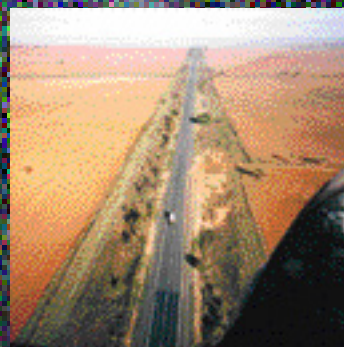


Gliding *Australian* SKYSAILOR



In this Issue:

Murray
Microlight
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Impressions
from the Gliding
World Masters



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

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Skysailor classifieds: Mailed or emailed to the sub editor or faxed to the HGFA on (02) 6947 4328. Classifieds will be included in the next possible issue after receipt of payment.

All 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.

CLASSIFIEDS AND ADVERTISING RATES

Classifieds are charged at \$15 for the first 4 lines, \$4 for every line thereafter (40 characters). Display advertising rates and mechanical specifications are available on request. All ads to be paid prior to publication.

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Subscriptions/circulation/changes of address:



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NEW DEADLINE

The new deadline for articles, photos, news and display ad bookings is the 21th of each month, 5 weeks prior to publication. Please read the editorials on pages 2 and 3.

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 Articles of unknown origin will not be published.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. Please do not print on the back of photos.

Drawings, maps, cartoons, diagrams, etc. should be in black ink on white or transparent 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

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CREDITS

Cover: Glider finishing, 1999 Worlds. Photo: Lisa Trotter

Design: Suzy Gneist, Gneist & Moffatt

Film, Printing: NCP Printing, Newcastle NSW

Mailing: ContacMail, Newcastle NSW



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).



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SKYSAILOR

Editorial

With the improved efficiency of the joint magazine, I'd like to notify members that the deadline for contributions has been moved from the 15th of each month (six weeks prior to publication) to the 25th of each month (five weeks prior to publication).

This deadline refers to all contributions (articles, news, advertisements and classifieds), however the method of submission differs for various material. Please read the following outline very carefully. Adhering to these submission instructions will allow for smooth and efficient operation of the magazine.

Submission of Articles and Photos

Article text is preferred by email (saves me typing it out again), although typed pages through the post are equally acceptable. Photos, however, MUST be sent through the post. Scanned photos as email attachments are not of a quality suitable for magazine reproduction, so DO NOT send any picture files by email to the sub-editor. With the inclusion of a stamped, self-addressed envelope, photos will be returned as soon as possible.

Submission of Advertising Material

Advertisers must book with the sub-editor by the deadline (25th). The booking (preferably by email) need only state four points:

1. Company and contact person (include contact details);
2. Size of advert and whether B&W (Mono or spot colour) or full colour;
3. Issue to be published in (usually "next available");
4. Whether or not the advert is currently on file with AG/Skysailor. If so, explain clearly in words which advert is desired. If not, state that advertising material (either four colour film, high quality print out, high resolution EPS or TIF image file or QuarkXPress file on disk) needs to be submitted directly to the production editor.

Contact details for the production editor will be given once the booking email is received. **No attachments are to be sent with this booking email to the sub-editor!**

Advertisers will be invoiced by the HGFA office after the publication of their advertisement.

Submission of Classifieds

Classifieds, together with payment, are to be placed through the HGFA head office by the deadline (25th).

I'd like to thank you in advance for following these guidelines. I'd also like to thank those that have contributed articles this year. As you well know, the magazine (both in content and quality) relies on what you have to offer.

It's also worth mentioning that any views expressed in magazine submissions are not necessarily those held by the HGFA or editors. As an example, I'd like to draw your attention to the poem published on page 21 of the September issue. The views and ideas expressed therein should be treated with common sense and pilot discretion. After extensive consultation with the HGFA, FAI and my mother, I'd like to offer the following safety related footnotes with regard to this poem:

TO FLY

*I stand alone on lofty peak⁽¹⁾ and search the gentle breeze,
In desperate quest for lifting thrusts of air⁽²⁾
I seek to loose the brawny clutch of Earth⁽³⁾
To soar aloft through boundless⁽⁴⁾ vale of sky.
No Condor's grace nor source of strength have I⁽⁵⁾
To chase the zephyred wisps above;
I stand in quiet faith, attached to raucous coloured
wings of cloth⁽⁶⁾
My trust in wind and sail and mind, all yearning
to be free.
And then it comes: the tell-tale bend of branch
Or wisp of dust from sun-baked flats below:
A laughing, swirling plume of unleashed air draws near,
And beckons me to launch⁽⁷⁾ into the vastness all around.
With surging pulse I fling my craft⁽⁸⁾ upon the
boiling blue⁽⁹⁾.
It swells my wings with breath, with life. I fly!
Up, up with twisting rise of current, skyward bound,
In liquid grace through haunts of Daedalus
and Valkyrie⁽¹⁰⁾
I lurch and twist and bend in arcing paths⁽¹¹⁾
Through misty shapes of virgin cloud⁽¹²⁾ and azure
pools of light.
In strident patterns freed of earthly sinewed grasp
I am a spirit moved by whispered forces in the wind⁽¹³⁾
I share this hallowed space with feathered form of life
More perfect than my own, yet bound in quest are we.
My winged friend with gift of flight I strive to match,
Becomes my guide through drifting tides of silent flow.
And as I behold the cirrus splendoured reach of his domain,
And sense the breaking free from Earth now far below⁽¹⁴⁾,
My spirit soars in awe with reverent strength:
I float, secure, sustained by the breath of God⁽¹⁵⁾*

By J. A. Bulger Jr

1. Pilots are reminded that they should never fly alone.
2. Pilots should always be aware of their state of mind before flying. Any indication of sickness, mental distraction, stress, or desperation for lifting thrusts should be taken into account before deciding to fly.
3. The force of gravity is an integral part of the operation of your glider. Do not attempt, under any circumstances, to loose it.
4. A maximum height of 10,000 feet applies to all vales of sky. Check for other local height restrictions.
5. Probably just as well, condors are extremely ugly.
6. Beware, CASA Sport Aviation Inspectors do not consider raucous cloth to be airworthy.
7. Laughing, swirling plumes of air are notoriously unpredictable. Do not attempt a launch in their presence, even if beckoned.
8. Craft flinging is not an acceptable launch method. Instead employ a good strong run while maintaining level wings and an appropriate nose attitude to attain sufficient airspeed.
9. Be very aware of prevailing weather conditions before flying; boiling blue can prove fatal.
10. A safe flying distance must be maintained from all other craft and obstacles, including Greek gods.
11. Dennis Pagen recommends a light touch on the control bar, being sensitive to subtle changes in roll and pitch pressure. Aggressive movements such as lurching and twisting are detrimental to efficient flying.
12. VFR criteria should be adhered to. Do not penetrate clouds, even the virgin ones.
13. If ever you find yourself thinking that you are a spirit moved by whispered forces in the wind, you should assess yourself for signs of hypoxia. Decrease your altitude as quickly as possible to relieve the effects.
14. Pilots are once again urged to appreciate the necessity of gravity. Stratospheric retrieves are expensive and time consuming.
15. The Breath of God should not be considered totally secure for sustained floating – always fly within reach of a safe landing area.

I hope this clears a few things up.
Looking forward to your contributions,

Richard Lockhart
Sub-editor HGFA Skysailor

November 1999

Australian Gliding Editorial



From 24 to 26 of September at the beautiful, new Avillion Hotel (down-town Sydney) the Executive and Councillors of the GFA met for their Annual General Meeting.

Councillors and Executive were focused on issues ranging from the humdrum to the contentious, and as an observer I must say that the commitment shown by all present to their roles was impressive.

The minutes of the meeting are barely dry on Maurie Bradney's printer and have not yet been validated, so detailed outcomes of the meeting will appear in the December issue, however I can give information about two aspects here and now:

1. **Australian Gliding will continue as a joint publication. After the initial trial period that allowed members to consider the change (with a prototype of the product at their fingertips), the motion to continue in joint mode was carried.**

As the newly appointed editor, I am keen to produce a magazine that appeals to the wide range of interests of our members throughout all states. Contributions need to be in by the 25th of each month (5 weeks prior to publication) and ideally should be sent via email. Any hard copy should be clearly typed and unformatted so that I can scan directly into my computer for editing. Making your article attractive via drop capitals, phrases of italics or blocks of UPPER CASE will mean that the whole thing has to be re-typed and that's a waste of your time and mine. If you are not computer or typewriter literate, do not be discouraged. Send a clear, handwritten article and I will type it up for you (time permitting). Unsigned articles cannot be considered. On this topic, I've received something from someone (?) about the Monarto Club.

My contact details and requirements for photos can be found inside the front cover.

2. Executive and Councillors elected for the 1999/2000 year are:

Executive

President: Beryl Hartley

Executive Vice-President: Bob Hall

Vice Presidents

New South Wales: Donald Wyllie

Victoria/Tasmania: Ian Patching

Queensland: Hope Ball

South Australia:

Northern Territory: Kim Bennett

Western Australia: Ron Cant

Treasurer: Rudi Salter

Chairman

Technical Committee: Roger MacRury

Chairman

Operations Panel: Daryl Connell

Chairman

Sports Committee: Terry Cubley

Councillors

New South Wales: Bob Hall

Kerrie Claffey

Darcy Hogan

Maurice Little

South Australia: Rob Moore

Wayne Kiely

Queensland: Dave Sharples

John Clayton

Western Australia: Owen Jones

Peter Merritt

People enter into official positions in clubs for a variety of reasons. Whether we agree with their points of view or methods of operation, we have to admire the amount of time and effort they put into their jobs. But who are these people; what do they do, what do they hold dear?

In this issue, I am profiling five of the GFA office bearers. Over the next few months, you will be able to read about all of the executive and councillors, the people elected to look after GFA interests. It should give you an insight into their roles, goals and commitments. Look also in this issue for my interview with Tony English, outgoing President.

Happy reading, happy flying.

Sandra Rosner

Sub-editor GFA Australian Gliding



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'99 Hang Gliding Worlds

MANFRED RUHMER

(reprinted from *Manfred's Rumors*,
courtesy of Icaro)

After one week of training at Monte Cucco during the British League (3-10 July), where I did not compete but took my time to trim the glider and to fly just for fun, I drove back to Icaro 2000 in Laveno, Northern Italy. My plan for the following week was to make a complete check of my competition hang glider and get my spare one ready for the Worlds, in case I should need it. The Alpen Open, which this year was the Pre-European competition as well, was taking place near Innsbruck during this same week. Since I already knew this area and the weather forecast for the Northern Alps was quite bad for this period, my decision to stay in Laveno proved to be the right one. I was totally concentrated on winning the World Championship; it was my only concern at the time. I had already been very close to winning this title twice, so it was time to really succeed! This year my motivation was excellent, I felt I had excellent flying equipment and I obtained great results in every competition I flew during 1999.

On 16 July, Claudia and I drove back to Mt Cucco to make the last training flights and the final adjustments. The weather for the next couple of days was superb, Mt Cucco was giving us its best! It also gave me the opportunity to test my glider against other world class pilots, who seemed somewhat disappointed after landing. There is nothing worse than discovering, before the start of a big meet, that even though your gear is considerably good someone else has something better.

I was a bit careless during those days and ended up catching a bad cold which forced me to stay in bed for three days just before the beginning of the competition. Apparently it was a virus since I was not the only one; some other Austrian pilots were ill too.

On 25 July we had the Opening Ceremony and the parade of 38 participating countries, with 170 flex wing (FAI Class I) and 25 rigid wings (FAI Class II) pilots.

The Competition

Day 1, 26 July

The first day was cancelled due to bad weather. I was glad about this because I was not feeling at all well.

Day 2, 27 July

The next day conditions were flyable at Tre Pizzi. This mountain works pretty well

in northerly winds. Class I and II shared the take-off places, only the start gate times were different and sometimes the tasks were too. We always had air starts using a start gate with several signals which would change every quarter of an hour.

On this day our task (Class I) was 86km long with three turnpoints; Class II pilots were able to start earlier and only had to fly 60km (!) – someone from the organisation had said rigid wings would always have more difficult tasks, due to their better glide angle, but that was definitely not true! It appeared to me as if the organising committee was having some problems running the meet; fortunately things improved as the days went by. On this particular day a lot of rigid wings got to goal, but not a single flex wing did!

Gérard Thévenot flew the furthest (77.6km) in front of Gordon Rigg and Oleg Bondarchuk. I did not set off very good in this competition: Just after the second turnpoint I started my transition too early and, in very weak conditions, towards the third turnpoint – I landed. Shortly after, many pilots who had stayed longer in the weak conditions found a thermal right above my landing field. They were able to get high enough to fly around the third turnpoint, but since we had to start behind the Class II pilots, it was too late for anyone in Class I to make goal. I was 23rd for the day with a 100 points less, but still knew that I could catch up.

Day 3 and 4

The next two days were not flyable due to bad weather. Once again I was glad because I was not totally fit yet.

Day 5, 30 July

It was flyable and we went to Tre Pizzi. This time Class I and II had the same task, but the rigid wings had, once more, the privilege of starting earlier. On this day I felt very motivated and even on my way to Tre Pizzi, about a 40 minute drive, I was already in my 'racing mode'. We had to fly 89km with four turnpoints, it was a zigzagged out and return flight. I took the earliest start gate. Usually flying ahead is risky, however, on this day some rigid wings were in front of me and some other flex wings were spread around the course. This allowed me to recognise where to find the best thermals. Moreover, later on the conditions worsened and I was able to leave the other flex wing pilots further behind while, at the same time, get closer to the rigid wings. At the third turnpoint I took my camera out to take the picture and it literally flew away from me! I hadn't tied it properly, luckily I had all the

pictures on my back-up as well. Flying towards the fourth turnpoint, out in the valley, I had good conditions again and was able to finish the task in a little over three hours. Second for the day was Thévenot, 45 minutes behind. The points for the winner (me!) were not a lot (488) because the average flown distance was low: Many pilots had landed shortly after the start gate.

The weather conditions during the Worlds, especially at the beginning, were somewhat weak. The vertical position of the sun at this time of year sometimes caused the valleys to work better than the mountain slopes and hills. Altogether the conditions were varied and it made flying very interesting because often there would be different possible routes to get to the next turnpoint. The Brazilian team was extremely strong from the very beginning; they liked this place very much, the conditions were often similar to what they were used to, plus they had excellent equipment.

Day 6, 31 July

It was the third valid task and we took off from Tre Pizzi again! This time after the start gate photo we were to fly towards the Mt Cucco area and around two turnpoints – Mt Petrano and Mocaiana. Goal was set at the Mt Cucco South landing zone for a total of 80.5km. On this day the window was the same for Class I and II, having the last signal at 13:00 (unusually early). Almost everyone took the latest picture and tried to fly towards the hills in the direction of Mt Cucco with some difficulty. Many landed around the start gate, which was right at the bottom of take-off. Later on the conditions around the Mt Cucco area improved and I was able to start 'attacking'. Oleg and I were able to escape from the rest of the group and I won the day with Oleg only 10 seconds behind. We flew for 2 hours 5 minutes with an average speed of 36km/h. I found it interesting that the three fastest flex wings were faster than the best rigid wing. After this task I was leading by a few points, but after the next flight everything changed...

Day 7, 1 August

We took off from Mt Cucco North; the task committee decided to set a 76km course with an open window from 13:30 until 14:45. The first pilots started shortly after the window opened into weak conditions with no real strong thermals, and could not fly towards the start gate while the rest of the field took off. The result was "a lot of aluminium and carbon in few lift sources". You had to be very careful with the other

wings flying so close by; now and then it was quite tight up there.

Everyone stayed flying in the weak blue thermals because the start gate was on the Mt Cucco North landing area, apparently there was no other possibility. On the southern side of the range, where the mountains are higher, I noticed the cumulus clouds developing better. After a quick consideration, taking into account the weak conditions and the heavy traffic, I decided to cross over to the lee side (south) and noticed that the Brazilian Carlinhos Niemeyer decided to come along as well. After scratching a while and being almost 'trapped' by the Cucco South landing field, we were finally able to find a strong core which took us up to 2,400m and allowed us to fly the 7km back to the start gate. I reached the gaggle over the start gate with 200 extra metres. It was a good starting position; but thinking back I realise it was not really worth the risk of bombing out on the south LZ. I and many other pilots took the 14:45 picture and flew towards the first turnpoint (Mt Nerone) where the overdevelopment and overcasting of the area could be noticed from far away. I knew this would be a problem and, as a matter of fact, I was right: Heaps of pilots landed around the mountain. My case wasn't any different; even though I flew around in a big circle desperately looking for some lift, it didn't help. We were all there: the 'hot shots' and most of the Austrians (four out of six) so I thought nobody would get to goal and the task wouldn't be worth much. I knew this wouldn't be a problem, but I was wrong: 15 minutes after I landed, the sun came out and the slow pilots had great weather! I must admit that not all of them were just slow, some had been clever and had waited before flying into the area. 24 pilots were able to fly high over the first turnpoint, high over the second and into goal. For me it represented skidding down to 6th place with 200 points behind the leader. Ron Richardson (GB) was 1st for the day, Gordon Rigg (GB) 2nd and Allan Barnes (GB) 3rd; this result granted the British team the 2nd place which they were able to defend until the end. Pedro Matos (BRA) was 1st overall and André Wolf (BRA) 2nd.

Day 8, 2 August – Cancelled.

Day 9, 3 August

On this day we were able to fly the 5th round and the weather was finally great – typical Mt Cucco conditions! We took off from Cucco South and flew a 115km task, this time in the other direction to Mt Serano then Assissi and back to the LZ at Mt Cucco South. On this day I flew extremely offensively and it was great! I won the day, 61

of pilots finished the task, plus Pedro Matos had a slow flight which allowed me to recover my 200 points! André moved up to 1st position, I was 2nd with 13 points behind him and 2 points in front of Pedro. I was happy because I got more points this day than what I had thought would be possible.

Day 10, 4 August

Task 6 and it was my birthday which I rightfully celebrated after winning the day and climbing up to the first position overall!

The hardest part of the task was the second turnpoint, Branca, where conditions were very weak and heaps of pilots had to land around the area. This time I may say it was not my fate! André was 2nd for the day and Beto Schmitz (BRA) 3rd.

Day 11, 5 August

We went to the take-off at Mt Subasio, right on top of Assissi, and flew 116km over two turnpoints: TP1 Mt Serano, TP2 Mocaiana. I found this task interesting because there were at least three different possible routes to fly from turnpoint 1 to turnpoint 2. In flight I was not really certain which one would be best. The first and riskier route was only taken by Brian Porter (US, Class II) on his Utopia. He flew in a straight line right over Mt Subasio and then over the hills close to Gubbio and finally to Mocaiana. He was 45 minutes faster than the rest of Class II pilots. The second possibility, which is the one I and some other pilots chose, was much more reliable. After TP1 we flew back to the mountain range and flew along it, in good conditions, back to Mt Cucco from where we crossed the valley towards Gubbio and then to Mocaiana. The third possibility, which ended up being the fastest one, was flying back to the mountain range, as we did, but crossing the valley towards Gubbio much earlier, at Branca.

Sandy Dittmar (VEN) won the day, but I was still able to maintain my lead over André thanks to my aggressive final glide. It was somewhat risky since I could have landed short of goal but it was worth it!

Day 12, 6 August

We took off from Mt Cucco South and, since the weather forecast was quite good, the committee set a 133km task over three turnpoints. It ended up being a very demanding task, especially after the second turnpoint when we had to fly from Assissi back to Gubbio. I tried the whole time to stay with André in order to have him under control; it wasn't really difficult since he didn't make any aggressive moves. Most of the time Oleg and I flew in front and André followed safely. This 8th task, just as the 1st, was won by Thévenot, I came 2nd, Oleg 3rd and then André.

I was just thinking that there was only one day left for it to be over and knew that if I stayed in front and made no mistakes I could do it, I could officially become World Champion. André told me that day that he was very surprised to find himself in 2nd place and that it was way above his expectations; therefore he had no intentions to fly offensively. He didn't want to risk too much and maybe lose what he had already achieved.

Day 13, 7 August

We drove up Mt Subasio again because the wind was too strong for Mt Cucco. When we got there the wind was all right, but it started picking up later on and a big wave cloud developed behind take-off.

The first couple of pilots took off and after some complaints from other pilots still on the ground the task was cancelled. I didn't want to take part in the discussion; somehow I felt the day was OK and somehow not. There was a lot at stake for me and I knew I could maintain my position even if we flew, but I didn't want to influence others to cancel the day either. The decision had to be made by those who were totally impartial, it just didn't feel right for me to say too much. Some pilots took off and flew, just for fun, back to Mt Cucco; they told us afterwards that it was a great and pleasant flying day. I think it was right to cancel the day because it is never the same for pilots flying for fun than when 170 pilots fly in a competition. Most pilots were worried about having a safe flight behind Mt Subasio and over the Nocera Umbra gap with very few decent landing areas in these strong ground wind conditions.

It may sound funny, but at a hang gliding World Championship there are always pilots without much experience at flying in different places and conditions who come from countries with not such a good flying level. When the tasks are set these pilots must also be taken into account.

All in all this was a good and safe competition with only a few small incidents. Finally was I right up there on the scoring list of a World Championship. My bliss was... how can I say... it was, it was just indescribable!



Results

1	Manfred Ruhmer	AUT	Icaro Laminar	5,198
2	André Wolf	BRA	Icaro Laminar	5,120
3	Pedro Matos	BRA	Icaro Laminar	4,901
4	Betino Schmitz	BRA	La Mouette Topless	4,730
5	Gordon Rigg	GB	Icaro Laminar	4,729
6	Richard Walbec	FRA	Wills Wing Fusion	4,703
7	Steve Cook	GB	La Mouette Topless	4,596
8	Oleg Bondarchuk	UKR	Aeros Stealth	4,578
9	Alvaro Sandoli	PAR	Moyes Litespeed	4,466
10	Gérard Thévenot	LUX	La Mouette Topless	4,462

Murray Safari 1999

TONY DENNIS

This year the third annual trike Murray Safari comprised of 29 trikes, 27 of which carried passengers. The course followed the Murray River from Yarrawonga (on the NSW/VIC border) to its mouth just south of Strathalbyn (near Adelaide, SA). We returned through Ouyen and Hopetown.

Just follow the mini-bus.
They're driving, driving, driving
and we're flying, flying, flying!
All photos: Tony Dennis



Tony and Therese Dennis, the organisers.

The first day we flew from Wangaratta to Echuca with a fuel stop at Tocumwal. The second day saw Echuca to Mildura via Swan Hill, with a fuel stop and lunch at Robinvale. The third day saw us flying from Mildura, stopping at Renmark, then to Waikerie (seeing again the fantastic bend in the Murray River). From Waikerie we flew to Murray Bridge, then on to Strathalbyn arriving about midday.

The MAS (Microlight Aviation Specialists) Chief Flying Instructors who participated were Tony Dennis (Benalla, VIC), Larry Jones (Adelaide, SA), Paul Haines (Sydney, NSW), Bob Silver (Noosa, QLD), and instructor Stuart Malone (Shepparton, VIC).

This year I'll let the photos tell the story of our 1,000 nautical miles of fun on the Murray Safari.



The beautiful Murray River
— a bird's eye view for sure!



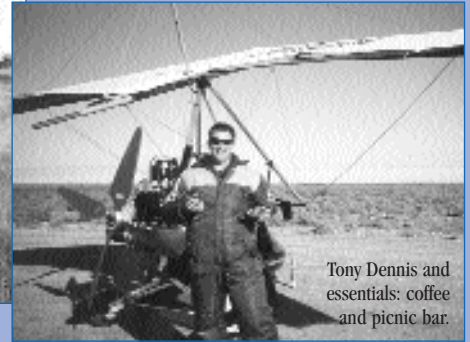
Left: Cheers! Here's to today's and tomorrow's flight. Left to right: Robin Hindson (Ceres, VIC), Victor Szabo (Noosa, QLD), Paula Eustace (Melbourne, VIC), Shane Gleeson (Melbourne, VIC), Germaine Fisher (Sydney, NSW), Andrew Fisher (Sydney, NSW), Kel Glare (Melbourne, VIC) and Russell Purdy (Ceres, VIC).



Karen and Wally Weiner and their Edge X. Truly fully equipped!



Tony Dennis and fellow pilots refuelling their bodies whilst landed "somewhere". Coffee, chocolate and fruit cake. Stuart Malone had a burner too!



Tony Dennis and essentials: coffee and picnic bar.



Above: Therese Dennis – landing out is fun!

Right: Overnight at Waikerie Airport. Dianne Pierpoint's unique trike cover – call it what you will!



Left: Three trikes on a road somewhere between Melbourne and Adelaide. Tony and Therese Dennis, Stuart Malone and Annette Jacob.



Time to catch up on the three R's: resting, reading and refuelling.

Murray Safari 1999 Trip of a Lifetime



TERRY GARNER

At 16 years of age, Terry Garner was the youngest attending the Murray Trip '99. He tells of his exciting experiences.

Today was the day, the day of the Murray Trip '99. Using our friend's (David Austin's) private airstrip, Dad (Rob) and I set off from Oaklands with our Air Creation trike, en-route to Tocumwal.

After leaving David's, fog appeared from nowhere but we decided to push ahead. As it lifted we could see the Toc' airfield in the distance and decided to proceed towards it instead of going to Cobram as planned. Once there we had to wait a while because the Wangaratta airfield was fogged in, and others attending our trip had to wait for it



Above: Rob and Terry Garner set to go. Photo: Tony Dennis
Left: Heading across the Murray. Photo: Terry Garner

to lift. A long three hours later and we heard the buzz of trikes approaching. We went outside and saw a flock of trikes invading the airfield, as if on an air raid.

We found out that we were in Red Group, and thought this appropriate for our trike was red along

with the other trikes (except however for Col Douch who had red spats and a white Pod – we accepted it, but he didn't know we were going to paint it red later on).

Soon we were off to Echuca, even though a little bumpy (and scary after having only flown three hours). Another trike saw ducks and we were having a conference to decide whether to catch one for lunch, as we hadn't eaten yet. Arriving at Echuca for a full stop we put our babies to sleep and booked into the Echuca Motel.

Waking up (early) the next morning we looked outside to see a beautiful sky. After take off the air was as smooth as a baby's bottom. Ten nautical miles after take off Red Group had made a formation and we were leading the flock. After landing at Swan Hill we left for Mildura. It was a bit rough so we went above the clouds to about



4,800 feet. It was fantastic (and cold). We saw a few trikes go through some clouds and come out the other side. Landing at Mildura was a bit different because it was an MBZ. Dad was nervous, but with "Red Leader One" (Paul Haines) leading the way it was no hassle landing in the crosswind.

I was told that the next leg of the journey would be fantastic. It was indeed the reddest and flattest land I had ever seen. We flew low enough to see the kangaroos and emus. Col had a UHF radio in his trike and was talking to a truckie, much to their amazement. I was pretty sad at the end of the leg because I knew from Renmark to Waikerie the thermals would get us. Leaving Renmark was the roughest and "Red Leader One" told everyone to do a few circuits, but we kept going because we didn't want to stick around in the thermals. We also knew that they were going to catch up because our trike was the slowest. Even though I was starting to get used to the thermals, at times I had my eyes closed. I was glad when we landed at Waikerie.

Later in the day we had a little trip to Morgan where the Murray makes a 90 degree turn inland. When we reached Morgan we saw a huge gas pipe stretching for miles. We didn't fly Thursday due to high winds.

On Friday we were off on our way to Strathalbyn. We saw ferries, paddle steamers, bridges, sheep, the lot. When we landed at Murray Bridge we started talking to a bloke. I told him I'd thought it had been a bit rough, but he said he thought it had been pretty good. I then asked him how many hours he'd flown. He said 4,000, and we later found out that he was Bob Silver, a CFI instructor. We were following the mighty Murray for a while, but had to cut across it to get to Strathalbyn. As we were landing in Strathalbyn I thought we nearly hit a fence, but Dad said we were miles away (I think he needs an optometrist). We woke up to a gale the next two days and were unable to fly. The next day (last day) Dad flew without me because we needed petrol to carry on the way. So I had to sit out the trip on the bus, and Dad later told me in Echuca he had had an interesting trip (making me wish I had've finished it with him).

I would like to thank Tony and Therese Dennis for allowing me to have the trip of a lifetime.



