

# Gliding *Australian* SKY SAILOR



## In this Issue:



**Winter Flying**



**Almost 750**



**2001 – A Forbes  
Odyssey**

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# 2001 – A Forbes Odyssey

VICKI CAIN

I knew something was up when I started getting calls about another Flatlands at Forbes

– “So, I hear you’re organising the comp again!” A quick call to Bill confirmed

that he had indeed been successful with a bid to hold an all aerotow comp

at one of his favourite places, Forbes; he just never

mentioned it to anyone else! My family’s

first reaction was, “But you said

you’d never do that again!”

All I can say is... who can

resist an offer to stand

in a black, dusty paddock

for a few hours in the

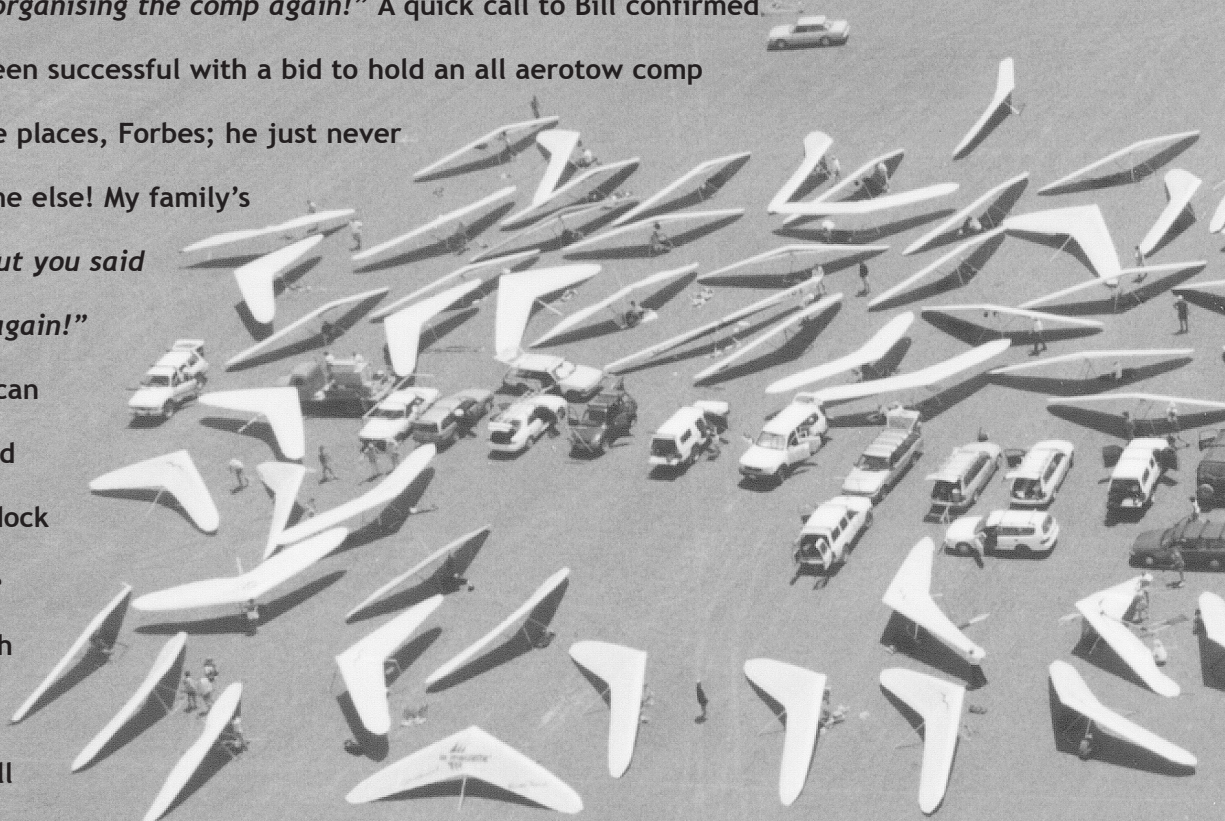
middle of the day with

45°C temperatures

and 82 ego maniacs all

wanting to get in the air at

the same time! Of course I put my hand up; I mean, who wouldn’t?



**B**ill handled the organisation of the tugs and the paddock, which was a mammoth task logistically. As Davis put it “*The fact that the meet was held out in a dirt paddock 12km from Forbes, a long ways away from the Moyes Dragonfly factory and glider factory made it quite a feat. Bill may be used to doing extraordinary things like this (witness his towing operation at Wilcannia this year for all the records), but it still boggles the mind that he can pull this off.*”

Des Mackay, the landowner, also had a huge job in preparing the paddock for us. Recent rains had left 10 inch deep tractor ruts which made the surface unsuitable for us. He had to slash and burn the paddock (a big call for the middle of summer) then turn the soil to make it useable for our needs.

My first priority was to secure officials positions. Tim Cummings said he’d be available and would bring his wife Sue and two year old Finn for a family holiday! Finn was only 10 days old when Tim came to score for the Flatlands at Forbes in ’99! This guy is amazing, giving an enormous amount of his time and energy to hang gliding. Among other things he designed the software for the GPS Turnpoint Verification Program and gives it freely to any competition organisers that are interested.

The best goalies in the world, Rob Van Der Klooster and Gen Rebbechi, agreed to come along as well. Rob started hang gliding back when Pluto was a pup and has been our Moyes agent in Victoria for the



Our goalies Rob Van Der Klooster and Gen Rebbechi

past 20 years. He agreed to make the 1,000km trek to Forbes in his Subaru to be our goal man. Gen, Joel’s younger sister, agreed to join him once again as she had for Forbes ’99. The Subaru, with dual windsocks flying, was the focal point

once at goal, with free beers, drink, cookies and other choices to quench the thirst of those that made it.

The most difficult task would be to coax Craig Worth into the job of meet director, but with Ian Jarman recently retiring as HGFA executive, Craig’s new position just did not leave room for Forbes time. So, no meet director as yet, but good things come to those who wait...

Lunch room chat at the factory identified the need for AAA ranking (maximum points for the Australian National Ladder) and WPRS points to attract international pilots. In hindsight though, much of the attraction for the competition came from the fact that this was an all aerotow meet;



Jon Durand Jr. top placed Australian pilot



Rhett Radford from Florida

pilots could travel abroad and not have to worry about cars, winches and drivers. Enquiries started flowing in from some of the big names in hang gliding, and that in turn created interest from others. By the deadline date of 30 November we had 62 entries, seven tugs (five Dragonflies and two trikes) and a meet director! While up at the Canungra Classic one day driving to goal with Molly and Steve Gilmour, I let out another one of my *"Who's going to be meet director?"* Stumpy said *"I'll do it,"* and the light went on! Why didn't I think of that? He'd be perfect: funny yet

firm and knows more about hang gliding than just about anyone. We now had a meet director!

Jed Gilmour (no one is better in the paddock than Jed) Matthew TeHira, Wayne Allchin and Lee Forbes were to handle the paddock as launch marshals.

Bill had his tow crew organised with tug pilots flown in from all over the world: Bob Bailey and Rhett Radford from Florida, Eiichi Tanaka from Japan, Gary Turner from Sydney, Rod Flockhart from Queensland and Keiran Brown from the Northern Territory. Trike pilots were Pete Wilson from Tumut and Grahame King from Cobar. (Unfortunately

Grahame had to leave after Day One because of a family situation back in Cobar, which left us one tug down.)

We were all set. What a crew!

By the end of registration evening on 13 January 2001, we had received entries from 82 pilots from 17 countries! There were 79 flex wing (including six kingposted) and three rigid wing pilots. There were nine women. The field was world class and resembled that of a mini World's.

Argentina	1	France	13	Norway	1	Switzerland	1
Australia	26	Germany	6	Slovenia	1	UK	2
Austria	3	Hungary	2	Spain	1	Ukraine	1
Brazil	1	Japan	11	Sweden	1	USA	8
Canada	3						

I announced at the welcome briefing that all excess funds would go towards prize money. At that time I didn't really know how much we'd have as this was the first all aerotow comp in Australia. Also at the welcome briefing the volunteer committees were selected. Safety committee: Richard Walbec, Rohan Holtkamp and Steve Moyes. Task committee: Locals, Len Paton, Guy Hubbard and Attila Bertok.

Earlier, lengthy discussions with Bill about how the aerotowing should work didn't seem to pan out. Bill had his ideas and Stumpy had his. They are both not the best at friendly negotiations! The first day towing was somewhat in disarray but we managed to get everyone away in manageable time. The task was a 121.4km dogleg to Trundle then Condobolin. Most pilots made the turnpoint but high cloud shut down the thermal activity and forced pilots to land on the second leg. Gerolf Heinrichs landed 4.6km short of goal (winning the day) but on the wrong side of



Bobby Bailey lands the Dragonfly

a river in the middle of nowhere. He tried to swim to goal by crossing the river, but the goalies had already packed up and gone home.

