the impact: a sort of shock absorber.

On very rare occasions the bungee would break at the hemp rope, and come back at the pilot with considerable force and quite capable of causing serious injury. I only saw it happen once – our pilot was lucky.

My next highpoint occurred at the camp at Nagold. We had steadily progressed up the slope and had reached the C station, the



Wally in the cockpit of his Grunau Baby. Standing is Geoff Gifford (now deceased)



Wally's farewell: Albury-Corowa Gliding Club members (L to R) John Goodman, Ruth Gibson, Ross Larcombe, Dianne Charge, Bruce Ockenden, Wally Wolf, Russ Jacob, Andy Gibson, Les Kipping, Ray and Pam Jowett, Malcolm Ferguson, Eugene Blunt, Askold Kilsilewsky, Lloyd Bungey



Wally pouring a red at his farewell, with his wife Sonya and, in front of him, a presentation plaque to commemorate his years with the club

very top. To launch from there we had to fly turns for the first time. No nose rolling, no instructor in the back seat, no practice run, no room for errors: do it right the first time! A short briefing from the instructor and off I went, out over the valley, higher than ever before: stabilize, listen to the wires for speed, left boot and stick, keep the nose down; round she comes, straighten out, fly along the slope, turn right away from the slope. The SG 38 had the glide angle to match this slope so I had a beautiful flight for half a kilometre without losing height above the ground. I turned right at the bottom and glided to a landing, right below my launch point. I was as pleased as punch. We fitted the nacelle to the primary and it felt more like an aeroplane then. It's remarkable how we recall pleasant things; how they stick in your mind even if relatively unimportant.

Also at Nagold, another group launched next to us. We overheard the instructor briefing his pilot: *"Do you see that glider down there, just landed?" "Yes sir."* *"Keep him in sight, land there."* *"Yes sir."* Off he went, flying down the hill, all of us watching. Suddenly the pilot below, waiting for his crew, started sprinting like one possessed. Our pilot had taken his instructions too literally. It's amazing how many decibels splintering wood and tearing, tautened fabric can produce, even from 500m away. Our pilot was lucky not to cut himself to pieces on the flying wires.

In the autumn of 1944, air raid warnings were quite frequent. Flying activities would cease; and aircraft aloft were signalled to land. One day our chief instructor was up in the Weihe, slope soaring along the Nagold escarpment. He ignored the signal to land, and then an American Thunderbolt fighter arrived. Our man avoided the fighter at first

and landed, but was only half out of the cockpit when the Thunderbolt finished it from behind. What a mess. I suppose the American flew home and painted another victory on his cockpit wall. Some victory!

Only days later the drone of heavy aircraft engines made us look up, and there it was: a Catalina overflying us at 4,000ft. A flying boat, deep in enemy airspace – no escorts, unhindered, unchallenged. We knew then that Germany had lost the war. I still ponder what the Catalina's mission could have been, flying over the Black Forest in broad daylight.

In May 1945 the war in Europe ended, and my gliding (as it did elsewhere in Germany) came to an end.

During the time of occupation after the war, there were hundreds of gliders sitting on abandoned gliding fields. The occupying forces thought of them as toys, and tried to fly them without tuition. Needless to say there were a lot of broken bones and worse. A General in my area, the American zone, decided to put an end to this and ordered all gliders to be destroyed. One could have wept.

A long time passed before I sat in a glider again, in Australia, when I joined the Albury-Corowa Gliding Club. I found all that one hopes to find in a club – similar goals, friendship, and camaraderie. I have had a long and happy association with this club, as well as with the Vintage Gliding Association later on, when Geoff Gifford and I acquired the GB IV, GHK.

We worked hard in that era to get some airtime, and had more difficulties. But I think we also had more zeal and enthusiasm, and perhaps more satisfaction for what we achieved under sometimes trying circumstances.



PROMOTE GLIDING

on the Sunshine Coast,
Queensland, whilst enjoying a life
style, others only dream about,
Fly 300 days per year.
Owner retiring.

FOR SALE

 **Diamond**
in the sky
AVIATION

Operated by:
Byron Gliding Club Inc
CASA Air Operator Certificate No. 536061

SUPER DIMONA HK 36 TC, as
new, only flown by Owner/Pilot
hangared at Sunshine Coast
Airport, Maroochydore.
New Motor Rotax 912 A3, 1070 Hrs
to run, New C.S. Prop. Hydr.
Feathering, 1500 Hrs to run.
IFR equipped Panel Incl. all spares,
equipment & workshop.
Well established operation,
extensive advertising in place.
Featured on TV: Getaway,
Great Outdoors, Great South East.
Only Pilots with impeccable Flying
History to apply.

Ph: (07) 5478 0077

Mob: 0419 022 501

Fax: (07) 5478 0555

www.sunshinecoast.au.nu/flyingtours.htm

Multicom & NAS 2b

Ned McIntosh

The ongoing implementation of the New Airspace System (NAS) prompts me to add information supplemental to my previous article (*Soaring Australia*, June 2004 issue). Again my remarks are confined to matters directly affecting microlight pilots. Those desiring a more rigorous treatment would profit from reading the article by Gerard Frawley commencing on page 36 of the July 2004 issue of *Australian Aviation magazine*.

As part of NAS, as originally implemented in November 2003, a dedicated radio frequency called Multicom was introduced. Space prevented my making mention of it in my previous article, so I am pleased to rectify the omission now. Its purpose is to reduce traffic on Area Frequencies at non-controlled airports which don't have a dedicated CTAF. The frequency is 126.7Mhz. (Illawarra-based trike pilots might remember this as the old Wollongong CTAF, amongst several others).

What use is Multicom?

Well, our Wollongong friends, for example, will find this frequency resolves an ambiguity encountered when flying to Mittagong (YMIG), which lies right on the boundary between

Sydney Radar (124.55Mhz) and Melbourne Centre (121.2Mhz). It was not clear which of those two frequencies should be used when approaching Mittagong. The locals tended to use 124.55 (which made more sense), but you had to know this, and aircraft using 121.2 were not unknown. Multicom resolves this. Under NAS, Mittagong is treated as a CTAF airfield, using Multicom. The same applies to other airfields (such as Barraba) which had no discrete CTAF. For example, a trike inbound for Barraba might call thus: "All stations Barraba, Microlight 204, five miles to the south-east, on descent passing 4,000, inbound." When departing a Multicom airfield, a taxiing call is all that is required, although other calls such as a departure call overhead may be given for the information of any known traffic in the immediate vicinity.


That's about it for Multicom. It's a frequency you should have stored in one of the memories on your Icom, Yaesu or whatever brand of radio you have in your trike. You'll need it one day, and having it easily to hand is a plus. If you're not sure whether an airfield uses Multicom, look it up in ERSa. If it's not in ERSa, check the Country Airstrips Guide for the relevant state.

What of NAS 2b?

NAS itself is still very much a work in progress

and therefore subject to "tweaking". One of the latest tweaks is the restoration of area frequencies and boundaries to charts. Many pilots will welcome this for reasons I outlined in my previous article. Other changes will be the proposed reclassification of certain sections of Class E airspace to Class C, to ensure IFR aircraft can climb and descend around airports without passing through different classes of airspace – this will have no effect on us microlight flyers.

Reading the aeronautical press, you could be forgiven for thinking NAS had degenerated into a series of ongoing wrangles between bureaucrats and vested interest groups. For those of us at the bottom-end of the aviation foodchain it has little effect. We will continue to operate as we have in the past – low, slow and admiring the scenery, whilst the heavies and commercial chaps do it by the numbers with all the complex procedures IFR and RPT operations dictate.

Add Multicom to your radio, buy some updated charts, get a new ERSa at least once a year and enjoy your freedom to fly. Still want to fly your microlight in controlled airspace? Sorry, but it isn't going to happen. Your aircraft isn't a CASA certified aircraft. The engine isn't a certificated aircraft engine. Your licence isn't the equivalent of a PPL – and that's just a start! Put it in the "Too Hard" basket – by special arrangement only. If this seems harsh, just remember, "Every cloud has a silver lining – usually made by Boeing." 

Look your best with the NEW HGFA Merchandise!

Available from HGFA sales

E: office@hgfa.asn.au W: www.hgfa.asn.au

P: 02 6559 2713 F: 02 6559 3830



The New HGFA car sticker
\$3.30 incl. postage



Peak Hat



Slouch Hat

Soaring Australia
Peak & Slouch Hats
Peak Hat \$16.50 ea
Slouch Hat \$17.50 ea

"Surf the Sky"

Short & Long Sleeve T's

Colours	Sizes
Royal Blue	Small (16)
Jade Green	Medium (18)
Taupe (lt. Beige)	Large (20)
Lt. Grey Marle	X-Large (22)
Mulberry	XX-Large (24)

Short Sleeve T \$25ea

Long Sleeve T \$30ea

Postage \$5.50



Long Sleeve T-Shirt



T-Shirt

Available in a range of sizes and colours. Contact HGFA for an order form on 02 6559 2713

The Turning Point

Allan Ash

HISTORY IS NOT JUST A MIX OF HAPHAZARD AND UNCONNECTED HAPPENINGS; RATHER, IT IS AN ORDERED SERIES OF EVENTS AND RESULTS. THE HISTORY OF GLIDING IN AUSTRALIA FOLLOWS THIS PATTERN.

I have said on many occasions that I see the design and production of the Kookaburra two-seat training sailplane as an important turning point in the history of our sport in this country. A series of clearly identifiable events led to the Kookaburra, and flowed on from its introduction. It was designed by Harry Schneider, and went into production by Edmund Schneider Ltd in Adelaide in 1952. After a rather slow start, this sailplane became the backbone of gliding clubs all over Australia during the following decade or two. Altogether, the Schneider factory turned out more than 30 Kookaburras.

The Schneider family had emigrated from Germany in 1951. Edmund Schneider had been designing and building successful sailplanes in Germany for about 20 years when the chaos of World War Two led the family to abandon its factory in eastern Germany, and seek to locate themselves to a more peaceful area.

What made them choose Australia? Edmund Schneider had written to the GFA in 1949 after reading a report of a flight by Keith Chamberlain of the Gliding Club of Victoria (GCV). Chamberlain had set a national height record by soaring to 12,800ft inside an enormous storm cloud over Benalla. Edmund Schneider was particularly interested in this report, because the flight was made in a Grunau Baby sailplane that had been built by Schneiders and sold to the GCV in 1937.

Members of the GCV had imported the Grunau because they had, by the mid-1930s, outgrown the several primary gliders on which they had trained, and eventually soared, since the formation of the club in 1929.

So we have traced the series of events that led to the Kookaburra, going back to 1929. Of course, we could take it back further to the establishment of the sport of gliding and soaring in Germany in 1920, then back to the Treaty of Versailles in 1919, and to the assassination of Archduke Ferdinand in Serbia in 1914... but why should we?*

Having now listed some of the events which led to the Kookaburra, let's look at the events that followed it.

The first was the great leap forward in flying training, both in quantity and quality. Clubs now had a trainer that could be soared readily. It was very strong, had excellent control responses, and was semi-aerobatic. Trainees could now be taught thermal soaring, aerobatics and cross country flying. Kookaburras were flown regularly in national contests during the 1960s and gave a good account of themselves.