Left: Red Group (clockwise from top left): Terry Garner, Joanne Depasale, Gary Burnell, Col Douch, Rob Garner, Don Payne, Paul Depasale, Greg Payne, Shae-Lee Burnell, Val Wallington, Paul Haines.
Photo: Terry Garner

Caption Competition Results



1st place

"I'll just go and taste his glider while all the others are distracting him" (from cow at left facing different direction).
MIKE CLEAVER

2nd place

"No, it's pigs that can't fly, I'm sure there's nothing about cows in the OPS Manual" (from man reading the magazine).
JOHN CHAPMAN

3rd place

"See what we could do if only we had thumbs!" (from cows in general).
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Thunderstorms over Bayreuth. Photo: Gabby Hayes

BRUCE TAYLOR writes candidly about his expectations and experiences competing in the World Gliding competition in Bayreuth. The conclusions he reaches make for thought provoking reading.

I hate to sound like a jetsetter, but I'm cruising along at about 35,000 feet on my way home from Germany. Apart from the fact that the red wine being served is a particularly good one, and that I am in the mood for doing something more productive than imagining that the girl next to me is even vaguely interested in gliding, travelling from one side of the planet to the other is a mind-numbing experience. It isn't even slightly glamorous, costs about \$50 per hour and leaves your body temporarily unsure of its position. So to Bayreuth.

What happened? As I was doing my preparation for this event I had in my mind that this was my best chance yet of getting a good result. It would take a big effort, but after our time there last year it was clear that if the weather was on our side, we could put up a good showing. The teamwork in our class was showing some promise, and I thought that the ASW 27 was a competitive machine. So, how did it come to pass that I finished three-quarters of the way down the list? This was my fourth attempt at a world comps, and to date I had been moving up the finishing order in a promising fashion – that was, until this time.

I flew four competitions during the past summer, to try to ensure that I was in good comp form. In hindsight, only getting some comp practice against the other competitors who turned up at Bayreuth would have given me enough of a feel for the level of performance necessary to do well. This 15 metre class field was without a doubt the best and deepest that I have seen at a world comps. You had to look all the way down to the last couple of places to find a name that could not end up in the top ten. I suppose it took me the first three



Bruce Taylor. Photo: Gabby Hayes

or four days to get up to speed. It was incredible to see the results of tiny mistakes in my flying as we all charged along together – these guys were good!

My wife, Louise, came to crew for me, along with Andrew Georgeson. Andrew shared his time between Brad Edwards and I and was a valuable assistant, even if I did have kick him out of the glider a couple of times on the grid! The glider I hired was from Holland, and despite being in good shape generally, I had much trouble with the instruments. This continued for all of the practice period, and was basically to do with the vario system. I had hoped that I could quickly learn the operation of the Filser LX 5000, and indeed it proved to be simple to use. But I fear that there was some quirk in the system that played havoc with the total energy compensation. What the vario was telling me was completely at odds with what my bum was saying, to the point where I was becoming unsure of whether I could still actually fly or not! I spend precious little time looking at the vario, preferring to listen to a well-tuned audio. My initial response was to replace the Bohli mechanical vario with a trusty Winter, which was great, except that I had to try to train



Above: John Buchanan and Gabby Hayes collecting John's new ASW 22 BLE from the factory prior to the Worlds. Below: The Aussie team at Bayreuth.



myself to look at the damn thing! In the finish I threw the lot out and replaced it with a Cambridge system, just some days before the comp started. This helped no end – the audio and my rear end agreed for the first time.

At the risk of always blaming my tools, the two things that made our task more difficult were that the 27 is not an easy glider to get the best out of, and the fact that the weather didn't run entirely our way. Firstly the glider... always when flying the 27 I have trouble getting good feedback from the wings about where the best air is. Yes, I am spoilt by the LS8, which must be the best machine ever for useful feedback. Brad and I both feel the same about this point, and find that we turned the wrong way more often than not. In fact, I sometimes found myself centring out of the thermal due to the different feel – very useful! It is obvious that pilots who have many hours in this type have a better feel for it, like Carl Striedieck and Goran Axe. I'm not sure, but I now have probably around 200 hours in the 27. At the end of the competition I usually feel like I am starting to get the hang of it, but then I jump into the LS8 again...

The other, and significantly greater unknown, was the weather. Last year we had a period of quite stable and (for us at least) predictable weather. We flew well in these conditions, and I always felt that we knew what was going on. This year the weather began with a bang; high, strong days and Aussie style speeds. Even then, the thermals were not like ours. They move around a lot and tend to pulse as you climb. The actual rate of climb varies by around 50% for a number of cycles as you go up. Just as you think it is time to leave, the vario swings up again and you decide to stay. I think this is due to the generally more moist airmass, as I have noticed it happen here in Australia in particularly wet seasons. So, while the going was fast, we were still learning and, as I mentioned before, we were getting up to speed. By about the third day I was in the groove at last and felt that I was flying well.

Then Brad and I put in a good day 6th and 7th and good points – only to have the day cancelled because of a launching problem which left two pilots stranded out of range of any airfield with no lift.



Above: The Aussie team's BBQ. Below: Brad Edwards and family at the Worlds. All photos: Gabby Hayes

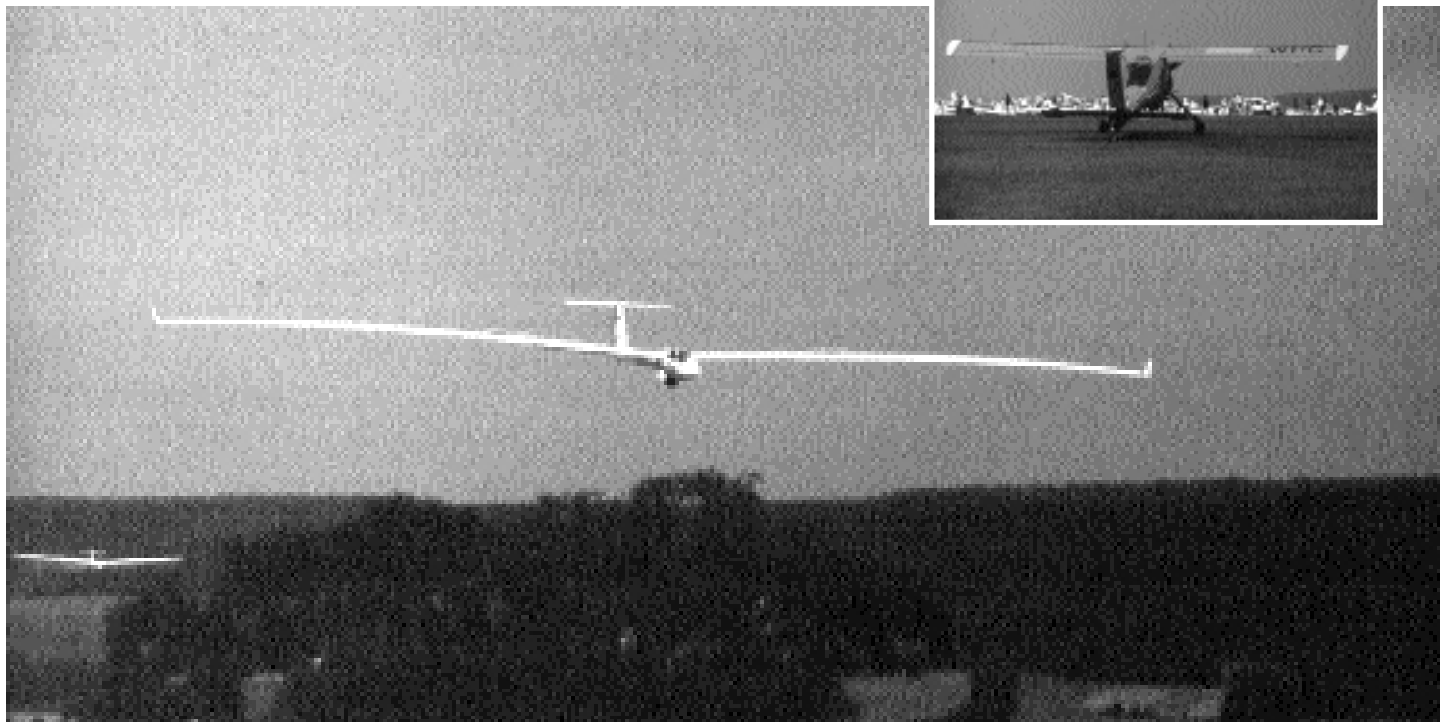


Then the weather stopped. It rained, and the clouds and instability settled in.

From here on, we had to fly in conditions that were always weaker, usually heavily overcast and often cycling between soarable cu's and big areas of totally dead air. Our biggest problem became when to start, and we never got it right! Being of a conservative nature (well, Brad at least!) we usually left early, only to flounder in complete garbage for half an hour or so, when it would all brew up nicely and those who left twenty minutes behind us would be alongside. Frustrating? Yes! From then on we could usually fly home with them, carrying our handicap to the finish line. These guys just know so much more about this type of weather than us, and it drove us mad!

My worst day was another weak one when only ten 15 metre class gliders came home, one of them Brad, but I had travelled less distance than most, and threw away 600 points. I was as cranky as hell – both with myself and the weather. I had been a little impatient with a (terribly) weak climb, followed by a run of sink that put me in real trouble. Then my last climb drifted me slowly under the shadow of a huge anvil, with the only option then being to glide out my distance to a lonely paddock. Nobody I could find spoke English at all, which was probably just as well, given the language floating around! Thank heaven for mobile phones... I sat on a bridge over the motorway, waiting for Louise and Andrew to arrive, pondering the marvels of modern vehicles, the efficiency of the German Auto-bahn system and the frustration of my days flying.

Even the last day was beyond us. Faced with a terrible-looking first leg under a dead, black overdevelopment, we went quite early and had to divert way off track just to stay in the air. Three quarters of the way down that leg, I was sure that we had made the right decision, as on track it was still as black as night. But as we turned, the whole leg was clearing with puffy cu's forming. Soon afterwards the pack caught us, and the rest of the flight was done knowing we were already beaten. The Italians, who won by miles, had been told by their coach to wait, and wait, and wait, as he could see the area clearing. Yes, there was a risk to be taken that they would run out



Top: ASW22 finish.

Above: Aussie team meeting.



Top inset: Wilga, a Polish made tug.

Above: Brad Edwards and Peter Trotter.

All photos: Lisa Trotter

of day, but not too great, and it put them into place to win the competition. On the same day, Karl Striedieck hit the dirt, the only glider in our class to do so. He had been flying so well he seemed unbeatable, but moved from first to twenty second place in one flight. Cruel...

How could we have improved our position? While in Bayreuth we discussed the possibility of a team coach's position. The Italians have the services of Jacky Clairbeaux, and could not speak highly enough of his work. On that vital last day that we flew, he pretty much won the competition for Georgio Galetto by making him wait before starting with some excellent weather interpretation. It is also interesting to note that he used to run the French team during their recent, successful years, before some political upheavals sent him to Italy looking for a better deal. A good coach won't make us win, but could be a huge aid in making individuals scrutinise more closely their performance each day, and provide assistance with information processing.

We need to know more about the weather at these sites, as this was one of our biggest failings this year. Whether that means obtaining the services of a local pilot or living there for a few years(!) I don't know, but it is vital. Just going to the pre-worlds is not enough, as almost always the weather is completely different for the two events. This problem with understanding fast cycling conditions and a multitude of synoptic situations needs some expert help. Then we just

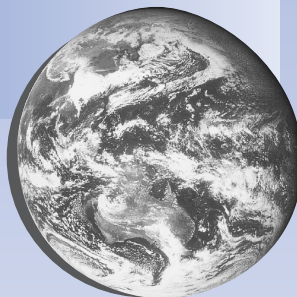
need to fly in those conditions more, and at a level that extends our performance. As I said, it took a few days for me to realise where the benchmark was and get my flying up to scratch, and those days cost too many points to recover.

It is interesting to note that John Buchanan was the most successful member of our team by far. John put in a huge effort in physical and mental preparation, as well as being the most experienced member of the team in a wide variety of conditions. If we look back to the past, it is always the case that those who put in the hard miles are the ones who gain success – there is no such thing as a free lunch! John was unfortunate to miss out on a place on the podium by just one point. That isn't a whole lot of time in the scheme of things, certainly only a matter of seconds. But while that is the case, I don't think he should be too upset, as his placement with regard to the winner was very impressive.

So that was Germany. For me it was quite a disappointment, but in retrospect I am sure that I will have learned some new things. There certainly was enjoyment to be had in flying in the difficult conditions, and it was necessary to always think a long way ahead. The frustration was in simply not understanding the vagaries of European weather! Now, I need a drink... Where is that hostie? Are we there yet?



In the Circuit



Local News

Waikerie Gliding Club Elections

Waikerie Gliding Club has elected Bill Mudge President and Moss Potter Vice President for the coming year. Two SAGA representatives elected on the night were Maurie Bradney and Mark Morgan. Mark has also taken on RTO/A. Mark Stanley and Steve Steer have both just been upgraded to Level 2 Instructors and passed their tests with flying colours. Still at Waikerie, the 50th Birthday party will be held for their Grünau Baby on 27th December. Allan Delaine, one of the original builders, is organising the event and can be contacted on 08 8583 7206.

Barossa Glide Opening

Through the efforts of Fred Foord (GFA Trophies Officer and World Comps Protocol and Trophies Officer) the Speaker of the Federal House of Representatives will open Barossa Glide on the 18th January, 2000. The Honourable Neil Andrew Esp. also just happens to be the member for Wakefield (Gawler). Well done Fred.

Narromine Fly-In

Narromine Airfield will be hosting a fly in, incorporating a cross country observer trial, spot landing competition, celebrity chef and keynote aviation speakers, from the 13-14th November. This event is to support the construction and maintenance of the Narromine Aviation Museum. One quarter of the museum is to be devoted to depicting the rich soaring history of Narromine. Arnie Hartley, (glider and Cessna 180 pilot) has further details. Ph 02 6889 2733 (w) fax 02 6889 2933.

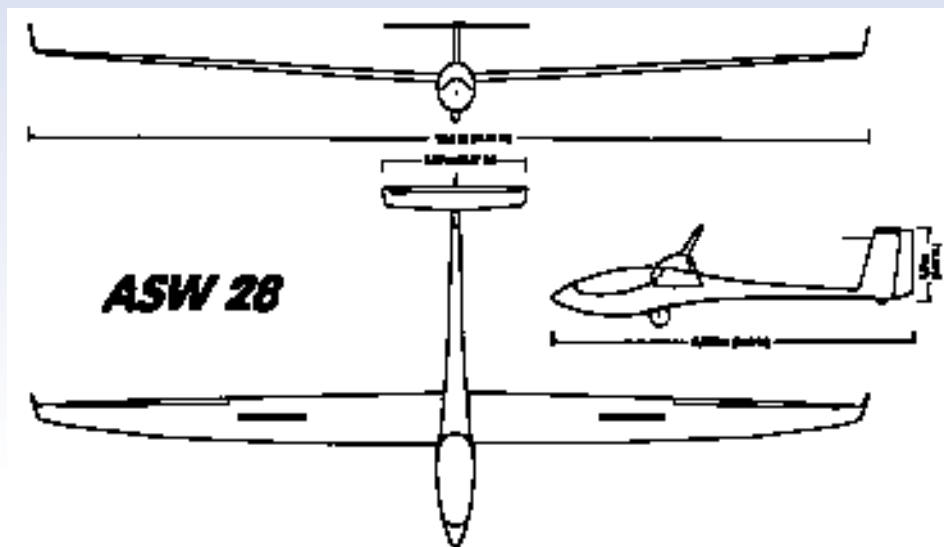
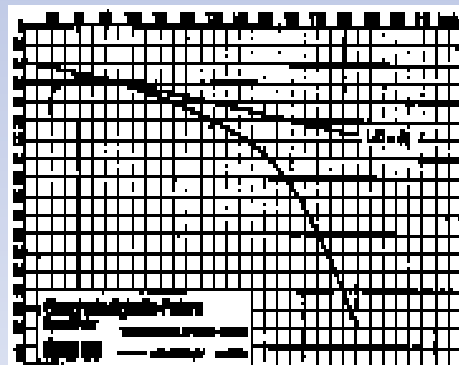
Overseas News

ASW 28 Coming Soon

Schleicher's prototype ASW 28 is expected to make its maiden flight any day now (probably before you read this). Designed to be a very competitive glider, it will also boast a new rescue system as an option. This system (as seen on the cover of AG September 1999) will let down the aircraft and pilot in case of a mid-air collision or similar mishap.

The rescue system will be activated by a small rocket, which will pull the parachute clear, properly inflated. The decent will be slow enough to avoid injury to the pilot on contact with the ground, making it unnecessary to wear a traditional parachute. (More information on this in a future issue!)

Schleicher are confident that the ASW 28 will outperform current competitors across conditions. They have developed a new wing section, using the expertise of Dr J. Hacker from the Flinders University in Adelaide. The wing section is designed with the aim of minimising flow separations in turbulent air.



Contributions for In the Circuit are welcomed. Information about and photos of gliding activities and people, here or overseas, are keenly sought. On this topic, a request to club secretaries. Please email, fax or post to me relevant section/s of your regular club newsletter for possible inclusion in this column. (Ed.)

Airworthiness Directives

GFA AD 516 Issue 1

KR-03A Puchatek. All serial numbers.

Recording of Flying Time.

GFA AD 511 Issue 2

Stemme S 10-V and VT. All serial numbers. Variable Pitch Propeller Propeller fork 10AP-V08 of propellers 10AP-V and 11AP-V/Project-No. 14-006.

GFA AD 518 Issue 1

ASH 26E. All serial numbers.

Inspection and exchange of the muffler.

GFA AD 517 Issue 1

ASW 27. All models and serial numbers. Check of control circuit clearance inside the fuselage tail boom to fin intersection.

GFA AN 34 Issue 2

Mini-Nimbus. All variants. Miscellaneous airworthiness information.

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What are Barometers for?

RUDI SALTER

Longtime readers of AG will remember how Professor Einstein haunts my dreams from time to time. For a while now, I have slept soundly and he has kept away. But when the amalgamation hassles began, my rest was disturbed with worry and he made an appearance once more.

I ran into him standing in the street looking up at one of the high glass boxes which double for buildings in our cities nowadays, looking up to the top floor, while holding a barometer in his hand.

Guten Tag, I said. Do you remember me, Professor?

He looked at me. *Ja, ja, he replied. You are the Dummkopf with the schmart answers. I haf a small problem you can solve, nein?*

Now I confess I did not like being called dumb, and resolved to show him my brain was as good as his. I swallowed the insult and asked him what his difficulty was.

I vant to know how high this building is, he said. I have a barometer and stopwatch to measure. You can do?

This was right up my alley. *You will only need the barometer, Professor, I said. We will read the subscale here in the street, then climb to the roof and read again. Subtracting the second reading from the first will give a number in millibars or hectopascals. We then multiply this difference by 30 to get the height of the building with reasonable accuracy in feet.*

Wunderbar, said Professor Einstein. But is small problem here. You can help, no?

What is the difficulty? I asked.

The Professor looked at the instrument, then held it out to me. *It has sunny, rain, variable no scale on damm thing. Vat you say?*

Well, we are snookered, Professor, I said. No can do.

You are spookered, ich nicht. I have stopwatch.

And what good will a watch do you here? I asked.

Aha not so schmart, said Einstein. I tell you. You take barometer to roof. When I shout, you drop. I time fall to ground. Is simple formula for distance fallen. Square of time in seconds, multiple by half of acceleration gives height in metres. We know figure for acceleration "g" is about 9.81 metres per second. OK?

I pondered this. The Professor was undoubtedly right, but a nagging doubt was at the back of my mind. *The instrument will be smashed to smithereens. It is a shame to ruin it, I said.*

The Professor scratched his plentiful hair and went into deep thought.

Ja, will be in smashereens, he said. Have you got a long string?

It so happened that I had a fishing line with me, but what use it would be in this situation, I could not fathom. I said as much.

Line is gut, but need think too, said Einstein. You go to roof, fix line and let down.

Aha, I get it, I said. You cut the line near the ground, then we measure the string length.

With no tape measure we got, Dummkopf? No, I tie barometer to line just clear of ground. Then give small push, make pendulum. With stopwatch, I time one forward, backward...

One full oscillation, you mean.

Ja, ja, one full. Then use pendulum formula: String length is time of swing squared, multiplied by "g", we had before over π^2 . No problem.

I was pretty sceptical about this and decided to check from my position on the roof. Most pilots have learned to time a second fairly well when they have to fly. It takes about a second to say "twenty-one". With this high technology, I timed one forward, one backward of the barometer tied to the string, and it came out at about five seconds, so the product of the two is about 250. This has to be divided by π^2 , which happens to be close to 10, making the length of the string and the height of the building about 25 metres, a reasonable result.

Very neat, I said. Wonderful what you can do with a barometer.

Can do with barometer and scales also, said the Professor smugly. From his pocket, he pulled a strange looking spring scale, calibrated in outlandish units. Is so sensitive can measure weight of ink when you blot an i.

Dot an i, you mean.

Ja, weight of dot. Is very accurate.

Do you want to put dots on the building or on the barometer?

He looked at me pityingly and shook his head sadly. Evidently I did not measure up.

No spots, he said. We weigh barometer on ground, then climb to roof, weigh again. Will be tiny bit lighter on top, no?

Why?

Is because gravity is decreased with distance from centre of earth.

Reduces as square of distance. You learn nothing at school?

I must have been away that day, I said.

Weight is specific mass times acceleration "g" always. Two different weights we have here. Mass is always the same, so "g" must be different. Also we know ration of weights inverse to ration of distances from centre of earth, no?

Yes, I said without much conviction.

But we have two weights already, so have ratio. Call ratio "R". Yes?

Yes, I mumbled.

Ratio "R" is inverse of two distances squared, call "a" and "b". So is now: $R = b/a$ or square root of $R = b/a$, or $b = a \text{ times square root of } R$. We have all we need to calculate distance "b," and "b" minus "a" is height of building.

We have not got the distance "a", I objected.

We have, said the Professor. Use head. Is radius of earth plus local elevation, nicht wahr?

To this, I had no answer. Privately I thought we could have found the height to the building by asking the caretaker without all this trouble, but I had to admit that there was more to a barometer than I thought. And Professor Einstein was in fully flight now.

Also must make correction for variation in local gravity, because earth density not uniform. I have here gravitometer

Never mind, I said.

Also earth is not perfect sphere. Bulge in low latitudes, affects distance. For this must make allowance...

But I had had enough.

You make allowances, if you wish. I make no more and I...

A nudge in the ribs, from she who must by obeyed, brought me awake.

Who are you making allowances for? Have you got another woman somewhere?

Of course not, dear. I was just thinking about one for a new dress for you.





Living Treasures

SANDRA ROSNER

NSW gliding clubs, as part of the celebration of the 50th Anniversary of the GFA, held a dinner on Saturday 25 November to commemorate the outstanding contributions to gliding by some of their most senior members. Dubbed 'Living Treasures', these members of clubs throughout NSW were selected for their selfless commitment to club based gliding.

Presenters from NSW clubs gave a two minute speech on the evening about their 'Living Treasure'. NSW Living Treasures are Joe Shibble, (Orana) Eric Oates (Hunter Valley) Ian McPhee (Lake Keepit), Joe Brown (Bathurst), Werner Geisler (Bathurst), Rudi Salter (Bathurst), Norm Milne (Grafton), John Postlethwaite (Southern Cross), Frank Crowe (Southern Cross), Bill Manwaring (Harden), Dennis Matthews (Southern Cross) and John White (Canberra).

A selection of their stories appears below. One Living Treasure was unable to attend the dinner and the presenters of the others were unable to furnish me with notes, having been speaking from the heart.

Werner Geisler began flying in Germany in the early 40's, in primaries launched by bungee, founding member of the Bathurst Soaring Club, (President 12 years), President of NSWGA 6 years, RTO Operations in NSW 6 years, Director of 2 Nationals and 3 State Comps, in 1976 came 3rd in the NSW Air Race in a Sperber with Dennis Matthews; these 2 treasures presented the Werner-Dennis Trophy to NSWGA for 15m class.



Living Treasures and the ladies who support them. Olive and Joe Shibble, Norm and Jean Milne.

Joe Shibble official observer since 1954, solo in 1954, Silver C in 1958, continues to support Orana Soaring Club by flying every weekend a classic club member, active and involved in day to day club activities.

Rudi Salter joined Bathurst Soaring Club in 1976, Treasurer for two periods, editor of the clubs Thermal magazine, 10 years as RTO Airworthiness, organiser of numerous airworthiness courses in NSW, sometimes two per year, currently Treasurer of GFA.

Bill Manwaring founded Harden Gliding Club, restored Kookaburra GNE for club,

Eleven of the twelve Living Treasures nominated by their NSW clubs as part of the commemoration of 50 years of the GFA. All photos: Sandra Rosner

designed and built winching drums, foundation Committee Member for Harden, designed and supervised club hangar construction, currently club instructor

Dennis Matthews first flight 1946 in a Zogling (lasted 38 seconds), joined Southern Cross Gliding Club 1968, became instructor in 1972, later senior instructor, then CFI and Deputy RTO-OPS NSW, Vice-President of SCGC, has flown FAI Comps, National Sports and Sports, Standard and Open classes, Comps director at NSW FAI comps, continues to instruct every week at Camden



Eileen and John White (Living Treasure), Ron Cant and Hope Ball at the Living Treasure seafood buffet.

John White first solo 1944 (all flights solo then!), 42 seconds longest flight of the day, joined Darling Downs Gliding Club and re-soloed 1964, relocated to Canberra, breaking 2 seater record in Kookaburra in 1966 (old 86 miles, new 212 miles), club instructor and committee member, later President, Panel Chairman and Vice-President of GFA, successful competitor in both NSW and National comps, comps director and safety officer on various occasions, aerobatic pilot, flown 48 glider types to date, level 2 coach and RTO Sports NSW

Joe Brown in 1938 at Wangaratta, was part of a group which constructed a Zogling primary and taught themselves to fly, 1963 joined Sydney Tech. College Gliding Club (with Werner Geisler and Monty Cotton), involved with construction of club hanger (then the Bathurst Soaring Club), 1972/3 negotiated with council to buy Piper Airfield site and used own farm equipment to make an airfield and maintain it, currently organises tug fuel, service of equipment, AI's and weather assessments, still active pilot.

Congratulations to the clubs of NSW in commemorating the deeds of these pilots and to the 12 Treasures themselves for their commitment to the sport of gliding.

Eungella 1999



The historic Eungella Chalet and swimming pool makes a great set-up area for Day 1 of the comp.

LANCE KEOUGH

Secretary, Cairns Hang Gliding Club

This beautiful location was once established for the rehabilitation of mentally disturbed people. So Eungella continues on from its beginnings. On 10-12 September it ministered to those with the mental affliction of wanting to get airborne.

Arrival

The nil vision corkscrew trip up the range through the swirling fog on Thursday night was a revelation in itself. We were glad that our driver must surely have been instrument rated, and in fact had been a military tank commander, but above all he had been to Eungella before. The full shock of that night drive did not dawn on us till daybreak the next morning.

What a morning it was! The lifting fog began revealing tree-clad crags and battlements, with light seeping into the immense and majestic valley. New comer pilots were on the ramp before breakfast, being versed on the topography of the landscape by their more experienced counterparts. This was a very important key to the weekend for first timers. In receiving a trophy at the presentation two days later, one grateful pilot paid tribute to the help his benefactors had given him at the start.

Leadership

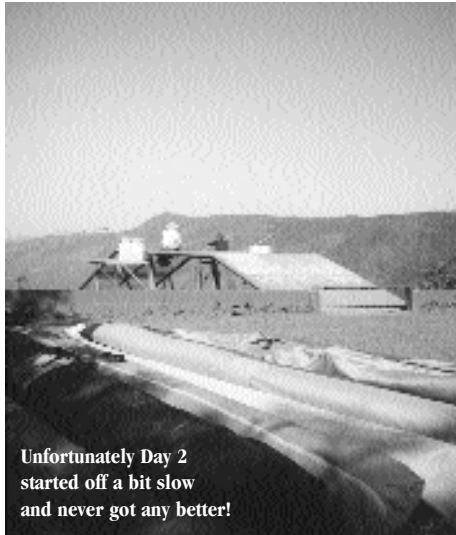
The success of the whole venture was due in no small part to the able and imaginative leadership of the competition director, Graeme Etherton (Ethel). His preparation and ability saw to it that all events went smoothly, with clarity, enthusiasm and humour. "You will be penalised for flying in cloud" he said at the very first pilot briefing, "and also for flying ahead of the comp director".

Friday Flying

Friday was certainly flyable, but no records would be broken this day. The task set was 32.3km to Septimus School, with Sybil Creek being a turnpoint at the halfway mark. Don't let the short distance fool you however, Eungella requires some very skillful and quite unique flying, skimming close to the top of ridges around the back of bowls, and making as much use of lee side turbulence as of true lift! Those pilots familiar with the type of flying required here certainly have the advantage.