Day Two was blown out and was the hottest day in Forbes for 62 years. Most everyone had set up and then had to break down in that heat, so we organised a last minute dinner at the bowling club to make up. Richard Barwick from the council put us in touch with a local caterer, and at 3pm we asked the caterer if he could have dinner ready by 7:30pm for 130 people – he said “no worries”. We spread the word, hoping that everyone got the message, and they did. We had the whole club to ourselves; it was cool and comfortable and most got to have a go at bowls later in the evening.

Day Three was much more organised in the paddock (and a cooler 38°C and all the ground crew were happy). A 136km crosswind task was set to the south-east to Rye Park, west of Boorowa. Conditions were very light to start with, but as the course moved into more undulating countryside, altitudes of 8,000ft were reached. The start gate was once again a 10km radius cylinder around the tow paddock, which proved very popular with competitors. Seventeen pilots crossed the goal line with several landings less than fifty metres short. The tailwind on the approach to goal changed to a strong headwind at lower altitudes and this made judging final glide very difficult.

Day Four was too windy again. When I arrived at the paddock just before briefing, I asked Steve (brother Steve) if we'd be flying today. He said “*It's not a good sign when the pilots don't even set up.*” He was right, the day was cancelled. So we organised a barbie at the Apex caravan park (where most of the pilots were staying anyway). Neil was most accommodating to let us use his facilities. So we spread the word again, “*Barbie at Apex!*”

We catered for this one ourselves; it's nothing for Molly to cook dinner for 100 people on any given day. She said, “*I told you we should have catered for the last dinner, it cost half the price as paying a caterer.*” My reply was, “*Well, I didn't know we were going to be doing it every second day!*”

The two dinners we had were a great success. It gave everyone the chance to mingle and get to know each other, without goggles and balaclavas!

Day Five was a total fiasco in the paddock – we had a mutiny on our

hands. Stumpy wanted to set the paddock up his way and Bill was doing his dictatorship thing. Bill had told the Japanese pilots and the women that they had priority as he wanted them to get away in the early, calmer part of the day. But again, he forgot to tell any of us (he did tell Rohan, as Rohan was on the safety committee, thinking that Rohan would tell the organisers). So no one knew what they were doing. The pilots suffered with having to walk long distances with their gliders and we all felt despondent. All the ground crew were on the verge of walking out! But after some lengthy negotiations with Bill (with the aid of Tim) a compromise was agreed upon and it all worked like clockwork from then on, giving us three more flying days, six in total. Hallelujah!

Task Four was a 228km run to the NNW via a turnpoint 22km to the WNW of Forbes to avoid airspace. Unfortunately a few pilots discovered 15km of dense forest directly in front

of the thistle inundated goal paddock. Some pilots, desperate for distance, opted to land on inaccessible patches of cleared forest before goal.

Eighteen pilots made the 228km task with the last pilot, Mike Barber, reaching goal at 8:15pm on dark.

Task Five saw the top four pilots all contenders for first position.

The task was a 134km dogleg to the SW at Aria Park. Conrad Loten,



Gordon Rigg (UK), winner of Day 3, enjoys the rewards of arriving at goal



Hot, tired, dusty, but happy: Winners Betinho Schmitz, Gerolf Heinrichs and Mike Barber

representing Australia, won the day with Gerolf Heinrichs of Austria maintaining his overall lead and Jon Durand Jnr on his tail becoming the leading Australian.

The final day saw a 118km race to Tomingley. Everyone was aware that the last day was crucial, with scores very close and the top four pilots all in the running. An unbelievable 58 pilots ended up making goal. Betinho won the day to come second overall, with Gerolf winning the competition. Davis Straub won Class II. Tish was the highest placing female with Kari Castle second.

## The day prizes were awarded to:

**Task 1: Gerolf Heinrichs for swimming to goal and winning the day.**

Berndt Weber for finding Gerolf's glider to sleep under until he was found at 2am.

Gordon Rigg's driver. They dropped their new local driver back to his car in the tow paddock at 2am after a difficult retrieve. He hopped in his car, but it wouldn't start. Gordon and the boys were already gone so he had to walk back to town, getting home at 5am. Wonder why he never showed up the next day?

**Task 2: Gerolf Heinrichs for winning the day.**

Rob Van Der Klooster, goalie: Rob and Gen found their goal paddock and went to the landowner's house to ask permission to set up on their property. An elderly lady opened the door and stood with eyes wide in shock. Rob and Gen later found out why the lady had reacted so strangely. She'd just heard on the radio that there was an escaped convict in the area with a description matching Robs: short, thin, red hair and beard!

**Task 3: Gordon Rigg for winning the day.**

Junko Hiko for making goal in an XT. Berndt Weber for flying 22km past goal before making his way back headwind.

**Task 4: Attila Bertok for setting a task with a final glide over 19km off forest. Attila Bertok for winning the day.**

Barry Bateman for making his first goal at Forbes, a 226.8km goal, but forgetting to turn his GPS on and scoring bomb-out.

**Task 5: Conrad Loten for winning the day. Oyvind Ellefsen for landing 50m short of goal.**

**Task 6: Betinho Schmitz for winning the day.**

## Class I – Top Ten

1	Heinrichs, Gerolf	Moyes Litespeed 4	AUT	5,175
2	Schmitz, Betinho	Moyes Litespeed 4	BRA	5,087
3	Barber, Mike	Moyes Litespeed 4	USA	4,921
4	Hazlett, Brett	Moyes Litespeed 4	CAN	4,807
5	Bondarchuk, Oleg	Aeros Combat	UKR	4,348
6	Hagewood, Robert	Wills Wing Fusion	USA	4,246
7	Durand, Jon Jnr	Moyes Litespeed 4	AUS	4,242
8	Weissenberger, Tom	Moyes Litespeed 4	AUT	4,153
9	Bertok, Attila	Moyes Litespeed 5	HUN	4,143
10	Loten, Conrad	Moyes Litespeed 4	AUS	

The comp finished on a high, everyone was happy. We didn't have any serious accidents and it was over! We had a lovely presentation dinner at the Albion Hotel (all catered for!) and we managed to have \$10,000 left over for prize money.

Bill had his own little presentation for his tug pilots, each with a story.

Rhett received a fuel tank. On one day, just after he'd dropped off a pilot, he did one of his rather steep turns and his fuel tank, which had not been strapped in properly, came plummeting to earth from 1,000ft.

Eiichi received a burnt out piston from the engine that he accidentally put four-stroke fuel into instead of two-stroke.

Bo received a bent axle as a complement to his tug landing technique.

Gary received a bent axle as well!

Pete, the trike pilot, was presented with a lemon attached to a second lemon by way of a string with a weak link. Bill explained with a wry grin: "Well, *Dragonfly pilots don't see trikes as the real thing and hang glider pilots don't see rigid wings as the real thing, and I see them as a lemon towing a lemon.*"

I would personally like to thank all the wonderful people that made this event the success that it was:

My mother Molly for being the backbone of the whole family and Moyes gliders! Stephen, Tim, Rob, Gen, Jed, Mat, Wayne, Lee for driving all those thousands of miles, for running all those dollies, for putting up with the heat and the abuse and doing it all for nothing!

Bobby, Rhett, Gary, Eiichi, Pete, Rod, Keiran for risking life and limb to get these guys in the air and doing it with a smile! Attila, Len and Guy: for setting almost perfect tasks every day. Having about a quarter of the field into goal every day is spot on! Rohan, Richard and

Steve for keeping the comp injury free.

Richard Barwick at Forbes Shire Council for the \$1,000 donation that went toward the prize money and all his help whenever we needed it. Barry and Deidre at the Vandenberg Hotel (HQ) for putting up with us and our late nights. Des Mackay and his family for the use of his paddock.

To all the companies that donated prizes: Dynamic Flight, Charly Products, Dennis and Claire Pagen (Sport Aviation Publications), Dennis Cummings (Ol' Eagle Eyes), Cross Country Magazine, Airborne Windsports, Plastiquel Wheels, USHGA, Skyline Flight Gear, Mountain Designs, Chap Stock, Cadbury Chocolates, HGFA and, of course, Moyes Gliders.

And Bill Moyes... What can I say? For being an absolute arsehole at times (as Molly puts it) but mostly for his strength, foresight, enthusiasm, energy and direction, without which none of this would ever happen. He just makes it all happen!

And to all of the 82 pilots, two thirds of who travelled halfway around the world to be there. Adios, Tschuess, Auf Wiedersehen, Sianara, Au revoir, see ya', until next time...



Tish the Flying Fish – Winner of the Women's Section



# Depreciation, Insurance, and other Annoyances

MAURIE BRADNEY

Rudi Salter produced a fine description of budgeting for gliding tugs in the February and March issues of AG/SS. While he detailed a hypothetical tug situation the example is also quite suitable to use for gliders. Just leave the engine items out. In the glider situation, most clubs will find that their glider, unless it has a heavy training load, is almost entirely a fixed cost operation.

**A**ctually training is a difficult area. It is high cost for the two-seater, but the launch volume provides utilisation for the tug to get it into an economic operating situation. Perhaps clubs which have a low training load need to consider alternatives like hiring a private tug, or (good heavens!) winch launching!

I felt Rudi was a somewhat cavalier in his treatment of depreciation. However, that is the way most clubs seem to treat it too, so I thought that I may as well add some of my ideas on that and related areas.