With the clubs now turning out more skilful and experienced pilots, there was a demand for better single-seat sailplanes of higher performance than the Grunau Baby. This led Schneiders to progres-



Long wing Kookaburra
at Gawler, SA, 1959

sively produce such excellent designs as the Nymph, Kingfisher, Arrow, Boomerang and Super Arrow, together with the Schleicher Ka6 built under licence from the German manufacturer.

It wasn't long before the sport attracted people who had the money to become private owners. With the availability of so many higher performance sailplanes came a spate of new national records, and even – wow – an international record (or several).

The old long distance downwind dash gave way to out-and-returns, triangles and a host of fancy new tasks. Australia became a regular participant in world soaring championships, which gave our pilots valuable additional personal experience and introduced them to the intricacies of large international events. For the first time, our pilots could gauge their performances against those of the world's best pilots.

By the early 1970s, our pilots and clubs were sufficiently advanced to bid for a world contest to be held in Australia. This took place in 1974 in Waikerie, SA. Our pilots didn't win – but they gave a good account of themselves, and learned a lot.

Some of the latest designs in sailplane technology in the contest were brought by Australian pilots, so our national records leapt further ahead and our pilots became even better flyers.

At a second world championship at Benalla, VIC in 1984, our pilots gained even more experience and enthusiasm and brought a new batch of the latest in sailplane design.

As the skills and experience of Australian pilots progressively improved, the standard of instruction in our clubs rose accordingly. With advanced two-seater designs coming on the market, the faithful old Kookaburras were gradually replaced with sleek new training sailplanes which now carry on the tradition of quality training begun by the Kookaburras 50 years ago.



**[Actually, there is a historical connection between the Archduke and Narromine, NSW where doubtless a Kookaburra or two have been seen. He was there on a shooting expedition. As the year was 1893, the only kookaburras seen by the trigger-happy Archduke would have been through his rifle sights. – Sub-ed.]*

Soaring Calendar

AUSTRALIA

The Canungra Classic 2004 ("Back to Base")

25 September – 2 October 2004

Canungra, SE QLD. We're going home to where it all began. Back to Moriarty Hall, in the heart of Canungra. Back to bigger parties, our own bar, great food, swimming pool, skate park, red faces, film nights, touch footy, cricket, pool comps, glider simulators, fun for the whole family. Pilot numbers are limited to 75 so book now. Registration day Friday 24 September. Entry fee: \$220 (after 1 September), site fee: \$40. GPS mandatory, int. pilot rating with inland experience. Camping is available at the showground, five minutes walk from HQ. Or alternately you can book accommodation with one of the hotels in town. For accommodation information visit [www.triptera.com.au/canungra/area/index.html]. For registration go to [www.hgfa.asn.au/~registration/index.php]. (Entry not confirmed until payment received. Payment by cheque or M/O to "Canungra Classic". Send to Rod Stead, 9 Griffith St, North Tamborine 4272). For entry enquiries contact Rod Stead on 0428 132215, 07 5545 0969 or email <canungrahg@hotmail.com>. For all further enquiries ph: Jay Longden on 0407 674094. Don't miss the best comp of the year!

Killarney PG Classic

2-7 October 2004

Killarney, QLD. A Grade, Category 2 PG competition. Killarney is three hours drive inland from the Gold Coast. The take-off has been bought by QLD pilot, Andrew Horchner, and he will be hosting the event; local and international pilots are invited. The Killarney Classic is to be run prior to the Canungra Cup. There is one day between the comps to allow pilots to transport themselves from Killarney to Canungra. Killarney offers some of the best XC flying in the country; it has numerous launch sites that cover most directions and has over 1,000km of wide open flatlands behind it with an excellent road network. In the past people have accomplished rewarding flights, flying over and gazing down upon extinct volcanic plugs and the immense, picturesque flatlands of the Dowling Downs. It's a must for your PG calendar. Only 85 positions available, so don't hesitate to register via the registration form at [www.chgca.asn.au/killarney]. If you need retrieves for the comp week, please let the organisers know on the registration form and you will be put in contact with local drivers (details to be negotiated yourself). It is worth noting that there are several water crossings between Killarney and the SE launch bomb-out (which should be the most widely used launch and bomb-out). Depending on creek levels a car with high clearance or a 4 WD vehicle may be required. If the creeks aren't up, most standard cars can make it. Entries accepted based on requirements in latest edition of HGFA Competitions Manual and all pilots should have at least 150 hours of inland flying experience. We will accept lesser hour pilots if they have comprehensive local inland experience, but only at the organiser's discretion. Accommodation is limited, so early bookings are recommended, details on the webpage. Entry fee: \$110 (incl. GST) for entries received before 3/9/04, and \$143 (incl. GST) after 3/9/04, no exceptions. Director/Organiser: Andrew Horchner, ph: 0427 807516, email <afactor@gil.com.au>, post: Killarney PG Classic, c/o Access Factor Pty Ltd, PO Box 3013, South Brisbane, QLD 4101.

Australian Multi-Class National Championships

6-15 October 2004

Dalby, QLD. Practice days: Monday 4 October and Tuesday 5 October. Contact: Ralph Henderson <rhenderson@austarmetro.com.au>.

Canungra Paragliding Cup

9-16 October 2004

Canungra, QLD. PG pilots are invited to compete in the fifth year of the AAA sanctioned Canungra PG Cup. The competition this year will be the last sanctioned Cat 2 competition before the Worlds in Brazil and the first AAA competition for the Australian season. Only 80 entries will be accepted to compete this year for the eight day event. Pilots must have an int licence and have 150 hours inland thermal experience. Entries will be accepted based on the requirements in the latest HGFA Competitions Manual edition. This will be the first year of the new glider classes, and details will be released as soon as possible on our website. Last year saw an epic seven out of eight days flying, all high scoring 800+ point days. You gotta' be here to experience the fun and games, supportive and diverse flying, and to win those first and last points available for the seasons. Entry fee: \$190. Fee includes pilot pack, official comp T-shirt, map, presentation night dinner and day prizes. Over \$3,500 worth of prizes are expected to be awarded over the duration of the event. The popular Retrieve Package will once again be available – numbers are limited, so book and pay early. The cost for the package, which includes Brisbane Airport pick-up and return, is \$180. The infamous Canungra entertainment schedule each evening will see the return of 'Miss Canungra Cup', 'Roast & Boast', 'Skills Clinics' and a new exciting night planned at the Canungra Hotel! Accommodation in Canungra is limited, so book early for rooms at the motel, B&B and hotel. Details available on [www.chgca.asn.au] (go to the Links page and find Paragliding). Registrations can be made online, or email Competition Director, Karen Sexton, for details or any enquires <canungracup@hotmail.com>.

Alice Springs Masters' Games

16-23 October 2004

A low key and social competition for anyone over the age of 35. To register or for any enquiries contact Darren Edwards, ph: 08 89550014, or Simon Holding, ph: 08 89534100.

VSA 2004 Basic Airworthiness Course

16-23 October 2004

Bacchus Marsh Gliding Club clubhouse. Open to GFA members who aspire to conduct glider maintenance and who have some experience with annual inspections under the supervision of their club maintenance officer or capable inspectors. The course objective is to advance all candidates towards ultimately gaining a Form 2 Inspectors endorsement. Course fee: \$350 includes course notes and CD. Application forms can be downloaded on the GFA website or contact Edwin Grech Cumbo ph/fax: 03 9336 2305, mobile 0419 542761, email <egrechc@melbpc.org.au>.

Sunraysia GC – 50 Years

30 October – 2 November 2004

To celebrate 50 years from its formation in 1954, the club is running a back-to event over the Melbourne Cup weekend. We invite past members and others who may like to re-visit the past and help celebrate the future. A low-key competition is being planned, vintage gliders welcome. Social activities, dinner, novelty prizes for the most outrageous retrieve story and so on. Contact David Nugent for further information on 03 5024 5865 or visit the website [www.vicnet.net.au/~gliding].

Vic Spring Comp 2004

Round 1: Bright, 30 October – 2 November

(Melbourne Cup weekend)

Round 2: Beaufort, 13-14 November

Round 3: Beaufort, 27-28 November

Victoria. This event is a low cost, informal, fun event designed to get people into the hills at the start of spring and to give novice pilots a feel of flying in a comp environment without the pressures associated with flying a real comp. For details visit [www.vvhgc.com/] or contact <agnorman@netspace.net.au>.

Gliding 75th Anniversary

6-7 November 2004

Pallamanna aerodrome, Murray Bridge, SA. Glider static display and demonstration flying, celebrating the 75th anniversary of gliding as an organised sport. See [www.aus-soaring.on.net/saga/index.html]. Contact: Emilis Prelgauskas, <emilis@lm.net.au>.

Gathering of the Moths Fly-in

20-21 November

Mt Beauty, VIC. 'BIG' 10th Anniversary get-together! Flyers of all denominations are invited to fly the sheltered Kiewa Valley at the foot of the picturesque Victorian Alps. Range of accommodation available. Contacts: Mark Ghirardello (03 5754 4572 or 0409 544572) and Don Pollock (03 5754 1301 or 0407 093054).

Narromine Cup Week

21-27 November 2004

Silver C to 1,000km. All welcome. Ph: Beryl or Arnie Hartley on 02 6889 2733 for enquiries.

Gulgong Classic 2004

22-27 November 2004

Gulgong, NSW. Practice days: 16/17 October and Sunday 21 November. Comp to be held in the same format as previous two years. This year will be a six-day event. Your \$350 entry fee includes competition entry, T-shirt, presentation dinner, airstrip usage fees and hangarage and all tows on competition days (pay per tow on practice day). Strictly limited to 50 aerotow rated entrants. Due to the complexity and cost of organising tugs, a late fee of \$50 for entries received after 30 September applies. Enquiries to <fly@gulgongclassic.com> or ph: 02 49423131 or 0412 423 133. Comp details, on line info and rego available at [www.gulgongclassic.com]. Comp factors are: AA, 5km, 70km, 10% GPS mandatory, virtual starts and goals.

Australian Junior Gliding Championships

5-11 December 2004

Temora, NSW. Please note the above change to the previously advertised contest dates. Practice will be held on 4 December.

Australian Open HG Championship

28 December 2004 – 3 January 2005

Deniliquin/Conargo, NSW. One day short to allow for pilots going to the worlds. Entry fee: \$190. Open AAA, Kingpost AA and Floater A, Sub Classes. Also open to Class 2, Class 5 and PGs. Aerotow or ground tow. Four pilots will secure your ground towing strip. Special welcome to new competition pilots, regardless of the glider they fly! Come to the comp that gives you a great chance of making goal! Fly with the champions, compete against your peers. All tow and retrieve cars needs to have comprehensive or third party property insurance. All tow and retrieve cars

need to have an approved fire extinguisher; if not you will get disqualified from the comp. You can buy an extinguisher at the comp (cost \$55/). For entry or enquiry please contact Tove: 0419 681 212, <chggpc@goulburn.net.au>, or go to [www.Taragoflightpark.com.au].

2005 World HG Championships

4-19 January 2005

Hay, NSW. Dynamic Flight, in conjunction with the Hay Shire, are presenting the World HG Championships 2005. Practice days: 4th and 5th. Registration, Grand Parade, team photos and Welcoming Party on the 6th. First comp day: 7th, last comp day: 19th with closing ceremony and party. For initial enquiries email <dynamic@netconnect.com.au>.