Displaying their skill on this day were Scott Payton (1st/goal/2:06 hours/Xtralite), Steve Towers (2nd/goal/2:17 hours/Shark), David Nash (3rd/goal/2:50 hours/Blade), Bernie Zwahlen (4th/22km/Shark) and Chris McDonald (5th/18km/XL).

Eagles were also out in force. One pilot received substantial leading edge damage from a particular marauding monster. Another pilot faced the same situation, "He was coming straight for the kite, with his talons out. I just screamed at him for all I was worth, and thankfully he gave away the attack and flew off." However, another pilot was joined by a feathered friend rather than a monster, "I just whistled to him in his own lingo and he whistled back and sailed serenely by."



Unfortunately Day 2 started off a bit slow and never got any better!

Social Saturday

After Friday's flying we received the reverse cycle, with the wind over the back. This gave the opportunity for in-depth sharing of the many facets of flying knowledge. Experience is a great and often costly teacher; what a privilege it is to have some of it thus handed to us while

we are still on the ground! Second generation pilots can also get a greater appreciation of some of the pioneering that has gone before.

Saturday also saw a couple of powered hang gliders in action. Test pilots Dave Lamont and Andrew Grey, on the Finch Hatton Air Strip, showed that their Explorers were adequately able to handle the distinctively lumpy air coming in via the 1,800ft Eungella range.

Thanks to the happy hospitality of Bob and Jan at the Chalet. Some meals were on special, and without being so worn out by flights and retrievals the atmosphere was great. Plenty of time to enjoy the fellowship, along with the roast, vegetables and gravy.

Silly Sunday

Sunday was no holds barred, with some young pilots getting in a couple of early practice flights before breakfast. Soon the lawn by the swimming pool was again covered with gliders. Everyone was busy – pilots and the comp director, as well as ground crew and family members answering questions from the Chalet guests who were keen to know the whys and wherefores of getting up into the sky.

A straight line 30.8km task was set to a quarry outside the Eungella valley. Much better cloud build-up allowed some pilots to reach base at over 5,000ft, however none made goal. The best efforts were Ethel (1st/ 27.3km/Combat), David Nash (2nd/25.8km/ Blade), Scott Payton (3rd/21.7km/Xtralite), Graeme Beplate (4th/21.4km/ Xtralite) and Chris McDonald (5th/21.1km/XL).

Conclusion

Every gathering is unique in some way. The overall atmosphere of Eungella '99 was that of a family. Brothers David and Clinton flew together, with many wives, children, friends and even parents sharing

the whole experience. There was a great rapport between pilots and non-pilots. For example, an out landing in a much neglected and overgrown stand of cane led to a broken upright and lost vario. The owner had given up, but mates stuck with it until it was found. Another pilot was about to launch on the first day. A warning was called from behind the ramp as Kasanda had noticed a trailing chord. With such a large possibility of causing a trip-up on the take off run, Kasanda's warning was a welcome one indeed. So our gratitude goes out to each one who contributed to the whole venture.

Our thanks for the very comfortable accommodation while there; to all who shared travel arrangements; for Bernie's pick-up vehicle (\$2 from bomb-out and \$3 beyond); and for Ethel's wonderful direction. Not to mention the appreciation we all had for the beauty and serviceability of Eungella being there in the first place! We now look forward to the continuation of the championship rounds at the Gillies Comp, 9-10 October '99. Be there!



The Eungella '99 comp winners from left to right: David Nash (1st place, Senior), Graeme Etherton (3rd place, Senior), Scott Payton (2nd place, Senior), Clint Smith (3rd place, Medium), Ken Wright (2nd place, Medium) and David Keough (1st place, Medium).

Results

Advanced

1	David Nash	Blade	1,331 points
2	Scott Payton	Xtralite	1,329 points
3	Graeme Etherton	Combat	1,202 points

Intermediate

1	David Keough	Foil	724 points
2	Ken Wright	Combat	541 points
3	Clint Smith	Shark	502 points

Day 3 picked up again for an enjoyable and challenging task.
All photos: Richard Lockhart



Team Work & World Records

TISH THE FLYING FISH
& TOVE HEANEY

Relax, relax; we're not going to write about how far, high, fast we went, or how strong the thermals were. Besides, I'm sure we've blabbed all that to most people already. What I think is worth a mention is the fact that Tove and I believe 'team work' is what enabled us to get our World Records last summer.

We planned to do record attempts in December, and teamed up with Conrad, Rohan and Jim. We all contributed toward organisation, weather info, paperwork, etc and Conrad's Landcruiser was the 'retrieve machine'.

All of us had bomb-outs and all had long flights, a real mixed bag. One thing that we already knew was highlighted during this time: It's true that as you become a better pilot, you have less bad days. We see the improvement in our own flying every season, but the old cliché is still true: Everyone has bad days.

We have watched the best pilots in the world bomb-out when 80 people made goal, then seen them try exceptionally hard the next day. It seems important not to dwell on bad days, or over-analyse them. Tove and I learn our lessons quickly, then look towards tomorrow. We strongly believe that dwelling on your bad days destroys your attitude for other days.

When Tove had a bad day she was fully supportive of the rest of us, "You guys have shown me what was possible on a day I thought was average." Conrad too, after a bad day, was on the radio saying, "You can do it, only 30km to go!" This kind of ongoing encouragement tells your subconscious that you **can** do it. That's a message which is sometimes hard to tell yourself when your arms are killing you, you're busting for a pee and you're 300ft agl in the middle of nowhere.

Tove got quite a bad cold and was struggling with energy levels by the end of this flying stint. On the BIG day (which was also to be our last attempt) she was having to summon all her mental and physical reserves. We were back to the most basic form of encouragement, "Don't worry, once you're in the first thermal you'll feel OK."

On that day Tove's message rang true. The rest of us bombed out after a good start and Tove had a slow start but kept going. Then the words "you showed us what was really possible with the day" rang in our ears. That one flight made the whole trip successful, the Women's World Open Distance Record. The team had a record!

Later in the summer at the Forbes Flatlands competition we teamed up again. Tove and I declared records three times (two triangles and one out and return). There's a fair amount of paperwork for declarations (sometimes it's all too easy to flag it and just go flying) which is especially stressful when a comp round is about to start. However, we made sure all the films and declarations were witnessed and signed. We were so lucky; when I got my two records Tove had flown slower, and when she got hers I had flown slower. We felt we hadn't taken anything off each other.

We both clearly understand that you can't feel 'hard done by' when one wrong decision puts you on the ground, or when you think you flew better than someone but they followed you and sneaked into goal first (or any other version of this theme). We have learnt to swallow our pride and accept that **results count**. We encourage each other to forget the bad days and "tomorrow you can do it".

It's important for everyone to be able to bask in the glory after a good day – that confidence you get will help you try harder again on the next flight. Tove has taught me that when you congratulate someone, mean it! Tove gave me the warmest heartfelt congratulations after a good fly earlier in the summer. That doesn't mean she isn't competitive, be sure she used the day as inspiration to try harder herself. However that goodwill clearly showed to me the meaning of 'Team Mate'.

We would both like to thank our drivers this summer: Paul, Brad, Nathan, Adam and Simon who are all valuable team mates. Without them there would be no records. We also want to thank Conrad and Grant for their endless support, inspiration, competition and constant faith in our ability.



Tish and Tove.

Photo: Courtesy of Tascha McLellan



Paragliding in India

SANJAY RAO

India is a perfect destination for a paragliding pilot. Here, he or she can indulge a thirst for varied types of flying conditions and sites. Mountain flying, coastal flying, flying over flatlands and desert flying. In fact, most of the Indian hang gliding and paragliding sites have been highly rated and those in the lower reaches of the Himalayas may provide the best regions in the world. An international competition has already been held at Billing – Himachal Pradesh.

History of Paragliding in India

The sport of paragliding was introduced into India in 1991-92, when some foreign visiting pilots decided to explore flying possibilities in the Kullu Valley. The sport, with its self-advertising nature, soon charmed the valley 'adventurers' who until then were involved in skiing, trekking and rock climbing. Billing in the Kangra Valley had already been identified as a flying site for hang gliding. The Kangra and Kullu Valleys witnessed the spreading and development of paragliding. Over the past few years a small number of set-ups have been seen operating in this area. Across the country there would now be 10-12 such small set ups, and 150-200 known active pilots in the country.

India as a Paragliding Destination

India was made for paragliding. Her physical features and climatic conditions are conducive to flying operations throughout the year.

The great Himalayan ranges in the north are the highest in the world and harbour perfect mountain flying conditions. When the winter snow blocks the passes and makes these sunny slopes inhospitable, it's time to gravitate to the western Ghats: a rugged mountain range 1,500m high, meandering southwards along the coast and stretching all the way to the southern point of India. These hills are dotted with ancient Buddhist cave temples and rugged medieval fortresses which often double up as take-off sites. The Aravalli ranges in Rajasthan – exotic desert

country – is perfect for flying, especially when the monsoons descend on the rest of the country. They offer amazing flying possibilities, as yet unexplored. The craggy hills which protect the beautiful beaches of the west coast and the tea growing country of the Nilgiri hills – famed for their forest reserves in which nestle the famous hill resorts of Ooty and Kodaikanal – also make for great flying sites.

Kamshet (Golden Glades)

Three hours from Bombay city by road/rail on the Bombay – Pune route, the site 'Golden Glades' lies a further 12km from the nearest railway station. It has an altitude of 2,200ft asl. The crescent shaped hills and flat undulating fields provide perfect flying conditions. The weather is pleasant and the huge unspoilt lake adds to the attraction of the area. It is ideal for basic, intermediate and cross-country flying. The topography and temperatures allow for both ridge and thermal soaring. The fields at the foot of the hills make for good landings. There is a fifteen minute hike to the wide take-off site, and once airborne you can soar for hours at a time with the vultures and eagles for company. There are many other unexplored and flown sites within a couple of hours from here.

Transport

Air: The nearest airport is Pune (56km away). The nearest international airport is Bombay (110km away).

Rail: Regular local trains from Pune as well as main line trains from Bombay's VT station via Karjat/Lonavala.

Other Paragliding Sites

Maharashtra:

Panchgani, Matheran, Raigad, Talegaon, Sinhagad (Pune), Panhala (Kolhapur), Murud-Janjira, Bhandardhara, Ajinkyatara (Satara), Amboli, Ratnagiri, and Ganpatipule.

Goa:

Anjuna and Arambol beaches.

Karnataka:

Chamundi hills (Mysore) and Nandi hills (Bangalore).

Tamil Nadu:

Nilgiri hills (Ooty & Kodaikanal).

Rajasthan:

Aravalli hills.

Uttar Pradesh:

Nainital and Pithoragarh.

Himachal Pradesh:

Manali, Bilaspur and Billing

Meghalaya:

Shillong

Hang Gliding Sites

Popular hang gliding sites across the country include Billing and Dharamsala in the Kangra Valley; Shimla and Kasauli in Himachal Pradesh; Sinhagad (Pune), Kamshet, Talegaon, Satara and Murud Janjira in Maharashtra; Nilgiri Hills in Tamil Nadu; Mhow (Indore) in Madhya Pradesh; the Chamundi Hills (Mysore) and Nandi Hills (Bangalore).

Road: State transport, luxury and air-conditioned buses ply the Bombay – Pune route at regular intervals. There are auto-rickshaws and state transport buses from Kamshet station to Golden Glades.

We have clean, comfortable rooms with attached baths and kitchenette, and the cafeteria serves wholesome vegetarian meals (breakfast, lunch and dinner).

For further information on flying tours in India, the author may be contacted via Nirvana Adventures, 2A, Takshashila, Tagore Road, Santacruz (w), Mumbai – 400 054. Ph/fax: 91-22-6493110, email: srao@giasbm01.vsnl.net.in. A web page is located at www.india-pulse.com/nirvana

7th World Microlight (Matkopuszta, Hungary)

MARTON ORDODY

Reprinted from *Air Sports International*

The general rehearsal (that is, the Microlight World Cup run last September) tested the venue, examined the staff, tested various tasks, and everything proved to be suitable.

The world began to get prepared for the big event, and quite rightly expected that last year's failure of category 1 microlight events in Italy would be rectified at last.

All those still in doubt were somewhat encouraged by the fact that previous events hosted by the Hungarian Aeronautical Association (1990 Microlight Worlds and 1991 Microlight Europeans) were a success.

As the opening of the event approached however, there emerged a number of new questions to be answered. Question number one was whether a championship could be run at an airport with a war only 100km to the south, and a big military airbase just 10km to the north. I received such questions mostly by email, but there were other messages circulated, full of fear, suggesting the possible cancellation of the championships without informing me of the worries. In order to calm down the sceptics, besides the pre-planned competition bulletins, I published an interim one stating

that NATO did not plan to use the bases in the vicinity, and even if it did there would be nothing to be afraid of. There were other sporting airfields suitable and available if need be. With my mobile organising staff and facilities there was nothing against a move if we had to. I could also have said that there was nothing new in this situation. In 1991 participants of the Microlight Europeans in Croatia (30km from Baja) could see active evidence of the war. However, the competition days of those championships ran smoothly.

It turned out that the war in Serbia came to an end, so the original project intention of hosting the event at Matko Airport was realised. The damage caused by fear of the war can be numerically estimated by the number of entry fees transferred first, then asked to be refunded later. Less measurable was the inconvenience of cancelling the airports kept in reserve, however it was good to know they were there if we needed them.

The second question was generated by local circumstances. As is usual, the photos taken of prominent course features (to help pilots navigate during the competition) were to be taken a maximum of a week ahead of the championships. If the period between taking these photos and the actual competition is too long, changes in the surroundings (mostly in the vegetation) may be so significant that identification becomes extremely difficult. When the time came I started to take the photos, but ran into goose farm areas at nearly every turn. I flew home, re-drafted the course and took off again, but only to encounter another enormous moving white patch on the ground that warned me I was approaching yet another farm. It went on and on, until in desperation I prepared a black and white "goose map". I included this with the coloured map task sheets, prescribing a minimum 500 metres height GND, asking everybody not to play with the throttle while flying within the "goose areas". This turned out to be a waste of time though, because the white suicidal animals would always panic, whether the craft was skimming the ground or flying in excess of 1,000 metres! Once the flock starts to run and one gets trampled, others will get trampled too. For me there was no choice,

however. Trampled geese or not, the championships had to start.



There was nothing new in this trouble I was experiencing. Two weeks before the Microlight Europeans in 1991, the Danube had flooded the area leaving billions of mosquitoes torturing the participants. Although the tasks ran smoothly, the evenings were awful. The Microlight Europeans that year got the name of "the Mosquito Championships". Although geese don't have a taste for human skin, '99 WMC will certainly be remembered as the "Goose Championships".

The period of the WMC was selected according to records from the past half century, and should have been calm and dry summer weather. Reality brought something completely different. Cb's appeared in the afternoon, storms arrived in the evening, and one could not sleep at night due to the thundering. There remained a narrow margin only for flying of tasks. Next afternoon the whole process started again. The intention to run on a given competition day two navigational tasks for the solos and an economy one for the two seaters, then vice versa on the next day, remained a dream only.



For me there was nothing new in such weather. At the World Cup last September

Championships

the month was selected as the driest and calmest period of the year, but instead of enjoying the Indian summer, in order to surpass the minimums we were forced to use every flyable second – sometimes among deadly conditions. With careful planning this time we were not forced to fly in deadly conditions, however we should have flown more.

What can a Director do, if lacking the cooperation of the gods of wars, animals and lightning? Pray and do his best, perhaps.

However, this championship turned out to be one of the best attended, and one of the best situated ever. It was only with regard to flying that the bare minimums were fulfilled. With 30 WSC, 27 WTS, 8 FSC, 15 FTS and 35 PPG, there totalled 115 aircraft on the list of final results. One may state that microlight category 1 events returned at last to the numbers characteristic of the beginning of this decade.



The surroundings suited the competition excellently. The high quality runway with the surrounding fields between the rivers Duna and Tisza constituted a huge microlight airfield, every point of which could be visited by microlights. The headquarters of Matko Airport were erected to provide a suitable complex for future sport flying championships. True, the finishing touches were still being put to the walls when the first teams started arriving, but we got it ready! Every element of the headquarters mirror the conception of the proprietor, Lajos Vlaszak. The hangar with the surrounding workshop complex is good, the hotel-restaurant-sanitation complex is even better, and the tower with its glass roof is something miraculous. But the miracle was not by chance. Matko Airport is preparing to host the 2000 Aerobatic Worlds, and as far as we know, never in the history of aerobatics has there been the

possibility of judges evaluating performances through a glass roof.



With regard to the tasks used to decide the 1999 Microlight World Champions, there were a number: One Point Visit Race along in flight with selected points for speed and distance with a defined amount of fuel; one Polygon Marsh and two Circuit Marshes through timing gates and along canvas ground markers and photo points; and two Precision Landings. These were the declared tasks, though it was clear that more tasks would have provided for a wider distribution of scores for the selection of winners. However no one denies that the best won.

After the championships the winning Hungarian team were wondering what would have happened if the duration had been run? It is known that in the past half decade the Hungarian victories were based upon the duration flights, and now all the medals won by them this year were obtained without thermalling at all. I received blame for missing the thermalling task. How did I defend myself? "Hey, lads," I said, "let's go to France next year and let's try to win the Europeans there. In the meantime let's wish strongly that the organisers should not get into trouble with the God of War, should build better relations with the God of Animals, and should bribe the God of Thunder and Lightning to be inactive during the championships." They all agreed with me.

Team Results

1 Hungary	12,775	6 France	11,372
2 Czech Republik	12,749	7 Ukraine	10,515
3 Great Britain	12,654	8 Germany	9,639
4 Poland	12,446	9 Russia	9,467
5 Spain	11,892	10 Israel	5,282

This article can be found at <http://airsports.fai.org>

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Thermals

JAMES COOPER

Over the next few months I will be writing a few articles on thermals. Much is well documented, much is myth and there are also new theories being developed all the time. I will endeavour to put to right some myths, and put together many of the other ideas necessary for you as a pilot to think your way through a day, working out why things are developing the way they are.

Sources

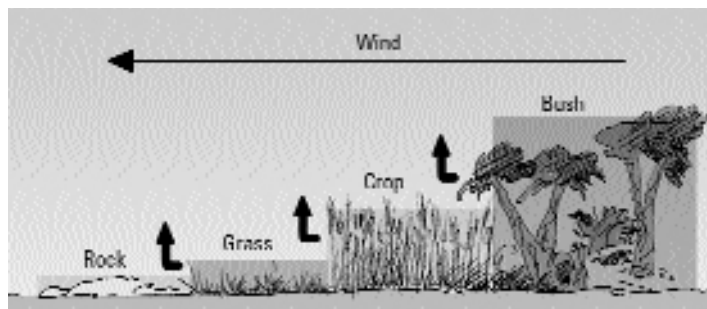
The first thing we must be aware of is that the hot air which makes up a thermal is created by the air coming in contact with hot ground and heating up by conduction. The sun will not heat the air directly. The only way that air will be heated whilst rising is when there is a high dust content, for example created by a vehicle in a paddock or sheep kicking up dust. Once the air leaves the ground it will rise, lose pressure and so cool at 30°C per 1,000ft.

As the air above the ground is warmed up you might think that it would soon become buoyant and rise up; the interesting thing is that this is not the case and if it were we would never be able to soar. It is similar to the trick done when you fill a glass full of water, put some paper over the top and turn it upside down. The water will stay in the glass until a corner is lifted and then the lot goes all over the floor. So going back to the air that has been heated and just above the ground, this is called the **super adiabatic layer**. It will remain in contact with the ground until certain conditions encourage it to escape.

It is also worth noting that dark areas will absorb more heat than light areas of ground. This will make them more efficient heaters of the air giving thermals more often, or stronger ones.

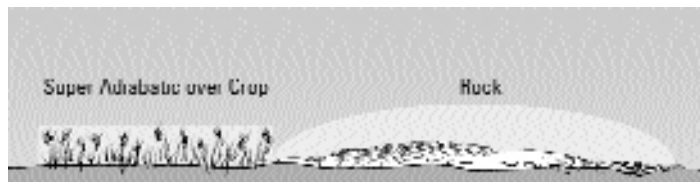
I have a theory that appears to stand up to observations; that the depth of the super adiabatic layer depends upon its environment. Over a rock it would be very thin, over grass a little thicker, in crop thicker still and in bush quite a bit thicker still.

Depth of Super Adiabatic Layer



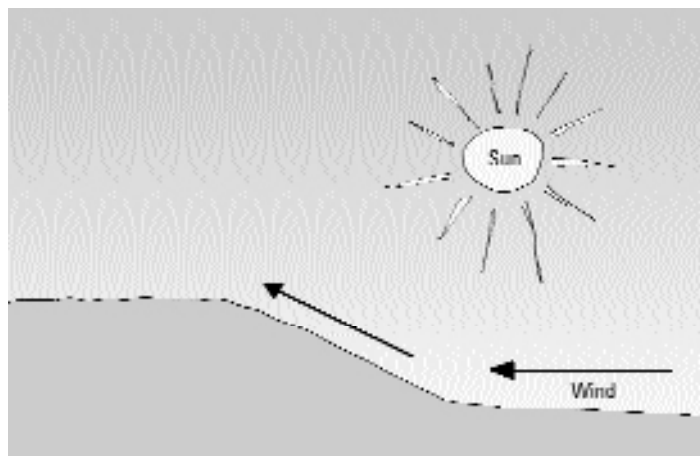
Now if the wind is blowing the air from say the bush to the crop, the super adiabatic layer leaked from the bush will be thicker than that which can be maintained in the crops environment. It will be

unable to sustain itself and so will start to rise, thus starting the creation of a thermal. This would also indicate why rocks are good sources, not necessarily because of their heat. Roads going through bush always appear to be a good source. Have you noticed in many cases that a willy willy will run down the side of an area of bush? (Ask Beverly pilots.) This also explains why large rocks, Yorkakine, and Caroline are not good sources. Let's look why.



In this case we see that the super adiabatic layer adjacent to the rock is actually sealed in and will only escape by drifting around the side of the rock or in the case of a strong breeze that will push it up over the top.

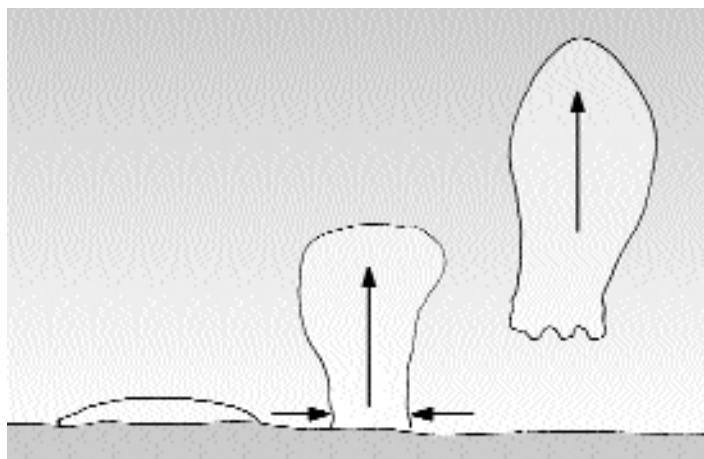
So when we are flying and looking for thermal sources we will be looking for dark paddocks or bush that is upwind of say a rock that is flush to the ground, a farm house or perhaps a road.



Humid Air

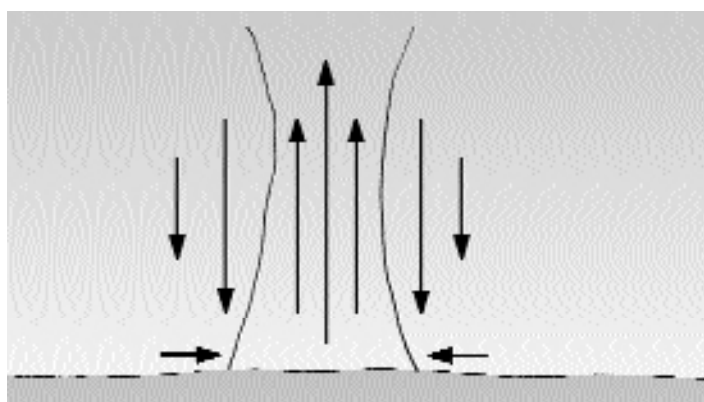
Another interesting point to remember is that water vapour is actually lighter than air. Hydrogen having an atomic weight, of about 1, oxygen of 16, therefore H₂O being 18 whilst nitrogen, the largest component in air, has a weight of 14, N₂ therefore having a weight of 28. It is, however, also important to remember that water requires a lot of heat to raise its temperature. So areas like salt lakes which reflect the heat and absorb much will not be a good source in the early part of the day. With their high water content they may be good in the evening, as they will have stored up a lot of heat energy over the day. In addition being more humid will make the air inherently more buoyant.

Although we fly in predominantly flat lands it is worth noting how hills will help us. If a hill faces into the sun it will absorb more heat than the surrounding flatland. If the wind is blowing up the slope it will assist the now hot air break away. I can assure you that if the wind is blowing the opposite way to the diagram it could still work, I have experienced this fact.



Breaking Away

We have looked at how the air is heated up now we should look at what happens as it breaks away from the ground. Let us initially assume there is no wind.

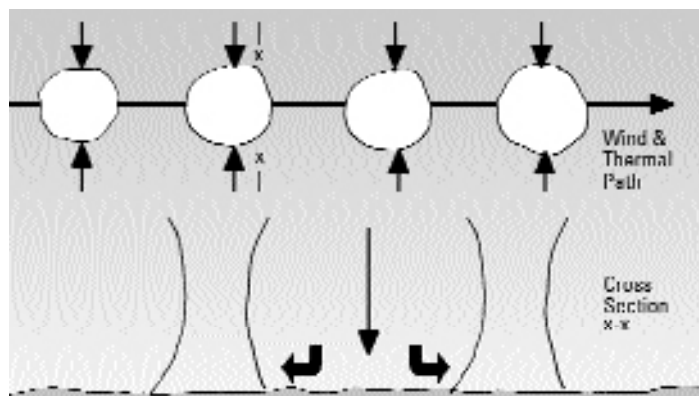


The thermal rises and in doing so drags in hot air from all sides. It will continue to rise and increase its cylinder length whilst being supplied with more hot air. This will depend upon its local environment. If there is a large area of available hot air in the vicinity the thermal column will be tall, if however, there is little available air due to a thin super adiabatic layer, adjacent cloud shadows or other thermals in the vicinity, the height will be less. Once the hot air supply has run out, the bubble will be cut off, allowing it to rise. (One thing to note is that the top of the thermal has a smooth contour, whilst at the bottom of the column it is turbulent.) Go to Scitech and have a look at their bubbles rising through a viscous liquid, you will see the effect. It is worth visiting them just for this. When you are flying, if you find a smooth thermal it may be the top of a new one and worth hanging on to. If, alternatively it is rough, then you may have arrived too late. We will see later that it is however possible to climb through the bubble, i.e. climb faster than the bubble itself.

Thermal Structure

We should be aware of the basic structure of a thermal, once fully developed. Note that diagram 5 shows a classic thermal with no wind shear and assumes a nice column length. At the bottom the thermal is dragging in surrounding air; remember this when you are low you will get dragged into the core. It rises, but due to the friction between the rising column and the surrounding air the core will rise faster than its edge. As the rising air has to be replaced, a downdraft will develop adjacent to the rising air. The friction between the sinking and rising air will develop turbulence that is noticeable as you enter the thermal from the side. As the thermal reaches the top, it is spread out by the inversion and will try to push you out. If you are continu-

ally trying to re-centre at the top, this phenomenon could be the reason. Maybe it's time to go! You should be able to see from the diagram why the core is so much stronger and therefore why it is necessary to turn quite tightly.



When considering a rising bubble, you will be aware that the core of the bubble will be going up at a faster rate than the edge of the bubble. Therefore the rate of ascent of the whole bubble will in fact be lower than the core itself. Bearing this in mind it may in fact be possible to out climb the bubble. This could indicate why some climbs start well, a little rough as you climb through the bubble, the climb rate dropping off, but smoothing out as you reach the top of the bubble and continue to climb on the top of it.

Streets and Wind

Now let us find out what happens when the thermal drifts downwind. The problem with the static thermal was that it soon ran out of fuel and in turn was cut short. If there is a little breeze, the thermal will drift downwind. As it rises and sucks new hot air from below it is continuously fed with a new supply of hot air as it drifts downwind. The thermal column will remain vertical. This will continue until the thermal passes ground that has either had its heat taken away by a previous thermal or is travelling over unsuitable ground.