The period 1972 to 1982 was a very inflationary period. Gliders purchased in the early 70s appreciated two and three times and held that value. It was only in the late 90s that old glider prices have been falling, but in general are still double what was originally paid for them. In times like that why depreciate? The appreciation will take care of that for you. Rudi says that is a myth and the fact is that inflation and other factors have reduced our golden dollar to a brass razoo. I think that we should rename the Australian dollar the razoo.

The concept of depreciation is that equipment will wear out and will need to be replaced, and that its earnings should provide the funds to do this. If that is not done then that particular unit will simply disappear from the inventory. Any replacement will need fresh capital input.

If depreciation is to be considered, the owners' decisions are: What is the useful life of the equipment? Will it have any residual value? With these decisions some calculations can then be made.

These can be very flexible figures. Suppose that a club purchased a Standard Cirrus, a current competitive glider, (hull and basic instruments) in 1975 for \$10,000. In 2000 they sold it complete with trailer, and full instrumenta-



The author, Maurie Bradney  
Photo: Courtesy Maurie Bradney

tion for \$25,000. Probably the extras were worth \$5,000 so that gives a capital gain of \$10,000. See, no need to allow for depreciation!

Wait a bit, what about its replacement? That is a new Discus 2, a current equivalent competitive glider, purchased for \$120,000. Where does the \$110,000 difference come from? I wonder if the club put aside \$4,400 a year aside from its earnings – (check the maths)? Certainly not, which is why few clubs have current competitive gliders these days. Why would a club want a competitive glider anyway?

Of course if the club had some extra cash it could take a less expensive option and purchase a used but more up to date glider like a Discus, LS4 or LS7, which is only just off the pace these days.

What about insurance? This is another decision area that can have some flexible figures depending on how you look at it. This is an expense that the club has carried all along the way. Probably in the early years, the glider was insured for its purchase price. But what about when inflation caused appreciation?

If the same Standard Cirrus was destroyed in 1990, probably replacing it with a similar age and condition Cirrus would have cost \$30,000, which was something near the then current market price. Did the club match its insurance cover to that value or did it stick with purchase price and have to find the additional \$20,000?

What was in the Cirrus depreciation fund could have been used for the replacement along with the insurance money. After 15 years of good budgeting the club may have had the extra cash. However, if it had matched insurance to the gliders value its replacement would have been covered and the depreciation fund may have had enough to upgrade to a newer glider.

An area of Rudi's work that looked a little light was his costs for tug 100-hourlies. Perhaps his club has some engineers who can reduce this normally commercial expense? This possibility brings another question to club charges.

If club members provide volunteer work for work which would be normally be done in a commercial workshop, who benefits?

The obvious answer is the club. But does it?

Suppose if all the work was done commercially and the club had to charge \$30 per tow to break even. Then by volunteer workers substituting their work, the cost could be brought down to \$20 per tow. Who benefits by the difference? Not the club, because it does not get the money.

Who benefits is the people who are paying for the tows. That is, the members. This may be considered to be the same as the club, but really it is not quite. If the people benefiting are only a small proportion of the members or even someone else, are the volunteers really achieving any benefit from their support of the club?

Of course if the committee was determined that "the club" as an entity should benefit from the volunteer work, then it would charge as if all work was commercial. Then the club really would get the financial benefit. Realistic, but probably it would not be a popular decision.

Committees' decisions are not easy and volunteers rarely get the appreciation that they deserve.





# Winglets

An article appeared in the March issue of AG/SS written by Mike Valentine, Senior Technical Officer – Airworthiness regarding winglets.

In this article, Mr Valentine mentioned a warning from DG designer, Wilhelm Dirks, to the effect that winglets should not be fitted to certain of the DG designs. This warning was meant to be re-printed in full, but due to an error in editing, by the AG sub-editor, it was omitted. Sincere apologies are extended to Mr Valentine and John Ashford, Chairman of the GFA Technical Committee, for any embarrassment this may have caused them.

The warning, by Mr Dirks, from the DG web page is reproduced with permission of DG Flugzeugbau as follows:

## The possibilities of combining various wings and winglets

This question arises frequently, a typical FAQ: *Your winglets on the DG-800/18 are obviously very good. Could they be added to a DG-400 or DG-500/22?*

Unfortunately the answer has to be “no”, for three reasons.

1. The depth of the winglets would have to be exactly identical to the depth of the wing at the point of extension. This never happens.
2. The profile of both parts would have to be identical, which also is not so. One could force a match with much filler, but the results would not be very satisfactory.
3. The wing has to be able to withstand statically and dynamically the extra mass of the winglets.

The first two points could be overcome by designing new winglets. We conducted extensive research to see if the 280 DG-400s could be equipped with winglets, which would bring their owners considerable advantage which they probably would be glad to pay for.

However, the third point proved to be an insurmountable obstacle.

The wings are designed with considerable safety margins according to the design rules, but not with reserves over and above the requirements. The wings are designed to withstand a stress of 6G plus a safety margin, but not more.

A winglet at the end of a wing generates additional lift – it is the equivalent of extending the span and the longer leverage adds a bending moment to the spar root. However, it has not been designed for that.

It is entirely possible that a destructive test, which is required for new wing designs, would prove sufficient strength. But the theoretical proof would also be required and for that there are not enough reserves in the design. Why should it be?

The calculation of static loads showed the addition of winglets is impossible. Even more complicated are the dynamic loads with regard to flutter. Obviously a winglet at the end of the wing could change the internal resonance of the whole structure and only extensive tests would show if the wing is still flutter-free. The cost is not worth the result.

We have reluctantly come to the conclusion that the addition of winglets will never be possible. Some aero technical companies offer “homemade” winglets for installation. As manufacturers we can only warn against this.

Sailplanes with such winglets no longer comply with the design rules. Probably nothing will happen because the design rules do contain considerable reserves, but would you trust your life to a possibility?

It is better not to try.

But there is one exception. It is possible to build winglets for the DG-300, as it is done for the newer DG-303

Similarly it is possible and very advisable to fit the DG-600 with winglets and even extend the wingspan up to 18 metres.

*STO/A note: The DG discussion then moves into span extensions. That part of the discussion is left out here.*

Then, as a result of a workshop offering “after-market” winglets for the DG-400, the designer finishes off the discussion by issuing a warning, as follows:

## Warning

**Please be informed that the results of our stress analysis don't allow to install winglets to the DG-400 17m tips.**

**So such winglets can't be certified in any country and operating the glider with such winglets is illegal.**

**Please stop advertising 17m winglets immediately.**

*STO/A note: Very simple – the wing of the DG-400 is not strong enough for the additional forces of a winglet. To fly with one is dangerous for your life!*

## THE GFA SAFETY SEMINARS

- Bi-Annual Safety Seminars will again be conducted this year by the GFA in all parts of Australia
- These important Safety focused Seminars are open to all GFA members – instructors, pilots and students.
- All are encouraged to attend – please look for locations and dates for a seminar in your area.

### Programme as follows:

29/4/01	Lake Keepit (Clubhouse)	13/5/01	Tasmania
		26/5/01	Warwick
27/5/01	Caboolture	9/6/01	Perth
10/6/01	Beverly	1/7/01	Alice Springs
15/7/01	Benalla (Clubhouse)	29/7/01	Townsville
		18/8/01	Balaklava
19/8/01	Renmark	1/9/01	Camden
2/9/01	Bathurst		(Clubhouse)
16/9/01	Leeton	7/10/01	Casino
20/10/01	Bacchus Marsh (Clubhouse)	21/10/01	Latrobe Valley

Kevin Olerhead – Chief Technical Officer Operations

GFA Secretariat, 130 Wirraway Road, Essendon Airport VIC 3041

## GLIDING FEDERATION OF AUSTRALIA

Airworthiness Inspection

## FORM 2 NOTICE

- ☐ A Form 2 inspection is due  
Cheque for \$137\* is enclosed
- ☐ A 20, 30 yearly, etc is due  
Cheque for \$302\* is enclosed  
with copy of aircraft log book
- ☐ An initial C of A inspection  
and initial registration is due  
Cheque for \$511\* is enclosed  
(tick appropriate box)  
on the following aircraft:

TYPE .....

VH .....

Please forward relevant airworthiness documents to:

.....

.....

.....Postcode .....

\* prices include GST

Forward to:

GFA Secretariat, 130 Wirraway Road, Essendon Airport VIC 3041



# Derek and Don's Difficult 500 Day

DON PALMER

**A**t midday on a hot summer Narromine day Derek and I watered up, confident of good thermal activity for our 500km task with Derek in the Jantar and myself in the Astir.

Our first leg to Parkes was fairly average, but got decidedly worse once over the foothills of the Harveys. We both got very low having not had a good thermal for about 20km. Finally, a little half-knotter came along but not before we both had good paddocks picked out and I had started to jettison water ready for an outlanding. The thermal that Derek had found took me a while to centre, before the vario finally started getting above zero. Meanwhile, Derek went exploring for stronger thermals, but there was nothing better, so he was soon back, this time below me. We both patiently climbed for quite some time. Since I had dumped my water it was now up to me to get away first and try to get us on track again. I headed back over the Harvey Ranges and picked up a ridge street which took me almost to the northern end. Unfortunately, I now discovered that my glider battery was failing so I could no longer contact Derek. This meant the end of our pair flying.