CIVL has allowed each country to enter six-person teams. Each country can enter more than one team! All team members must qualify by having finished in the top 66% of a Cat 2 (Hay Pre-worlds, Bogong Cup, etc) comp since 2001. Come on Aussie pilots, this is your chance to fly with the world's best!

Vintage Gliders Australia

Annual Rally 2005

8-15 January 2005

Bordertown. Arrangements have commenced for our Annual Rally. Although much planning is still to be done, the organisers expect to be able to provide: camping and bunkhouse accommodation on the field, meals, winch, and possibly aerotows. No extra hangarage will be available. Further information is expected by the next issue of the VGA Newsletter, Vintage Times. Already expressions of interest have been received from operators in Victoria of an ES52 Shortwing, ES60 Boomerang, ES57 Kingfisher, Ka6 and Ka4. No doubt many more will join in the fun. For further information and to offer assistance please contact Ian Patching on 03 9438 3510.

2005 National Club Class Competition

9-21 January 2005

Waikerie Aerodrome, SA. Practice day on Monday 9 January. Contact: <john.hudson@santos.com> or <hudson@senet.com.au>; ph: 08 8224 7784 or 08 8272 5929.

Corryong Cup 2005

9-15 January 2005

Corryong, VIC. Registration/practice day: 8th, comp start: 9th with registration in the morning. Come to the best FUN comp of the year. Mt Elliot, Corryong, is one of the most reliable and spectacular flying sights in the Eastern highlands. It's a hill launch set at the base of the Australian Alps on the border between Vic and NSW. Tasks are generally between 50-100km, with up to four turnpoints set to make pickups easy. This year the comp will again be scored on a handicap basis according to glider type and flying experience, so everyone who enters has a chance of taking out the top prizes. This year prizes will be awarded for the first three positions as well as a prize for the best placed veteran and most improved newcomer to competitions. Also, the first placed team will receive the Corryong mugs. Day prizes given out each day. You must have an intermediate rating (preferably with inland experience), UHF radio and parachute. Camera optional (data back not required); this year scoring will be with GPS or camera, whichever you prefer. This is still the cheapest comp in the HG calendar at only \$100 if you register before 30 Nov 2004 (\$130 thereafter). Cheques made out to Blue Mountains Hang Gliding Club. Included in this fee is comp entry, T-shirt, film for turnpoints, colour topo map of the area and a presentation dinner. Places are limited so don't miss out. Register

now with: The Blue Mountains Hang Gliding Club, Steve Bell, PO Box 110 Woonona, NSW 2517. Ph: 0412 686812 or email <spbell@1earth.net>.

Bogong Cup HG Championship

22-29 January 2005

Mt Beauty, VIC. AAA Sanction, entry \$195. Practise day/registration: 21st. Open, Kingpost, Floater & Female categories. Strictly 70 places. Min rating Int. Website [www.hgfa.asn.au/Competition/Bogong/index.html]. For more info see the website or contact Carol Binder <binder_carol@hotmail.com>, 03 57501507 or 0417 311360.

Horsham Week

5-11 February 2005

Horsham aerodrome. Contact Peter Buskens <pbuskens@melbpc.org.au>.

Bright Paragliding Open

19-27 February 2005

Bright, VIC. Sanction AAA, FAI Cat 2. Postal address: PO Box 238, Bright VIC Australia. For more details visit [www.alpineinfotech.com.au/BrightPGComp2005/].

OVERSEAS

Motorless Flight Symposium

8-10 October 2004

Varese, Italy. The Milan Section of AIDAA (Associazione Italiana di Aerotecnica e Astronautica) is the main sponsor of this international congress. Prof. C Cardani of the Politecnico di Milano, President of the Section, and Ing. V. Pajno are managing the organisation. OSTIV (Organisation Scientifique Technique Internationale pour le Vol a Voile) has already offered "Patronage" of the event; other Associations and Organisations are supporting the Symposium. The town of Varese and the surrounding territory has a long heritage in the aeronautical field and the township will host the Congress in the historical Palazzo Estense. An exhibition of old technical documents is foreseen in the Town Library and a static show of old Italian gliders and modern ones will be held in the gardens. The list of participants and subjects to be treated includes: Aerodynamic (Prof. LM Boermans - OSTIV Chairman), Aeroelasticity (Prof. N Niedbal/FH Bielefeld), Design (Dr Ing. R Kickert), Composite Structures (Ing. C Kensche of DLR), Design Rules (Ing. H Fendt/H Kopp, LBA), Flight Tests (Ing. S Ronig, LBA), Meteorology (Dr H Trimmel), Motorgliders or Self Launching (Ing. A Lange - Antares), ULM Sailplanes (Prof. P Morelli of Politecnico di Torino), Instrumentation (Ing. M Seyschab, LBA), Non Destructive Testing (Ing. R Aoki, DLR), Crashworthiness (Prof W Roeger/Dr M Conradi), Performance Measurements (Ing. R Blume, LBA), Record Flights (Ing. JM Clement). The invited papers will illustrate the actual "state of the art" and give indications to follow or to investigate in order to improve the actual techniques. The Symposium proceedings will follow. For more info, please contact Dr Ing. V Pajno: ph: 0039 2 98231644, email <pajnovittorio@libero.it>.

IGC World Gliding 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 2005
2008 WGC - Std/Club/World, Bid selection 2005
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 2007
2010 WGC - Std/Club/World, Bid selection 2007
* Sites for these WGC's will be selected in 2005.



NOW OFFERS 6-DAY COURSES

The next courses are being run in September, October & November 2004.

Bunkhouse accommodation included. All club facilities available, including clubhouse, kitchen and more.

For information, contact Richard Bull: BH (02) 9752 8745 • AH (02) 9872 1454 Mob 0418 411 593 • rbull@ric.nsw.gov.au

LEARN TO Glide

www.bathurstsoaring.org.au

Advertising Index - October 2004

Aventura - Dieter Stuempl	25
Bathurst Soaring Club	43
Craggy Aero	3
Deniliquin Nationals	BC
Diamond in the Sky Aviation	39
Eco Watch	34
Fly from Forster	7
GFA Form 2	26
Gradient - Paragliding Headquarters	37
HGFA Merchandise	40
Lake Keepit Gliding Club	11
Microair Avionics	25
Moyes Delta Gliders	29
OAMPS	18
Parachutes Australia	IBC
Tom Gilbert	IBC

After 2005 sites for all WGC's will be selected three years prior to competition.

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 2009
2012 WGC - Std/Club/World, Bid selection 2009
2013 WGC - Juniors, Bid selection 2010
2013 WGC - Women's, Bid Selection 2010
2013 Alternative Events, Bid Selection 2010
2014 WGC - 15m/18m/Open, Bid selection 2011
2014 WGC - Std/Club/World, Bid selection 2011

NOTE: This calendar is shown as running through 2014 for illustrative purposes only. The calendar and structure of the World Gliding Championships will continue on as shown after 2014 (until changed or modified by the IGC Plenum).

Contact Addresses

GFA

NSW Gliding Association (NSWGA)

Australian Air League

NSW Gliding Wing, 1 Perry St, Kings Langley NSW 2147.

Australian Soaring Centre

PO Box 1315, Byron Bay NSW 2481.

Bathurst Soaring Club

PO Box 1682, Bathurst NSW 2795.

Byron Power Gliding Club

PO Box 815, Byron Bay NSW 2481,
02 66847627, 0428 847642.

Byron Soaring Centre & Aeroclub

PO Box 549, Byron Bay NSW 2481
02 66844244.

Canberra Gliding Club

PO Box 1130, Canberra City ACT 2601,
02 64523994, 0428 523994.

Central Coast Soaring Club

PO Box 1323, Gosford South NSW 2250, 02 49772740.

Cudgegong Soaring Pty Ltd

PO Box 352, Frenchs Forest NSW 1640,
02 94522777, 02 94530777.

Forbes Soaring & Aero Club

PO Box 267, Forbes NSW 2871,
02 68523845.

Goulburn Gliding Group

57 Munro Rd, Queanbeyan NSW 2620.

Grafton Gliding Club

16 Fuller St, Mullaway NSW 2456,
Sec: Bob King, 02 66541638 (h), 040 388551, <kingb@coffscs.nsw.edu.au>.

Greenethorpe Gliding Club

Weerona Young Rd, Grenfell NSW 2810,
02 63431375, 02 63431375.

Harden Gliding Club

78 Badenoch Crs., Evatt ACT 2617, 02 62585554, 02 62578280, 0418 670291,
[users.bigpond.com/richard.hart/hgc/default.html], Sec: Richard Hart 02 62585554.

Hunter Valley Gliding Club

PO Box 9, Newcastle NSW 2300.

Kentucky Flying Club

The Hill, Kentucky NSW 2354.

Lake Keepit Soaring Club

PO Box 1525, South Tamworth NSW 2340,
02 67697514, 02 67697640.

Leeton Gliding Club

PO Box 607, Leeton NSW 2705, 02 69536970.

NSW AIRTC Gliding Club

41 Simpson Ave, Forest Hill NSW 2651,
02 69227526.

NSW Police Gliding Club

27 Bourne St, Wentworth Falls NSW 2782,
0427 592744.

Orana Soaring Club

PO Box 240, Narromine NSW 2821,
02 68892733, 02 68891229.

RAAF Richmond Gliding Club

RAAF Base, Richmond NSW 2755.

RAAF Williamstown Gliding Club

c/o Mr AJ Lee, 10 Federation Dr., Medowie NSW 2318.

Royal Australian Naval Gliding Association

PO Box A37, Naval Air Base, Nowra NSW 2540.

Scout Association NSW Gliding

Dr Reg Mitchell, 15 Harrison Ave, Eastwood NSW 2122, 02 93519660, 02 93519540.

Soar Narromine Pty Ltd

PO Box 56, Narromine NSW 2821,
02 68891856, 02 68892488.

Southern Cross Gliding Club

PO Box 132, Camden NSW 2570,
02 46558882.

Sportavia Soaring

PO Box 78, Tocumwal NSW 2714, 03 58742063.

Summerland Gliding Club

PO Box 820, Lismore NSW 2480, Sec: David Wright, 02 6621 6495 (w), <wrights@norcom.au>

Sydney Gliding Inc. (Concordia GC)

PO Box 633, Camden NSW 2570, 0412 145144.

Temora Gliding Club

PO Box 206, Temora NSW 2666, 02 69772733.

Wagga Wagga Gliding Club

25 Beauty Point Ave, Wagga Wagga NSW 2650, 0427 205624.

Wee Waa Gliding Club

(formerly Warrumbungle Gliding Club)
PO Box 586, Wee Waa NSW 2388,
02 67954333.

Queensland Soaring Association (QSA)

Boonah Gliding Club

PO Box 107, Boonah QLD 4310, 07 54632630.

Bundaberg Soaring Club

PO Box 211, Bundaberg QLD 4670,
07 41553158.

Caboolture Gliding Club

PO Box 920, Caboolture QLD 4510,
0418 713903.

Central Queensland Gliding Club

PO Box 953, Rockhampton QLD 4700,
07 49371381.

Darling Downs Soaring Club

PO Box 584, Toowoomba QLD 4350,
07 46637140.

Gympie Gliding Club

PO Box 103, Gympie QLD 4570, 07 54867247.

Kingaroy Soaring Club

PO Box 91, Kingaroy QLD 4610, 07 41622191.