When there is a wind, the thermals, as we have seen, will drift downwind taking new hot air from below the thermal column and either side. It drifts downwind sucking up more air. Now having been depleted of heat, the air to the side of the track will be cold and not be able to produce further thermals. In addition the downdraft from the initial thermal when hitting the ground will spread out in all directions and will stimulate the growth of thermals crosswind. It may be a few kilometres across wind that further thermals will develop causing similar streets.

After the initial bubble has left its source, there will be a period of reheating and the process will begin again. Once the day has developed and this action has taken place over the country for a little

My First Thermal

As a child I lived in a large area of woodland, Sherwood Forest. To the back of our house was an area of cleared land about one hundred meters square. When I was about 8-10, I had a small man with a parachute that I would throw into the air and usually he would drift down to the ground with the parachute generally open. On this particular day the super adiabatic layer that had stored up in the woodland must have drifted into the grassy area. (I did not understand that at the time, but I did understand that my little man was not coming down but instead lifted up and drifted off over the trees and horizon, never to be seen again. I suppose from that moment I was hooked.)

while, a pattern develops. What happens now is that thermals are stimulated as much by the sucking effect of the thermal above, as by the fact that the super adiabatic layer either side of the street is being pushed into the street.

Once the street pattern develops, the areas of lift will become quite long but in turn become very narrow, on many occasions only 15-30 metres, certainly not wide enough for a glider to turn in.

It is noted that in strong winds the thermals are more broken than on relatively calm days. The reason behind this is that at the lower levels, where the super adiabatic layer is built up, air is turbulent by surrounding ground features. The problem with this is that there is not sufficient time to build a nice deep super adiabatic layer; it will be broken away early by the turbulence on the ground – too early to have a good supply of hot air to keep it supplied. Its energy will soon run out, so it will in effect just become a small bubble with little structure. Don't get low when it's windy!

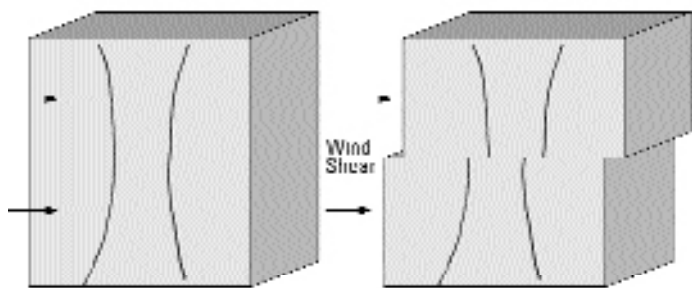
Gliding Myths

Thermals bend with the wind – or is it against?

As we have seen from all the descriptions above, the thermal will form a vertical column. Just look at a willy willy and you will see its vertical tendency. Thermals do not bend into wind or downwind. There are some cases where kinks may occur in a thermal.

When considering what happens to a thermal column, you need to think of it in a box of air that is travelling downwind with it. The bubble will be rising vertically in the box and so form a vertical column, but the whole box is drifting downwind. The problem arises when the box is moving at a different speed downwind at the top than at the bottom.

Shift into wind or downwind?



When you have lost the core of the thermal you will have to re-centre on the assumption that you have not lost it due to inaccurate flying. The general comment is 'move into wind'. This is good when you have reached the top of the thermal, or fallen out of the bottom, move into wind to find the original thermal source. If, however, there is a wind shear (usually wind gains strength with height), it is necessary to move downwind, i.e. with the shear. You can see from diagram 7 above that if you are at the top of the bottom half of the thermal, to move back into the core you need to move with the shear to get into the bottom of the top half of the thermal. On this basis it makes sense to examine the weather report in the morning.

Cumulus

If we are lucky enough for cumulus to be formed, cross-country speeds will be increased dramatically. You can see the thermals, so are able to fly like stepping-stones across the sky from one to the other. With careful observation you can see the core as you approach. In addition the thermal strength is generally stronger under a cu than in the blue for the same thermal height, normally 1 knot

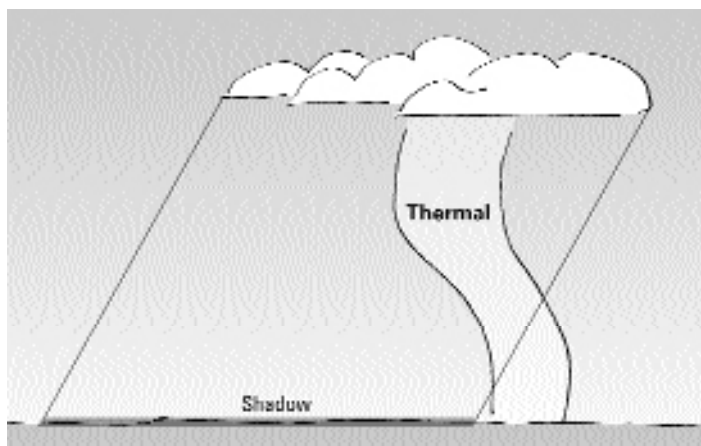
strength per 1,000ft height band. I have also heard 1 knot per 1,000 ft minus 1. This makes a little more sense.

Why does a cumulus increase the lift?

- When you boil a kettle you have to put in energy to convert the water to water vapour. Remember Newton's law: "For every reaction there is an equal and opposite reaction." If you convert water vapour to liquid water, you get energy back.
- Air can only hold so much water vapour; the cooler it is, the less it can hold.

So the thermal rises, cooling at 30°C per 1,000ft. It will eventually reach a point when it has cooled to where it can hold no more water vapour. The water condenses and as we have seen above, we will get some heat input into the thermal. There will now be an added boost to the thermal. Once the cloud has developed sufficiently it will actually begin to suck air in. If you can keep in contact with the cu's there is a great advantage.

When flying on a cumulus day it is worth noting how it will effect the thermal sources. If the sun is high in the sky, shadows appear directly under the cu. This will cut off the thermal source, so the thermal will not last for long (Well, this is what we may think at first). On the basis that the sun shines on the ground adjacent to the shadow, it produces the super adiabatic layer, that will now become thicker than the super adiabatic layer in the shadow. Another thermal will rise, but to the side of the cloud along the shadow line. It will tend to rise vertically and then shear to one side so as to be directly under the sucking cu. If there is any wind, we can assume that the thermal column will not be upwind of the cu as it will already have consumed that air. If the sun is other than directly overhead, there will be a tendency for the thermal source to be on the sunny side of the cu as this gives the least path of resistance to the rising thermal.

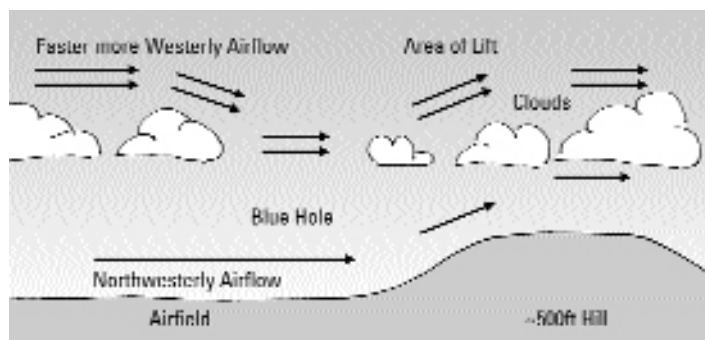


Wave

Wave is a phenomenon that we get more often than we recognise, (although there are some times we recognise it when it is not actually there). On the flatlands we fly, wave is generated either by windshear or by a frontal system to the west. Wave can be visible by producing wave bars in the form of lenticular or cumulus with smooth tops. The effect of the upper level wave will affect the thermal activity right to the ground. The secret is to recognise it and act accordingly.

When the wave is on the up stroke there will be a tendency for it to pull thermals from the surface. They will break away smoothly and tend to achieve higher altitudes than the day would normally be expected to achieve – i.e. under the cloud and towards its windward edge, that being the upper wind.

When the wave is on its down stroke it will tend to depress the thermals. If the thermal rises due to the reasons mentioned previously



it would in turn be depressed by the upper wave. On that basis you will tend to get large areas of air trying to gain height but in turn being depressed. In other words, areas of rough thermals going nowhere. The danger is assuming the thermals are no good and pushing on when all you are going to run into is further subsiding air. The wave length may be many, many kilometres.

Remember that it is unwise to go crosswind in the down part of the wave. Better to push into or downwind – find the best part of the wave before going across.

Rogue Thermals

We have a term called 'rogue' thermals. These are thermals that are considerably stronger, smoother and go higher than others found on a given day. The problem is recognising them and being aware that the day has not actually improved. The tendency of the glider pilot having taken this, say 10 knot climb is to push on hard, leaving the 6 knots he would have previously taken behind, until he starts calling Kilo Uniform Landing out.

I do not know the reason for these rogues forming and would dearly like to know how to track them down. Don't confuse them with the seabreeze front, that can have a similar effect, but has in addition a strong wind and no thermals behind it!

Problems & management of physical body tension when flying

MAURIE BRADNEY

At the last Club class Nationals, I asked the question: "When you are approaching a thermal, do you find that you have tensed your legs?"

About 90% of the pilots answered affirmative. A few were not sure, but came along later and confirmed that they did.

At least 4 stated that they found that particularly on a final glide, but sometimes at other times as well, they found themselves hunched forward quite tense in the shoulders and upper arms. Only two pilots of the whole group said that they had never noticed that they tensed any part of the body.

Nearly all of the current National team pilots tense legs. Only one stated that they never noticed any tensing during flight.

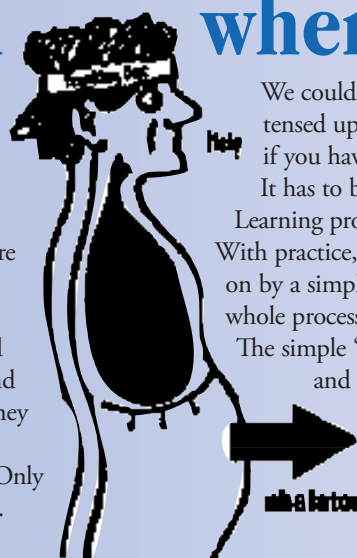
Certainly in most gliders to get a full rudder control deflection the pilot will need to provide some extra muscle power. Similarly, when using the stick some tensing of the legs is necessary to ensure that only the appropriate movement is obtained and not some additional involuntary inputs. Many pilots have found that on their initial landing attempts, they found themselves applying some rudder as they moved the stick back to complete the hold off. A minor thing to learn to control.

Is this a problem?

Considering that for most cross-country and competition flights, the pilot is in an essentially static position for some three to six hours, frequent tensing of muscles can (and does in many stated cases) lead to cramps. It must be a problem for many pilots.

Cramps are a distraction we can do without. So, what can be done about it?

The physiotherapists suggest exercise to improve the blood flow in the offending areas can be helpful both as a preventative and as a recovery exercise. There are a large number of suggested stretching exercises that we could try. General aerobic health improvement such as can be obtained by walking for at least 40 minutes three times a week will also help.



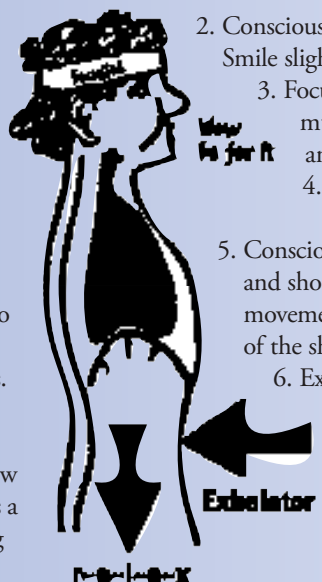
We could also try to relax anytime we find that we have tensed up. This is sometimes not so easy, especially if you have been tensing for most of your soaring life. It has to be learnt and practiced.

Learning progressive muscle relaxation can be an aid to this. With practice, the desired stage of relaxation can be brought on by a simple key gesture instead of going through the whole process. This could be very useful in the cockpit.

The simple "centering" relaxation technique can be useful and can be done in the cockpit, even in flight.

Centering Procedure

1. Stand comfortably with your feet shoulder distance apart and your knees slightly flexed. This is similar to a seated cockpit position!
2. Consciously relax your neck, arm and shoulder muscles. Smile slightly to release the tension on your jaw.
3. Focus on the movement of your abdominal muscles. Notice your stomach muscles tightening and relaxing.
4. Take a slow, deep breath using the diaphragm. Notice you are extending your stomach.
5. Consciously maintain the relaxation in your chest and shoulders. There should be minimal chest movement and absolutely no hunching or raising of the shoulders.
6. Exhale slowly. Let yourself go. Feel yourself get heavier as all your muscles relax.
7. Do this two or three times.
8. Focus on your job right now. Use your Exhalator training to find your correct focus point.



Centered Athlete

Mt Bakewell Long Weekend

MICHAEL DUFTY

Mount Bakewell is probably the best hill near Perth for launching a cross-country flight. The steep 300m face offers more time to find a thermal than anywhere else within 400km of Perth, and it seems to generate reasonable thermals despite facing south. Despite these good points, the 1998/99 summer was a bit disappointing, with no reasonable cross-countries except one weekend in December. Finally on the Anzac Day weekend we got a good weather forecast. I abandoned my plans for a trip up to Geraldton and instead headed for Mt Bakewell with Mike Annear and camping gear, prepared to sit it out until we got a good flight.

The torturous drive up the 4WD track with its four gates brought us to the take-off. As usual the conditions were a bit hard to judge from take-off, but it seemed OK. When I launched I went straight up 1,000ft where a wedge-tailed eagle joined me. The wedgie hovered inches behind the trailing edge of my wing and I couldn't resist getting some photos. I flew back toward the ridge continuing to take photos, as I was waiting for Mike Annear to come up and join me. Unfortunately that wasn't to be. He'd aborted his take-off due to a stick in his lines, and a gust of wind had taken his glider into a tree as it came down. It didn't look like it was coming out in a hurry.

Conditions didn't seem quite so good now either. I soon ended up below launch scratching along the ridge. Although the ridge lift was weak, the edge of the thermals produced gusts strong enough to blow me backwards momentarily. It was difficult to decide whether to hang around looking for the thermal causing it and risk being blown back, or run away and risk bombing out.

The wind seemed to be picking up and I eventually got a good thermal with a core. I decided to stick with it even though it was taking me back past the point of no return with only 1,000ft or so above take-off. I hoped it would carry through to cloud base, but it faded at about 2,000ft. There were some nice ploughed fields cross-wind, and some fires further away downwind. I didn't like the idea of arriving over the fires too low, so I thought I'd try the fields. I hadn't counted on the horrendous sink on the way over though, and I ended up landing in the field, just before what felt like a nice thermal came through trying to blow away the glider while I packed it. The GPS said I'd managed 2km, that's a glide ratio of about 2:1 from my high point. I was able to walk back up on the bitumen road that we're not allowed to drive on – quite nice really. I was dismayed to find Mike still hadn't got his glider from the tree. It was well skewered over a huge dead limb. I gave him a hand, and a couple of hours and a couple of near death experiences later we got the glider down. A couple of metres of yellow gaffer tape and we were ready to go again.

The thermals had calmed down, but the wind had settled into the classic Bakewell "magic lift". We happily boated about for a couple of hours in the buoyant air until it got dark.

We camped nearby overnight and were ready to catch the first thermal the next day. Probably a bit too eager actually. I flew to the bottom without a single moment of lift. Mike Annear tried a bit later and was able to prolong his descent, but not much more than that. We grabbed some lunch in town and drove back up to launch to find a bit more activity. I started to unpack my glider and we saw Miguel launch from further down the ridge at Lou's place where the hang gliders usually take off.

We watched as he scratched back and forth below us, clinging to the ridge, and slowly making ground. Finally he made it up to the summit. With Miguel to mark the thermals, I was able to time my launch perfectly. I circled up behind the hill with him to about 1,000ft ATO in my launch thermal, then we headed back forward again. I diverged to the left a little to pass over the gravel pit, normally a good source. Sure enough I found something solid. I called to Mike on the radio that I'd found something, and immediately suffered a full frontal collapse to emphasise it. It was a good thermal, and took me right up over the back to about 4,000ft.

Some good cloud streets were starting to form, but this thermal went straight up into the blue gap between them. As the thermal started fading I spotted the skydivers' Pilatus porter turbo prop climbing towards me. I soon realised it had probably seen me and was not actually on a collision course, but put a few steep turns in anyway. It climbed alongside and turned around me, climbing steeply. I waved and started looking for lift again. I liked the look of the cloud streets, and was hoping to hang around until someone joined me.

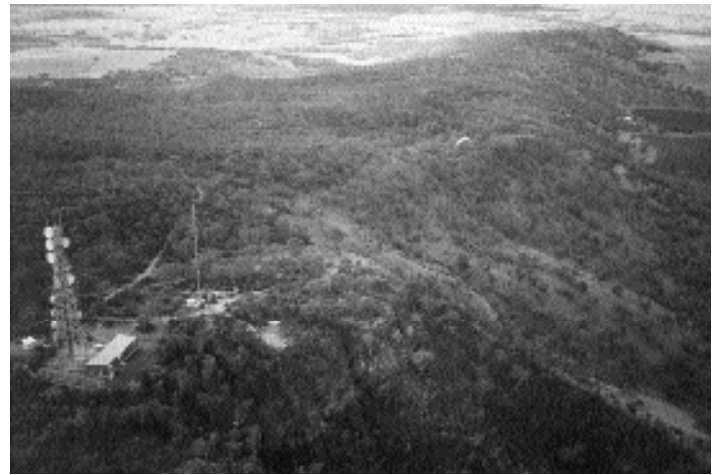
Hang gliders in front of Mt Bakewell take-off.
All photos: Michael Duffy

I headed upwind towards the nearest cloud and sure enough there was some lift under it. I got right up to base at over 6,000ft. I could see Mike had launched but was still scratching around at ridge height. Miguel had bombed out just after I climbed out, so it seemed like time to stop waiting and start flying. I headed downwind under the cloud street. It was taking me almost due west, not an ideal direction due to the forests of the Darling scarp and controlled airspace, but I couldn't resist the street. I figured I'd head crosswind if and when I got too close to the forest.

It wasn't continuous lift, but the sink wasn't too bad either. There were plenty of good climbs, which sucked right into the clouds. There were a few rough bits but also some of the smoothest strong lift I've encountered, with the glider staying totally steady as the G force made my harness creak. Excellent flying.

I tried to branch north as much as possible without leaving the security of the clouds. There was a lot of burning off still. At one stage I thought I had to choose between a cloud and a fire as a possible thermal source. I was quite pleased when I got to the cloud to find they were one and the same thermal, as the cloud had a distinct smoky smell to it. By now Mike had made it up to cloud base too and was heading north from Bakewell, just visible in the distance.

I reached the Great Eastern Highway at Wooroloo just as Mike passed by Northam. I got a good climb over the town then had to leave my cloud street as it was taking me further over forests and away from my initial goal of Toodyay. There's quite a gap between the highway and the next main road (Toodyay Road), however it looked like I'd just about make the glide even with no lift and I boldly headed out. Of course I struck strong sink over the first big patch of forest, and that had me heading for the ground midway between the roads. At the edge of the forest was a gravel pit, and near it some lift. I turned into the wind and climbed for some time, but every time I tried to circle I'd fall out of the lift downwind. The wind had picked up and I was making very little progress into it. I could see the windmills spinning wildly and trees thrashing below me. I was over a somewhat neglected looking farm with a paddock. I worked out where the powerlines were, and ended up hovering there waiting to land rather than risk a high speed dash over the next few paddocks on the off chance of a low save. I found the desperate need to stop for a piss was really hurting my concentration too, and it was actually quite a relief to land safely. The GPS showed 40.1 km, a personal best for me in



Climbing out.

WA. Mike Annear flew over just after I'd landed, having gone north then west while I'd gone west then north. He'd found a similar thermal to my last one, but rather than try to turn and fall out he just climbed several thousand feet pointing straight up wind. I wish I'd thought of that. Then again, maybe his thermal was better than mine. He was going to land near me until he realised my poor choice of location, about 10km from the nearest bitumen, quite an achievement so close to Perth. Mike carried on and landed near Toodyay Road, going ever so slightly backwards as the easterly at ground level was quite strong.

After some desperately needed relief I packed up my glider and headed for the farmhouse. It looked just as deserted at ground level as it had from the air. No radio or mobile phone contact here either. I was looking at my map trying to guess which direction would be the shortest route to a bitumen road, when an ancient and battered looking ute drove up to the shed and someone started loading hay. He jumped when I came up and introduced myself, not expecting to see anyone else out here. He looked about 70 years old. His face was hidden by a huge white beard and floppy hat, so all I could see was a large deeply pitted nose and deeply sunken eyes. I asked which way was shortest to walk, and he mumbled something about giving me a lift, if I didn't mind him driving, as he'd already had a few. The prospect of a 10 km walk with a glider didn't appeal, so I agreed. I managed to clear myself a small patch of dusty seat in the cab, between the stacks of empty beer cans, the fencing gear and the rifle.



Landing at the racecourse in front of Mt Bakewell.



This is how I like to see Mt Bakewell.

I was given a lift back to the highway at about the same speed my glider flies, and I really appreciated it. I still couldn't quite believe I'd landed in the remote outback despite being within 50km of Perth.

The Great Eastern Highway had plenty of traffic, but all in a hurry and not keen to stop despite my "Glider Pilot" sign (which has worked really well for me in the past). After some time a truck returning from a dirt track go-cart race stopped. I squeezed into the cab four abreast with a man and his two sons, who were quite intrigued by my GPS and vario.

A short while later I was dropped off at the lakes. I figured I'd earned some greasy roadhouse food, so I grabbed a ham cheese and tomato toastie and headed out to eat by the road verge. I was lucky on this occasion, as a car pulled alongside me in the carpark and I was offered a lift before I even made it to the road. This was quite a comfortable car too. I only had to share my seat with a small dog that had just been picked up from the airport. I guess he'd flown further than

me that day too. I arrived back at York just ahead of Mike Annear, who'd also had a successful hitch, via Toodyay and Northam. All that remained was to climb the 300m main face of Mt Bakewell to get the car back. Well worth it. It wasn't just Mike and I who'd got away either. Miguel had re-launched and made it to a safe landing near the pub in Toodyay, along with Derek on a hang glider. Several other hang glider pilots also had good flights. A great day, and we still had the holiday on Monday.

On Monday Mike and I didn't feel too optimistic about bettering Sunday's flight. We might even have sat it out, except for all the other pilots who were keen to fly after hearing about Sunday. We set out with Julian, Bill and Wally, initially going to Noondeening Hill as the wind seemed to be north east. On take-off it appeared easterly and quite gusty. We stood and waited for a while until one of the hang gliders launched into some really shocking air. We were sure we didn't want to fly in that, and the York weather station was now reporting ESE so we set off to drive some more. The thermals were still there as we could hear hang gliders on the radio, flying across from aerotow launching at Cunderdin. As we drove up the back of Bakewell we saw a hang glider launch from the top, circle upwards and head off. It was looking good despite the late hour. I was first on launch. It felt good to know there was a car at the bottom so I didn't waste too much time. I launched straight into good lift, but after a few minutes it faded and I was reduced to scratching back and forth until I finally faded out. It did pick up again, giving Wally good height in front of the hill, but it seemed we'd missed the best of it. The evening magic lift came on however, and we all got some pleasant ridge soaring as a consolation prize.

All in all a fantastic weekend. More flying time than driving time for a change. Hopefully there'll be more great weekends next season.



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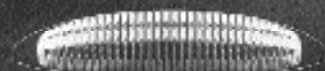
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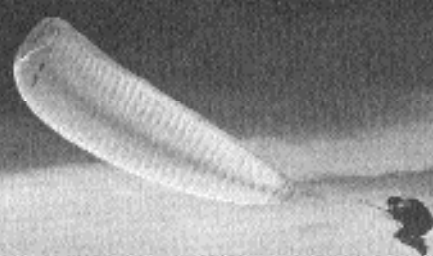
Congratulations to Carlo Borsantino of Brighton. Also to Ali Maddock, winning the Ladies competition both there and again in NZ - and to Simon Oliphant for doing so well in Australia!

Well done too to Howard Travers for his new world records set on the Apeo Futura tandem. (Apeo wings have taken more world records than anyone else's)



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Pilot Grading

► The current system for grading pilots is obviously fatally flawed, and needs a complete re-think. If things go on the way they are, I'll soon find myself in the National team before I've barely made goal!

A quick glance at the 1999 National Ladder (www.ozemail.com.au/~zupy/index.html) is enough to show that it does not reflect pilot ability, particularly at the mid to lower levels.

The problem is that many top pilots no longer attend more than one comp per year, and since the current system counts your best three scores in the last two years, these pilots are only getting low rankings. On the other hand, a keen novice who bombs out every day for three comps will get enough points to make the top 100, and so will be ranked B Grade!

Next year, if the same pilot attends three major comps and finishes 70% of the way down the field in each one, he will suddenly find himself in A Grade, quite likely never having made goal! He now has to compete against the world's best, and can forget about any chance of winning any sort of prize for a long time. Why would he now want to spend \$250 on a competition he will have absolutely no chances in? Soon he too is only attending one comp per year, and competition attendance continues to drop.

A further problem is that once you have been ranked A Grade, you are there for the term of your natural life. This is a disincentive for older pilots who were once good, but now fly only recreationally, and who may wish to return to competition flying at a less intense level. Most other sports I can think of allow competitors to down-grade after a period of being non-competitive – why not hang gliding?

What I propose is a new system that works like this:

Firstly, we need a transparent system (i.e. a FORMULA) for determining how many points a comp is worth. Maximum should be 100 points, with lesser comps getting scored depending on how many, and how good the participants are. Intuitively, Flatlands, Bogong and Canungra, should easily be worth 100 points; with NSW State Titles at Manilla (a strong field last year) being worth not much less – say 90 or 95; and Birchip being only a little less again – say 85 or 90 (I won't try to judge the paragliding comps).

For each competition, the points would be normalised so that the first placed Aussie in a 100 point comp gets 100 points, with every other Aussie getting pro-rata points. I think this is not very different to what happens now, except that the current system uses a committee to rate each comp as AAA, AA, etc. for 450 or 360 points, etc.

For national ranking, only a pilot's single best score should be used. This score should diminish by 2 or 3 points every year, to reflect the fact that pilot skills do fade slowly over time. The cut-offs for each grade should be reviewed at the start of each year by the competitions committee, and be set so that the numbers in each grade in the previous season's major comps would be roughly equal. My guess is that the cut-offs would end up at around 60 and 35 points.

This would mean that if a pilot won a 100 point competition, then stopped competing for family reasons, he would not revert to 'B' Grade for more than ten years. Yes, there may be one or two old gun pilots who could come back and win a 'B' Grade section, but hey, aren't we trying to attract pilots back to competitions? We should welcome any old-timers back with open arms, not regard them suspiciously as having an unfair advantage. Such a rare pilot would soon be ranked 'A' Grade again anyhow, and would have contributed to the hang gliding scene along the way.

For National team selection, the current system should be retained, as it does reflect current commitment and performance. And it is reasonable to expect our National team aspirants to attend several competitions per year.

Please give my suggestion some thought, and get your support or ideas to myself (peter.dall@CASA.gov.au) or the Competitions Committee (Michael Zupanc).

Safe Circles,

Peter Dall, SSO ACTHPA

Promoting the Sport

► There are three certainties in life: death, taxes and the knockers who emerge from their habitats whenever someone tries to benefit others through positive initiatives.

Well done Gary Allan for your insightful letter in response to the article "Promoting the Sport".

Perhaps this letter required no response as most people would have seen it for its true worth. However, I offer the following comments.

Among other things, Gary displays little understanding of how children learn. Experiences such as those presented by Regina are not 'mere entertainment'. Pre-school children learn by interacting with

hands-on experiences and this experience would indeed have been educational for them.

Gary may well be right in his statement that none of these children will ever become hang glider pilots. So what! An educated child is one who can better make logical and reasoned decisions. One of these children may one day own one of the hills or properties that we all seem to enjoy flying from.

Finally, I would like to assure Gary that current educational practice focuses extensively on environmental issues such as animal habitats.

To Regina, well done; there should be more enthusiasts like you in our sport.

Graeme Garlick

► In response to Gary Allan who is confused about my motives...

Well Gary, I am equally confused about your motives to criticise and belittle the effort I made in sharing the joy of flying with children (including my own) who are still full of wonderment and curiosity about the world around them. Who but an extremely selfish person could say that we shouldn't tell our kids about flying, in case they should dare to take up flying themselves. Who gave you permission to become a pilot Gary? Aren't you taking up space in the sky, taking it away from the real birds? How come it's OK if you do it?