Realising this would disadvantage me, I decided to push on to our next turnpoint at Tooraweenah airfield and, by keeping Narromine within gliding range, I could delay any thought of abandoning until much later. Once I was at the northern end of Narromine gliding range the thermals were becoming nearly reasonable, so then I had Gilgandra (an airfield I already knew well) as my next standby drop in point. I reached Tooraweenah by keeping high around Gilgandra. I was encouraged to push on by the promising looking cu's to the north. At last Coonamble looked reachable, and I calculated that on present pace I could turn Coonamble and still

get to Narromine before last light. The problem was, I had reached the last of the cu's but Coonamble was still 20km away in the blue, and thermals were averaging about 10 to 15km apart. Still, Coonamble had an airfield so it was worth pushing on. I had been plotting thermal positions heading to this turn point on my GPS, so I crept to the top of every thermal, assuming it would be my last, and hoped I could run to the turnpoint and back and that my marked thermal would still be working. Well the theory worked, and I did a total run nearly 40km and arrived back at my marked thermal at a height of 3,500ft QNH.

Finally the run home, so again I headed for any cu's but this took me easterly off my track, but at least I was going south. It was now 7 pm and my final glide was close, but I was concerned that I needed to speed up to beat the fading light. I now headed south-west but my GPS had finally died (I had been flying over seven hours). I had spare batteries and had proved I could reach them in my pre-flight check. However that test had been done with the canopy open (something for all of us to remember) but in flight I just couldn't contort myself enough to reach them. Well, time now for plan B and use my limited map skills and my recollection of flying in this area on previous days. I was confident of my position and heading but flying south-west at the end of the day, with sunset on my horizon, I mistakenly took Dubbo as Narromine. By the time I realised my mistake I was no longer in glide range of home. The ground was creeping up and I soon found I was concentrating on picking paddocks. I made my landing in the best paddock available (I'll take on bulls any day compared to powerlines) – the retrieve part of my flight was another complete experience well detailed in Derek Ruddock's outlanding retrieves article in the March edition of AG/SS.

Derek's flight was also an experience. We didn't see each other around our task for the rest of the day, however he must have passed me somewhere mid-flight to have been able to complete the same course within such a obtainable time. Obviously Derek's experience and tactical skills prevailed on the day.

Well, my first 500km flight – what an experience – what a memory.



# The Cost of Gliding

ANTHONY SLAVEN

**R**ecently, while rummaging through some old gliding magazines at home I came across one of our club newsletters from early 1988. Opening the newsletter I found that costs associated with gliding at the club were printed on the inside of the cover. As cost is now the main factor in influencing how much gliding I do, I decided to compare these prices to the cost of gliding at the same club today.

I look upon the costs of gliding from the view of a young person. I am 17, and I pay for my own flying. I am one of three active members under the age of 25 left at my club, which has a total membership of 140. One of the other members of whom I speak joined only a few months ago. Last year there was another member of my age, and at about my standard of flying, but he left because gliding had become too expensive.

In January I competed in the WA State competition. This was the last time I flew solo. Once I returned from this competition I worked out how much money I had spent on gliding in the previous year. Over \$1,700. I flew 95 hours during the last year – 21 hours of which were as AEI. I considered this fact and decided I could not justify the expenditure. Many, if not most people cannot. After a few more sums I discovered I would have saved myself nearly \$5,000 by flying at one of the other clubs near Perth. However, this club is further away, therefore increasing the

transport costs. There are no winch clubs available to me; the only clubs that do operate winches in WA are situated more than 350km from Perth.

I have now started at university. Running my car is expensive, as it is for everyone. A few part-time jobs are able to pay for this, with a little extra. However, now I find myself asking 'why should I be stressing myself in order to go gliding for a weekend?' I find it strange my saying that. As you are probably able to tell from my hours, there are not too many more enthusiastic glider pilots around.

Gliding club memberships Australia-wide are declining. Why? Many members in clubs somehow find it difficult to comprehend the fact that it is because of cost. I have heard it stated at my club once that "if people don't have the money to glide they shouldn't be here." Do people wonder why I question if I should be gliding. More specifically, with regard to youth in gliding, I heard from a member at another one of the WA clubs that the committee there had decided to attribute the declining youth membership to the fact that the youth of today are lazy and cannot be bothered with the effort of gliding.

I did compare the prices of gliding in February 1988 to February 2001. In 1988 at 2,000ft tow at my club cost \$11.50 – it now costs \$19, a 39.5% increase. Full membership in 1988 cost \$120 each year, it now costs \$198, a 39.4% increase. In 1988 twin glider hire for an hour cost \$18.50, it now costs \$30 an hour, a 38.3% increase. TIF flights have risen 64%, from \$25 to \$70 a flight. Enquiries with the Australian Bureau of Statistics reveal that over this time Australia's inflation has totalled 34%.

How much did you spend on gliding last year?



# Soaring Grand Prix

## – A new type of soaring competition that brings gliding to the public and the media

TERRY CUBLEY

The first International Soaring Grand Prix was held in conjunction with the World Championships for Club Class at Gawler, South Australia early this year. The competition was quite small, only six competitors, but this was sufficient to prove the concept to competitors and observers alike.

### The basic concepts are as follows:

#### Common start time

This means that the first competitor home is the winner for the day. The start zone was a two kilometre radius circle centred on the start point. The competitors must cross out of the start zone after the start opening time is announced. The start time is a set time after the last launch (40 minutes at Gawler) and competitors are given regular warnings about the opening.

At Gawler, competitors generally started at about the same time, but rarely in the same gaggle. There is some tactical advantage in delaying when you actually start out on track, although this was not used greatly during the competition.

On a couple of difficult days, some competitors were unable to start at the allocated time but were not severely disadvantaged by starting up to 10 minutes after the official start, as the difficult conditions made it possible to catch earlier starters on some of these occasions.

Suggestions have been to include a height limit prior to the start, and to use a start sector rather than a start circle.

#### Simple scoring system

A place scoring system that is easy to understand for non-gliding people. Bonus points for first and second place means that pilots who are prepared to lead out are rewarded significantly.

It also means that a poor result, even an outlanding, can be overcome fairly easily. You are not out of the competition by a poor performance on the first contest day, so this keeps the competition more open, keeps all pilots interested and striving for top performance. This is undoubtedly more fun for competitors.

The scoring system awards one point for exceeding 60km, and one point for each person who you beat or draw with. There is one bonus point for coming second, and three bonus points for coming first.

#### With six competitors at Gawler the scores were:

First	Second	Third	Fourth	Fifth	Sixth
9 points	6 points	4 points	3 points	2 points	1 points
5 point gap		2 point gap			

At Gawler it was easy to explain to visitors and the media what the scoring system was, and what people had to do to get the points.

#### Gaggles

There is potential with the start system that gaggles will develop. Experience at Gawler shows that gaggles form and dissipate around the track. Pilots commented that there was always the opportunity to try and get ahead of the pack. There were no close finishes with pilots racing each other for the finish line – the race was won or lost out on track. The rules prohibit any overtaking of another glider with the aircraft overlapping. This was introduced to stop any safety issues at the finish, but in practice was not an issue.

With greater numbers, the concept is to operate with a series of groups. Groups would each have 6-10 competitors, and pilots would be rotated through groups on a daily basis.

#### Enjoyment

All competitors have commented on the enjoyment and challenge of this form of competition. The fun is in the one-on-one racing, knowing whether you are winning or losing continually around the flight, taking tactical risks to get ahead, knowing when you have a bad time that tomorrow you can make amends, knowing that when you win you can have a rapid rise in overall position.

#### The future for the Grand Prix

Left on its own, this form of competition will have a few supporters and a few competitions will be organised, mainly at a local level. Glider pilots are a conservative lot and they will turn up to the competitions that are running. For this competition to be a success, 'we' need to take some positive action. 'We' need to do this if we want to create a media/public focused gliding event, one that can be used to promote our sport and increase total awareness.

#### To achieve this goal we are looking at some alternatives:

##### Option 1:

A series of grand prix events around the world. These can be fairly short events, say three to five days of flying. The winners of each of these events would then be invited to compete in the International Soaring Grand Prix. The final would be sponsored with significant prize-money. The amount of sponsorship available will determine if support can be provided at the National events.

##### Option 2:

A series of events in a grand prix circuit around the world – a similar arrangement to the motor grand prix. Plots would gather points at different events around the world. This approach would require significant sponsorship.

To actually start this process, I am seeking contact from individuals prepared to become involved through arranging events in their own country or region. The search for appropriate sponsorship will require personal contacts with relevant businesses.



# Electrikery — Electricity and You

## Part 2 – Batteries

NED McINTOSH

Last month we met the basic units used in electrical work. Now it's time to delve a little. Your trike starts with a battery. So does this discussion.