Moura Gliding Club

PO Box 92, Moura QLD 4718, 07 49973265.

North Queensland Soaring Centre

PO Box 1743, Aitkenville QLD 4814.

No. 229 Squadron Australian

Air Force Cadets

3 Hedlow Court, Carindale QLD 4152,
07 33989745, 0148 984752.

Southern Downs Aero & Soaring Club

PO Box 144, Warwick QLD 4370,
07 38923473.

Tarwan Soaring

PO Box 34, Wandoan QLD 4419, 07 46274080.

SA Gliding Association (SAGA)

Adelaide Hills Soaring Group

PO Box 1, Bridgewater SA 5155.

Adelaide Soaring Club

PO Box 94, Gawler SA 5118, 08 85221877,
08 85223177.

Adelaide Uni Gliding Club Inc., Adelaide

Uni Sports Association

The University of Adelaide, SA 5005,
08 88262203.

Alice Springs Gliding Club

PO Box 356, Alice Springs NT 0871,
08 89526384.

Balaklava Gliding Club

PO Box 257, Balaklava SA 5461,
08 88645062.

Barossa Valley Gliding Club

PO Box 123, Stonefield via Truro SA 5356,
08 85640240.

Bordertown Keith Gliding Club

PO Box 377, Bordertown SA 5268.

Gawler Gliding Club

PO Box 135, Cockatoo Valley SA 5351.

Millicent Gliding Club

PO Box 194, Millicent SA 5280.

Murray Bridge Gliding Club

PO Box 1277, Victor Harbor SA 5211.

Northern Australian Gliding Club

PO Box 38889, Winnellie NT 0821.

Port Augusta Gliding Club

PO Box 272, Port Augusta SA 5700,
08 86436228.

Renmark Gliding Club

PO Box 450, Renmark SA 5341,
ph/fax 08 85951422, mob 0417890215.

SA AIRTC Gliding Club

PO Box 2000, Salisbury SA 5108.

Scout Gliding Club

22 Burford Crescent, Redwood Park SA 5097.

Waikerie Gliding Club

PO Box 320, Waikerie SA 5330, 08 8541 2644, 08 85412761.

Whyalla Gliding Club

PO Box 556, Whyalla SA 5600, 08 8640 4432, 0413 127825.

Victorian Soaring Association (VSA)

Albury Corowa Gliding Club

PO Box 620, Wodonga VIC 3689.

Beaufort Gliding Club

116 Tennyson St, Elwood VIC 3184.

Bendigo Gliding Club

62 Lawson St, Bendigo VIC 3550.

Corangamite Soaring Club

Kurweeton, Derrinalum VIC 3325.

Geelong Gliding Club

PO Box 197, Bacchus Marsh VIC 3340.

Gliding Club of Northern Tasmania

58 Hales Street, Wynyard TAS 7325,
03 64422108.

Gliding Club of Victoria

PO Box 46, Benalla VIC 3672, 03 5762 1058, 03 57625599.

Grampians Soaring Club

PO Box 468, Ararat VIC 3377, 03 53524938.

Latrobe Valley Gliding Club

PO Box 625, Morwell VIC 3840.

Mangalore Gliding Club

PO Box 80, Avenel VIC 3664.

Mount Beauty Gliding Club

44 Roper St, Mount Beauty VIC 3699.

Murray Valley Soaring Club Ltd

PO Box 403, Corowa NSW 2646.

RAAF East Sale Gliding Club

c/o Gary Mason, 9 Weir St, Sale VIC 3850.

Soaring Club of Tasmania

c/o Bruce Thompson, 34 Clinton Rd, Geilston Bay TAS 7015, 03 62552191 (h), 03 62252561 (CFI).

South Gippsland Gliding Club

PO Box 475, Leongatha VIC 3953.

Southern Riverina Gliding Club

PO Box 78, Tocumwal NSW 2714,
03 58742063, 03 58742705.

Stawell Gliding Club

20 Jones St, Stawell VIC 3380, 03 53582713.

Sunraysia Gliding Club

PO Box 647, Mildura VIC 3500.

Swan Hill Gliding Club

PO Box 160, Nyah VIC 3594.

Tumbarumba Gliding Club

Mundaroo, Tumbarumba NSW 2653.

Victorian Motorless Flight Group

(Operates out of Baccus Marsh aerodrome)
GPO Box 1096J, Melbourne VIC 3001, 0402 281928, 03 98486473.

Wimmera Soaring Club

PO Box 158, Horsham VIC 3402.

WA Gliding Association (WAGA)

Beverly Soaring Society

PO Box 136, Beverley WA 6304, 0407 385361.

Gliding Club of Western Australia

356 Abernethy Rd, Cloverdale WA 6105,
08 92774148, 0409 683159, 08 96351023.

Morawa Flying Club

PO Box 276, Morawa WA 6623.

Narrogin Gliding Club

PO Box 232, Narrogin WA 6312, 0407 088314 or 08 98811795 (weekends).

Stirlings Gliding Club

c/o Post Office, Lower King WA 6330.

WA Squadron Australian Air Force Cadets

Headquarters, RAAF Base, Pearce, Bullsbrook WA 6084, 08 95717800,
08 95717877.

HGFA

All correspondence, including changes of address, membership renewals, short term memberships, rating forms and other administrative matters should be sent to:

HGFA National Office

PO Box 157, Hallidays Point NSW 2430. Ph: 02 6559 2713, fax: 02 6559 3830, <office@hgfa.asn.au>.

HGFA General Manager

Chris Fogg, PO Box 258, Helensburgh NSW 2508, ph/fax 02 4294 9300, 0417 766356, <general.manager@hgfa.asn.au>.

Information about site ratings, sites and other local matters, contact the appropriate State associations, region or club.

Board Members

Pres: Rohan Holtkamp RMB 236B Western Highway, Trawalla VIC 3373, ph/fax: 03 53492845, 0409 678734, <President@hgfa.asn.au>.

Vice-Pres: Rohan Grant 188 Bathurst St, Hobart TAS 7000, 03 62334405 (h), fax: 03 62243598, <Rohan.Grant@hgfa.asn.au>.

Sec: Carla Pierce 33 Edmonds St, Diamond Creek VIC 3089 Ph: 0407 788710, <Secretary@hgfa.asn.au>.

Trs: Stewart Dennis PO Box 118, Dickson ACT 2602, ph/fax 02 62470008, 0429 158721, <Treasurer@hgfa.asn.au>.

Board Members:

Hakim Mentes 16/59 Riversdale Rd, Hawthorn VIC 3122, 0412 617216, <Hakim.Mentes@hgfa.asn.au>.

Bill Moyes 173 Bronte St, Waverley NSW 2024, 02 93875114, fax: 02 93693342, <Bill.Moyes@hgfa.asn.au>.

Andrew Polidano PO Box 1903, Byron Bay NSW 2481, 0428 666843, <Andrew.Polidano@hgfa.asn.au>.

Kathy Little (formerly Robinson) Lot 108, Pinjarra Rd, Ravenswood WA 6208, 08 9537 6204, <Kathy.Robinson@hgfa.asn.au>.

Mark Thompson 40 Hovia Terrace, Kensington WA 6151, 08 94912417 (w), 0428 729028, <Mark.Thompson@hgfa.asn.au>.

Microflight Public Relations

Paul Haines ph/fax: 02 42941031.

GFA MEMBERSHIP FEES 2003-2004

Membership:	Normal	Family
NSW/WA/QLD	\$175	\$139
Victoria	\$176	\$140
South Australia	\$179	\$143

Student membership:	Full	Family
NSW/WA/QLD	\$108	\$72
Victoria	\$109	\$73
South Australia	\$112	\$76

Short-term membership:	1 Month*	3 Month*
NSW/WA/QLD/VIC	\$48	\$60
South Australia	\$57	\$69

States & Regions

ACTHGA

PO Box 3496, Manuka ACT 2603; Pres: Steve Foggett 0417 313589, <sfoggett@hotmail.com.au>; Sec: Mark Elston 0428 480820, <mark.elston@defence.gov.au>; Trs: Tony Davidson 0500 883322, <td@silktel.com>; Committee members: Michael Porter, Sascha Moroney, Craig Donnell, Tim Grabovszky; SSO: Peter Bowyer 0412 486114. Meetings 3rd Mon/month 7:30pm Yamba Sports Club, Phillip.

Hang Gliding Association of WA

PO Box 82, South Perth WA 6151; <hang_glding_association_wa@hotmail.com>. Admin: Rick Williams, <hang_glding@dodo.com.au>; HG Rep: Gavin Nichols, <gknichol@tpg.com.au>; PG Rep: Mike Duffy, <MikeDuffy@graduate.uwa.edu.au>; Trike/HGFA Rep: Keith Lush, <keith.lush@iinet.net.au>

NSW Hang Gliding Association

Sec: Steve Hocking, 19 Gladswood Gardens, Double Bay NSW 2028, ph/fax: 02 9327 4025, <nswhga@s054.aone.net.au>.

North Queensland HG Association

12 Van Eldik Ave, Andergrove QLD 4740; Pres: Graeme Beplate 07 49552913, fax: 07 49555122, <sitework@mackay.net.au>; Sec: Ron Huxhagen 07 49552913.

Queensland HG Association

Pres: Greg Hollands <greg.s.hollands@transport.qld.gov.au>, PO Box 61, Canungra Qld 4275 07 38448566.

South Australian HG Association

1 Sturt St, Adelaide SA 5000, ph: 08 8410 1391, fax: 08 82977532; Pres: Stuart McClure 08 82973452 (h), <stuart.mcclure@csiro.au>; Sec: Mark Tyminski 0411 414 816, <marknjn@senet.com.au>; Trs: Robert Woodward 08 82977532 (h), <rob_woodward@alternaterepositioning.com>.

Tasmanian HG & PG Association

19 Christella Rd, Kingston TAS 7050, [www.thpa.net]; Pres: Anthony Mountain (Sth HG pilot) 0407 299011, <president@thpa.net>; Sec/Trs: Mico Skoklevski (Sth HG pilot) 0418 398624, <secretary@thpa.net>; PG contact: Rob Steane (Sth PG pilot) 0418 146137, <paraglide.info@thpa.net>, Bill Brooks (Nth PG pilot & HG info) 0409 411791, <northark@thpa.net>.

Victorian HG and PG Association

PO Box 157 Northcote VIC 3070, [www.vhpa.org.au]. Pres: Carolyn Dennis; Sec: Steve Norman; Trs: Lisa Charleston; SSO: Rob Van Der Klooster 03 52223019 (h). Site weather-boxes: Three Sisters 0409 864700, Buck-land Ridge 0407 356295, Mt Buffalo 03 57501515, Ben More 0417 112062.

Clubs

New South Wales

Blue Mountains HG Club Inc.

Pres: Peter Burkitt 0418 435204, <pburkitt@ozemail.com.au>; Sec: Jim Grant 02 47588625; Trs: Allan Bush 02 47738037, <fairallan@pnc.com.au>; SSO: Dave Petrie 02 47871610, <petrie@lisp.com.au>; Allan Bush 02 47738037,

<fairallan@pnc.com.au>; Newsletter: Alan Bond 02 98995351, <skybond@primus.com.au>. Meetings: 3rd Wed/month, 7:30pm, Blue Cattle Dog Tavern, Mamre Rd, St Clair.