If you want to apply your logic properly, then go and tell the HGFA/GFA, the manufacturers and all the instructors out there to stop teaching and promoting the sport. That would make more sense than picking on me! And since you also appear to be worried about overpopulation, I strongly suggest that you go and complain to the Pope! Or maybe you'd even like to help us out with the problem – one less could make all the difference.

If you think I sound angry, then you are right! Because the moment someone makes an effort to organise an event or make a contribution, there are 10 knockers lining up to whinge!

Regina Böhler

PS: I am awaiting an article on your effort to teach pre-schoolers about the dangers of overpopulation.

Parachuting Paragliders

► I've sometimes been accused of being a dreamer. To me that is not derogatory. I'm currently dreaming of paragliders that you can step out of a plane with. Imagine, it's on a static line so that it begins to open before your airspeed builds up, so minimising

Air Mail

Continued

the opening shock. It has a staged deployment to prevent cravats and further minimise opening shock, i.e. it opens initially with the wing tips tied together in a forward or backwards horseshoe. This stops the tips going in amongst the lines and getting caught.

We could just turn up at existing sky-diving drop zones. They shouldn't mind taking us up so long as we get out downwind from the drop zone and only head off downwind. It should be cheaper than aerotowing hang gliders as you could put six people in a plane. They could drop a whole gaggle of us at cloudbase under a nice cu and we would be off. Now the GFA have told us that they don't want to dance. If we're hard up we could put the hard word on the parachute federation. Maybe they'd like to bring our bodies together in an amalgamation?

Graham Sutherland

Paramotoring

► I would like to comment on the article "Paramotor" which appeared in the September 1999 issue of AG/Skysailor.

Having flown paramotors for over five years I have always been interested in everything affecting them, even those most complicated problems like circulation going around the canopy.

The matter, how real forces act on the canopy at maximum power of the motor, was one of the first which I felt I needed to investigate. Finding the stall point when using brakes (at maximum power of the motor) was the next. After finishing numerous calculations, I found the results showed something opposite to the conclusion which Jos Weemaes is drawing from his considerations presented in the article.

Since it is a safety issue and other paramotor pilots may be interested in the stall point in such a situation, I thought I should say what I think about it.

Using a different approach from the one which Jos Weemaes used, and taking under consideration principles described in books on mechanics I found that, using a paramotor in a normally accepted way, **the further from the vertical line your motor is pushing you, the closer to the stall point you are.**

I don't want to start any big discussions or judge Jos' logic (and possibly Dennis Pagen's?) in presenting the forces acting on the canopy. Not at all. That is not the purpose of this letter. Here, I would like only to attract the attention of the pilots using paramotors. **Be careful with the**

brakes at full power of the motor, the stall may be closer than you expect. Especially since a stall, which is very turbulent in itself, can be much worse in conjunction with the maximum force acting on the pilot without solid suspension from the collapsed canopy.

Tom Szwarc

P.S.: Jos, it would be excellent to join the smallest paramotor club which you have together with Jeff Hoffmann. Unfortunately, you are too far away from Melbourne. Here, we have a similar one gathering three or four pilots. Soon, another pilot will join.



Bondi Soaring

► Although the quality of the enclosed photo isn't great, from a hang gliding point of view they are historically significant. They show pilot Bruce Wynne soaring above Bondi Beach in October or November 1980. At the time we knew of no one else who had, nor does he know of anyone who has done it since.

Bruce and I shared a flat in Paddington, and after work one day decided to go to Bondi and check the wind as this flight was something he and some others had discussed trying. Although very gusty, the wind was blowing straight onto the promenade on the south end of Bondi Beach. So we set up the glider, and with me holding a wing tip to help keep it straight, Bruce managed to get into the air after a couple of attempts. He was then able to work his way along the promenade and get enough lift to soar above the pavilion for 15 minutes or so.

There weren't very many people about, but those that were all came for a closer look and I remember noticing a couple of others also had cameras. I took my photos on 110 film.

Mary MacSmith

(Editor's note: Needless to say, it probably wouldn't be in the best interest of our sport for anyone to attempt a re-creation of this event these days.)

Praise from Hawaii

► I just got my copy of AG/Skysailor and am thoroughly impressed with the magazine in general. Things like the inclusion of all forms of soaring aviation such as sailplanes are great; over here they're still trying to decide if Moyes gliders should be in the same mag as Wills Wing – actually it's not quite that bad! Also, your treatment of my article was fantastic. The photos were well selected and fitted the text appropriately.

I never expected a cover inset photo and front page billing. Sincere Thanks,

Brett Snellgrove

Classifieds and More...

► When will something be done about the return of free ad entries for the impoverished foot launched glider pilots? Have you looked in the classifieds lately? There's equality and there's reality. The ads are there as much for the readers as for the advertisers, and I for one miss the many entries. A system of equality needs to be adopted, but we have some significant differences from our sailplane brothers. For example, our wings are almost exclusively owned by individuals, whereas in sailplane circles the opposite is likely; also our fabric covers make our gliders much more of a consumable with limited life.

A simple solution would be to allow free entries for any gliding related goods, including multiple entries by an individual or a dealer, up to \$10,000. Any comments?

On a brighter note, there is much interesting reading from the other gliding areas, and where the articles are flagged suitably there is no compulsion to read the other articles on the first browse. Thank you for a quality magazine. Here's hoping that the magazine joint venture survives, I have never felt more motivated to try the other side before. However, long live Unreal gliding.

Andrew Kennedy

► A new HGFA/GFA magazine committee is currently reviewing all aspects of magazine policy, including content equity/quality. Free classified advertising for members is one of a number of aspects under consideration. A decision will be announced once all costings have been reviewed. Please remember "there is no such thing as a free lunch" and lost revenues will need to come from somewhere else. Producing such a high quality magazine for such a small membership does come at a price, and as a consequence of this and other considerations (such as GST) the board has been asked to consider a membership fee increase next year to help cover these sort of adjustments.

Thank you for the constructive feedback. The Board and team here are hearing what you and others are saying, and in fact we too are keen to run free classifieds again as long as we can stay within the annual cost per member targets set by the Board in the context of our annual budget.

Ian Jarman, Executive Director

Dust off your Glider

► In recent years the performance of hang gliders have taken a significant step forward after being somewhat static for a number of years. Topless gliders, airfoil base tubes, and low drag harnesses have seen significant improvements in glider performance. Improving pilot skill levels, driven by the pursuit of such champions as Thomas Suchanek and Manfred Ruhmer, have seen 100 mile tasks become routine in the flat-lands. Unfortunately this has come at a cost. The price of competitive equipment took a steep price hike with the introduction of exotic materials like carbon fibre into gliders. Not all pilots who have enjoyed competitions in the past have wanted to purchase these thoroughbred gliders, but without them they are at a significant performance disadvantage. Task lengths have become tailored for the top guns rather than the average pilot, making it harder and harder for non sky gods to make goal.

The result has been that the number of pilots participating in competitions has fallen. This is sad because competitions offer a fantastic way to meet fellow pilots and improve your flying skills. An added bonus is that if you take a week off for a competition you generally get to fly cross-country nearly every single day.

So what's new? The rot has been stopped, that's what. This year's competitions will focus on bringing the fun back. Shorter tasks (read: achievable by mere mortals) aiming to get pilots back to town at a civilised hour will be combined with a class structure to allow similar gliders to race against each other.

For this year's competitions there will be three classes: **Open** (essentially for the serious racers with topless equipment), **Racing** (for high performance king posted gliders), and as a new addition the **Floater** class, offering the chance for new pilots to come along and have fun competing against other pilots with similar equipment. The top pilots will still get to race their topless gliders, but for the honour only. All the prizes will be allocated in the racing and floater classes. Yes, Thomas/Oleg/Manfred/Guido may get the trophy in Open class, but you can still get the trophy and the prizes in Racing or Floater classes. Your equipment

won't help because no gliders will have a significant performance advantage in these classes. If you win it will be because you have flown better. Finally the righteous can prevail against the forces of darkness.

So what are you waiting for? Book your holidays. Send your entries. Dust off your gliders and come and enjoy what promises to be Australia's most enjoyable summer competition season for years.

James Freeman

Big Brother CASA?

► Tony Rothwell's announcement of CASA about to stretch it's authoritarian fingers into our beloved free sport is very scary indeed. As a general aviation pilot who understands how these people work and has witnessed misuse of their power, I warn you all to be afraid, very afraid.

Rothwell has signalled a brace of "Sport Aviation Inspectors" will soon be released upon us. Make no mistake these people are Aviation Police and they will be looking for trouble with spectacles. These public servants are from CASA's Compliance Division. That means they are going to turn up on your hill and make sure that you **comply** with the stated "Safety System Principles" which of course are promulgated by CASA. Remember these are the same people who have been calling us "Fringe Crazies" since 1971.

Rothwell says in his article "We are getting our act together". This bit of feel good frippery is Gov-speak for "We're going to get **your** act together". Imagine a suit arriving at your launch and grounding your glider because the shielding is frayed on one of your lines, or because the cad plating is scratched on your wing bolt. Over-the-top scenario? Absolutely not! I have seen a "CASA Officer" as they like to call themselves, arrive at a North Coast airfield and issue brown envelopes to half the owners on the field because their aircraft were 5kg overweight. He was wisely accompanied by two burly plain clothes police. After seriously screwing with several peoples lives, the inspector ended his Northern holiday and returned to Canberra to sleep soundly. The fact that he did not hold a pilot's license (like nearly all of them) or weigh some of the aircraft did not matter a jot. Whatever happened to Self Regulation?

As a sweetener Rothwell hints that you may be able to get a high paid government job involved in your fav sport, forget it! You have to be an expert in everything from Air Traffic Control to Instrument Approach Procedure. In fact the requirements have been written around the people that have already been chosen for the job, of that

you can be sure. I personally guarantee you that no current para- or hang glider pilot will fill any of these positions.

I remind club presidents that CASA officers cannot enter private property unless invited to do so.

General aviation organisations like AOPA spend nearly all their time fighting over-regulation and pursuing the freedom to fly responsibly. Yet so feared is "The Department" that many critics do not sign their letters of protest for fear of "special attention" by CASA. I am not afraid of CASA, but I am terribly afraid of the consequences for our sport.

Mark (Max) Townsend

Mt Warning

► It did my heart good to see that Gordon Merrit (August issue) had a great flight around Mt Warning, located just south of the QLD/NSW border. However I was disappointed that there were no photos, so here they are!

I launched my paraglider at 'Flying Fox' near Canungra, SE QLD. Between launch and Mt Warning is Lamington National Park, some of the most inhospitable "tiger country" in Australia. Cutting across to Numimbah Valley and flying down to Mt Warning has long been a personal goal. As I crossed the QLD/NSW border I was elated.



Mt Warning. Photo: David Pearson

I worked my way to Mt Warning which is the core of a huge volcanic crater, the northern rim of which marks the QLD/NSW border. I chose a landing spot near the town of Chillingham before flying on close enough for this picture postcard view.

I have to, like Gordon, mention the retrieve team. Fran Ning, after her own cross/headwind, inversion bashing, smoky flight to Rathdowney, picked three of us up from near the border. Thank you Fran. A mention also of Graham Mansfield, my hangy flatmate who let dinner go cold to rescue me. Thanks buddy.

This was a mid-winter flight, which it virtually has to be for this task. You need a north west influence with no afternoon seabreeze to hold you back.

David Pearson

GFA Executive Profiles

President and FAI Badges Officer

Name: Beryl Hartley

Length of time on executive: one year

Duties:

- Manage day to day business of the GFA.
- Process FAI Badge and Foreign Claims.

Previous position(s):

- Executive Vice-President
- Australian Team Manager (International)
- Orana Soaring Club Committee
- NSWGA Secretary and President

Gliding details:

- Home club Orana Soaring Club (Narromine).
- First began gliding at Waikerie 1964.
- Attended all but two FAI Australian National Championships since 1965, seven World Championships.
- Organiser and Contest Director of a number of National and State championships.
- Organiser Heart of Australia Safari

Personal gliding goals:

- Fly more in my own club.

Goals as member of GFA Executive:

- To help with the creation of an Australia wide promotion activity to attract and retain members.
- To ensure affordable and effective services to all members of the GFA.
- To assist where possible each individual member to achieve their goal in gliding.

Executive Vice-President

Name: Bob Hall

Length of time on executive: 7 years

Duties:

- Carry out day to day policy set by GFA council

Previous position(s):

- Club committee
- CFI
- ARTO
- RTO
- COP
- Airfields and Airspace ASAC rep.

Gliding details:

- Home club Bathurst.
- Gliders flown include most 2 seaters, Jantar, ASW 15, LS 3, Pic 20, Ka 6, Boomerang, Olympia.
- Instructing, cross-country and competition flying.

Personal gliding goals:

- Continue development of instructing techniques.
- Cross-country and competition flying for fun.
- Try mountain soaring.

Goals as member of GFA Executive:

- To assist to update and streamline the GFA and make it inclusive and responsive.
- To assist in the development of new infrastructure which promotes the development of individual club aspirations so as to reverse the decline in membership.
- To support those with responsibility for high standards of operation and training in all its aspects.
- To promote constructive co-operation between all branches of aviation but particularly sports aviation.



Outgoing President, Tony English (right), with Ros Robertson and Don Wyllie at the AGM.

Treasurer

Name: Rudi Salter

Length of time on executive: New

Duties:

- Accounting
- Budget
- Performance appraisal

Previous position(s):

- RTOA NSW
- Club Treasurer
- Education Airworthiness

Gliding details:

- Home club Southern Cross, Bathurst Associate.
- Local and cross-country flying, flown a wide variety of single and two seaters.
- PPL for light aircraft and helicopter.

Personal gliding goals:

- (Geriatric!) Recreational flying

Goals as member of GFA Executive:

- Membership!

Chairman Operations Panel

Name: Daryl Connell

Length of time on executive: 3 years

Duties:

- Chair operations panel.
- Maintain standards.
- Responsible for operations and interface with CTO/O.
- Pursue safety improvements



editor Australian Gliding, and Wayne Kiely relax after a hard days conferencing.

All photos: Sandra Rosner

Previous position(s):

- RTO/OPS NSW
- CFI

Gliding details:

- Currently member of Ranga and Temora clubs and Libelle owner.
- Active in promoting Sports (Club) Class.
- Flown in most Sports Nationals of the modern era.

Personal gliding goals:

- Remain active cross-country pilot.
- Fly faster!

Goals as member of GFA Executive:

- Promote effective two-way interface between operations and GFA administration.
- Growth of GFA.
- Promote improving flight safety.

Chairman Sports Committee

Name: Terry Cubley

Length of time on executive: 14 years

Duties:

- Manage all sporting areas coaching program, FAI badges/certificates/records, decentralised competition, National championships, international championships.

Previous position(s):

- President
- Executive Vice-President
- Treasurer
- Chairman Sports Committee
- International Gliding Commission rep.
- RTO/O
- State President

Gliding details:

- Member of Geelong Gliding Club, joined 1968.
- 3,600 hours gliding.
- Flown in 4 World championships, highest placing equal 13th.
- Organiser for 2001 World Gliding Championships at Gawler, will be Competition Director of that competition.

Personal gliding goals:

- Compete in future World championships.
- Ensure success of Grand Prix competition.

Goals as member of GFA Executive:

- Ensure focus remains on developing sporting aspects of GFA.
- Support development of the sport and its organisational structure.



Interview with Tony English, outgoing GFA President

Tony English revels
in his last moments
as President, sharing a
joke with Henk Meertens
and Jerry Wells.
Photo: Sandra Rosner



Australian Gliding: When did you start your gliding career?

Tony: In 1985, in Western Australia

AG: What did you fly?

Tony: I started off in Blaniks, L13s, progressing into Twin Astirs, then I bought a share in a single Astir. I kept that with a partner for about 5 years, when my health began to deteriorate and I thought, 'OK, I can fly with a safety pilot with me, an instructor who knows my condition and is happy to fly with me' – but I haven't flown for the last 5 years.

AG: So you maintain your interest in gliding by being active in the Federation?

Tony: Exactly.

AG: Tell me your best flying memory

Tony: My best memory from flying is doing a 500km triangle (FAI) after my health had deteriorated, with a safety pilot and it was great fun. We were in a Twin Astir; it was a good day for a while, then a scratchy day, then good again. I would never have done it on my own, but having him to assist me round was great fun.

AG: So I guess he never had to touch the controls?

Tony: No, no. He just talked me through it.

AG: What else have you flown?

Tony: The PW 5 and the Puchatek.

AG: What's your favourite glider?

Tony: I'd have to say the Twin Astir. It's demanding. I suppose the most important thing as far as I'm concerned is that the front seat is very comfortable. The back seat was miserable, but I could always make myself comfortable in the front without too much of an effort and that made the flying enjoyable.

AG: Have you always flown at the same club?

Tony: No. I've spent most of my time at my home club of Beverley. I've flown from Bunyin (Canberra) and with the Soaring Club of Tasmania and Narrogin (WA)

AG: What's next in gliding for you?

Tony: I have a year that I can remain on the Executive of the GFA as immediate Past-President and I think I will put my best

efforts and energy into helping clean up the mess that we're in at the moment.

AG: Do you want to elaborate?

Tony: Well, the main thing that we have to do, in my opinion, and it came out fairly strongly at the Council meeting today, to really do something about the Memorandum and Articles of Association under which we're working. Whether we decide to go under a 'State Associations and Incorporations Act' I'm not sure. The only one I'm aware of which we can do this with is the NSW act which allows other states to incorporate, even though it's a NSW act. I think that's where I'll be spending my energy.

AG: And personal goals?

Tony: To get that part of the Federation in order, because I believe it really is a mess.

AG: Any final comment?

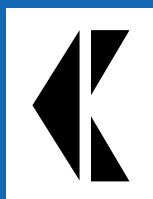
Tony: I have not enjoyed my two years as President.

AG: Why is that?

Tony: Well, Roger Woods died, we lost Mike Valentine who resigned after 18 years. Pat Kedge retired after 18 years. They both went on the same day, so we lost 39 years of service on one day. Johnathon Cant, the Airworthiness Officer at the time resigned and got a new position. That's enough.

AG: What is your advice to those who follow you?

Tony: Just do it as you see it and remember that you are there for 3,000 gliding members – that's who you're there for.



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GFA Letters to the Editor

Open Letter to the Sports Committee

▶ As some of you are probably aware, the numbers at the FAI Nationals are shrinking rapidly, only 36 Australian pilots at Narromine (virtually no young pilots flying Club gliders whilst 2 Discus, 3 LS7, 2 DG300, 1 LS4, all club gliders that used to be hired for the Nationals, were sitting in hangars).

I believe that reducing the cost and complications of attending the Nationals are what we should be concentrating on. If we keep going the way we are, I predict that within five years, we will be down to less than 20 Australian pilots spread over 3 classes just the elite who are in contention for the Worlds, virtually all millionaires or high income airline pilots. These are the facts as I see them.

Time and again the Nats pilots have voted against POST type tasking, yet here we are trialling Assigned Area Tasking (AAT) for the benefit of the IGC, and thereby alienating some more of our own pilots.

We do not have a gaggle problem, we have solved it with our mandatory multiple start system, which is acknowledged as the best in the world. The European problem is different; they have large numbers (124 entrants at Bayreuth), one start point, and consequently horrific gaggles, hence their preoccupation with introducing POST, AAT and RUN type tasks. I see no reason for trying to solve the problems of the Europeans at the risk of alienating our own pilots.

We have a head in the cockpit problem, not a task problem. In my opinion the spate of mid-air collisions has coincided with the introduction of GPS and computer in-cockpit screens. Doing away with the finish line will completely remove any spectator interest for the crews (it is hard enough to find a crew person as it is), and most pilots enjoy the high speed final glide across the finish line. Anyway, we don't have a finish line accident problem. Also, we will have no same-day provisional results if we do away with the traditional finish line, further reducing the social enjoyment of the Nationals (i.e. having a drink at the bar watching results come in via the computer screen.) The IGC's paranoia about cheating and datalogger security cost the sport dearly. I went to my first Nationals with a \$30,000 Pegasus and 2 \$90 cameras. If I had had to meet today's datalogger requirements, I would not have gone. There are young pilots out there who can afford to hire the Club glider but cannot afford to buy the dataloggers. I am spitting chips that I now have to fork out \$1,200 for

another datalogger and GPS unit whilst at home I have a handheld Garmin and 2 cameras, any one of which would do the same job. The pilot with 2 dataloggers can confidently turn 0.4km short on every turn including the start so you have made it mandatory to have two dataloggers thereby eliminating all young and low income pilots. The hang glider pilots looked at what we and the IGC were doing, and said no way, too expensive, our pilots cannot afford it. They use a \$450 Garmin handheld GPS and download that with a simple program. There are enough of these Garmins around so that it is possible to borrow one with camera for a back-up.

We do not have a cheating problem, and never have, but we do have an affordability problem. The new rule that deals with using a camera to photograph the physical feature should your datalogger stop working on track is totally unworkable. You have no way of knowing if your datalogger has stopped working. There are many hardware, software and wrong co-ordinate entry failures that will prevent you getting a verifiable trace whilst your GPS light is merrily flashing the whole time. A back-up flight verifying system must be working the whole time, and that means under the new rules, you must have two stand-alone GPS dataloggers with a dual battery set up in the glider, something most Club gliders don't have. Anyone who advises a young pilot to turn up with one datalogger is doing that pilot and the sport a dis-service because he is bound to go home frustrated when he comes last due to datalogger failure. Human error, batteries and dataloggers are not that reliable. At the last pilots meeting, by a vast majority, the pilots voted against the rule changes introduced at Narromine whereby we turn the co-ordinates rather than the physical feature. For safety reasons, anything that increases head in the cockpit time, is a bad idea. This has been ignored by the NCC. Any major changes to the rules or the type of tasks we fly should be approved or at least run by the National pilots, as the majority of members on the sports committee are not conversant with the FAI Nationals or the wishes of the pilots. The pilots meeting should also have a detailed prior agenda so that we get well considered decisions out of these meetings.

I propose we use the physical feature as the turnpoint with a sector or circle behind the turnpoint, a start line through the physical start feature or a circle behind the feature and a finish line (or circle behind it), this way we can use Tim's verifying program. By

having the circle behind the physical turnpoint we can go back to doing what we have done successfully for the past five years and use one datalogger with a camera for a back-up.

The current system of having the circle centred on the co-ordinates somewhere near the silo is a disaster safety-wise, with some pilots turning at 0.4km from the turnpoint, others 0.2km and others going around, and everyone has their head in the cockpit looking at kilometres and direction arrows on their screen. There is no other way of navigating to a set of co-ordinates.

I also propose that we take a leaf out of the hang gliders' book and allow the use of Garmin handheld GPS which can be downloaded like a datalogger. The current system has ignored the needs of our up-and-coming pilots and any sport that does that is bound to die.

Hank Kauffmann

▶ Hank raises some good points in his open letter to the Sports Committee. The Sports Committee discussed the different suggestions, extensively at the meeting on 24 September.

We certainly agree that there is great concern over decreasing numbers of competitors at the FAI Nationals. It should be noted that the number of competitors at Club Class National have been increasing; this is due either to concerns over cost, glider availability or different types of tasking (POST and Assigned Task).

The Sports Committee is keen to try new ideas to make both competitions more attractive.

Taking Hank's comments point by point: **Use of Assigned Area Task (AAT).** This is not POST tasking. There is a set task to be completed except that the turnpoints are a little fuzzy, giving pilots some options to make better use of the weather conditions. The NCC (National Competitions Committee who set the National rules) decided to introduce the AAT in an attempt to provide some variety in the competition whilst retaining the general thrust of set tasks. This is not being done for the benefit of IGC. They have made no such request. This type of task was flown successfully in South Africa and is expected to be used in the World championships. It was also flown in the World Masters in France and has been strongly recommended by Australian pilots who competed there. The Sports Committee endorsed the NCC decision to use AAT at the next FAI Nationals.

I agree, we seem to have resolved our gaggle problem, in particular with

Soaring Calendar

our smaller numbers. There have been questions on the impact of new technology on pilot workload and lookout. The general consensus is that the new technology is an improvement over the old system of trying to read maps and manoeuvring to use a camera at a turnpoint. The Sports Committee agreed that we need to educate people on correct use of the technology and this will occur at major competitions and through Sports Coaches.

Finish lines. We have not done away with finish lines, although we expect that time recording will be much easier. If loggers are used, finish times can be derived from the logger trace. The manual time recording will be a back-up for logger failure and pilots not using loggers.

Use of handheld GPS. A good suggestion, and really supports Hank's main philosophy of trying to reduce costs. The Sports Committee has agreed that Garmin GPS can be used as a back-up logger. It is the pilot's responsibility to ensure that the software and cables are provided to the organisers.

Physical feature versus GPS co-ordinates. This involved a huge discussion with many issues raised and numerous pictures drawn to explain the problems. We started with the premise of using the physical feature as the turning point, but over a 1 hour discussion finally concluded that it is impossible to run a fair competition in this manner. Sports Committee agreed with the NCC decision to use the GPS co-ordinates as the turnpoint if using a logger and physical feature when using cameras. We are getting better at ensuring that the physical feature and co-ordinates coincide. We considered the safety issues raised and are still of the opinion that a GPS turnpoint is safer than a camera turnpoint in competition.

I will provide a more detailed response to Hank and I am sure that there will need to be further discussion on these issues. The Sports Committee consider this type of discussion is of great benefit to the development of our sport

Terry Cubley, Chairman Sports Committee

Request for Return to Previous Format of Magazine

► Dear Sir,

I have noted with interest the results of the referendum regarding the proposed merger between the GFA and the HGFA.

Admittedly there was a majority of those that did vote who voted yes, but nowhere near the 75% required. Is there now any indication as regards the length of time that the hybrid magazine will be published?

1999 Homebuilt Glider Symposium

13-14 November 1999

The AHSA annual technical meeting and flying demonstration. Maupin "Windrose" and Ultralight gliders on show at Smithfield, near Nagambie, VIC. Contact James Garay, ph: 03 93673694.

VSA Regional Committee meetings

18 November 1999, 24 February 2000, 20 April 2000

At the Uniting Church Hall

329 Dorcas Street

South Melbourne. 19:30.

29 July 2000 AGM (venue t.b.a.)

Narromine Cup Week

20-26 November 1999

Orana Soaring Club will host a seven day Narromine Cup Camp during the week immediately preceding the NSW FAI and

Club Comps, also at Narromine. Try for FAI badges records, decentralised comps, Barron Hilton Cup or your personal best flight.

NSW State Competitions

FAI and Club (Ex-Sports/2 seater) Classes

28 November - 4 December (inclusive)

Practice Day: 27 November 1999. At Narromine.

Contact: Armin Krueger 02 9618 7799

Victorian State Competitions

(the Friendly Comps)

3-11 December 1999

Open class, Standard class, 15m/Racing class, Club class. Clubs are encouraged to participate and promote coaching of early cross-country pilots.

Basic Cross-Country Seminar

11-12 December 1999

At Gawler, contact Rob Moore, ph: 08 82588026.

Notification of events will be made in the Soaring Calendar up until the time of your event.

Event information should include a description and the date of the event and location and contact details of the organiser. Contact details should include phone, fax and email numbers to gain maximum response from readers. (Ed.)

SAGA Performance Week

12-17 December 1999

At Waikerie. Team flying and coaching for advanced pilots, contact Bruce Tuncks RTO/S, ph: 08 82527905.

WA State Comps

2-15 January 2000

Narrogin. Contact: Dennis MacNeal

08 9246 9593, email: mach11@hotmail.com

SAGA State Competitions at Balaklava

9-15 January 2000

Practice day: 8 Jan. Enquiries to John Cheetham ph 08 8379 6747, fax 08 8379 6758 for info. Entry fee \$120 or \$90 if paid before 1 December. Full catering, camping & vans may be on site. Good chance for pilots to get practice if entering Barossa Glide. Entry form and pilot qualification form see webpage www.bgc.asn.au

Barossa Glide

Australian Club Class Championships

17-28 January 2000

Gawler South Australia (Pre-world Club Class formerly Sports & 2 Seater Class)

See September issue of AG for entry form.

Vintage Sailplane 2000 Rally

January 2000

Lake Keepit, NSW. The Vintage Glider Association is holding their rally at Lake Keepit, near Tamworth, NSW, in early January. Winch and aerotow available. For final details contact Ian Patching, ph: 03 94381497.

Year 2000 Homebuilt Glider Fly-In

To be held at Lake Keepit in conjunction with the VGA Rally.



I have spoken to some HGFA members who are of the same opinion as myself and would like to see a return to our original magazine.