**A** battery is a device for storing electrical energy via chemical means. It consists of two or more cells. On trikes the usual starting-battery is a sealed lead-acid type. This is a smaller version of the starting-battery in your car and uses the same materials, just in a more convenient form. The plates are still made of lead peroxide and spongy lead, immersed in an electrolyte of sulphuric acid. The whole lot is housed in a moulded plastic case and because the electrolyte is a paste rather than a liquid, there is no need for any openings to top up each cell. There are gas vents to release any hydrogen given off by the charging process, but your sealed batteries are designed to be charged at rates much lower than ordinary



car batteries to avoid producing hydrogen in the first place (so **never** fast-charge them!).

When fully charged, each cell has a terminal potential of about 2.2 volts. When fully-discharged this falls to about 1.9V per cell. Six cells in a battery equals 13.8V charged, 11.5V discharged.

How much electrical energy does your trike battery contain when fully charged? The answer is on the side of it, a figure quoted as so many "Ampere-Hours". Suppose your battery has a 10Amp-hr rating. This means it will deliver one amp for 10 hours, or half an amp for 20 hours, or two amps for five hours and so on, within reasonable limits. Draw too many amps in too short a period and it may not achieve the rated capacity. Draw a very small current over many hours and it may well actually exceed the Amp-hr rating by a significant amount.

Your battery isn't an electrical equivalent of a fuel tank – you can't fill it up as fast as you can pour current into it, nor can you draw very high currents from it either. If it can only source electrical energy at the speed permitted by the chemical reactions inside it then recharging likewise requires time because the chemistry inside can only proceed at a certain rate. Sealed lead-acid batteries usually require between 14 and 16 hours for a full recharge. You know it's fully charged when it starts to get warm... because the energy you're putting into it is being dissipated as heat rather than re-working the chemistry. It helps to buy a proper charger for sealed lead-acid batteries and use it judiciously.

Lead-acid batteries (of any type) really **hate** being left discharged – they become sulphated and useless (they won't hold a charge). So, never leave a lead-acid battery in a discharged condition.

One final word about lead-acid batteries. The voltage versus charge graph is a nice linear one. That means the voltage you measure at the terminals tells you pretty much exactly where you are on the charge-discharge cycle at any point. If your battery measures halfway between 11V and 13.5V, then it's half-discharged and so on.

Now, what about the Nicad battery on your radio? Well, it uses different chemistry but the effect is the same – it stores electrical energy. Nicad cells contain an alkaline electrolyte (Potassium Hydroxide), with a central coiled positive metal foil electrode of a Cadmium alloy separated from a coiled negative plate impregnated with Nickel Hydroxide which is attached to the outer metal casing. Coiling the plates allows greater surface area to be squeezed into the container, increasing capacity. Once again, it can only accept a charge at a certain maximum rate. Once again

### HGFA merchandise

Available from the HGFA PO Box 558, Tumut NSW 2720

Phone: 02 69472888 or Fax: 02 69474328

Prices include GST

- ◆ **\$33 Polo shirt** with embroidered HGFA logo in navy, green & white (sizes 16 to 24)
- ◆ **\$55 Rugby top** with embroidered HGFA logo in navy, green & grey (sizes 16 to 24)
- ◆ **\$16.50 Cap** (cotton or corduroy with HGFA colour logo) in red, blue, black, navy or green



- ◆ **\$1.65 Car Sticker** (colour HGFA logo) – no postage required
- ◆ **\$30 HGFA Hang Gliding Training Video** (23 minutes)
- ◆ **\$30 – 1998 Hang Gliding Grand Prix Series Video** (110 minutes)
- ◆ **\$5.50 HGFA Pilot Training Workbooks**

- ◆ **\$35 Better Coaching** – Advanced Coaching Manuals
- ◆ **\$30 Hang Gliding or Paragliding Training Video**

**Publications Replacement Copies:**

- ◆ **\$11 HGFA Operations Manual\***
- ◆ **\$16.50 HGFA Operations Manual Binder\***
- ◆ **\$5.50 HGFA Log Book\***

**\$5 Postage and Packing**

(Bulk orders sent C.O.D.)

\* Replacement Prices only – These items are issued free with initial Membership (Full, Family and STM only)

# r Trike

it becomes warm as it approaches full charge. Once again over-charging is not good for them. Up to now they seem just like lead-acid, but there are two very important differences.

First, a Nicad doesn't care if it is stored for a long period discharged. It won't damage it. However, it definitely doesn't like being over-discharged.

Second, unlike a lead-acid battery, a Nicad battery maintains a more or less constant output voltage over its entire discharge range until it is nearly totally discharged, at which point the voltage falls very rapidly. An individual Nicad cell is fully charged when its terminal potential is 1.2V. Some will go as high as 1.5V but they very soon drop to 1.2V and then they stay there. It is fully discharged when its terminal potential is 1.0-0.9V. This means if you start with a fully charged Nicad cell and steadily draw current from it the voltage will stay constant for almost the entire discharge, then it will fall rapidly to 0.9V.

Taking a Nicad all the way down to zero volts will almost certainly cause the cell to reverse polarity and ruin the cell! For example, 10 Nicad cells as a battery will begin with a full-charge voltage of between 12 and 15V. When this battery measures 10V, it is fully-discharged. Go any lower than that and you risk reversing one or more cells, and that isn't good. (Immediate recharge might save them, but there is no guarantee of it and they are expensive to replace.)

Nicad cells are (in)famous for developing "memory". Actually, what we call memory effect really isn't that at all, it's cell-imbalance caused by excessive charging. Only Nicads exposed to long periods of identical charge-discharge cycles (satellite batteries, for example) develop genuine memory effect. Cell-imbalance is something we inflict on them by our own efforts – and ignorance. The effect is an apparently fully-charged Nicad which falls well short of its normal capacity in use.

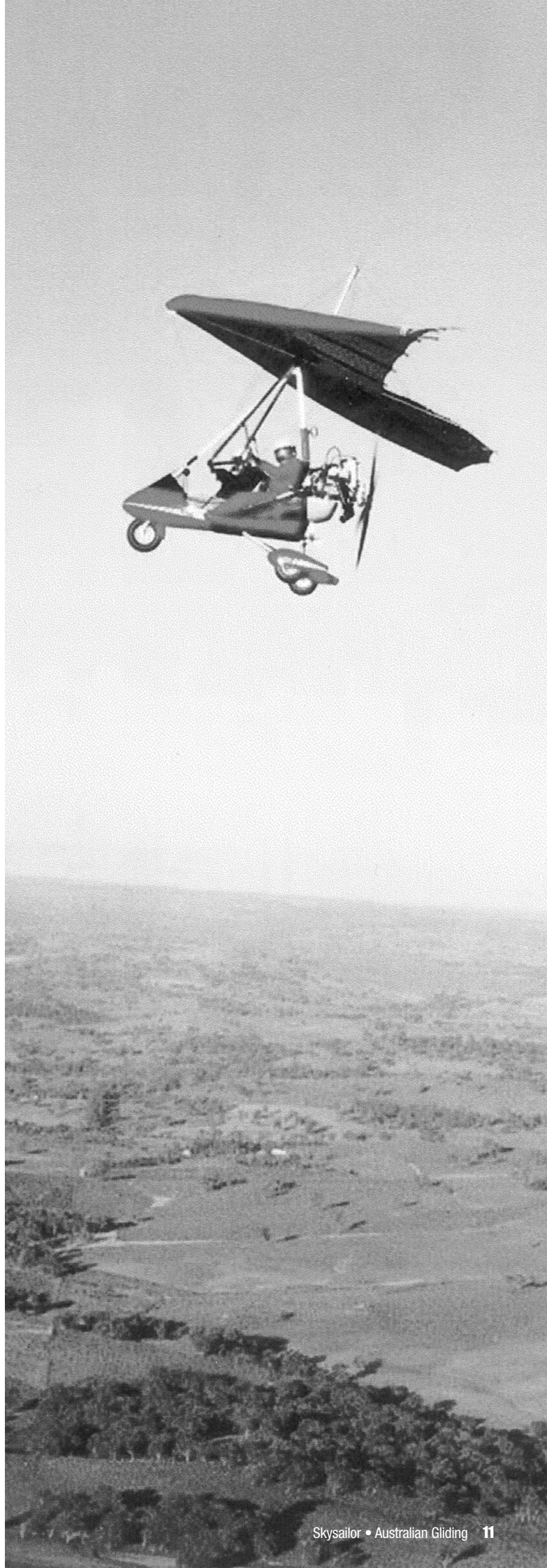
Why does this imbalance develop? Remember the Cadmium alloy? Well, there are two separate forms of it. The dominant form has a (slightly) greater electrical potential than the alternative and when new, there is almost none of the "weaker" alloy present. However, long periods of trickle-charging (and especially trickle-overcharging) results in the development of increasing amounts of the weaker alloy at the expense of the dominant form. The result is one or more cells in the battery having reduced storage capacity and a lower voltage. During discharge it goes flat well ahead of the rest, dragging the output voltage down dramatically and making the whole battery appear to be faulty. One failed cell is all it takes and abusing Nicads will cause such failure.