Byron Bay HG Club – see Northern Rivers Hang Gliding and Paragliding Club

Dusty Demons Hang Gliding Club

30 Dumaresq St, Dickson ACT 2602. Pres: Scott Hannaford 0417 272498, <shannaford@canberratimes.com.au>; Trs: Dan Watters 0410 347801, <daniel.watters@csiro.au>; Sec: Andrew Barnes 0416 020588, <andrew@dustydemons.com>; SSO: Grant Heaney 02 48494516, 0419 681212, <grant@dustydemons.com>; Editor: Kath Kelly 02 64561590, 0427 220764, <phase9@snowy.net.au>.

Hunter Skysailors

Pres: David Holgate 0410 112381, <david.holgate@hotmail.com>; V-Pres: Meg Butler

0408 446358; SSO: James Thompson 0418 686199, <james.b.t@hunterlink.net.au>.

Meetings: last Tue/month 7pm, Hexham Bowling Club.

Illawarra Hang Gliding Club Inc.

27a Paterson Rd, Coalcliff NSW 2508. Pres: Frank Chetcuti 0418 252221 <chetcuti1@bigpond.com>; Sec: John Parsons; SSO: Tim Causer 0418 433665 <timcau@ozemail.com.au>.

Kosciusko Alpine Paragliding Club

[www.homestead.org/kapc]; Pres: James Rylie 02 62359120, <rymicalago@netspeed.com.au>; Sec: Alex Johnson 0411 748713.

Manilla SkySailors Club Inc.

PO Box 1, Manilla 2346, [www.FlyManilla.com]. Pres: Brian Shepard 0401627830; V-Pres: Suzy Smith 02 6785 6545; Sec/Trs: JJ Bastion 0427 161504; SSO (HG): Patrick Lenders 02 67783484; SSO (PG): Godfrey Wenness 02 67856545, SSO (Towing): Rhett Rockman 0428 428962; Trikes: Will Ewig 02 67697771.

Mid North Coast HGPG Club

Pres: Nigel Lelean 0419 442597, <ilean@smarchat.net.au>; SSO: Jason Turner 0419 997196, <jasonflys@hotmail.com>.

Newcastle Hang Gliding Club

PO Box 64 Broadmeadow NSW 2292; [www.nhgc.asn.au], <fly@nhgc.asn.au>. Pres: Mick Walmesley 0425 735784; V-Pres: Glenn Selmes 0425 275549; Sec: Matt Olive 02 49423131; Trs: Tash McLellan 0428 278 867; SSOs: Al Giles 02 49430674, John O'Donohue 02 49549084, Tony Barton 0412 607815. Meetings: Last Wed/month 7:30pm Souths Leagues Club.

Northern Beaches HG Club

Pres: Steve Phillips 0408 662608, <stephenphillips@optusnet.com.au>; Trs: Jim Gaal 0414 799822, <jimg@acay.com.au>; Sec: Owen Pearce 02 99133547; SSO (HG): Glen Salmon 02 99180091; Wayne Fitzgerald 02 99827094; SSO (PG): Wayne Fitzgerald 02 99827094. Meetings: 1st Tue/month, 7pm, Mona Vale Bowling Club.

Northern Rivers HG and PG Club

PO Box 126, Byron Bay NSW 2481, [http://bbhgc.tripod.com/]. Pres: Eddie Gray 02 66841795, <edgrey@linknet.com.au>; Vice-Pres: Maggie Clark 0404 263524; Sec: Mick Mackender 0414 867820.

Stanwell Park HG and PG Club

PO Box 258 Helensburgh NSW 2508; Pres: Chris Fogg 0412 904800, <fogg@idx.com.au>; Trs: Adrian Le Gras; Sec: Scott Zwanenbeek <scottz@internode.on.net>; SSO: Tony Armstrong <tony@hangglideoz.com.au>, 02 42949999.

Victoria

Dynasoarers Hang Gliding Club

Pres: Darren Brown 03 93971233 (w), fax: 03 93974566, <dbrwn@bmlegal.com.au>; Sec: Dale Appleton 0408 382635; Trs: Greg Holt 0418 516058; SSO: Rob Van Der Klooster 03 52223019, 0408 335559; Publicity Officer: Harry Buckle 03 52214544, <monument@pipeline.com.au>. Meetings: 1st Fri/month, venue see: [vhpa.org.au/dynal].

Melbourne Hang Gliding Club Inc.

PO Box 8057, Camberwell North VIC 3124; [www.hgfa.asn.au/~melbourne], <melbourne@hgfa.asn.au>. Pres: Vanessa Sparke 03 94583780; Sec: Steven Ross 0410 600 595; SSO: Peter Batchelor 0417 379069. Meetings 3rd Wed/month at 6:30pm at the Palace Hotel, 893 Burke Rd, Camberwell.

North East Victoria HG Club Inc.

[www.hgfa.asn.au]. Pres: Paul Harrison 0428 356239; Sec: Garrit Verway 0427 551074; Trs: Jill Borst 0438 328636; Web: Barb Scott 0408 844224; Meetings: Check [www.home.aone.net.au/gilbert/nevhc.html].

Sky High Paragliding Club

[www.skyhighparagliding.org]; Pres: Colin Page 0411 555128; V-Pres: John Styles <jdstyles@hotmail.com>; Trs: Clinton Arnall

ALL CLUBS PLEASE CHECK DETAILS IN THIS SECTION CAREFULLY

Could all Clubs please ensure they maintain the correct and current details of their Executive Committees and contacts here in the magazine. Specific attention is directed to the listing of SSOs and SOs for the Clubs. Please ALL CLUBS and nominated Senior SOs and SOs confirm ALL SSO and SO appointments with the HGFA Office <office@hgfa.asn.au> to ensure that those holding these appointments have it listed on the Membership Database and can receive notices and correspondence as required. Appointment of these officers is required to be endorsed by Clubs in writing on the appropriate forms. Sometime in the future if confirmation is not received, those listed in the Database where no current forms or confirmation is held, the appointment will be taken as having expired.

General Manager, HGFA

0415 229315, [membership@www.skyhighparagliding.org]; Sec: Georgia Buckingham <secretary@www.skyhighparagliding.org>; Web: Tony Tidswell <webmaster@www.skyhighparagliding.org>; APN Editor: Julie Sheard 0425 717944 <editor@www.skyhighparagliding.org>; SSOs: Kevin Gingell-Kent, Alister Johnson, Adam Neinkemper. Meetings: 1st Wed/mth 8pm, Retreat Hotel, 226 Nicholson St, Abbotsford.

Southern Microlight Club

[http://home.vicnet.net.au/~stclub/]. Pres: Kel Glare 03 94395920 (h), 0421 060706; V-Pres: Mark Howard 03 97511480; Sec: Dianne Pierpoint 03 9735278; 0429 938426. Newsletter: Barry Wood <jbwood@bigpond.net.au>, Michael Rose <mrose3@bigpond.net.au>. Meetings: 2nd Tue/month 8pm, The Mannington Club, 1 Thompsons Rd, Bulleen.

Western Victorian Hang Gliding Club

PO Box 92, Beaufort VIC 3373, [www.vhpa.org/vwhgc]. Pres: Glenn Bachelor 0419 324 730, <GlennB@pocketmail.com.au>; V-Pres: Mark O'Keefe 0412 473724, <mokeefe@bigpond.net.au>; Trs: Stuart Coad 0408 524862, <scoad@edlyn.com.au>; Sec: Lisa Miller, 0407 319397, <lisam130@hotmail.com>; Web/Database: Damian Georgiou 0413 677090, <damiand@bachomp.net>; SSO: Rohan Holtkamp 0409 678734, <dynamic@netconnect.com.au>; Paul Rundell 0418 348948. Meetings: Last Sat/month, The Beaufort Hotel, Beaufort.

Queensland

Cairns Hang Gliding Club

Pres: Russell Krautz <krautzrl@yahoo.com.au>; V-Pres: Joe Reyes 07 40555553, <reyes@ledanet.com.au>; Sec: Lance Keough 07 49012117, 31 Holm St, Atherton QLD 4883; Trs: Nev Akers 07 40532586, <nevjoy@ozemail.com.au>.

Canungra Hang Gliding Club Inc.

PO Box 41, Canungra QLD 4275; [www.chgc.asn.au]. Pres: Brandon O'Donnell 07 33999850 (h), 0416 089889, <olofly_@hotmail.com>; V-Pres: Raphael Mackay 07 55345190; Sec: Col Hjortshoj 07 55437248 (h), 0429 312067, <col61@gil.com.au>; SSO (PG): Rob Wilton 0418 732325, <robertmarie.wilton@bigpond.com>;

SSO (HG): Ken Hill 07 55435631, 0418 188655, <kenhill@iprimus.com.au>.

Central Queensland Skyriders Inc.

915 Yeppoon Rd Iron Pot Qld 4701. Pres: Bob Pizzev 07 49387607; Sec: Grant Suthers 07 49361790; SSO: Alister Dixon 49861984; Towing Biloela: Paul Barry 07 49922865, <prbarry@tpg.com.au>.

Conondale Cross-Country Flyers Inc.

Pres: Peter Buch 07 54949615, <buchy9@bigpond.com>; V-Pres/SSO (PG): Graham Sutherland 07 54935882, <grahamsu@mail.cth.com.au>; Sec: Sue Buch, 343 Commissioners Flat Rd, Peachester QLD 4519, 07 54949579; Trs: Kim Hodson, 16 Gizeh St, Enoggera QLD 4051, 07 33541910; SSO (HG): Russell Groves 07 54450084.

Dalby Hang Gliding Club

27 Van Gogh Pl., Mackenzie QLD 4152, [www.hgfa.asn.au/~dhgc]; Pres: Daron Hodder 0413 515160, <daron@powerup.com.au>; Sec: Rod Flockhart 07 32193442, 0412 882639, <flockhartrod@hotmail.com>; SSO: Jason Reid 0418 771400; Trs: Cameron McNeill 07 38913457.

Sunshine Coast Hang Gliding Club

PO Box 227, Rainbow Beach QLD 4581;

<intheair@ozemail.com.au>. Pres: Mark Savage 07 54416423, <marksavage@dart.net.au>; Sec/SSO (PG): Jean-Luc Lejaille, 0418 754157, <rainbow_flyer@hotmail.com.au>; Trs: Michael Powell, 07 54425568 SSO (HG): David Cookman 07 54498573.

Whitsundays HG Club

Pres: Graham Lee 07 49546726, <gdsrlee@hotmail.com>; Sec/Trs: Ron Huxhagen 07 49552913, fax: 07 49555122, <sitework@mackay.net.au>

Northern Territory

Alice Springs HG and PG Club

Pres: Ricky Jones 08 89551088, 0402 805 099. Please contact for paramotoring, PG ridge soaring & thermal flying.

Western Australia

Albany HG & PG Club

Pres: R D Jones, 1/14 Lyndavale Dr, Alice Springs NT 0870, 08 89551088, 0402 805099; SSO: Simon Shuttleworth 0427 950556; Sec: John Middleweek 08 98412096, fax: 08 98412096.

Cloudbase Paragliding Club Inc.