If it is a matter of economics, which has engendered the present situation, I along with others would quite happily return to the bi-monthly Australian Gliding magazine as it was, instead of the hybrid monthly magazine we have had inflicted upon us. It still smarts that the members were not consulted as regards the magazine merger, but had it presented a fait accompli. Suffice to say that I now pay the magazine scant attention, where I used to await its arrival with anticipation.

I believe that it made little sense to fix something that wasn't broken. On consideration, I suggest that it could be seen as a subtle form of brain washing, to assist

with the executives push for the amalgamation they proposed. Regards,
Henry Levy, Hunter Valley Gliding Club

► Thank you for your letter Henry. To answer your question, it seems that most members are happy with the joint magazine and it will now continue past its trial period (which was a time for members to digest and reflect on the proposed format) into an official joint magazine. As the new editor, it is my aim to make the magazine relevant for the wide range of interests of our readers and to include articles from all states.

I hope that you can overlook your disappointment to continue to contribute and I consider it my challenge to present you with a magazine that you will once again await with eager anticipation!

Sandra Rosner (Ed.)

GST and Sport Aviation

What are the likely impacts and when will they take effect?

IAN JARMAN, *Executive Director HGFA*

Overall our sports will be adversely impacted by a GST

The following statements reflect the changed environment created by the introduction of a GST on Sport and in particular HGFA sports.

Pre tax reform

- HGFA services were not directly subject to sales tax.
- HGFA enjoyed some sales tax exemptions (printing and materials for education, and safety related materials such as operations manuals, student materials, Skysailor etc).
- Microlights and associated products were wholesale sales tax exempt.
- Hang gliding/paragliding and associated products were subject to 22% Wholesale Sales Tax.

Post tax reform

- HGFA is primarily a service organisation, therefore services and outputs will be taxable under a GST. Tax will be added to all the transactions, services and activities provided to and provided by the HGFA.
- Increased administration will be required to handle the GST – administration costs will increase.
- Payment of state fees to the state associations by HGFA will be subject to GST.
- Microlight and associated products will become subject to 10% GST (a cost increase).
- Hang gliding/paragliding and associated products will reduce in cost by about 7%.
- GST is payable on all contractor fees (e.g. Skysailor editors, legal consultation, auditing fees, etc.).

When will the GST begin to take effect?

You should be aware that contracts or agreements which you have entered into before 1 July 2000, and which involve the supply of anything after that date, may give rise to GST obligations. How the GST will impact on these contracts or agreements will depend on whether:

- the contract or agreement is reviewable or non-reviewable
- it is with a buyer who would be entitled to full input tax credits
- it involves the supply of goods or real property or services.

Many situations will arise between now and the implementation of the Goods and Services Tax (1 July 2000) where payment has been made before 1 July 2000 for the supply of goods, services or any other thing after this date.

General Principle:

As a general principle, GST applies to all goods delivered and all services performed after the implementation of the GST on 1 July 2000. The critical point is **when goods are supplied or services delivered.**

Scenario 1:

Pre-paid AG/Skysailor magazine subscription

If you contract with HGFA for a magazine subscription then GST will be payable on the value of publications received after 1 July 2000. The HGFA will be liable for GST on each issue of the magazine delivered after 1 July 2000. Hence from 1 October all magazine subscriptions must include a pro-rata GST component for the number of issues to be supplied post 1 July 2000.

Scenario 2:

Annual fees for HGFA membership & services.

For all memberships the part that relates to the period after 1 July 2000 will be subject to GST.

Once again, as the liability for the GST rests with the supplier (the HGFA in this case), suppliers will need to carefully assess any possible GST liability for anything they sell before 1 July 2000. If these sales will give rise to a GST liability, suppliers will need to factor this into their price. Therefore, the price they may charge the consumer between now and 1 July 2000 may include the impact of GST even though GST does not begin until 1 July 2000. However, in assessing the impact of the GST on their price structure, businesses should also factor in the cost of inputs under a GST system.

[Please be aware that no GST was calculated into the HGFA membership and insurance fees for renewals due between 1 July 1999 and 30 October 1999, as no ATO advice had been received. However, it may become necessary to apply this GST component retrospectively for the months of July to October 2000]

As in Scenario 2, where the supply consists both of services and goods, the supply is broken down into the supply of the service and the supply of the magazine. The service component would be prorated with GST applicable to the months after 1 July 2000 and the value of the magazines supplied after 1 July 2000 would be subject to GST.

Example of how basic membership fees will increase with GST leading up to 1 July 2000

Month	VIC, TAS & QLD	WA	SA/NT	NSW/ACT
Rate p/mth up to 1 July 2000	\$10.83	\$11.25	\$11.66	\$12.08
Rate p/mth post 1 July (+GST)	\$11.91	\$12.37	\$12.83	\$13.29
New Annual Total				
(with 12 month GST)	\$143.00	\$148.50	\$154.00	\$159.50
Old total	\$130.00	\$135.00	\$140.00	\$145.00

Example 1:

Renewal of Max Hyte, Hill Top NSW – PG instructor/passenger carrying. Membership expiry 30 November each year.

5 months non-GST rate + 7 months GST rate:

Pre-GST NSW-HGFA fees	5 months @ \$12.08	\$60.40
Incl GST NSW-HGFA fees	7 months @\$13.29	\$93.03

Plus PI/PAX insurance (current rate \$300):

5 months pre-GST	5 months @ \$25.00	\$125.00
7 months inclusive GST	7 months @ \$27.50	\$192.50

Total fees due	\$470.93
----------------	----------

This compares with current non-GST fees of \$445.00 p.a.

Example 2:

Ms Mayhem Deathridge of Kilmore VIC – WM pilot. Membership expiry 1 April each year.

3 months non-GST rate + 9 months GST rate:

Pre-GST VIC-HGFA fees	3 months @ \$10.83	\$32.49
Incl GST VIC-HGFA fees	9 months @ \$11.91	\$107.19

Plus Motor Insurance levy (current rate \$20):

3 months pre-GST	3 months @ \$1.66	\$5.00
9 months inclusive GST	9 months @ \$1.83	\$16.50

Total fees due	\$161.18
-----------------------	-----------------

This compares with current non GST fees of \$150 p.a.

Calculating the pro rated value for any combination of annual fees and charges:

To estimate any fee the calculation involves dividing the **current total annual fees** by 12 to establish a monthly rate (include HGFA membership, state levies, insurance levies and any other service that is delivered over the entire year, BUT do not include merchandise or payments for manuals such as new member package charges delivered prior to 1 July 2000). This monthly rate is applied to the number of months up until 1 July 2000 which are covered by the membership period. The monthly rate is then **multiplied by 1.1** to include 10% GST, and this new rate is applied to the remaining months until membership expiry.

State Associations and Clubs

It will not be mandatory for non-profit organisations with an annual turnover less than \$100,000 to register for collection of GST.

This means that all HGFA clubs and associations could choose not to collect and account for GST. Obviously most club and association treasurers will welcome not being required to undertake these taxation accounting responsibilities.

The down side of this will be that the club or association becomes the end consumer and hence pays GST on all services and products it uses without any opportunity to offset this through claiming Input Tax Credits. The bottom line will be that the cost of running these clubs will increase significantly, with the club and its members liable to meet those costs.

Under current arrangements the collection and disbursement of GST on state fees would probably have to be done by the HGFA

office. This will increase the administration burden on the office staff. To avoid increased administration and bureaucracy it may be better for state associations to either:

1. Collect these fees directly from their membership as described in their constitution, and as non registered enterprises avoid the charging and collection of the GST; or
2. Standardise state levies and consolidate as part of the HGFA annual fee for deposit into a joint regional fund. This fund to be administered jointly by the treasurers/administrators of the regional associations, where apart from an annual administration grant to each association, associations would apply to the joint committee for grants from this fund for specific projects such as site development, etc.

Concluding Comments

Although the Federal Government has not yet formally notified us of final GST requirements for non-profit organisations, the ATO documentation consulted in developing this paper clearly indicates that the HGFA will have a GST liability for all membership contracts that run beyond 1 July 2000. The value of that liability is likely to be determined as a monthly or quarterly ratio of the total annual membership fee.

It is imperative that all state executives/treasurers understand the implications of the GST. We may well find it necessary to charge state associations expecting the HGFA office to administer GST on their behalf, as significant staff time would become devoted to handling state association GST accounting functions as can be seen from the tables above.



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A 'Hang Gliding Hanger On' View of the

A brief insight into a typical day spent with this fascinating group...

TRACEY

It happened over two years ago. I met a hang glider pilot. I knew he was serious about the sport because he told me that he was a pilot on the first night we met. Our first date was a romantic dinner for two – just him and me. Our second date was a day in the mountains for three – just him, me and the glider. I passed the test. The three of us are still together.

Since then there have many more days spent in the mountains, and many more flights, in many more countries. And what this has proved to me is that the typical 'Hang Gliding Day' is much the same wherever you are, and whoever you are with. It goes something like this...

11 o'clock

From over the tips of my shoes, which are propped up on the dashboard of the car, I can see the small group of people huddled at the edge of the cliff. They stand shoulder to shoulder, facing the valley as it stretches out green beyond. A wall of bodies, with the winter sun on their backs, heads nodding, arms gesturing, nestled into the hill next to a long pole onto which a windsock is attached.

The sound of their banter drifts up towards me. Someone points towards the flaccid-looking sock. It's languishing against the pole. I hear a shout and a laugh as one of the group breaks away and runs towards it. Once there, he turns towards them with a silly grin on his face and holds the sock up into the air so that it stands horizontally, at a right angle to the pole, bright orange against the clear blue sky. The others all laugh again – probably a dirty joke.

He drops the sock, which sags back to where it was, and ambles back over to the group. One or two of them break away and move up the slope towards the cars. I pull out the thermos flask. It's time for a cup of coffee.

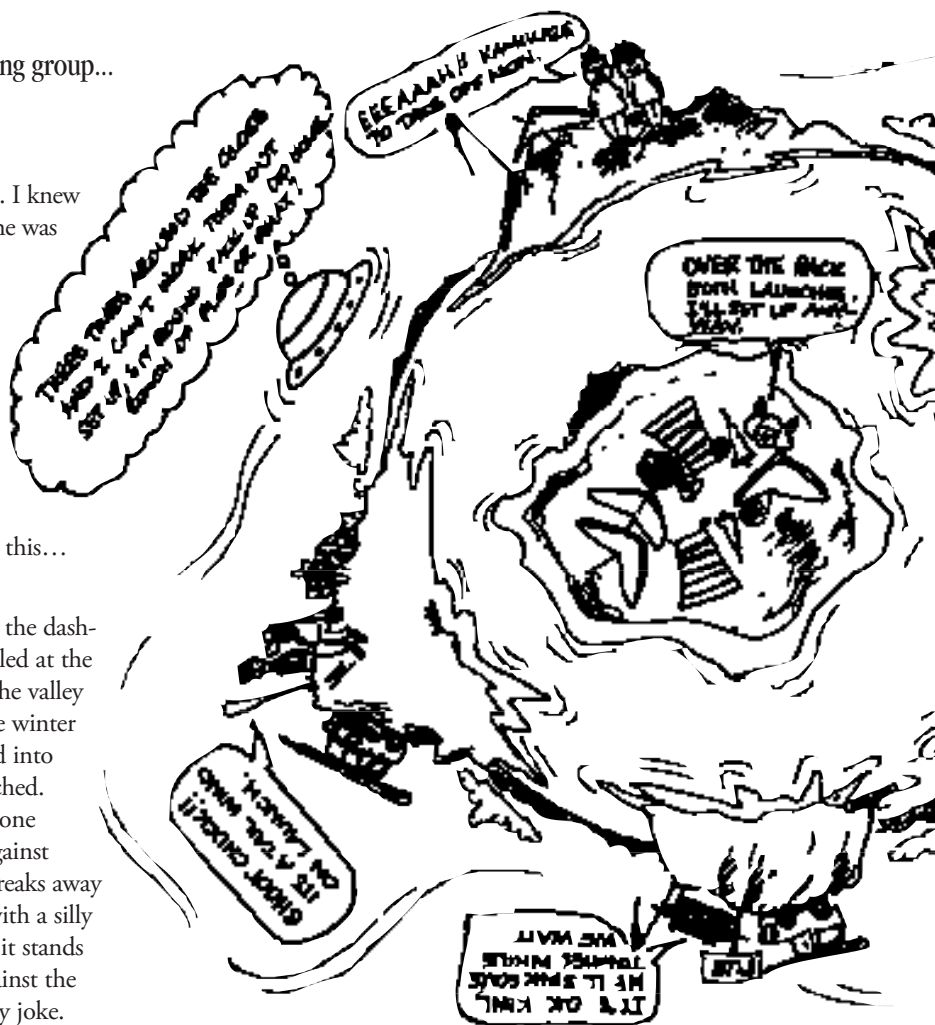
There's not a breath of wind in the air. Should have known better than to get out of bed so early.

12 o'clock

The winter sun has battled its way up to its highest point for the day. A few hopefuls are still standing vigil, keeping careful watch over the valley, willing air to move up the slope. Others are throwing sticks for dogs, laughing with lovers, fighting with kids, or amusing themselves by playing with GPS's and the like.

I wander down to the group at the edge of the hill and join in some silly banter. The windsock, for the time being, is virtually forgotten.

Then it happens. The windsock lifts slowly and is held in the air for a moment. Just a moment. Then with a leisurely twist of hips it flops itself seductively back down against the pole. Everything seems to stop. Dogs are left to chew on sticks, lovers are left to read the paper, children are left to beat each other to a pulp, and gadgets are left beeping in the back of cars. For a second nobody breathes. The atmosphere is electric. The windsock has made her first move.



1 o'clock

The windsock is belly dancing against the pole, to a rhythm that only the breeze knows. She's the perfect tease. She has the entire group trying to guess her every move: "It's definitely going to pick up..." "A little cross right now, but it'll swing for sure..." "I reckon by 2 she'll be right..."

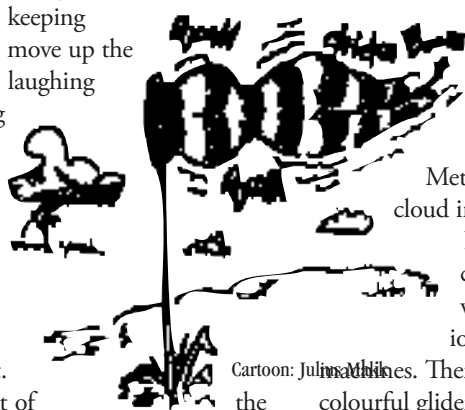
Snippets of the latest meteorological forecast and weather wisdom get tossed about: "They said it was going to swing to the west in the afternoon..." "At this time of the year it's always like this in the early afternoon, but just you wait till 2 o'clock..."

As well as a fair bit of Met office bashing: "The Met office said it was going to rain today and there's not a cloud in the sky. Bloody useless bunch..."

Hopeful members of the group haul their precious cargo from the roofs of vehicles, trusting the weather voodoo of the locals. They unzip and unwrap the various bits and pieces that make up their bright flying machines. Then they clip everything together and within 20 minutes, colourful gliders dot the slope, like big paper aeroplanes, ready to fly. Ever optimistic, in true hang gliding fashion. And the real wait begins.

2 o'clock

The windsock dance goes on. She's still swaying her hips, but not much more energetically than before. She's just a tease, after all.



Hang Gliding Day



Cartoon: Graeme Garlick

his. There the

True to form, the group is ever hopeful. Theories abound: "It's definitely going to pick up now – the sun's going to heat up the face..." "Look! – Afternoon cloud build-up!" (Pointing up at a little wisp of a white thing in the sky.) "Thermals are going to start coming through any time now..."

A pilot moves his glider to the top of the ramp. He just can't wait any more. He's all rigged up with nowhere to go. The tension is mounting. To launch, or not to launch. That is the question. Time ticks by. A glance at a watch – precious winter minutes slipping away into the chilly afternoon.

Suddenly there is a thundering of feet down the ramp and the first one is off. Every eye follows the first few moments of his flight, trying to anticipate his fate, and read their flight from follows a friendly jibe over radio as he starts sinking out. The next lemming gets into line to see if he has the patience to sit it out.

Then there's a rush of excitement as someone goes up, up and away, pushed towards the big blue sky by a bubble of hot air. One glance at the windsock settles the point. She's stretched out from the pole firm and steady. For the moment her seductive dance is over and she's going "The Full Monty". There follows a frantic flurry of activity, of last minute rigging and checking of equipment, as each pilot is determined to take off before the magic moment is over.

There's one thundering launch after another and pilot after pilot is sucked up overhead. Till the pilot who is just that moment too late, and sinks down to the landing area below, and the others who are yet to launch know, with heavy hearts, that their fate will probably be the same...

4 o'clock

And when the day is over, there are some things that never change.

The pilot who was first off promises himself that he will be more patient next time. The pilot who had the lazy take-off determines to run faster next time. The pilot who was the first to miss the window tells herself to be rigged and ready earlier next time. And the pilot who narrowly missed the powerlines on landing promises himself to be more careful next time.

Afterwards each flight, whether five minutes or longer, is discussed at length throughout the hour of de-rigging. Gliders are gently folded and stroked back into their bags, and levered onto vehicles which have careened their way down to the landing site.

As the sun wearily drops towards the horizon, a tired convoy weaves its way up the slope, headed towards home or the nearest pub. A peace settles over the valley, as the eagles sigh with relief that they have their thermals to themselves once again.

November 1999



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Keith 'test sitting' the PW-6.

KEITH WILLIS

At Leszno, Poland, during the World championships of the World class (July 6), I had the opportunity of flying the PW-6, the two seater development from the PW-5 design team headed by Dr Roman Switkiewicz.

I was at Leszno, helping crew for Tom Gilbert and Ron Sanders, and having over 300 hours in the PW-5, when asked would I like to try the PW-6, I was very interested to compare the two aircraft.

It was a grey, no contest day, with no thermals when I took my flight. The ground run was typical of a two seater with a nose wheel, but with a Wilga as tug, it did not take long to settle back on the main wheel; the take off and behaviour during launch was excellent. Off tow at 500m, trying the change 45 left to 45 right was acceptably quick, the circling seems more stable and steady than the PW-5, possibly because of the extra wing span and weight.

The cockpit area is much bigger than the PW-5, so should suit all sizes of pilots. The glide control of PW-6 is very good and the airbrakes are excellent.

My overall impression of PW-6: I believe it will be an excellent training aircraft. Wing span 16m, empty weight 340kg (best L/D 34), being a small and light two seater, the problems of outlandings will be lessened, with a smaller trailer required, lighter wings and fuse, etc, retrieving will be less problematic than for the current heavy two seaters.

I would have liked to try PW-6 on winch launch, but this was not possible.



Front cockpit of the PW-6.



'Jaws' out of water? No, just a PW-5 outlanding.

All photos: Ron Sanders

SA State Comps 2000

BERNARD ECKEY



The new millennium is starting with a bang as far as glider pilots are concerned. First there is the South Australian State Competition hosted by the Balaklava Gliding Club immediately followed by "Barossa Glide" at Gawler.

The exact dates are as follows:

SA State Comps (Balaklava): 8-15 Jan 2000

Barossa Glide (Gawler): 17-28 Jan 2000

This timing allows all "Barossa Glide" competitors to gain valuable experience in exactly the same contest area. In fact the turnpoints used at the SA State comps are almost all identical with the ones used at Barossa Glide which means that pilots competing at Balaklava will have a distinct advantage flying at Gawler the following week.

The club has a licensed bar and club members will provide a full catering service at low cost. Limited bunkhouse accommodation might also be allocated strictly on a "first in – best dressed" basis. Although a number of motels are located in the area the club will arrange budget style accommodation in additional powered caravans based on the airfield (on request only).

Tasking will generally be over flat farming country, which is occasionally interrupted by low ridges running north-south. The entire contest area is within the boundaries of South Australia and is covered by WAC chart No. 3458 (Adelaide). Good and reliable thermals can be expected at this time of the year with blue skies on the majority of days. The biggest advantage of the site is the

almost unrestricted airspace allowing climbs up to 8,500ft right over the airfield. An even higher ceiling is available in the area to the north and the east. Members in medium performance aircraft with local knowledge regularly perform final glides over a distance of 100km or so.

All BGC club members wish to

make this competition an event to remember. Preparations are under way to provide occasional evening entertainment. The club has established excellent facilities over the years. These include toilet facilities, a licensed bar, a laundry/washing machine, a large clubhouse with kitchen, barbecue facilities for visitors, a caravan park, a large workshop and six hangars for approximately 20 aircraft. The large airfield features 2 runways with generous grassed adjacent landing strips. It is envisaged to conduct winch launching on

one strip and aerotowing on the other. A marquee will be erected on the lawn next to the clubhouse. This will allow Mum to keep an eye on the kids in the playground but at the same time fully relax while waiting for Dad to call "final glide."

For pilots prepared to submit the entry fee before 1 December 1999 the club is offering a discount of \$30.

We are all looking forward to seeing you at Balaklava in January.

Top: Club facilities at Balaklava.


Photos: Bernard Eckey



Club members in front of the new ASK 21 trainer.

Detailed information on the SA State comps at Balaklava is available on the net and can be accessed at: www.bgc.asn.au

The Balaklava Gliding Club is determined to hold a friendly low cost competition catering for all levels of experience. Winch launching and aerotowing will be available on all days. Pilots have the options of competing in either Sports class or in any of the FAI classes but must present written confirmation from their CFI that they are qualified to compete in this event.



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LS4 – VH-III	\$55,000
3,867 hours – 2,356 landings Ferro Gelcoat Cambridge C Nav 50 Dittel 720 radio Tinted canopy – Tail wheel	
Libelle VH-GSP	P.O.A.
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Narromine Cup Week

It's on again!

CHRIS STEPHENS
& BERYL HARTLEY

Due to popular demand, the Orana Soaring Club has organised another Narromine Cup Week this soaring season. It's at Narromine Airfield from Saturday 20 to Friday 26 November 1999. That's the week immediately preceding this year's NSW State FAI and Club competitions, which are also at Narromine. So as well as chasing personal bests, intending pilots can also use this week for unofficial practice. Double the fun.

You may remember how in the 1997 Narromine Cup Week article, we said pilots who came to the event would have no excuse for sitting around over winter thinking of the tasks, badges, records and personal bests they

could or should have achieved. Over 60 pilots have flown during the two Cup Weeks Orana has run so far. Many Silver C's have been completed, both the five hour duration and 50km cross-country components, more than a few Gold C Goal flights (300km) and at least 10 Gold C Distance flights (500km). As well, a host of record flights have been attempted and personal bests achieved.

Let's not pretend it's easy getting organised to attempt tasks. A huge effort is required to arrange mid week launches, official observers, crew, retrieves, etc. – to say nothing about disappearing from the home front whenever it appears the weather may co-operate. For many add the difficulties of convincing the club or syndicate members it's okay to take their pride and joy away. While you may still have to organise a glider, here is a real solution to all the other problems.

The Orana Soaring Club will again host a seven day Narromine Cup this season from Saturday 20 to Friday 28 November 1999. This presents you with the opportunity to do those tasks and achieve new personal bests at an organised camp with other pilots attempting similar goals. It's not a Team's or Coaching type event, it is for individual pilots with personal goals. However, you won't be alone and the organisation has been done for you including tugs, official observers, GFA/FAI Forms, a daily briefing and SAR watch. Tasking advice will also be available. Have a think about the following:

FAI Badge and Record Flights

Declarations, claim forms, sporting code requirements and official observers (film and dataloggers) all at Narromine for you. One hour film developing in town for both B&W and colour. Best of all, the FAI Certificates Officer, Beryl Hartley, is on the spot for speedy processing of your claims. That cross-country badge and/or record will never be closer to you than at Narromine this November.

Decentralised Cross-Country Competition

The summer competition will have started. Your best three flights count, but enter as many as you like. All the rules, handicaps

and documentation you need plus your official observer, will be in the Orana club-room. A huge WAC is on the wall together with an even bigger 1:250,000 map for more detailed cross-country planning. No excuses this season. Do all three or more flights while at Narromine and post them off in the same envelope before you return home with a smile on your face and a lot less lines in your logbook.

Baron Hilton Cup

IGC has elevated this event to the World championship of decentralised competitions. In general one point per kilometre for your best triangle over 400km. FAI triangles score highest as points for non-FAI triangles are reduced by 12.5%. Founded by the late (and great) Helmut Reichmann, sponsored by Hilton Hotels Corp. and Daimler-Benz, World Champions have said, 'winning the BHC is better than winning the Worlds'. The prize is ten days of fantastic soaring and lots of other activities at the Flying M Ranch, Nevada, USA about August 2000 for the pilot and their crew. The pilot also gets a gold medal at a swank presentation ceremony. Everything is included; meals (Hilton standard), accommodation, modern gliders, unlimited launches, return airfares, land lots of non-soaring activities too. If you want to show your crew you appreciate him/her, this is the best way.

1999 NSW FAI and Club Competitions (27 November to 4 December 1999)

Wishing you had the opportunity for a bit more cross-country practice before the State comps start? This is it; same task area, use the turnpoints, become familiar with all the start points and get the best tie-down spot. Be really ready on Day 1 for a pleasant change.

No need to book or apply, but there will be a once only \$20 charge to cover temporary flights. However, it would be best to let us know you are coming. Contact Beryl or Fran on 02 6889 2733 during business hours or fax to 02 6889 2933.

See you at the Narromine Cup Week, 20 to 26 November!



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Temora

Home of the Temora Gliding Club Incorporated

CAROL TAYLOR

For the first time in about 15 years, Temora will be a comp-free zone during the coming 1999/2000 soaring season.

Competitions have been very good for our club and we look forward to hosting more in the future, however our club started from a visiting club's Christmas Camp and we are looking forward to one long Christmas-type camp which we hope will extend over most of the coming soaring season.

This relaxed atmosphere will hopefully encourage individuals, families and clubs to Temora for a gliding holiday.

In a previous article I wrote about the excellent facilities of the Temora Aerodrome with its Caravan Park and comfortable air conditioned club rooms; I now wish to write about the town and district.

Temora apart from being an excellent gliding site is on the northern edge of the Riverina and start of the south west slopes of NSW, a rich sheep and wheat area. Population 4,600.

The town is very sports minded with football, tennis, golf, squash, bowls, swimming, basketball, parachuting and trotting, to name a few.

Temora has four registered clubs, seven hotels, four motels, one bed and breakfast, banks, churches, beautiful parks with barbecue facilities, award winning museum, a lake and some great architecture.

An hours drive south is Wagga Wagga, the largest inland city in NSW. The Murrumbidgee irrigation area boasts wineries, orchards and rice fields and is well within a days outing.

I'm sure that all who come whether as pilots or not will find plenty to do and see in Temora.

Members of visiting clubs we know will be fairly self-sufficient with their own tugs, gliders and crews; individuals however will need some assistance and a simple phone call to advise us of your arrival and duration of your visit will allow us to organise ourselves around your needs.

For further information, contact our President, Geoff King ph: 02 6977 4424.

The Temora Gliding Club is progressive, active and friendly and eagerly looks forward to welcoming visitors to its site, town and district for gliding, holiday relaxation and fun!

What's your club got planned? Write to me so that we can spread the news. Nothing special happening? How about an article on the location, membership, history or set-up at your club: a kind of "Why I fly where I fly" feature. Photos would naturally add more interest. (Ed.)



N

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Competition Committee Elections

The competition committee is typically made up of at least two hang gliding reps (one elite and one developmental level), at least two paragliding reps (one elite and one developmental level) and a CIVL delegate, with optional members such as the HGFA Executive Director, the coach of National HG, PG, WSMML, or women's teams.

Most of the committee is currently staffed, however there is no representation of weightshift microlights. Any person with enthusiasm or expertise in the area of WSMML competition is invited to nominate for a position on the committee, or to just register their ideas with the committee. If there is the need to hold an election for a microlight representative, then it can be held in conjunction with the upcoming HGFA Board election.

Nominations are also invited for the position of a paragliding representative on the competitions committee. This pilot would be someone who is relatively new to the competition scene, or who is more of a social competitor rather than focussed to reach the elite level. We are aiming to get someone that will represent the views of casual and novice competitors.

This election will take place at the Paragliding Nationals in Bright, which will run 12-19 February 2000. If you are interested in contesting this election but cannot attend this competition, you can arrange for your nomination to be presented by a proxy.

Michael Zupanc

Competition Manual

The fifth edition of the Competition Manual is now available. It contains a lot of new material regarding the use of GPS flight verification systems and has been restructured in a way that should make it a lot more readable.

It is available on the web and from the HGFA office.