To avoid cell imbalance, fully discharge a Nicad battery before recharging it at least once in every four or five rechargings, and use a proper current-sensing charger which can sense when the battery is fully charged and automatically shut off. Too many Nicad chargers are just cheap "battery cookers" which rely on a thermal switch inside the battery pack cutting out as the particular cell it is attached to reaches a certain temperature. These are cheap chargers, usually supplied with the battery-powered equipment and they just help make large profits for battery makers by ruining Nicads well ahead of their time.

Now you know about the two kinds of batteries on your trike, you are well equipped to maintain and use them properly. Starting-batteries are not hugely expensive to replace, but Nicad battery-packs for Icom radios are a different matter. It is well worth having a failed Nicad battery re-packed by one of the companies that specialise in this work. A look through the "Videos & Accessories" section of the "Trading Post" can be to your advantage.



*Next month we look at DC and AC.*



## Australian Hang Gliding Championship

# 45 Degrees and Rising...

DR (DRIVER) CAROL BINDER & DR (DOCTOR) JAMES FREEMAN

Hay is situated eight hours WSW of Sydney. It is flat, dry and challenging.

Last year I flew in Hay as a competitor and had PB's almost every day.

It is with ease to thermal up, pick a road, climb to base, and when you have to land you just need to turn into the wind and land (almost anywhere). This year with a new glider and not wanting any stress

I decided to take the driver's seat and tow pilots up instead of being towed. I thought it would be crap, but you know, I actually enjoyed it.

**I**n Hay this year it was damn hot, and each day got hotter. This year the dusties were to a minimum (except for in the distance) and the competition was injury free with the exception of a broken wrist. Long retrieves were to a minimum and lots of pool parties and BBQ's were on the go. What more could you ask for?

On the first day was the usual stress of organising the ropes, weak links, picking the right end of the paddock and hoping all radios were working. The day before the official start massive cells had opened up over the tow paddock, setting off fires and dumping rain, turning the paddock into a slippery muddy mess. But by midday on Day 1 it was already dried out and ready to go. That's how hot it was...

Day 1 the window opened at 1:15pm with the risk of over-development. After hearing my first "take up tension" and "go now, go now, go now" I was off and driving like a crazed woman down the dusty tow strip passing dead sheep and remainders of previous tow cars which had burnt to the ground. With several cells building on course it made conditions challenging for the late starters, with many pilots forced to land around the second turnpoint. The day was a success and valid.

The second day saw stable conditions and a 125km out and return task to Gunbar was set. More "go go go's", rope breaks, rope end searches in 45°C heat, ropes being dropped on cars, etc, etc. Yep, here we were again. Conditions proved challenging, but seven pilots made it into goal including Attila Bertok, Andreas Olssen and Gordon Rigg. The only Aussie to goal, Grant Heaney, made it in late but flew like a legend with many low saves just on dusk.

Day 3 dawned brown and inverted. The lack of any cu's told the story. A 154km downwind task was set, but then shortened to 131km after the organisers reassessed the conditions in order to give the slower pilots a fair chance. However, conditions on course proved better than expected and half the field made it into goal. Aussie Ben Kennedy put in a good effort to be the only king posted glider in goal, cruising in at sunset – top effort (look out for this guy).

Another inverted day on Day 4 also proved deceptive with the approach of a low pressure trough. Haze domes rapidly changed into beautiful cumulus and a perfect flatland racing day with 1,000 up (5m/sec) lift and a 9,000ft (2,600m) cloudbase on our side. A 161km (100 mile) straight line task was called, and amazingly 47 of the 67 pilots made goal! The fastest pilots averaged 70km/h. As for us

drivers, well I was lucky with the best tow and retrieve crew you could wish for (thanks Steve, Tony and Tim). Some of the American team, including Bo and Paris, had an all-nighter with wrong GPS co-ordinates in the driver's GPS (there's a lesson there to be learnt). And a lack of petrol stations stranded a few cars on the 3.5 hour return drive. Those who were on the road had to constantly avoid kangaroos, wallabies and emus, thus keeping the speedometer down to a frustrating crawl. We were however, blessed by amazing sunsets each evening, which topped off the day's perfect flying. What a place!

With the unstable air from the low pressure trough still providing excellent soaring conditions, a relatively short dogleg task of 120km was called on Day 5. Oleg smoked in, probably driven by his previous bad day, to win the day. Gordon Rigg hit a dust devil on tow, climbed vertically over the tug, broke the weak link, then decided to go back for seconds – all at less than 500ft. He found the dust devil again, tumbled once and deployed his chute. Arriving under canopy back on terra firma, he commandeered a glider, harness, and chute; launched; and took the start gate some 30 minutes later. Naturally, after an effort like that, he also got to goal.

Because our comp director, Zupy, specified that a rest day would be called after six consecutive days of flying, a long task of 265km was called on the sixth day of competition. Unfortunately the weather on Day 6 was the worst of the competition, with slow initial climbs to a low inversion. To make matters worse the course line proved to be cross-tail rather than the intended straight downwind. For those who made the first 50km conditions improved with good climbs to 9,000ft. It turned into an open distance task with Rohan Holtkamp winning the day with a flight of 247km. No one made goal, but the stories of no pickups and over-nights were pretty funny. If you've ever been out to Hay, you definitely know that Aeroguard doesn't work out here. From dusk to dawn, beware... A few pints of blood were lost by all.

After the rest day, Day 7 saw a fine day for flying with light winds, so an out and return of 150km was called. By this stage of the comp

## FUNNY CAPTION COMPETITION

We've got a great photo for this month's comp!

Submitted by James McGinty,

it was taken earlier this year at the Bogong Cup.

We print it here with kind permission from our  
two good-humoured subjects, Louise and Jon.

our tow rope looked the worse for wear. The tow paddock was full of salt bush, which seemed to act as blades slicing our rope to a frayed mess (like some tempers). We had our share of rope breaks, with some tailwind dolly starts and more than 250 pound pressure to get the pilots to a decent height to get them into anything going up. The initial conditions were good with 800 up climbs to 7,000ft. Unfortunately some high cirrus cloud made the last 20km to goal a real struggle, with many pilots on the deck just short of goal. Paris Williams blazed, leaving early, and would have taken the coveted 1,000 points except he landed just short.

The final day was cancelled due to high winds.

Many thanks to our sponsors Dynamic Flight, Skyline, Mountain Designs, Cross Country Magazine, pilots and the town of Hay for making it such a great competition. Oh, and thanks to the weather god too for his/her benevolence (thanks also for the 45°C heat every day!).



For full details on the Australian Nationals go to [www.dynamicflight.com.au].

### Tasks

T1 Pretty Pine	133.9 km
T2 Tow Paddock	124.6 km
T3 Gap Dam	130.6 km
T4 Lake Cargellico	165.9 km
T5 Willow Corner	117.6 km
T6 Hopetown	265.2 km
T7 Kooroongal	149.2 km

### Results

1 Heinrichs, Gerolf	Litespeed 4	AUT	6,210
2 Bertok, Attila	Litespeed 5	HUN	5,975
3 Barber, Mike	Litespeed 4	USA	5,733
4 Rigg, Gordon	Litespeed 4	GBR	5,645
5 Holtkamp, Rohan	Climax	AUS	5,444
6 Gerard, Jean-François	Stealth 14	FRA	5,168
7 Olsson, Andreas	Litespeed 5	SWE	5,094
8 Weissenberger, Tom	Litespeed 4	AUT	4,991
9 Williams, Paris	WW Proto	USA	4,984
10 Moyes, Stephen	Litespeed 5	AUS	4,713

### Women

18 McLellan, Tish	Litespeed 3	NZL	4,397
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If you have a witty mind  
What funny caption can you find?  
Send to me your words with haste  
If HGFA caps are to your taste!

Send your entries to Richard Lockhart  
(C/O Blackheath Post Office,  
Blackheath NSW 2785,  
or email <skysail@ozemail.com.au>  
by 25th May.

The winner (announced in the July issue)  
will receive an HGFA cap.



The winning entry for the March comp is:

*As the pilots assembled for the cross-country hang gliding championships, Professor Hansen was quietly confident that his new anti gravity boots would give him a much needed advantage. – Brian Crawford*

# Almost 750

MICHAEL O'BRIEN

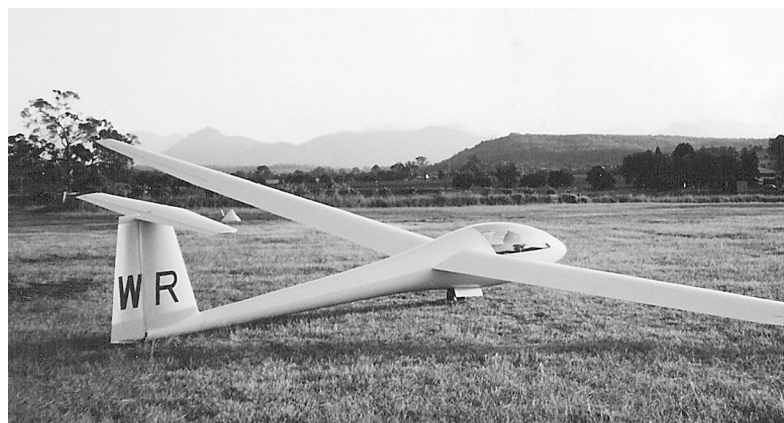
This is a story about a quest. It is a quest that has taken many years. I have enjoyed the journey. Several times I have come very close to achieving the goal. I have made some great friends along the way, and I will sprinkle their names freely throughout what follows. It does not matter if you don't know the names. I have this theory that gliding is just one big family. We are not always a happy family. We have a few black sheep. Let us be honest: We have some fluorescent purple sheep! But your family is still your family. So just think of any unfamiliar names as distance relatives, who you may meet one day at a wedding or a funeral, or on an airfield.