334 Belmont Ave Kewdale WA 6105. Mes-sagebank 08 94875253; Pres: Wesley Zadanowicz, 08 92493707, 0411 185091, <president@cloudbase.asn.au>. V-Pres: Nigel Sparg, 08 93049785, 0427 476629, <nice_president@cloudbase.asn.au>. Trs: Colin Brown, 08 94594594, 0407 700378, <treasurer@cloudbase.asn.au>. Sec: Ian Threlfo, 08 94177952, 0407 089101, <secretary@cloudbase.asn.au>. Committee members <committee@cloudbase.asn.au>; Colin Asplin (08 92774191, 0409 050370), Mike Allen (0408 947048), Mark Wild (0411 423923), David Morgan (08 93590390, 0418 908625). Meetings: 2nd Tue/month 8pm, Rosie O'Grady's Pub, South Perth.

Goldfields Dust Devils Inc.

9 Broadarrow Rd, Kalgoolie WA 6430. Pres: Murray Wood 08 90215771, <dustdevils@hgfa.asn.au>; Sec: Peter Cepuritis 08 9022 2084, <pcepuritis@kal.snowdenau.com>; Trs: Richard Breyley 08 90227684, <Richard.Breyley@harmonygold.com.au>; SSO: Mark Stokoe 08 90911297, <Mark.Stokoe@health.wa.gov.au>.

Hill Flyers Club Inc

<hillflyers@dodo.com.au>; Pres/SSO: Rick Williams 08 92943962, 0427 057961; Sec/Trs: Dave Longman 08 93859469 Meetings: Last Tues/Month, 7:30pm, Venue: Rosie O'Grady's Pub, South Perth.

South West Microlight Club

Pres: Brian Watts 0407 552362; V-Pres: Don Wilson 08 97641007; Sec: Paul Coffey 08 97251161; CFI: Brendan Watts 0408 949004.

Western Soarers

<wshgc@hgfa.asn.au>, PO Box 483, Mt Hawthorn WA 6915, [www.iinet.net.au/wshgc/]. Pres: Mirek Generowicz 0427 778 280, <mgenerow@bigpond.net.au>; V-Pres: Mark Wild 08 94098581, <mark@gastech.com.au>; Sec: Ben Griffith 08 94724068, <benandrobjyn@aardvark.net.au>; Trs: Sun Nickerson 0401 135042, <Sunny@iinet.net.au>; SSO (HG): Shaun Wallace 0411 885178, <swallace@iprimus.com.au>; SSO (PG): Jules Sanderson 0405 089709, <airoz@speedlink.com.au>. Meetings: Last Tues/month, 7.30pm, Rosie O'Grady's Pub, South Perth.

GFA

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.

MODIFIED ES52. We have bought a share in the Platypus & reluctantly offer our unique Kookaburra for sale to a good home. We have had many hours of sociable soaring in this wonderful aircraft, which must be seen & flown to be appreciated. Performance is considerably better than standard Shortwings following Doug Vanstan's fabulous redesign & rebuild in 1987. For about \$12,000, this aircraft represents great value for private owner, club or a syndicate. An open trailer is included for free. Ph: David & Jenne Goldsmith 03 54283358.

STD LIBELLE, GBN. This is a good clean glider & comes complete with enclosed light-weight trailer & electric instruments. Being sold to make way for a higher performance glider in the club fleet. \$18,000. Ph: Armin Kruger 02 95892222, 0421 681905, <kruisa@ozemail.com.au>.

STD LIBELLE 201B. Flies well, good appearance. Fitted with a GPS, Joey & Dittel radio. Encl. trailer & tow-out gear. New dust covers (wings, canopy & tailplane). Ph: John 03 93282536, <john.robinsons@bigpond.com>.

JANTAR SZD41A, Standard, TT 1746 hrs, radio, nose & belly hooks, modified canopy, encl. trailer & two-out gear. New wing dust covers. Ph: John 03 93282536 <johnrobinsons@bigpond.com>.

BG12A. Excellent cond, rebuilt 30-year survey. Form 2 available. 31:1 LD. Open trailer, hangared Central Coast. All offers considered. Ph: Peter 02 65536095.

NIMBUS 3T – 25.5m span, 60:1 performance with sustainer engine. Genuine 1,000km machine. Refinished, always hanged, full competition panel & seals, Mountain High oxygen system, Komet trailer, etc. Price negotiable. Ph: Shaun on 0407 042468 or <shaun_driscoll@roadshow.com.au>.

LS4A HDK. Proven Nationals performer, never damaged, refinished, excellent cond, tail tank, Cambridge L-Mav & electric audio vario, PZL vario, 720ch radio, 1,900 hrs, encl. metal Thompson trailer with VG fittings, easy two-person rig, tow-out gear. Ph: Frank Turner 07 32318888 (w),
07 33783302 (h), 0419 702416 (m), <fturner@thvmac.com.au>.

STD LIBELLE, GBN. This is a good clean glider & comes complete with encl. light-weight trailer & electric instruments. Being sold to make way for a higher performance glider in the club fleet. \$18,000. Ph: Armin Kruger 02 95892222, 0421 681905, <kruisa@ozemail.com.au>.

JUNIOR. SZD-51-1, 15m, Based at Benalla & always hangared. VGC. Aerobatic. Delightful handling. Incl. spare canopy. Offers invited. Ph: Stu 0428 191079.

LS3a 15M flapped glider, IZR. Built 1978, excellent cond, low hrs. Borgelt B50/B11, Garmin GPS, Joey ladder, 760ch radio, cradle & wiring for a Compag PDA. New ballast bags. Registered encl. trailer. For more info [www.sandcock.com] or Ph: Mick Webster 0407 834531, <mickwebster@bigpond.com>.

K6e, SSR. Based in Gulgong NSW, encl. trailer, \$8,500 ono. For details ph: John 07 49756613 (evenings).

MODIFIED ES52. We have bought a share in the Platypus & reluctantly offer our unique Kookaburra for sale to a good home. We have had many hours of sociable soaring in this wonderful aircraft, which must be seen & flown to be appreciated. Performance is considerably better than standard Shortwings following Doug Vanstan's fabulous redesign & rebuild in 1987. For about \$12,000, this aircraft represents great value for private owner, club or a syndicate. An open trailer is included for free. Ph: David & Jenne Goldsmith 03 5428 3358.

BERGFALKE II GKZ. In very good cond. throughout, new Form 2, basic instruments, open trailer, one-piece canopy. Great training aircraft. Have fun flying a true classic. \$16,000 ono. Ph: 02 66847572.

K13, GSL. Based in Gulgong NSW, \$25,000 ono. For details ph: John 07 49756613 (evenings).

DG500M, XQA. Excellent cond, 560 hrs, 42 engine hrs,
 'compact' enclosed trailer, tow-out gear, steerable nose
 wheel, tinted canopy, water ballast, automatic engine
 retraction. Ph: John Moore 07 32636618.

GROB G109B, HNK. 2500h. Owned by Flinders University & operated as atmospheric research aircraft. Excellent cond, never damaged, always hangared, extremely reliable. Many spare parts incl. spare propeller. Excellent avionics incl. two radios, Garmin 150 GPS & transponder. Night-VFR equipped. All modifications to the aircraft are certified by Grob, GFA & CASA, but can be removed & the aircraft can be operated as a normal motorglider under GFA. For further details, contact Jorg Hacker 0418 857115 or <Jorg.Hacker@flinders.edu.au>.

TOWPLANES: Two wanted for hire by GCV, 1) @ Liliydale, Nov-May '05, 4 or 6 cyl tug for weekend Blanik passenger flights with experienced pilots at our Liliydale site. 2) @ Benalla, Oct-March '05, PAWNEE for 7-day per week launching. Tugs hanared. Ph: Rob Dorning, 03 94894298, <softdawn@swiftsl.com.au>.

RIGHT WING FOR HORNET 206, structurally in good cond, minor defects to coating acceptable. Advise, price asked, model & serial nr & location to <raul@diego.com.au>.

OPEN CLASS 17-18m GLIDER. Eg: Ventus, DG 202/17, LS6/8. Will consider DG 400. Private Buyer. Ph: 03 93767210.

GLIDER for 2004/5 season for 750 km & 1,000km flights central NSW & northern NSW. Pilot 500 hrs, 120 hrs 2004 season in LS6. Ph: Rob Walker 0419 839631 or <Rocket40Adel@hotmail.com>. Look forward to hearing from everyone.

AVTEC AVIATION. Repairs & Maintenance F.R.P. Ph:
Roger Bond 07 33894843.

PARACHUTES AUSTRALIA Thinback Pilot Emergency Parachute. Aerolite 26ft Low Porosity Parachute (never used) Date Of Manufacture: 2001 (excellent cond) \$1,950. Ph: 02 66742180 or <shellypage@optusnet.com.au>.

CANOPIES, Kestrel Fr, & Motor Falke, \$500 ea. IS28 canopy w/frame (used), IS28 canopy (new) Also IS28 complete but damaged, & many IS28 spares & Falke eng. spares. Ph: Stu 0428 191079.

NEW GARMIN Models, now available, GPS Map 196,
the GPS Map 96 & GPS Map 96C. VERTEX YXA-150
Vertex h& held 720ch comm. \$495. MARS
PARACHUTES, ATL 88/90 Short Pack only \$1,830, ATL
88/90 Long Pack only \$1,830. Ph: Airborne Avionics
02 68892933 or <hartley@
avionics.com.au>, [www.avionics.com.au].

DISCOUNTED CAMBRIDGE 302 vario/logger/final glide systems. State of the art available for more than 15% off advertised price on demonstrator models. That is \$3,650 for an entire 302/303 system! Can also be connected to iPaq for moving map display. Plus plenty of Maxi Gap Tape in stock for \$15/roll. Ph: Bruce 02 67720508 or <bruce.taylor10@bigpond.com.au>.

XCOM760 RADIO is here so which radio do you get (I have custom gliding harness). Cambridge 302 & 303 or new 302A logger are going well & finally my PDA mounts that do not cost an arm & a leg. Also seals, tyres & wingstands. <ian.mcphee
@bigpond.com>, Box 657 Byron Bay 2481, ph: 02 66847642.

NEW CANOPIES: Dimona H36 \$2,970, Grob twin rear \$1,650, Std. Libelle \$1,650, LS \$1,980. GST incl. Windows & vents available. Aviation Acrylic Mouldings Pty Ltd email: <aamoulds@senet.com.au>. Ph: Ian or Cecilia Linke 08 82513780.

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](http://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 21100 Angel St, Tehachapi, CA 93561 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.
Annual subscription: 70DM. OSTIV c/- DFVLR, 50833
Wessling, Germany.

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 & experience. All members must adhere to the maintenance requirements as contained in section 9 of the Operations Manual & as provided by manufacturers. Secondhand equipment should always be inspected by an independent person, an Instructor wherever possible. Advice

should be sort as to the cond, airworthiness & suitability of the aircraft. It should include examination of maintenance logs for the aircraft. It is unethical & 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 CLIMAX C2 13 adv, in top cond, first to fly will buy, \$5,300 ono. Ph: 0425 304624; 02 49582255.

AIRBORNE CLIMAX C2 13 adv, white/yellow US, only flown for 3 hrs, reluctant sale due to no time, \$6,200. SKYLINE ZERO DRAG RACER HARNESS, suit 160-170cm, same hrs, \$1,500. Both in br& new cond, urgent sale. Ph: 0419 413741 (w); 02 97927172 (h).

AIRBORNE FUN 190 nov, red/blue, in EC, approx. 45 hrs, speedbar, \$2,500. Ph: Adrian 0413 072228 (Sydney).