Michael Zupanc

Western Australian State Soaring Competition 2000

History

The Western Soarers Hang Gliding Club (formerly the Dalwallinu Hang Gliding Club) will host the inaugural Western Australian State Soaring Competition. It will combine both the sports of hang gliding and paragliding in a single competition. The success of such a competition has been hinted at by Godfrey Wennes efforts in the NSW State Titles, March 1999. The Western Soarers have hosted the Western Australian State

Hang Gliding Comps since 1991, and last year had the honour of hosting the Australian Open Hang Gliding Nationals.

This year's competition will be run in the same manner as all previous years, with the emphasis being on providing competitors with a challenge whilst maintaining safety and a sense of humour.

Soaring Competition

The competition is open to all hang gliding and paragliding pilots. Initial interest from West Australian pilots should see a turn-out of about 25 ageing die hard pilots, 5-10 new restricted pilots (courtesy of Sky Sports flying school), 5-10 paraglider pilots from the Cloud Base paragliding club, and any number of visiting or eastern states pilots who make the trip across the desert.

Competition Format

The competition is a towing based event with a strong reliance on the teams event. All pilots will fly the same course each day regardless of glider type. Pilots will be scored in an overall category, plus intermediate and novice hang gliding category, and a paragliding category. Towing will be based around a mixture of static lines, winches and aero towing.

Teams will compete in the teams event for the "Andrew Humphries memorial trophy". A handicap system will be implemented for novice, intermediate and paragliding pilots, allowing them to compete for their team on an equal basis with the gliders flown by the advanced hang glider pilots. In previous years novice pilots have been the best scoring team members. Last year the Sky Junkies claimed victory, but this year who knows? The CMFs could even win it!

Venue and Timing

The competition will be held once again in the small but friendly West Australian wheat belt town of Wyalkatchem (170km north-east of Perth). The town has accommodation at the barracks, camp site and pub. The barracks is where the action is, so stay somewhere else if you want a quiet comp. If not, bring your water pistols and flour bombs.

Registration day will be Saturday, 22 January 2000, with competition task days from 23-29 January 2000. As a spare day will be 30 January.

What you will need

The following is a brief overview of the things you'll need to survive the week.

- Towing endorsement
- Parachute
- Radio (usually UHF for towing and retrieves)
- Driver and tow vehicle (to get you in the air and back to the pub)

- A really big esky for light refreshments
- Team T-shirts (a bit of a traditional thing)
- A sense of humour (you'll need it)
- Maps of the area (a map is supplied at the comps, but you'll need a road map for the driver and one to navigate by; I recommend a WAC chart (\$12) from Jandakot airport or Perth Map Centre to fly with, and the WA Country Roads Directory to drive by)
- Camera (for turnpoint verification, databack not necessary)

Optional: GPS (makes navigation and turnpoint verification easier, Garmin or Aircotec)

Cross-country seminar

To assist new pilots and provide some general discussion I plan to run a Cross-Country Seminar sometime in December, depending on the level of interest shown. If you are interested in such a seminar please email me mark.thompson@telstra.com.au Include any particular topics or questions you have. The format of the seminar will cover topics that should assist you get from the comp paddock to goal.

Cost

To be determined, but the expected cost is \$80-100 per pilot (this covers trophies, equipment hire, venue, phone, etc). We are applying for funding to keep the costs to pilots to a minimum.

Further information and registration

You should be able to register online via the Western Soarers web site at www.iinet.net.au/~navi or by emailing the organisers at mark.thompson@telstra.com.au (ph: 08 94913076) or Daryl.Speight@kbjv.com (ph: 08 9320 0864). See you there,

Bomber

Paraglider Instructors Wanted

ZeroPorosity are looking for an experienced PG instructor to work with us full time. The pre-requisites are as follows:

- Certified as an instructor by a recognised training agency.
- English as a must and a second language is welcome.
- Must have previously lived/worked outside of home country for a least six months
- Must be willing to work in a culturally diverse environment.

We are located in Sharm El Sheikh (South Sinai, Egypt).

If you or someone you know is interested, please contact us ASAP: Zero Porosity, email: team@zeroporosity.com, website: www.zeroporosity.com, fax +1 603 2979268, mobile +20 12 3134327, ICQ# 8459322.

Massimo M.

Tourism NSW Support for Manilla Paragliding Competitions

The annual paragliding competitions in Manilla have been awarded the status of a “Regional Flagship Event” by Tourism NSW. From over 140 varied event applications the competition held in Manilla at Mt Borah during early March was one of only two new events selected.

The application by event organiser Godfrey Wenness was successful in obtaining funding in the form of a \$10,000 grant to be managed by the "Big Sky Country" Regional Tourism Organisation based in Tamworth. It is to be allocated broadly for publicity and media purposes to lift public awareness of the event and the sport in general, both locally and overseas. It represents a major step forward in gaining mainstream media acceptance of paragliding, and will be ongoing and increasing pending a review of the initial programme. The name of the competition will also change to reflect the new status, becoming the "Big Sky Manilla Paragliding Open 2000."

1999 Paragliding World Cup

Advance team and test pilot, Kari Eisenhut of Switzerland, has won the 1999 Paragliding World Cup (PWC).

After six PWC's all over the world and 17 validated tasks, Kari's performance proved that he really is one of the best pilots in the world after leading the general ranking for practically the whole season. Kari flies an Omega prototype that is at the cutting edge of glider design and incorporates a number of new concepts not yet seen in a competition glider (such as 1/3 of the main cells being closed). This technology will be incorporated into the new Omega 5 (not due until the end of 2000) and is sure to filter down to other levels in the years to come.

General ranking 1999 Paragliding World Cup

1	Kari Eisenhut	Omega
2	Christian Tamegger	X-Pert
3	Hans Bollinger	Boomerang

Blue Mountains Hang Gliding Club

Summer is back, and the BMHGC would once again like to invite all novices in the Sydney region to come and be involved in our club. Our sites in the Blue Mountains and beyond range from novice rating to advanced, and offer the best (and closest) thermalling experience to Sydney. For information on our monthly competition days, monthly novice days, and other club activities give me a call on 0418 130354.

We encourage new pilots to come and meet us at one of our club meetings: last Wednesday of the month at the Blue

Cattledog Tavern, St Clair (take the Mamre Road exit off the M4 (southbound), turn left at the first set of lights and you're there!). This venue offers great food and drink, making our meetings very enjoyable. See you there.

Richard Lockhart, President



Website for the VHPA

The VHPA (Victorian Hang Gliding and Paragliding Association) is pleased to announce the launch of its website located at www.vhpa.org.au/

This website has been primarily developed to host the Victorian Site Guide. The site guide has been around in paper form since the early 1970's. Since then it has been updated every few years, however there have always been the problems of producing and costs of distribution. The more complete the guide, the more pages it had and the less able was the VHPA to afford it. Of course, the less sites it had, the less use it was to members.

The site guide has been reviewed (with a broader hang glider and paraglider perspective) and a more complete list of sites produced. It has now been published on the internet. There are some 48 sites currently listed, along with relevant restrictions. Some sites are sensitive, particularly privately owned ones, and it is important that any restrictions shown are followed.

To make it clear where sites have been closed, and are not just omitted, a list of these has also been included. A downloadable version of the site guide is available in pdf format. Use the free shareware Adobe Acrobat Reader software to view.

The website also contains other relevant information such as committee member information, minutes of meetings, a list of Victorian clubs and schools, hang gliding and paragliding [www](#) links, as well as discussion forums including a forum with equipment for sale.

We welcome feedback, and if there are any other flying sites or information which should be included, please email the Webmaster at webmaster@vhpa.org.au.

In the future we hope to see other associations also publishing similar guides for their states, as well as a broader HGFA web presence representing all Australian flying activities on the Internet.

Michael Bruce

Cloudbase Paragliding Club of WA

WA put on some really nice flying conditions for the end of winter. We had some of the best ridge soaring conditions I've experienced at Noondeening Hill, with up to three hang gliders and eight paragliders sharing the ridge, including Sylvie on her first ridge soaring flight. Big smooth areas of thermal lift came through regularly, which allowed us to get up to 1,000ft above take-off and way out in front of the ridge, but didn't quite let us get away.

Mike Annear and Eric Metrot got away from Mt Bakewell, following two eagles over the back in a nice thermal. They had a pleasant flight, but failed to connect with much more lift and landed about 10km downwind.

Dennis and I had a similar flight from Noondeening, thermalling up to cloudbase and having to pull Big Ears to escape the cloud suck. It looked like the start of a great flight, but the cloud suck was soon replaced by abundant sink. I found myself lining up a landing field, but spotted an eagle circling at tree top height. I veered across there and found lift, but too little too late. Dennis got it a little higher and managed to climb up, but not enough to clear the next range safely. Just after landing I managed to hitch a lift in a 63 Chevvy hearse. I'd never thought of

NZ PG TOUR

Over the past two flying seasons I have operated with great success paragliding package tours of New Zealand. On both prior tours, flying was attainable to all pilots everyday. This year I'm offering two tours, one especially for the novice pilot. Your tour guide has Level I instructor ratings and a good knowledge of local sites visited. A great opportunity for novice pilots to experience a range of coastal and inland flying.

PACKAGE INCLUDES

Airfare ex Sydney • Transport Average
3,500km • Nine Sites Available • Accom-
modation 12 Nights • Light Breakfast •
10,000ft Tandem Skydive • Bungee
Rocket Ride • River Jet Boat Ride • NZ
HGPGE Fees

TOUR DATES January/February 2000

TOUR COST AUD\$2,100

FOR DETAILS CONTACT

MARCUS ROWLANDS

34 Ada Street, Bexley NSW 2207
Phone: 02 9570 7095

SYDNEY PARAGLIDING CENTRE
Mark Mitsos
PO Box 225, Helensburgh NSW 250
Phone: 02 4294 9065
Email: spc@ffa.com.au



ending the day in a hearse as being a good thing before.

Also in August a large group of pilots headed up to Geraldton for a weekend and enjoyed five days of good flying weather, mostly on the coast at Horrocks.

The club winch is running well now. Fees have been revised and are now \$10 per day for members, or \$20 per day for non-members.

A state cross-country league has been started for hang gliders and paragliders by the Western Soarers Hang Gliding Club. A handicap system has been introduced to allow paragliders to compete with hang gliders. The handicap is based roughly on glide ratios. Performance hang gliders get 1 point per km, novice/intermediate hang gliders and performance paragliders get 1.4 points per km, whilst novice/intermediate paragliders get 2 points per km. Please submit all your cross-country flights to Mark Thompson 0417 764571.

Standings in this league at time of writing are: 1st Mike Dufty (Adv, PG, Merak/ Sector) 64 points. 2nd Karl Ruckreigal (Adv, HG, XS) 45 points. 3rd Mike Annear (Adv, PG, Energy) 42 points.

Current standings are displayed in detail on the web at www.iinet.net.au/~navi/xcleague99.htm

Western Soarers are also organising the State Soaring Championships from 22-30 January in Wyalkatchem. Both hang gliders and paragliders will compete in the same tasks. This will be the first paragliding comp held in Western Australia! It should be a fun event and novices are encouraged to participate.

Michael Dufty

New Basic Intermediate from Advance

Advance paragliders of Switzerland have just released their all new entry level intermediate, the Epsilon 3. It is intended for a slightly higher pilot level than the previous model, the highly acclaimed Epsilon 2.

The gap in the range for the school/occasional pilot will be filled by the Alpha 2, which will arrive early next year. The new glider is suitable for confident, just out of school pilots right through to intermediate level flyers who want maximum fun and safety. The performance is excellent and comparable to the previous high performance wing, the Omega 3, but being an entry intermediate it has DHV1-2/2 safety. Glide is just under 8.0, sink rate 1.1m/s and speed 21-45km/h (the top speed was limited as

Advance feels this is plenty for this type of glider). This performance also provides the pilot with a safe way to enter the world of competition flying without giving too much away to the current high performance wings. The Epsilon 3 is the result of over a year's development with 25 prototypes, and was designed with flying pleasure and ease of use in mind. It is available in 4 sizes (24, 26, 28, 30) for all up weights between 65-122kg. It comes fitted with a big ears kit (special handles), speed system and a choice of two sizes of rucksacks (an optional mountaineering rucksack is also available).

For more information contact: Parafunalia, Godfrey Wenness, ph/fax: 02 6785 6545/46, email: SkyGodfrey@AOL.com

Pocket Weatherstation

Have you ever been stuck trying to work out what the weather trend is, frustrated by weather reports that give you meaningless non-information such as the no weather tomorrow approach taken by many news readers?

Well, now you can find out your own, up-to-date, local weather trends. The new device, is an upgraded version of the Windwatch, now called the Alba Windwatch. It's an all in one barometer, altimeter, clock, windspeed indicator and temperature gauge with memory and computing functions. The Alba Windwatch is ideal for site checking, it is designed for easy hand use, its computing functions are user-friendly and the rugged sky blue plastic case will cope with heavy duty use.

The Windwatch continuously logs a digital display of the current and last barometric pressure, in four hour blocks over the last 16 hours to give you clear weather trend information. It reads and records peak windspeed, current windspeed, temperature and even the windchill temperature. Its altitude function is accurate and has an update rate of once every second. Who could ask for more in a pocket size weather station!

The Alba Windwatch calibration is user selectable with speed displayed in mph, km/h or m/sec, temperature in Celsius or Fahrenheit and height in metres or feet. More information is available from Ultralight Flying Machines in Melbourne. The price is expected to be about \$289 each.

Rod Birrell, Ultralight Flying Machines



Raptor Paramotor

The Raptor is an Australian made paramotor, developed over three years. Development is never at an end, however. As more people fly Raptor, each day brings new changes and innovation, aimed at Australian conditions.

Powered by an upright Solo 210, Walbroe Carb and reduction, there are two models. One has a 42 and the other a 46 three-bladed glass composite propeller. Raptor construction is designed to keep the centre of gravity below the centre of the propeller line to help counter torque. Amongst many other features, Raptor comes with:

- A 5.5 litre effective welded aluminium fuel tank that won't suck flat if you shut the breather off for transport (an inherent problem with plastic tanks).
- A full Aussie-made comfortable seat harness with an independent 50mm thick back cushion.
- A sturdy three piece propeller shroud for great protection. The slatted base helps prevent burying if you run up the engine on the beach etc. The unit can be left free standing with the harness attached.
- An independent 7-bladed cooling fan works off the propeller drive pulley, turning at about the same revs as the engine.

One wonders what experimental conditions are being used when manufacturers test for thrust. We tested a Solo 210 imported paramotor rated at 115lb thrust, only to find it was screaming its head off at 80lb thrust static, well above its torque range. We have found with Raptor if you are using freshly mixed fuel, a standard muffler, and the air is cool and dry, then the needle is just touching 100lb with a 46 prop at 6,300 revs. This is extremely good.

Finally, there have been increasing inquiries for a homebuilders power pack option down to engine mounts. At time of printing a video should be available from agents. For further information on the Raptor, please call Ezeflight Components ph: 07 4121 6803.

M. Davey

FAI News

World Pilot Rankings Update

The World Pilot Ranking System report now includes each pilot's nationality, sex and top 4 WPRS points competitions. This should make more interesting reading for both pilots and media, and enable pilots to check out how their ranking points are accumulated.

Paragliding competitions included in WPRS since last issue are: British PG Open, France; German PG Open; Norwegian Cup; Jackson Hole, USA; Telluride Open, USA and Red Bull Wings Over Aspen, US PG Nationals. The PWC Final in La Bresse only had one task and therefore was not valid for WPRS points. There are no changes in the top 14 paragliding rankings. Robbie Whittall (GB), Olivier Nef (CH) and Tibor Berki (SWE) have gained a few places following their placings at the US Paragliding Nationals. Claire Bernier (F) still heads the female rankings with 130 points (58th overall), and Petra Krausova (CZE) has moved up to 2nd only 1 point behind (129) following her good results at the British and Slovenian competitions. Sandie Cochepain (F) is 3rd in the female rankings (69th overall). There are currently 550 paragliding pilots ranked.

The hang gliding rankings have only seen the addition of the Pre-Pan American Open, and there are no changes to the top 20 places. The top 3 HG female rankings also remain unchanged. There are now 463 hang gliding pilots ranked.

Full rankings can be found on FAI/CIVL website at www.fai.org/hang_gliding/

Results not yet received include the Pre-World Speed Gliding, Greece; Snowbird PG, USA and WHGS San Francisco, USA.

Forthcoming hang gliding competitions that qualify for WPRS points are:

Category 1: Pan American Championships, USA; Female World Championships, Greece; European Championships, Austria; World Speed Gliding Championships, Greece.

Category 2: WHGS New Zealand; Canungra Classic, Australia; South African HG Champs; Australian Champs, Hay; Bogong Cup, Australia; Millenium Cup, Mexico.

Future paragliding competitions that qualify for WPRS points are:

Category 1: European Championships, Germany.

Category 2: Japanese Nationals, Japan; Coo PG Fruit Cup, Japan and the Millenium Cup, Mexico.

New FAI Class 0 Records

Sub-class 0-1 (HG with a rigid primary structure/controlled by weightshift) –

Feminine Category

Claim number 5924:

Type of record: Speed over a triangular course of 100km

Course/location: Forbes, NSW (Australia)

Performance: 30.81km/h

Pilot: Tascha McLelland (NZ)

Hang Glider: Moyes CSX-4

Date: 31/12/1998

Previous record: New

Claim number 5925:

Type of record: Out-and-return distance

Course/location: Forbes, NSW (Australia)

Performance: 143.85km

Pilot: Tascha McLelland (NZ)

Hang Glider: Moyes CSX-4

Date: 3/1/1999

Previous record: 135.9km (9/1/98, Nichola Hamilton, UK)

FAI congratulates 'Tish the Flying Fish' on her splendid achievements.

Sub-class 0-3 (paragliders) – Multiplace Category

Claim number 6127:

Type of record: Distance over a triangular course

Course/location: Bellinzona (Switzerland)

Performance: 78.15km

Pilot: Roland Würbler (Switzerland)

Passenger: Jacqueline Gubler (Switzerland)

Paraglider: UP Pick-Up XL

Date: 23/5/1999

Previous record: 53.1km (19/6/96, Bernhard Koller, Germany)

Claim number 6128 :

Type of record: Speed over a triangular course of 50km

Course/location: Bellinzona (Switzerland)

Performance: 18.91km/h

Pilot: Roland Würbler (Switzerland)

Passenger: Jacqueline Gubler (Switzerland)

Paraglider: UP Pick-Up XL

Date: 23/5/1999

Previous record: 10.15km (19/6/96, Bernhard Koller, Germany)

FAI congratulates the pilot and his passenger on their splendid achievements.



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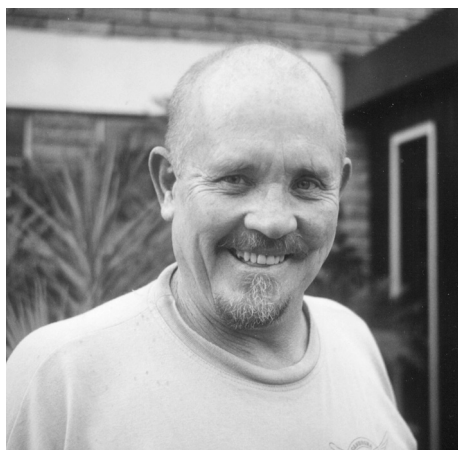
AM Mob 018 051 686

e-mail: timothyasbern@hotmail.com

or asbern@tim@sol.com

Paragliding & Ridge Soaring Centre 15 Hill Street, Darling NSW, Australia

HGFA Operation Manag



Q. Why is the HGFA website left without being updated?

A. The Board is well aware of the deficiencies of the current websites (there is not actually an official HGFA site at present). At the Board's recent meeting it approved a project to develop and maintain an official site with links to most of the current plethora of hang gliding, paragliding and microlighting related sites already on the web.

Q. Are Board meetings achieving results with costs being substantiated?

A. The Board meetings last year actually cost less than budgeted. The costs of these meetings are part of the ongoing management of the HGFA and are an unavoidable expense. In the last 12 months the funds allocated to Board meetings were \$14,000, which is approximately 2.3% of our total budget.

Q. Could some of the TM money go back to the clubs for use in site acquisition?

A. The Board has money available for funding the retention of sites of "national significance" – as has been utilised by several clubs in the past. There has been a policy for some years that these funds are provided as a loan – if HGFA funds were merely passed out on request from clubs, the funds would soon disappear.

Accident Reports

No 1

Pilot: Intermediate hang glider pilot
Experience: 46 hours
Exp. last 90 days: 1 hour
Glider: Intermediate hang glider
Aircraft damage: broken leading edge, broken upright

Weather: 3 knot breeze, nil turbulence
Location: Inland site
Pilot injury: Dislocated shoulder

Description:
The launch was between trees and required a strong launch, the pilot "popped" the nose and was unable to gain sufficient speed; and once airborne a slight stall ensued, a wing dropped slightly, the glider drifted sideways, hit the windsock and was turned into the trees.

Comments:
Often when a strong launch run is required pilots will attempt to "jump" into an instant run, resulting in popping the nose. It is preferable to take a few accelerating steps and ease into the run whilst maintaining angle of attack by asserting pressure on the control frame through the upper arms. Once the glider begins to fly and the grip is changed, the run can be strongly accelerated whilst holding the nose down slightly prior to returning to trim to launch. I believe that "easing" into the run is critical in being able to maintain pitch control during a light wind launch.

No 2

Pilot: Restricted paraglider pilot
Experience: 8 hours
Glider: Standard paraglider
Aircraft damage: Nil
Weather: 18-25mph (16-22kt), light turbulence
Location: Inland site
Pilot injury: Slight back sprain

Description:
The pilot had flown in similar conditions at the same site on the previous weekend. On this occasion he launched and was ridge soaring in front of the hill, when after about 15 minutes he started to get pushed back. After drifting slowly back and about 200' above the hill, the pilot was keen to get forward and opted to initiate a "B" line descent, losing about 100'. The pilot released the lines but the rate of descent continued and he hit the hill hard about four seconds later in a parachutal stall. The pilot executed a good PLF, and thanks to the back protection, good boots and helmet, suffered only minor injury.

Comments:

The pilot was quick to say that using "Big Ears" and speed bar would have been much better in this situation, but as he had recently been practising "B" line stalls he thought he would try one. During practise, the canopy had immediately began to fly again on release of the risers but as is often the case, this time it merely went parachutal. If time allows, the procedure to recover from a parachutal stall is to get the angle of attack down, either by using the speed system or by pushing out on the front risers to effectively shorten them and get the glider flying again.

No 3

Pilot: Restricted hang glider pilot
Experience: 10 hours
Glider: Restricted-intermediate hang glider
Aircraft damage: Bent control frame
Weather: 5kt, light turbulence
Location: Coastal site
Pilot injury: Concussion, bruised knee

Description:
The pilot was making his first pass in light and fairly crowded conditions; flying at min sink next to the hill to take advantage of the minimal lift available. As he was beginning to level off after his first turn the glider struck mild turbulence and continued to turn toward the hill. Despite efforts to turn away, he struck the hill and was knocked unconscious.

Comments
The area where the glider stalled is well known for turbulence in the prevailing conditions, due to the shape of the hill. A combination of inexperience, flying at min sink close to the hill, and the unexpected turbulence appear to have caused this accident. The pilot's instructor, who was in the air at the time said that the pilot was confident and competent, and the accident surprised him. He also said that had he been able to talk at length with the pilot he may have been more wary of the conditions. He also suggested that perhaps there should be a system in place to require pilots to undertake some ongoing instruction with the aim of minimising this kind of accident.

**Fly safely,
Craig Worth**

er's Report

I recently had the pleasure of attending meetings of the Southern Trike Club in Melbourne and the ACTHPA in Canberra. As with most clubs I visit, these pilots enjoy their flying and also enjoy the social aspects of club participation (in Melbourne largely due to the hospitality of Drewe Bellmaine at his nightclub premises).

Whilst at these meetings I was asked a number of questions that seem to come up regularly, and at the HGFA AGM and Awards Night fielded some more, so I thought I would include a few of my responses for all members. HGFA Board members helped me to answer the HGFA policy related questions.

Q. Is Operations Manager a full time position?

A. It certainly is. Over the past six and a half years I have had no trouble finding something to do. The role of OPS Manager is laid out in Section 2.3.2.2. of the Operations Manual – this role includes: developing and implementing standards for flying and flying training in our three disciplines; seeking to ensure member compliance with regulations and requirements; liaising with CASA on matters relating to HGFA operations and safety; and promoting safety in general. Obviously I cannot begin to fulfill these aims without the assistance of members, clubs and instructors.

Q. Do you print every accident report in the magazine?

A. No, though I print any report that carries a message for pilots. All reports are added to the HGFA Accident Database to enable me (in conjunction with the HGFA Safety and Operations Committee) to identify accident trends and determine areas that may require the implementation of changes to our training or safety systems. I encourage all pilots to report accidents (in accordance with Section 5 of the Operations Manual).

Q. Would it be possible for the HGFA to develop competitions for microlights?

A. This is encouraged, both at club level and national level. As the AUF is no longer affiliated with the FAI, the HGFA Board has decided to make application to FAI through ASAC to enable HGFA microlighting members to claim records and compete internationally. We are currently looking for a microlighting member to assist the HGFA Competitions

Committee to develop criteria with the aim of fostering microlight competition.

Q. Where to now that the GFA amalgamation will not occur?

A. Given the support for the amalgamation within the HGFA and the lesser degree of support from the GFA membership, the Board has agreed that the HGFA should continue to work with the GFA in areas of mutual interest (such as lightweight gliders). The Board is currently discussing the future of the joint magazine with the GFA executive.

Q. What was the cost of the amalgamation project?

A. The cost to the HGFA for amalgamation consultation cannot be accurately measured (there was much crossover with other projects so specific earmarking of costs is difficult). Apart from the time spent by HGFA volunteers it is estimated that it probably cost the HGFA about \$20,000 over the two year period.

Q. What was the purpose of introducing the newly revised Trainee Membership (TM) category?

A. There were several reasons which would take a lot of time to fully explain, but briefly they were: The HGFA has struggled to balance the budget in recent years; and as maintaining the system that allows people to try our sports is expensive, and insurance is an area of steady cost increase, it was deemed appropriate that those undertaking introductory training flights should assist in covering these costs. It is also planned to use some of the revenue to promote our sports. Having participants join the HGFA also provides an added legal buffer in the event of an accident – the HGFA Constitution prevents any member from suing another for any amount other than that which is paid by the HGFA's insurer.

Q. Is the HGFA finding that the TM is being used by all instructors?

A. The TM system became compulsory as of 1 August last. From my observations in the areas I have visited recently there is a reasonable level of compliance – though I have heard that there are some instructors not fully using the system. I rely on club SSOs and Executive Committees to assist to foster compliance.