In my club, modern tradition is always to start a story about cross-country with the words "It is all George's fault really".

It is all George's fault really. When I landed on Sunday, 24 March, 1991, I really had the whole cross-country thing worked out. I knew to fly straight and fast, and never deviate from track. I understood the McCready theory perfectly, and always set the ring nice and high to be sure I would go fast. I would always fill the Hornet with water, and never dump it until I got so low I had to. I had even managed two 300km flights, even though the weather was never good enough, and the sink used to be much worse back then. I didn't know what an averager was, so thermals were much better, with lots of 10-knotters, though most of them only had two knots on one side. And no-one could deny I was pretty good at outlanding. In fact there was some evidence I might develop awesome capabilities in this regard.

Everyone had left the airfield except for Eddie, Con, Denise and myself. We were all about to head for home when George Brown turned up. He was driving his old Skyline, and he had his glider trailer on the back. George had spent the summer in Tocumwal, where we had been, working as a tow pilot and instructor. After attending to his first priority, which was to get a beer, we started to talk. George wanted to know who was going to the Easter competition at Taroom. We had no intentions. However within an hour, the arrangements had been made. The next weekend, the five of us would be taking a Blanik up to Taroom. I truly believe this was the turning point.

The fact that George was happy to take a Blanik, an old two-seat trainer, was pretty remarkable: It meant leaving behind his beautiful standard class single-seater, an LS1-f. We had only seen this fly a few times, but had observed that it had a performance about 30% better than the Hornet. Obviously George had worked out we were promising pilots!



Flying from Warwick to Taroom is significantly over the 300km mark. Nevertheless, the plan was always to try and fly as much of the way as possible. George had a cold, so Eddie and myself got the pilot's seats. We managed 202km in just over five hours, which really wasn't that bad considering cloudbase was only 3,000ft agl for much of the flight. We had never done a cross-country in a two-seater before, and we were very happy with the experience. We had a great comp. I managed to solo on the winch. We enjoyed the flying even though it rapidly became obvious that we didn't fly nearly as well as we thought: We had just never flown against decent pilots before. Life had changed.

The next summer, Eddie and myself flew a 300km in the Blanik. It took five hours 12 minutes from release at 1,200ft agl to touchdown afterwards. It brought us more kudos than any other flights we have done. I took the Open Cirrus to a teams challenge at Kingaroy. I started making 500km attempts. I did 400km in the Open Cirrus, as well as a 400 with Eddie in the Twin Astir. Then George left for England, and four of us bought his LS1. Life had changed again.

With a nice glider, I started to really learn to fly. I had discovered that the LS1 did not really go any better than a Hornet, but has absolutely delightful handling, and really talks to the pilot. I flew my first State comps in 1993. I did my first 500: 512km in six hours 28 minutes take-off to touchdown. I did another 500km over an hour faster. But this brought frustration, not satisfaction. I had launched late into a seven-knot thermal to 7,000ft agl, and I was swearing at myself after only a few turns. I had wasted a good day. I knew bigger things were possible.

*Advice for beginners: Get a good glider! Don't worry too much about the performance. Has it got a good trailer, so you can do an easy two-person de-rig? Will you feel really comfortable flying it?*

On my glider, I have the C of G right on the aft limit. I am not very big, and there is lead in the tail. With me, the aircraft had a bad habit of running out of forward stick on aerotow, which is not pleasant. We checked the weight and balance, which was fine. Removing the lead removed the problem, but hurt the climb. Turbulator tape on both sides of the elevator fixed the problem. I believe about 55% chord is the magic distance for most gliders of this era.

Turbulator tape under the wings makes a big difference to the thermalling speed. On older gliders it goes a long way forward, about 60% of the chord works well on the LS1. (We put a straight edge over the reflex surface, and chose the spot where it comes within three millimetres of this.) I think the gains are much bigger on the older gliders, because there is much more turbulent air flow to improve! The gain is mainly in smooth thermals, because if it is rough you need the extra speed for control. I am talking about a drop in stall speed of perhaps five knots here – It is quite a transformation. We also did it to the club Hornet, and, along with Mylar sealing, and turbulation of the tailplane, it totally transformed this gliders handling and performance.

On Friday, 19 November 1993, I made my first serious 750 attempt. Gus Mauch came out to give me a tow, I guess his wife Francie must have run the wing. I had crew arranged to come out later in the day.



Michael O'Brien's LS1-f, VH-GWR  
– A thing of beauty is a joy forever  
Photo: Michael O'Brien

I ended up aborting the task, and achieved 641km in seven hours 15 minutes. In retrospect I should have gone on, I certainly would have got past 700km, but I didn't want to inconvenience my crew.

*Advice: Try and pick up as many people as possible out of paddocks. That way you will have no guilt about pushing on and outlanding, as you will have plenty of credits. Make good friends,*

*because good friends don't count anyway.*

On New Year's Eve of '93, George Brown did something rather uncharacteristic. He went to bed very early, without the usual number of beers associated with this night. It was his turn to have a go in the LS1 the next day. It turned out it was not that good a day, but George flew 767km. (This was the second 750km out of Warwick, Glen Hart did one in a Mosquito several years earlier.)

*Advice: Serious drinking and serious gliding do not go together!*

The next day, I declared 750. I covered the first 50km at a reasonable speed considering I could not get more than 2,000ft agl. I missed the transition when the day took off, and was on the ground after less than an hour-and-a-half. As it turned out the day was not up to it anyway.

*Advice: You have to take a risk and push early to make the distance on these big tasks, especially in lower performance gliders. If you do not have the wing-loading to fly at warp-speed through the middle of the day, you have to make up for this by struggling at the beginning of the day when the heavy gliders cannot stay airborne.*

Somehow I wasted the next seven years doing lots of 300km flights, a few more 500km flights, and at least one competition a year. For this last summer, I decided to get serious. I flew the state comps, and was reasonably pleased with my performance. I thought the Warwick Christmas regatta was a chance to finally get my act together and do 750.

## Suspected Alien Abduction?

The Warwick Christmas regatta started with light rain, which gradually changed to heavy rain. After a few beers, and the some red wine, Rod Haase (I have to name the true guilty party, but please don't tell his wife.) said, "Let's go to Narromine." A quick phone call to Chris Stephens revealed the weather down there was good. (Chris has since proven to be a shameless liar on certain matters, but in this case he was actually telling the truth.) We de-rigged the LS1 and Astir that night and packed the cars and trailers. We rang Heath L'Estrange, to find he was at his grandmothers, and with lots of work to do painting her house. We told him the plan, which was to leave by 6am. I heard his car pull in some time after midnight, he had a couple of hours drive to get to the club. He's keen! The Wilkinsons were also coerced into pulling their Discus to pieces and throwing it in the trailer.

Funny incident number one: We went via Rod's house in Stanthorpe. He agonised about what note to leave to his wife, and finally settled on: "Honey, something has come up. I will ring you tonight."

Funny incident number two: We arrived at Narromine about 4pm after a 10-hour drive. When we tried to rig the LS1, the trailing edge was at the front, and the turbulator tape was on the top! It appears that it is possible to put the wings in the wrong side of the trailer. (We had pulled the glider apart in the hangar, and carried out the bits one at a time.) So (at Narromine) we had to carry the wings around to the other side, which I am sure could have caused amusement to the Orana Soaring Club team, who were all drinking beer as we rigged in front of them. Hopefully we were far enough away that they did not detect our shame-May 2001

ful mistake. (By the way, Orana is a great soaring club: Great people, and a good site too.)

We flew five days out of Narromine. My best flight was 651km, and I did my old trick again of aborting task when in retrospect I almost certainly would have made the distance. I just didn't understand their weather, and was a bit confused by the daylight saving thing. I loved flying across the Warrumbungles. We left a couple of days before the big hail storm which wiped out a fair bit of Dubbo.

Back at Warwick the next weekend, I flew another 600. This day was good enough in places, but storms had totally killed the whole area around my second turnpoint. Rod Haase flew his first 500 in his Astir CS, and we were all happy about that. Australia day proved another great day. Matt Anglim flew his first 750 in his Discus. Heath L'Estrange flew his first 500 in Rod's Astir CS. Not bad for an 18-year-old in a 20-year-old glider. (The aircraft had never done a 500, and then did two in a row.) Errol Spletter (in "my" LS1) and Val Wilkinson (in her Discus) also did 500, and Stuart Lutton took me around 400 in the club's Twin Astir, his biggest flight. The next day looked like more of the same, or even better, and it was my turn.