ICOM IC-A22E VHF handheld radio, almost unused, with charger & connectors, provides sensible conversations most of the time, \$500. Email: <alaricgiles@yahoo.com>.

MOYES LITESPEED 4 adv, in VGC, fast bar, new side wires, spare DT, \$4,800. Moyes XT 145 int, GC, spare DTs, test fly at Stanwell Park, \$1,200. 3 x Airborne Fun 160 DTs, br& new, \$120. Ph: Kath & Lee 0427 220764; <kat@katabtic.com.au>.

MOYES LITESPEED 4 adv, blue/yellow US, 60 hrs, in mint cond, just fully re-serviced, new wires & VG, flies very nice, \$5,800. Also, tandem glider, new Falcon 225, int, blue/green US, in mint cond, only 30 hrs, spring loaded tips, reinforced sail cloth, well known for the easiest tandem to fly, paid \$6,800 will sell \$4,000. Ph: Rob 0411 082 642; 02 42948694.

MOYES LITESPEED 5 adv, late 2003 model, as new, Mylar mainsail, grey/orange US, \$5,450. Ph: 02 95254961; 0408 262585.

MOYES SX4 adv, black/purple US, just tuned up at the factory, looks good & flies great, 2 spare DTs plus basebar, 100 hrs only, \$2,000. Ph: Luc 0404 499514; 02 91301076 (h).

MOYES XTRALITE 127 adv, flies really well (good sink rate & glide – a hot, small glider), small A-frame, for small pilot, orange/purple, plenty of life left in sail, \$1,000 ono. Ph: Maggie 02 66858768; 0409 611845.

VICTORIA

MOYES SONIC int, max 50 hrs, still crisp, with airfoil DTs plus 2 spare & Mylar LE, \$2,000 not neg. Also, Black Hawk harness with parachute (matching colours), \$600. Ph: Damien 0431 463778.

MOYES SX 3 adv, power rib, purple & fluoro yellow US, VGC, \$1,000 ono. Roof racks, suit Subaru L series sportswagon, \$75. Ph: Mark 0408 801356; 03 92080566.

QUEENSLAND

AEROS COMBAT 2 14 adv topless, 14m² (153ft²), white with yellow US stripe, white TS, Wills wing, low drag DTs, carbon airfoil basebar, competition spec glider, EC, \$4,000. Ph: 0407 463668.

MOYES LITESPEED 4 adv, in VGC, fast bar, new side wires, spare DT, \$4,800. Ph: Kath & Lee 0427 220764; <kat@katabtic.com.au>.

MOYES LITESPEED 5 adv, blue/yellow US, low hrs. immaculate cond, \$5,700. Ph: 07 3800 2760; 0408 457159.

MOYES SX4 adv, power rib, EC, 90 hrs, royal blue/orange US, handles well, easy to land, \$1,800. AIRBORNE STING 2 140, nov/int, PC, as new, 30 mins. Airtime only, US lavender/fluoro yellow with black batten pockets, fared DTs, springtip battens plus 2 spare DTs, flies perfectly, suit smaller pilot, \$2,500. Ph: Tim 07 55435093.

MOYES XT PRO 165 int, VGC, great colours, fluoro orange LE, blue/green US, rubber-backed fared DTs, speedbar, Scrim LE with mylars, c/w owner's manual & batten profile, \$900. Also, Skyline harness with chute, VGC, black slider type, suit 5'10"-6'1" pilot, made in Germany, \$830. Ph: 0422 571253; 07 38022333 (h).

MOYES XTRALITE 137 adv, Dacron main, LE Laminate, GC. Lower wires back, front, sides all replaced last 35 hrs. Well behaved, easy handling. Ideal for int/adv, in SE Qld to NE NSW, \$300 ono. Ph: Wayne 07 55333719.

SKYLINE harness, black colour, slider type – changes hang position on a slide bar, centre zip with adjustable shoulder straps, suit 5'10"-6'1" pilot, c/w recently repacked chute, VGC, \$750. Ph 07 38022333; 0422 571253.

Paragliders & Equipment

NEW SOUTH WALES

FIREBIRD @ DHV 1-2, small, 65-85kg in-flight weight range, only 10 hrs airtime, as new, \$2,500 ono must sell. Medium reserve chute (65kg), \$500. Ph: Rachel 02 66808633; 0422 224339.

NOVA PHERON M DVH 1, 85-105 kg, blue/white, Supair Evo harness with rear mounted Charly reserve, backpack & new stuff sack. Only 10 hrs use, still crisp! Complete kit for \$3,800 ono. Ph: Jens 02 47876153; <jbl@pnc.com.au>.

WINDTECH AMBER DHV1-2, 85-105kg, white/red, 100 hrs, top cond, porosity tested over 400 sec, \$1,500 with harness & air bag. Ph: Peter 0410 466518; 02 95483124.

VICTORIA

PARATECH P41 28 sqm, suits pilot 70-90kg (all up weight 80kg-105kg). As new, 13 hrs. Excellent 1st wing. Adel harness with backpack & Adel reserve parachute 34m² – all for \$1,800. Ph: David 03 9359 8561(w); <djob@ford.com>.

QUEENSLAND

APCO TETRA M with AirExtreme harness & Mayday reserve, \$4,000. Ph: 0403 868223 (Brisbane).

SWING ARCUS XL latest (105-130kg) DHV1, back pack, Swing Connect XL harness, new Apco Mayday 18 reserve, Lazer Downhill XL helmet with headset, finger switch, link lead, helmet bag, TX610 radio, Brauniger AV Pilot vario, \$4,300. Ph: Les 0413 863106; <lproud@ozemail.com.au>.

SOUTH AUSTRALIA

FLIGHT DESIGN B4 30 Large DHV2-3, 100-125kg, 80 hrs, \$400. Flight Design C5 Proto medium, 80-100kg, 80 hrs, \$200. 1x NEW full-face helmet, \$150. Backpack F2 Adventure Engine, 80 hrs, 4-blade + spare blade, \$2,400. NEW 10l water ballast bag, \$40. Ph: 08 83980102; <wallner@chariot.net.au>.

SWING MISTRAL 2 DHV 1-2, 70-95kg all up, red/white, 85 logged hrs. EC, no dings no repairs, 2 yrs old. A responsive, playful but very solid & safe wing with great performance (8:1 glide), \$2,300 ono. Ph: 0428 436737; <gh@mik.com.au>.

Trikes & Equipment

NEW SOUTH WALES

AIRBORNE EDGE EXECUTIVE 582 Rotax T2-2500, 270 hrs, Edge Wing, 4-blade Brolga prop, 2 x helmets, head sets, stone guard, compass, silencer kit, jerry cans, travel covers, CHT, EGT gauges, Microair in-dash radio, electric start, custom trailer for trike & wing carrying. Trike red in colour, all in A1 cond, just had rego inspection, etc, \$15,500 ono. Ph: 0418 648105.

AIRBORNE EDGE X T2-2327, TT 267 hrs, Streak wing, dual EGT, water temp, 2 helmets, dual Icom headsets & radio, 4-blade Brolga prop, stone guard, dust cover, tug hitch, \$19,000 ono. Ph: Tim 0411 243222.

SOUTH AUSTRALIA

EDGE-X REDBACK T2-2466, 115 hrs TTime, fun, affordable aircraft in EC, well maintained, always hangared. Wizard II wing/503 Rotax fitted. Incl. 2 x suits, 2 x helmets, 2 x headsets with intercom. Ph: Joe 08 83582131; 0409 030256.

Wanted

WEST AUSTRALIA

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

General

BYRON BAY: LEASE HOLD HANGAR

5 years on existing lease. Trading Namg (SKYLIMIT) Plant/Tools & Equipment. Over 500m² plus substantial caretaker's quarters. RARE OPPORTUNITY. Ideal for a Trike School. Offers over \$200,000. Tony Patterson on 02 6685 6552, 0408 712885 or <sales@byronbaypro.com.au>.

BUY & SELL YOUR GEAR ONLINE FOR FREE!

A free service, we have over 600 pilots per month buying & selling their used flight gear on our website [www.highadventure.com.au]. No mailing list, no commissions. Go to the Market Place link & join the other happy pilots that sell their gear on our website.

"SKYOUT"... NEED A LAUGH?

Jules Makk's delectable, collectable cartoon compilation. 50 pages of 150 loony cartoons & two A3 sized board games... "XC Circles" & "Thermals & Sinkholes"... too much like the real thing & heaps of laughs... \$15 to anywhere in Australia... post \$ to: Jules Makk, 61 Anakie Drive, Cornubia QLD 4130 <sky_out@optushome.com.au> – "it's a Hoot!"

SPORT WINDSOCKS

Portable windssocks self standing models available. Easy set-up in 2min. Sizes range from 90cm to 3.5m. Pivot kits available for permanent or portable mounting. Contact WINDWERKS for a fact sheet. Ph: 03 6352 3429, fax: 03 63523829, <windwerks@tassie.net.au>.

HGFA Schools

VICTORIA



DYNAMIC FLIGHT
Hang Gliding School & Flight Park

Little over an hour from Melbourne
Australia's Largest School
Virtual Reality Hang Gliding Simulator
Introductory & Full Licence Courses
Tandem Introductory Flights
Ground & Aero Tow Endorsements
Cross Country Tours
Equipment Sales, Hire & Trade In



Ph/FAX: 03 53492845
email: dynamic@netconnect.com.au
Rohan: 0409 678734 Paul: 0418 348948
Jlm: 0417 366766 James: 0419 129234

DISCOVER THE FREEDOM !

WINGSPO RTS

- ♦ Paragliding & Hang Gliding Courses
 - ♦ Coastal, Inland & Towing Courses
 - ♦ Tandem & Cross-Country Tuition
 - ♦ Accommodation Students & Visitors
- Fantastic Location for Pilots and Family

EDEL Australia

- ♦ Paraglider Sales/Distribution
- ♦ Accessories, Varios, Reserves



www.wingsports.com.au
hans@wingsports.com.au 0419 378 616
Apollo Bay VIC 3233 Fax: 03 5237 6486

VICTORIA

Alpine Paragliding

- Complete training in
 - Paragliding ◦ Paramotoring
 - Hang gliding
- Introductory days
- Tandem instructional flights
- Advanced skills coaching
- Hill launch and towing
- Thermalling and XC
- Flying holiday tours
 - Domestic & overseas
- Shop
- Equipment sales
- Gift vouchers
- Team building activities
- Film and TV



PO Box 3, Bright VIC 3741
 ph: 03 57551753, 0428 352048
 <enquiries@alpineparagliding.com>
 [www.alpineparagliding.com]

NEW SOUTH WALES

HIGH ADVENTURE Paragliding

Specialising In:

- * 1-day, Weekend, and up to 12-day Paragliding courses
- * Small Class Sizes
- * Learn both Coastal & Inland Flight Skills
- * Tandem Flights in Paragliding and Microlites
- * Australians Paragliding tour specialist
- * Paramotors, 2 Brands

FLYING SINCE 1978!

4-Day Conversion Courses for Hangglider pilots!
 Over 15 Flight Sites to choose from!
 Buy the Finest European Products on the Market!
 See Our Website Sales, "NO Fixed Prices"
 We guarantee we have the best prices on Paragliders and Accessories!

www.HighAdventureParagliding.com

(02) 6559 7177
 or Mobile (0429) 844 961

BYRON AIRWAVES Hang Gliding School

- Lessons & full instruction available in Byron Bay.
- Over 25 years hang gliding experience with training all year round.
- Learn to fly safely & accurately with all skill levels catered for.