HGFA merchandise

Available from the HGFA, PO Box 558,
Tumut NSW 2720 Phone: 02 69472888
or Fax: 02 69474328



- ◆ **\$30 Polo shirt** with embroidered HGFA logo in navy, green & white (sizes 16 to 24)
- ◆ **\$50 Rugby top** with embroidered HGFA logo in navy, green & grey (sizes 16 to 24)
- ◆ **\$15 Cap** (cotton or corduroy) with HGFA colour logo in red, black, navy or green

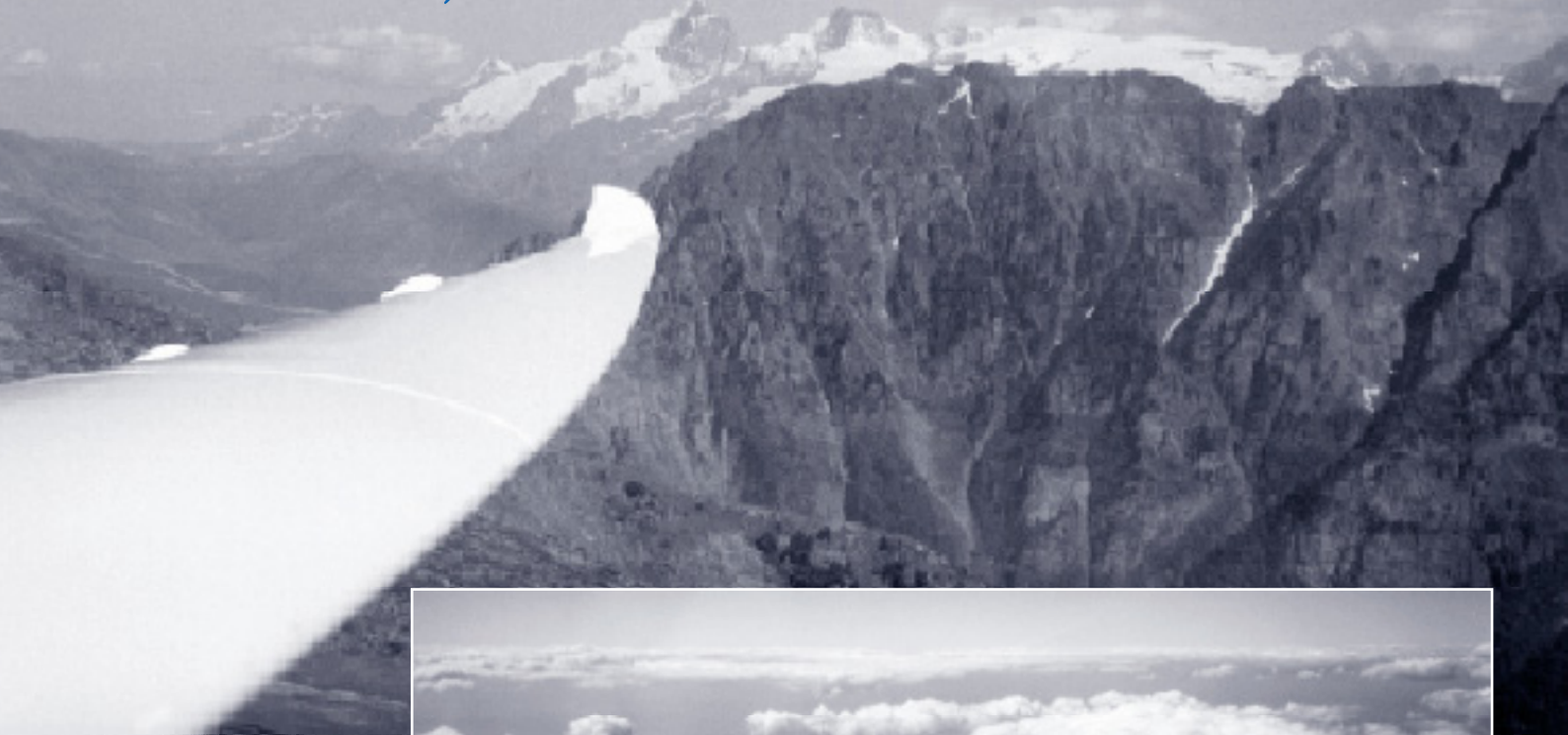


- ◆ **\$1.50 HGFA Car sticker** (no postage required)
- ◆ **\$6 Embroidered Badge**
- ◆ **\$30 HGFA Hang Gliding Training Video**
- ◆ **HGFA Competitions Manual** – no charge
- ◆ **HGFA Towing Manual** – no charge
- ◆ **\$45 1998 Hang Gliding Grand Prix Series video**
- ◆ **\$5 HGFA Pilot Training Workbooks**
- ◆ **\$15 Beginning Coaching** (Australian Sports Commission)
- ◆ **\$35 Better Coaching** (Australian Sports Commission)
- ◆ **\$35 Hang Gliding or Paragliding training video**
- ◆ **\$10 HGFA Operations Manual***
- ◆ **\$15 HGFA Operations Manual Binder***
- ◆ **\$5 HGFA Log Book***

* Replacement Prices only – These items are issued free with initial Full Membership

- ◆ **\$5 Postage and Packing** (Bulk orders sent C.O.D.)

Impressions from the World Masters St Aubans, France



Both pages: Flying at the World Masters in St Aubans, France, sometimes in wave.
All photos: Gabby Hayes



New FAI Badges & Certificates

Summary to 28 September 1999

A Certificate

BLYTH Samuel Arthur	10324 NSW AIR TC
HINDMARSH Ross William	10325 Southern Cross
GILMOUR Peter Charles	10326 Lake Keepit
KELLY Christopher John	10330 SA AIR TC
RICHARDSON Alexander	10332 Adelaide
EXLEY Tim	10333 Byron Power GC

B Certificate

KARP Maja	10190 SA AIR TC
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B & C Certificate

Gilmour Peter Charles	10326 Lake Keepit
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A & B Certificate

HALLT Ian David	10331 Darling Downs
GEE Stephen	10334 Darling Downs

C Certificate

GRAY Nigel	10318 Bathurst
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A, B & C Certificate

VUICHOD Ronald Peter	10323 Bundaberg
ALTSON Malcolm	10327 Mangalore
HURN Anthony deLacey	10328 Barossa Valley
FERGUSON Stuart Donald	10329 Canberra
GILBERT Nicholas	10335 Bathurst
RUTLAND James Anthony	10336 Geelong
HARRIS Stephen Ross	10337 Darling Downs
PLANNEGGER Daniel	10338 Gawler/Adelaide

Silver C

THOMAS Robert Septimus	4283 Sportavia
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Gold C

PREM Hans	1508 Geelong
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Diamond Distance

DREW Vivienne Jean	G.C.V
MACKAY Daryl Brenton	Beverley
DODD Luke Kenneth	GC of WA
BOOTH David Eric Martin	RAAF Richmond

Diamond Goal

PREM Hans	Geelong
-----------	---------

Diamond Height

WESTON Dion John	
PREM Hans	Geelong

Diamond C

BOOTH David Eric Martin	195	RAAF Richmond
WESTON Dion John	196	

Claims for all badges and certificates to:

FAI Certificates Officer:

Beryl Hartley

106 Meryula Street

Narromine NSW 2821

Ph: 02 6889 2733 (w), 02 6889 1250 (h)

Fax: 02 6889 2933

Email: hartley@avionics.com.au

Decentralised Competition entries to:

Gary Hollands

92 Grange Road

Westbourne Park SA 5041

Ph: 08 8230 5722 (w), 08 8271 2020 (h)

Fax: 08 8230 4428

Email: Gary.Hollands@adelaide.on.net



Trophy presentations (top to bottom):
 15 metre class
 1st Giorgio Galetto, 2nd Stefano Ghiorzo, 3rd Steven Raimond.
 Open class
 1st Holger Karau, 2nd Jan Andersen, 3rd Bruno Gantenbrink
 Standard class
 1st J. Caillard, 2nd John Coutes, 3rd Laurent Aboulin.



GLIDING FEDERATION OF AUSTRALIA

Airworthiness Inspection

FORM 2 NOTICE

- ☐ A Form 2 inspection is due
Cheque for \$125 is enclosed
- ☐ A 20, 30 yearly, etc is due
Cheque for \$275 is enclosed
with copy of aircraft log book
- ☐ An initial C of A inspection
and initial registration is due
Cheque for \$465 is enclosed

(tick appropriate box)
on the following aircraft.

TYPE

VH

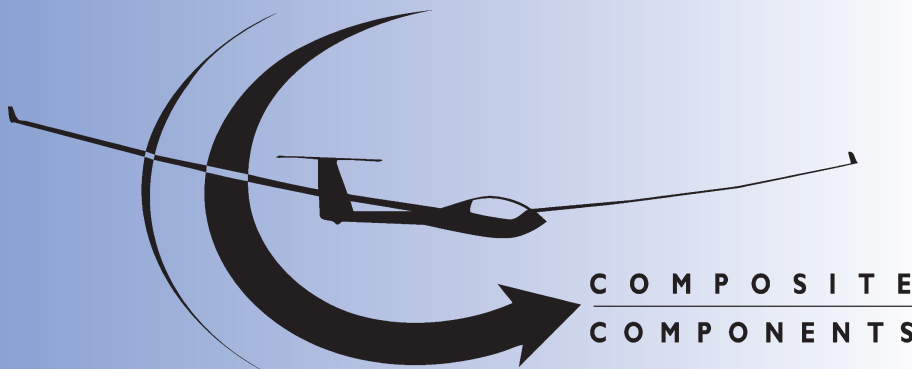
Please forward relevant airworthiness
documents to:

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Postcode

Forward to:

GFA Secretariat,
130 Wirraway Road,
Essendon Airport 3041



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BOOK EARLY FOR REFINISHING THIS YEAR

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 Hangar 03 53826777 Fax: 03 53821999
 23 FARRAR AVE, HORSHAM, VIC 3400

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Australia

Paragliding Flatlands

4-8 December 1999

Hay, NSW. We're chasing those late spring/early summer flying conditions that have produced world record distance flights at this time of year. If you want a great flying week of bettering your PBs & can only afford 3 days off work, then this is the comp for you. Blow away the winter cobbles & kick off your summer soaring season. Join us for the whole 5 days or register just for the weekend. Note that comp may be extended up to the following Saturday if the weather does a wobbly on us, but we're due for a good run. Tasks will be race to (downwind) goal & open distance for big air, big distance. Open, Standard class & Women's prizes. No cameras needed. GPS recommended, but not essential. Tow endorsement required (contact organiser if you need one), minimum restricted rating, radio & tow bridle required. Organise yourselves into teams of 4 per tow strip with a driver. Ring me if you need a team. Sanction: B Grade. Entry fee: \$125 by 24 Nov, \$140 thereafter. Entries to: Rob Lithgow, Adventure Airsports, 2 Kirkmore Ave, Jan Juc, VIC 3228, ph/fax: 03 95262895, email: rklithgow@gsat.edu.au

Corryong Fly-In

26-30 December 1999

Meet 12-1pm at the Elliot bomb-out. Free entry. Free camping by the river. Int to Adv rating. Ph: Greg Smith 02 42680589.

Laurieton Christmas Fly-in

27-31 December 1999

The Mid North Coast HG & PG Association will run this fly-in at the resort town of Laurieton. Cash & prizes to the value of \$3,000 will be up for grabs & there will be nov, int & adv sections for the prizegiving. PG & HG are welcome. Contact: Trevor Kee ph: 02 6586 4800 or Lee Scott ph: 02 6556 5265, email: info@highadventure.com.au

Hay Flatlands Hang Gliding Nationals

3-13 January 2000

Hay, NSW. Practice day: 3 Jan. Registration: 3 Jan at the New Crown Hotel/Motel, Hay commencing at 7pm. Welcome briefing to take place at 9pm. Sanction: AAA. GPS scoring used. GPS mandatory (Garmin or Aircotec). Entry fee: \$180. Minimum 4 pilots per strip. Entries close 24 Dec 1999. Min. pilot requirements: Restricted, tow endorsed, HGFA member. Other min. requirements: Airworthy HG, parachute, instruments, tow gauge, rope, releases, driver. Monetary prizes in excess of \$4,500 total awarded to winners in the Skyfloater & Racing classes. Open class will receive trophies only. Emphasis at this year's comp will be placed on shorter courses with 2 or more turnpoints allowing pilots to enjoy the night life of Hay, instead of some isolated farmhouse out in the boondocks! Min. course time will be approximately 2 hours. If you're interested in a low pressure flatlands comp with great prizes send entries to: Dynamic Flight Pty Ltd, 32 Willoby Street, Beaufort VIC 3373 or email us for further info: dynamic@netconnect.com.au (Info booklet sent upon receipt of entry fee.)

Corryong Cup Hang Gliding Competition

15-22 January 2000

Registration & practice day: Saturday 15 Jan. Requirements: int-adv rating with inland experience, camera, altimeter, UHF radio, recently repacked parachute, 1:200,000 Wagga Wagga & Tallangatta topo maps, current HGFA member. Strictly 60 pilots. Entry fee: \$80 incl. T-shirt (specify size), sticker, film, presentation night, BBQ during competition, numerous prizes & trophies. Categories: Open (all competitors) & Entry

level (open crossbar & int gliders). Entries to: Steve Bell, ph: 02 4294 1268, email: spbell@1earth.net

Corryong Paragliding Competition

22-29 January 2000

Sanction: AA. More info next issue or contact David Mills ph: 0411 513404 or email: djm@cs.mu.oz.au

WA State Soaring Competition

23-29 January 2000

Wyalkatchem, WA. Registration day: Saturday, 22 Jan. Competition: 23-29 Jan (Reserve: 30 Jan). This inaugural competition will combine both the sports of HG & PG in a single competition. The emphasis will be on providing competitors with a challenge, whilst maintaining safety & fun. Also contested will be the Andrew Humphries memorial trophy (teams event). Requirements: tow endorsed, parachute, radio, driver & tow vehicle, team T-shirts (a traditional thing), sense of humour, maps, camera (database not necessary), GPS (optional). For further info & to register online via www.iinet.net.au/~navi or by email: mark.thompson@telstra.com.au (ph: 08 94913076) or Daryl. Speight@kbjv.com (ph: 08 93200864).

Bogong Cup Hang Gliding Competition

25 January - 4 February 2000

Mt Beauty, VIC. Sanction: AA. Registration: Tuesday 25 Jan. Competition: 26 Jan to 4 Feb inclusive. Entry fee: \$150. Total prize money \$5,000. Categories: Topless, Kingpost, Floater (& possibly Rigid Wing if we get the entries). The Bogong Cup, one of Australia's premier events, is taking a new direction: a fully class based event. Pilots will be able to compete 'apples with apples', without being disadvantaged by the glider they own. We aim to put the real spirit back into competition. Mark it down for this flying season, it promises to be a fun & interesting event. HQ: Mountain Creek Lodge, Tawonga VIC. Contact: Phil Lahiff ph: 03 57544247, fax: 03 57544860, email: mountaincreek@net.net.au or John Adams ph: 03 57544945, email: jcadams@telstra.easymail.com.au

2000 Paragliding Nationals

12-19 February 2000

Bright, VIC. Sanction: AA. More info next issue or contact David Mills ph 0411 513404 or email djm@cs.mu.oz.au

2000 NSW Hang Gliding State Titles

Due to a date clash with the PG comp, the HG dates will be either 19-26 February or 18-25 March. The preference is for February. Firm dates available next issue, or contact Billo. Registration: Imperial Hotel, 10 Mar. Sanction: AA. Entry fee: \$120 incl. films, T-shirt & presentation dinner. Requirements: int-adv with inland experience, UHF radio & parachute, GPS recommended (if it still works in 2000), databack camera optional but recommended. HGFA rules & scoring apply with GPS turnpoint & timing verification. Fee payable to: NSW HG State Titles, 50 Park St, Charlestown 2290, email: BOLIVE@hahs.health.nsw.gov.au or ph: 02 49213804 (w).

Big Sky Manilla Paragliding Open 2000

4-11 March 2000

Sanction: AA & CIVL category 2 (for international ranking). Over \$3,000 in cash & prizes for Open, Int, Nov & Female classes plus day prizes. Registration: Manilla Town Hall HQ 3 March 7-9pm. Max. 120 pilots. Requirements: GPS (Garmin or Aircotec), UHF radio, reserve, adequate thermalling experience. Entry fee: \$140 (\$170 after 21 Feb) incl. posted info pack (if not on email), hill transport, map, prizes, trophies, T-shirt, presentation night (dinner & band). Pilots must organise their own retrieves. Wind techs welcome. Full pilot info at: www.gri.une.edu.au/mss Info & entry by ph/fax/ email (credit cards accepted), cheques/MO payable to: Manilla Comps "The Mountain", Manilla NSW 2346.

Contact: Godfrey Wenness ph 02 67856545, fax 02 67856546, email SkyGodfrey@AOL.com

2000 Victorian Hang Gliding Open

12-18 March 2000

Corryong, VIC. Contact: Wesley Hill email: whill@nm.com or ph: 0408 305943.

"Flatter than the Flatlands" Birchip 2000

Easter holidays

Birchip, VIC. This year's comp will be 5 long glorious days of flying due to ANZAC day falling on the day after Easter Monday. Apparently this has something to do with the eclipse. Entries open 15 January 2000 (note this has changed from previous years). Further info & updates available on the official website: www.users.bigpond.com/warwick.duncan

Paragliding State of Origin Series 1990-2000

Easter Weekend (2000)

Manilla, NSW. The PG State of Origin Series is a joint initiative of the Canungra Hang Gliding & the Sydney Paragliding Club. It is a state-based team event where low airtime pilots are encouraged to stretch their wings a little & fly those first few XC km under the watchful eye of their more experienced compatriots. As in previous years the event will be held in Manilla over the NSW Labour Day weekend & the following Easter weekend. Contact either Deirdre Skillen (NSW) on (02) 9877 0279 or Mark Plenderleith (QLD) on (07) 3278 6274 for more information. Alternatively check out the events at: www.uq.net.au/~zzdcrook/psos/pssohome.htm

"The Lore of Flight" Grampians Adventure Flying Holiday

10-16 April 2000

Grampians VIC

7 days of scenic flying & Nav-ex's. Fly or tow to the 4,000ft RWY & park your aircraft right next to your accom. Accom. & all meals from \$325pp. Open to all pilots & all aircraft types. Accom. is limited, so for more info call Peter or Anne McLean, ph/fax: 03 57972159; email: lore@yccs.com.au

Yea Adventure Fly-In

29-30 April 2000

Murrindindi Aviation Group Inc. is holding the 3rd Annual Yea Adventure Fly-In. Fly into Yea, VIC, on Sat. & join the aviators for some fun. Sat. night dinner & entertainment at the airfield Fire Station Hall. Sunday we will be doing more local flying to some of the 10 airfields in our area. Food & accom. available both days. For more info call John Norman ph: 03 57972972 or Peter McLean ph: 03 57972159.

Overseas

WHGS NZ Speed Gliding World Cup

18-25 September 1999

Practice day: 18 Sept. For more info contact Geoff Dossetor (comp organiser), email: antigravity@xtra.co.nz

New Zealand Hang Gliding Championships

12-19 February 2000

Wellington, NZ. Pilots are invited to fly in the NZ National comps. The Wellington area offers a variety of user-friendly sites to suit conditions, varying from mountainous to flat valleys. Accom. is at "The Ranch", hostel type accom. in the Southern Wairarapa. Entry fee: estimated at \$110. Accom. cost is \$15pn. There will be an Int & Open class, as well as day & spot prizes. For more info contact: Grant Tatham ph: +06 3797322, email: tathams@xtra.co.nz or Trevor Leighton ph: +06 3088464 or email TREVOR.HELEN@xtra.co.nz.

Women's Hang Gliding Worlds

18-30 June 2000

To be held in Greece. Contact HGFA office on ph: 02 69472888.

CLASSIFIEDS

Classified Rates

The magazine now has a policy of charging for classified advertisements. The rate is \$15 for up to 8 lines (40 characters per line); with longer ads charged at \$4 per extra line. All classifieds MUST be paid for at the time the ad is placed. Please direct ads, together with payment, to the HGFA office (credit card payments may be made by phone).

Hang Gliders and Equipment

New South Wales

Blade Race R41 adv, light (sky) blue under-surface with Blade Race in yellow print. New side wires, excellent condition, new UV-bag (48 hours since new), one of the best Blades around. Will deliver to NSW, \$1800. Ph: Peter 02 42942550.

Combat 152c adv, flies well, plenty of spares never used, \$500. Danny Scott Stealth harness only used this season, would suit new buyer at 6' and 85kg upwards, immaculate condition \$600. Owens Valley 8000 alti/vario/airspeed sensor, total energy compensated and Macready ring, \$200. Ph: Harry 02 42967796.

Enterprise Wing Elite adv, minus one leading edge (broken). Prefer to sell whole, good repaired sail, asking \$500 negotiable. Ph: John 02 42342081; 0408 448108.

Fun 190 nov, by Airborne, factory new, test flown only, \$3,950. Ph: Mark 02 43511400 (w); 02 43521483 (h).

Mission 170 int, L/E d/blue/white, VGC, low hours, tight sail, kite manual and batten profiles, \$800. Ph: Steve 02 95697963.

Rage 157 (Moyes Max) int, new side wires, spare upright. Beautiful glider, excellent condition, \$1950 ono. Ph: John 02 42342081; 0408 448108.

Sting XC int, low hours, near new harness, ball vario, parachute, 2 UHF handheld radios, tow bridle \$2,400 ono. Ph: Tony 02 96645970; 02 68691791.

Sting XC int, 3 hours use since new, Moyes pod, high energy parachute, vario, wheels, spare upright, excellent condition \$3,500 ono. Ph: Darren 0418 110 857.

Xtralite 147 adv, fluoro green undersurface, power rib. Includes spare downtube, spare basebar, canvas bag UV and water proof. Only 80 hours airtime, a bargain at \$2,000 ono. Ph: Andrew 02 66843510.

Xtralite SX4 adv, suit new glider buyer, low hours, genuine reason for sale, \$4,000 (no offers). Ph: Clive 02 49434900.

Queensland

Blade Race 152 adv, 35 hrs airtime, excellent condition, \$2,300. Ph: Matt 07 54928139.

Victoria

Blade 132 adv, good cond white/yellow. \$1,400 Carol 0417 311360.

Harness Italian Custom Built Dimensione De Volio, \$400. Ph: Carol 0417 311360.

Sting XC 166 int, white top surface, aqua and fluoro green undersurface, speed bar & wheels, EC, \$2000. Reserve parachute \$250. Ph: David 03 96475805 (w); 03 95839105 (h).

Paragliders

New South Wales

Advance Sigma II int, DHV-2, 29m², 40 hrs as new, light purple and yellow \$1,300. Ph: Mark 014 617 530; email markandrews@telstra.easymail.com.au

Queensland

Paramotors, Adventure F2 and F3 good condition, only 20-30 hours flight time. Over \$7,000 new, will sell \$4,200 each. Ph: William 07 49466305; 0419 133458.

Victoria

Edel Quantum S NCIS, 55-75kg, lilac/yellow, 20 hours, EC, comes with Edel Hero harness \$3,000. Also, new unused Edel reserve, will sell separately, \$500. Other gear also available. Ph: Andrew 03 95604760; 0413 522416.

Trikes

New South Wales

Airborne Executive Edge 582, 125 hours, full instrumentation, electric start, quiet kit, stone net, covers and registered trailer. Recently serviced, registered till June 2000. Immaculate condition, \$18500. Ph: Simon 02 94604282; 0410 600002.

South Australia

Airborne Edge Executive 582 T2-2671. Immaculate condition mechanically and in appearance, always maintained to Airborne specifications. Nice colours, always hangared, never been used for teaching. Instrumentation includes radio, twin EGTs, twin CHTs, altimeter, airspeed, tachometer, clock and compass. Total hours 210. Comes with intercom and helmets. Must sell, please, genuine buyer only! \$13,000 First to see will buy! Ph: Arthur 87332933; email: kelm@dove.com.au

Wanted

Moyes Max or XT, with harness, chute, helmet, etc. Ph: Nigel 08 97911014; email nigel@gateway.net.au



Great Christmas Gift Ideas !



Airborne — at one with the Alps: 120 high quality colour pages of brilliant photos by Swiss paraglider pilot Andreas Busslinger \$95

WindWatch: Small, waterproof & accurate. Digital display, multiple scales (km/h, mph, kt), average & gust memos, temp. & wind chill. Takes the guesswork out of wind strength measurement. Swiss made. \$140

Manzella Wind Stopper Gloves: Made in the USA..... \$49

Parafunalia Flying Suit: Locally made using wind-proof Nylon, choice of linings, 6 combinable colours, custom features on request..... \$190-250

Hanwag Fly 2000 Boots: Designed for paragliding to reduce the incidence and severity of foot injuries. Winner of magazine tests..... \$350

FLYTEC Varios: The world leader — various models from..... \$520

Paraglider UV bag: The BIG stuff sack for those big toys \$40

All prices include express postage.

Credit card phone orders accepted.

Contact Godfrey at PARAFUNALIA,
"The Mountain" Manilla NSW 2346

Ph: 02 67 85 65 45
Fax: 02 67 85 65 46

email: SkyGodfrey@AOL.com

PARAGLIDERS STOLEN!

Paragliders stolen from Jean-Luc, Rainbow PG at Sunshine Beach QLD, on Friday 8 October around 11am. Please, look out for the following: Apco Bifutura 42m² tandem, purple top surface, white bot. surface with "Ken Johnson Homes, Tin Can Bay" blue and red logo in a purple stuff carry bag. Apco Santana 30m², blue, few patches, some with dark blue ripstop, in a purple carry bag. Apache 2 tandem 40m², faded orange top surface, white under, in a white apco inner bag. Reward of \$500, no questions asked for the return of the gear. Thanks for your help, Jean-Luc, intheair@ozemail.com.au

Other

Free Flying Magazines

Cross Country Magazine subscriptions Carol Binder 0417 311360.

Equipment

For supplies of Strong and National Parachutes, Sage Varios, the now famous Source Drinking Systems, thermal underwear and waterproof bags for GPS contact Geoff on 03 52293890; 0419 515767; or email grlumb@yahoo.com

Business for Sale

Ideal Business Opportunity for HG/PG Pilot: Mobile Saw and Tool Sharpening business for sale. Includes 4x4 workshop trailer and all equipment. Comfortably earn \$40 per hour. With 2-3 days a week earned 27-28 K per year (average for last six years in Brisbane). Training included. More info: Chris Nagel 07 32192034; 0411 793692.

Schools in Australia

New South Wales

BYRON AIRWAVES

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- Lessons & full instruction available.
- 20 years hang gliding experience with training all year round.
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HGFA Addresses



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

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For information about site ratings, sites and
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state associations region or club.

States & Regions

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12 Van Eldik Ave, Andergrove QLD 4740; Pres:
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49555122, email: sitework@mackay.net.au;
Sec: Ron Huxhagen 07 49552913.

New South Wales HG Association

Sec: Steve Hocking, 19 Gladwood Gdns,
Double Bay NSW 2028, ph/fax: 02 93274025,
email: nswhga@s054.aone.net.au

Victorian HG & PG Association

PO Box 400, Prahran VIC 3181; Pres: Phillip
Campbell 03 53343034; Sec: Andrew
McKinnon 03 95631162; SSO: Rob Van Der
Klooster 03 52223019.

ACT HG & PG Association

PO Box 3496, Manuka ACT 2603; Pres: Michael
Porter 0415 920444; Sec: John Wilson 0419
600636; Trs: Craig Hopkins 02 62862488 (h),
SSO: Peter Dall. Meetings: 1st Tue/month
7:30pm, "Sky Lounge" Yamba Sports Club,
Phillip.

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1 Sturt St, Adelaide SA 5000; ph: 08 84101391,
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NSW 2353; Trs: Dolores Sempredoni, SSO:
David Middleton 02 4736 2605; Newsletter:
David Phillips 02 9456 252, email: dphi@jna.
com.au; Meetings: Last Wed/month, 7:30pm at
the Blue Cattedog Tavern, St. Clair.

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Shirley Lake 02 66858147, lois@linknet.com.
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(PG) 02 66876907. Meetings: 1st Wed/month
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http://gri.une.edu.au/mss
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Trs: Tony O'Connor 02 49529146, SSO: Coastal
— Jason Turner 02 49408665 (h),
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Trude 02 98873371; Trs: Greg Wilkinson
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PO Box 206, Rainbow Beach QLD 4581. Pres:
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VICTORIA

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Andrew Medew 03 98227861, 16/25-29
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Pres: Phillip Campbell 03 53343034; Vice-Pres:
Andrew Hume 03 93760907; Trs: Sandra
Holtkamp 03 53492845; Sec: Rachelle
Guy 03 98092974; SSO: Rohan Holtkamp
03 53492845. Meetings: Last Sat/month,
The Golden Age Hotel Beaufort.

WESTERN AUSTRALIA

Avon Valley Hang Gliding Club

Pres: David Drabble, 08 93071816, wescoast
@inet.net.au; Vice-Pres: Rob Stevenson 08
92211338; Sec: Stephen Hoefels 08 9527582;
Trs: Michael Derry 08 92840750.

Cloudbase Paragliding Club Inc

Club message bank 08 9487 5253; www.cygnus.
uwa.edu.au/~madmike/paraglid.html; email:
cloudbase@paragliding.org
Pres: Dave Humphrey 08 9574 5440, 0418
954176, paradise@avon.net.au; Sec: Michael
Duffy 08 9382 3036, 0417 923741 madmike@
cygnus.uwa.edu.au Meetings: Last Wed/month,
8pm at the Sportsmans Association, Woodsome
Rd, Mt Lawley.

Geraltion & Midwest Hang Gliding Club

Pres: Des Hill 08 99216219; 231 Third Street,
Geraltion WA 6530.

South West Microlight Club

Pres: Brian Watts 0412 552363; Vice-Pres:
Don Wilson 08 97641007; Sec: Paul Coffey 08
97251161; CFI: Brendan Watts 0408 949004.

WA Hill Flyers Club

Contact: Rick Williams 08 92943962 (h),
015 057961. Meetings: last Wed/month at
7:30pm at the Swan Districts Football Club,
Guildford Rd, Bassendean.

Western Soarers Hang Gliding Club

Pres: Sam Blight 08 93363738; Trs: Nav
Brennan 08 93397991; Comp coordinators:
Gordon Marshall 08 94519969, Nav Brennan.

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