Phone Brian and Anne on
 02 6629 0354 or 0427 615950,
 email: <byronair@optusnet.com.au>

NEW SOUTH WALES

Manilla Paragliding



- MT BORAH, MANILLA is the one of the top 10 flying sites in the world & has more flyable days than anywhere else in Australia. It has 4 large launches for nearly all wind directions & easy, safe top & bottom landings all around. Great ridge soaring & XC all in one place. It is also the #1 candidate for the PG World Championships in 2007!
- YOUR CFI IS GODFREY WENNESS: The most experienced paraglider pilot in Australia. Over 5,400 hrs airtime since 1988, World Record Holder – 335km (1998-2002), Longest Tandem Flight in the World – 223km (2000-03), Multiple National Records, National XC League Winner (inaugural 2001 & 2002), CFI, Instructor Examiner, Australian Team Member, Prototype Test Pilot, HGFA Safety & Ops Committee (PG), International Comps Organiser, & Owner of World Famous Mt Borah.
- NOVICE LICENSE COURSES: Our excellent 9-day Novice License Courses will now be continued with new waivers.
- THERMALING, XC & OTHER TUITION: We specialise in PG & offer personal one-on-one & group tuition in areas such as basic skills refresher, thermalling, cross-country, SIV safety clinics, & Intermediate, Advanced, Tandem, Motor & other ratings.
- HG TO PG ENDORSEMENTS: its easier than you think!
- ONLY QUALITY PRODUCTS FROM THE BEST BRANDS: Importer of Advance, Flytec, Hanwag & JDC. Stockist & service of all equipment, new & secondhand.
- CABINS & CAMPING ONSITE: Stay at Mt Borah – its nice & quiet! Cabins for just \$15p/n (\$100 p/w) & camping \$6 (\$35 p/w).

So come flying with Manilla Paragliding, where the person who shows you the mountain, owns the mountain!

Phone Godfrey Wenness on:
 02 6785 6545 or fax: 02 6785 6546

email: <SkyGodfrey@aol.com>

"The Mountain", Manilla, NSW 2346.

ACT/NEW SOUTH WALES

AUSTRALIAN Paragliding CENTRE

Learn to Fly in Canberra!

The Paragliding Capital of Australia and only 3 hours drive from Sydney.
 At Australian Paragliding Centre we fly all year round & are open 7 days a week.

Learn to fly in a friendly, caring environment with first class tuition & equipment.

- License & Introductory Courses
- Tandem Flights
- Gift Vouchers & Group Discounts
- Pilot Development Clinics for Novice, Intermediate & Advanced pilots.
- International Flying Tours
- Cross-Country & Towing Tours
- Pro-Design Paragliders, Harnesses, Reserves, Flying suits & Para-Kites.
- Paramotor sales & tuition
- Sales & Service of all major brands.

Contact: Peter Bowyer on

02 6226 8400

<pete@australianparagliding.com>

Check out our new homepage!
 [www.australianparagliding.com]

SOUTH AUSTRALIA

Adelaide Airsports Microlight Aircraft Specialist

All microlight flight training and endorsements available from beginner to instructor level and beyond.

Sales of new and used microlights, hang gliders, skyfloaters, powered hang gliders and all associated equipment.

CFI & EXAMINER – Larry Jones
 Ph: 08 8556 8195 Fax: 08 8557 4113

Mobile: 0408 815 094

Email: <fly@airsports.com.au>

[www.airsports.com.au]

GAWLER MICROLIGHTS

Feel the freedom of flight over the beautiful Barossa Valley. Concentrating on all aspects of microlight aircraft only! Whether it is just for fun, or serious cross-country skycamping, we can provide the training and sales of new or second hand aircraft and equipment.

Only the latest state of the art equipment is used for training. On ground theory and hand-outs are FREE.

CFI Rob Hatswell "Get More Air"
 Ph: 08 8527 2785 • Fax: 08 8527 2227 Mob: 0428 527200

Email: <info@gawlermicrolights.com>

[www.gawlermicrolights.com]

QUEENSLAND



RAINBOW PARAGLIDING

APCO AUSTRALIA

Offering the full range of APCO equipment

APCO Aviation three years/250 hours warranty for porosity. Gliders that are made to last unique in the industry. Customer service and 100% satisfaction guarantee.

Test centre for APCO gliders [www.apcoaviation.com].

APCO Australia and PWC winner of the Serial Class 2000

Established since 1996, Rainbow Paragliding is based on the Sunshine Coast and Hinterland. The school has access to 25 sites and holds a permit to operate in the Coolool National Park including Teewah and world famous Rainbow Beach. In the Sunshine State, we fly all year round, 60km cross-country flights have been achieved in winter!

FULL LICENCE COURSE – Strictly only four students per instructor, for quality personalised tuition at your own pace, between eight to 10 days.

REFRESHER COURSE – Groundhandling, top landing or asymmetric recovery techniques: Come learn with the experts. INTERMEDIATE, ADVANCED, TANDEM OR PARAMOTOR ENDORSEMENT – We have the sites, the weather and the knowledge.

SALES AND SERVICES – New and second-hand, trade-in, maintenance and repairs.

YOUR INSTRUCTORS: Jean-Luc Lejaille, CFI and senior safety officer, paramotor pioneer (first licence issue in Australia), over 2,500 student days' experience, instructing since 1995. Robert McDermott: Tandem instructor and safety officer.

Jean-Luc Lejaille CFI 45192

Rainbow Paragliding — Apco Australia

PO BOX 227, Rainbow Beach 4581

Ph: 07 5486 3048 — 0418 754 157

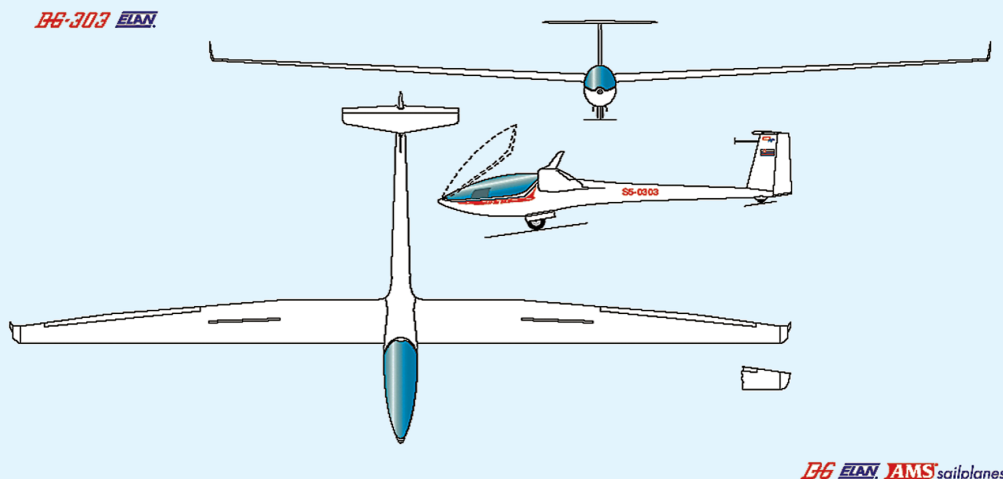
Email: <intheair@ozemail.com.au>

[www.ozemail.com.au/~intheair]

T&J Sailplane Services

Hangar 4 Temora Airport • 126 Baker St Temora NSW 2666
Phone 0269 781559 • Fax 0269 780505 • Mobile 0409 557079
Email: tnjgilbert@bigpond.com • Website: www.tjsailplanes.com
DG Website: www.dg-flugzeugbau.de • AMS Website: www.ams-flight.si

Major and minor repairs on FRP and metal gliders.
Tyres, tubes, wheels, brakes, perspex, seals, tapes,
Australian Agents for DG and AMS Sailplanes



DG ELAN AMS sailplanes

DG-303 ELAN. The affordable Standard Class glider. Now flying with the Canberra Gliding Club and on order with the Southern Cross Gliding Club. Contact us for a very competitive price.

Emergency Parachute Systems

Parachutes Australia

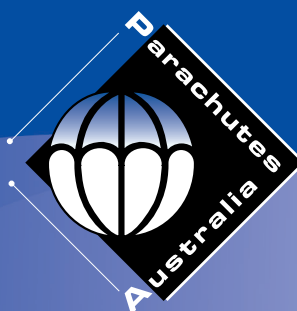
has been supplying the world with emergency parachute systems for Civilian and Military applications for over 30 years.

The **Thinback** and **Slimpack** Emergency Parachute Systems

manufactured by Parachutes Australia are designed, tested and manufactured beyond regulatory requirements and provide the maximum safety, performance and comfort.

- Certified under FAA TSO C23(b) with Certificate of Type Approval issued by CASA.
- Long 20 year Service Life*, an important point to consider when comparing prices.
- Manufactured from durable Cordura fabric.
- Military specification harness webbing for reliable strength and durability.
- Stainless Steel closing grommets and ripcord assembly.
- Thin, soft pack for pilot comfort.
- Now available: **Sheepskin Accessory Option** for improved comfort and hygiene.
Static Line Deployment Option

Slimpack
(Seat Version)



22 Bosci Road Ingleburn NSW 2565
Ph 61 2 9829 5355 Fax 61 2 9829 1300
Email: sales@parachutesaustralia.com
www.parachutesaustralia.com

Thinback Emergency Parachute System

* Refer Parachutes Australia Service Bulletin SB9502 Rev.2 15/8/03

A O H G C 2 0 0 5 *

Deniliquin NSW Australia

28th Dec 2004 —
3rd Jan 2005
(Practice day 27th Dec)

Join us for—
The Comp with a difference.
3 Competitions in one!
A special welcome to new competition
pilots. This competition is especially
organised for you!

OPEN Class AAA (Difficult tasks, but more emphasis on racing)

KINGPOST Class AA (Medium difficulty tasks)
(Kingpost class includes Litesport)

FLOATER Class A (Easy, shorter, downwind tasks)
(Floater class includes Sting, XT, Sonic etc)

ALSO OPEN TO CLASS 2, CLASS 5, AND PARAGLIDERS

OUR AIM

- to have **more fun!**
- to set **tasks to suit** most pilot skill, experience and fitness level.
- **all pilots** to have a realistic chance of **making goal every day.**
- new, **low airtime pilots** being able to **fly with** the good guys, but competing against their peers.
- most pilots to **have a chance of winning** the competition regardless of the glider they are flying.

We will be back towing in Conargo. HQ is in Deniliquin.

Please contact us if you want us to help you find a tow team, retrieve team, or driver.

- All pilots needs to be tow endorsed
- All tow and retrieve cars need comprehensive or third party property insurance.
- All tow and retrieve cars need an approved fire extinguisher.
Bring your own (please check if it's "approved") or buy one at registration \$55.
- All pilots must sign an "Conditions for Competitors" agreement as well as a waiver form at registration.

entry fee \$190

AUSTRALIAN OPEN **HANG GLIDING** CHAMPIONSHIPS 2005

Queries about anything please contact TOVE on -

EMAIL chgpqc@goulburn.net.au

TEL 0419 681 212

WEBSITE www.taragoflightpark.com.au