## Almost 750

I launched at 10:30am in blue conditions, not what I had expected. An hour into the flight, my shirt was soaked in sweat, but I had covered about 60km, and cu's were starting to appear, with occasional climbs to about 6,000ft agl. I had a good run, up to the first turnpoint, not fast, but no mistakes. Best thermals were about seven knots on the average. I was cruising at about 70-75kt. (I always like to cruise slower than most. I hate getting low. I am very choosy about thermals.)

My task was a three turnpoint task, with the second turnpoint close to home. I arrived there at about 4pm. By this stage, cloudbase was up to

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## The Victorian Soaring Association Incorporated is seeking Expressions of Interest from Victorian Gliding clubs to host the following courses during 2001/2002:

### Weight & Balance Course

This course is being directed at Form 2 Inspectors who wish to include weight & balance to their existing inspector's endorsement. The intention is to conduct at least two courses during this year, at separate locations in Victoria.

The course entails a weekend, with one day on theory and process, the second day will be dedicated to hands on practical experience.

The timing of these courses shall be determined by the hosting club, in consultation with the Regional Technical Officers Airworthiness.

Clubs interested in being host for these courses should contact Edwin Grech Cumbo on 03 9336 2305 or by email at <egrechc@melbpc.org.au>.

### Basic Airworthiness Course

The VSA is seeking to conduct 2001 Form 2 course at a location other than Bacchus Marsh. The intention is to encourage regional and country clubs in supporting their members to obtain a Form 2 Inspector's rating.

This course requires 8 days of living in, intensive training. The theory and practice sessions are supported by well-known speakers and practitioners.

Clubs intending to host this course should be aware that full lecture room facilities are required and should be close to hangars and workshops. Arrangements for catering for the prospective candidates must also be considered.

The timing of these courses shall be determined by the hosting club, in consultation with the Regional Technical Officers – Airworthiness and the various speakers.

Clubs interested in being host for these courses should contact Edwin Grech Cumbo on 03 9336 2305 or by email at <egrechc@melbpc.org.au>.

## The Victorian Soaring Association Incorporated is seeking Expressions of Interest from Victorian Gliding clubs to host the State Competitions during 2001/2002

### Victorian Soaring Association Inc.

Venue:

Date:

Operations Director:

Assistant Director:

The expression of interest should include the details shown above, the club hosting the State comps are at liberty to schedule the competition timing. The VSA will endeavour to assist clubs with no experience at running this event. The VSA State Competition is an ideal introduction to early cross country pilots to meet the challenges required of FAI Competition.

Clubs interested in being host for this event should contact Edwin Grech Cumbo on 03 9336 2305 or by email at <egrechc@melbpc.org.au>.

9,500ft agl, but climbs were still only about seven knots, somewhat less than I would expect on a day this high. My final turnpoint was Jimbour Silo, the standard 300km out-and-return milk run from our club. I had comfortable glide back to the airfield. Four o'clock is rather late in the day to start a 300. I came close to the decision to give up once again.

Matt Anglim had aborted the 800km task he declared, after a slow first leg, but had really picked his pace up on the way back, and was only about 10km from my position. His suggestions were brief "Go for it!" On the way up to Jimbour, some of the best looking clouds I have ever seen were developing. It was possible, but not at the speeds I had been achieving. The clouds looked good. I made my decision: I will go on. I will cruise at 85kt. I will not turn in under eight knots! As it turned out, the clouds worked better than anything all day, and justified the higher cruise speed. I only turned occasionally to "stay in contact" and for the next leg I believe I averaged about 137km/h!

The problem was that the clouds were working so well because they were turning into storms. With 100km to home, I was not much above circuit height, over the Jondaryn gliding club. I dumped my water, and pushed on, out of glide, to a patch of sunlight, and was rewarded with four knots. There was another patch of sun in 30km, rather off-track, and I just had height to reach it. So with 70km to go, I was at circuit height again, in zero knots, and radioed base to tell them where I was about to outland.

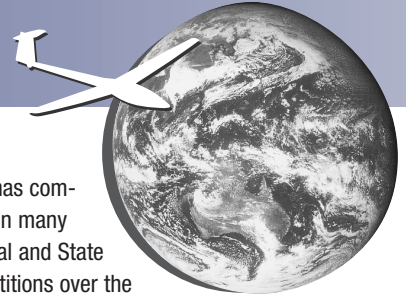
We live in hope, we die in despair. Zero improved to one, then to two. After half-an-hour I was 1,500ft (or 1km) short of a nil margin final glide. The bad news was, it was raining ahead, and it was going to be too dark soon to safely pick an outlanding paddock. The good news was that I had outlanded two weeks before in the biggest safest paddock imaginable, and I knew I could land there in any wind direction, and I knew I could make it. So with a safe option I headed off. I crossed my safe paddock with plenty of height to spare, and went on another five kilometres beyond. There were good paddocks below, but visibility meant there was a lingering doubt that there might be a power line I could not see. There was another problem. It seemed like a sea-breeze front may have spilled over the mountains. I could not work out what was going on, but I knew something was happening. My ground crew insisted wind was light and from the south on the ground. I decided that I was going to land into the north-east regardless. If I landed in a few knots of tailwind, I could take that. But if the wind changed at low altitude and I landed in a stiff wind, that was dangerous.

There was a known airfield five kilometres ahead, but it had tall trees around it and the possibility of stock. It would almost certainly give me the 750km distance. It was not worth the risk. I turned back for my known safe paddock. At 600ft agl, just as I was about to feed into my circuit, I flew down into the sea-breeze. I landed dead into a wind that was over 20kt.

I had been airborne for eight hours 33 minutes. I was 24km short of home. I hit the save button on the GPS. I had not checked the exact task distance before take off, but Val Wilkinson had declared the same task the previous day, so I guessed it was just over the required distance, and I had done about 730 to 740km.

My crew were there promptly, and we de-rigged the glider in dark and windy conditions. We shared our thoughts. It really was not that good a day, and I am absolutely sure that 900km is possible, for me, out of Warwick, in the LS1, on some of the days I have flown. I was not unhappy. I knew I could probably have made the distance if I had pushed on and taken a risk, but I know I would never have felt good about it if I did.

*NOTE: I wanted this article to be suitable for all types of real glider pilots, flying all types of real gliders. In keeping with that aim, I have discussed it with a hang glider pilot and a paraglider pilot. They tell me that most stuff is pretty much the same, all you have to change is the numbers and peoples names. They have introduced me to some new terms, which I think I understand. "Magic air" is my favourite. I think this article might be about persistence, but a few other themes creep in.*



## Local News

### Victorian Soaring Association Incorporated

The 1999-2000 annual general meeting agreed that it is time the association appeared on the internet. Those who attended the meeting voted unanimously for this to happen. One of our volunteers has been producing web pages for the last six or seven months without any input from clubs. The design of the web pages is simple and is intended to convey useful information to all clubs. Please visit [www.gfa.org.au/vsa]. The latest update has an invitation to all Victorian clubs to take part in an experiment using the internet as our communication medium. It is in the interest of each club to participate so that a process can be established which will allow us to conduct future meetings using this medium. Thus the views of clubs and their members can be aired and shared by all.

It is prudent that clubs determine what it is they want to see viewed and reported, so do not hesitate to write or email Edwin Grech Cumbo offering your views or subjects of interest to other clubs.

Edwin Grech Cumbo

### Warwick Gliding Club

Congratulations to big Rod Haase, who finally nailed his first 500km flight late March. It was also the first 500km that his Astir has ever done. Rod did the task alone, which is the way any badge flight should be done, and it was a difficult day, at least for the first couple of hours. Matt Anglim and I were pretty happy to see him when he drifted in across the trees at, I think, about 6:30pm, as he had been maintaining radio silence for the previous few hours. (We are both working hard on this unfortunate habit.)

As some of you know, Heath L'Estrange has been flying Rod's glider a bit, but has been under strict orders that if he did a 500 before Rod, he would never fly the glider again! The week after Rod's mammoth flight, Heath, not to be outdone, flew his first 500km, I wonder what the next challenge for these two will be!

Michael O'Brien

### Youth 2001

The following clubs have taken advantage of the Youth 2001 scholarship scheme:

*Beaufort Gliding Club Inc – Christian Marsh and Suzanne Fairweather; Albury Corowa Gliding Club. Inc – Adam Jones and Joshua Woodhead; Gliding Club of Victoria Inc – Andrew Zammit, Oliver Spiesser and Scott Musgrove; Soaring Club of Tasmania Inc – Matthew Lovell, Khan Dervish and Samuel Whittle; Gliding Club of Northern Tasmania Inc – Nick Wood.*

These students have received a congratulatory letter from the VSA and their flying training would have now commenced.

May 2001

The Youth 2001 camp, which was to have occurred at Easter, has been postponed to the year 2002 due to delays experienced in establishing the scheme. Clubs that need further clarification and/or assistance can contact Phil Hearne whose details are on the web pages. [www.gfa.org.au/vsa].

We urge all clubs to become proactive in attracting young people to our sport. We should seriously reconsider our present structures and operational habits and like the VFL and many other sports try to re-structure gliding to make it affordable and easily reached by the young.

Several of the executives in VSA are trying to obtain sponsorships and support from many organisations in order to continue this scheme for at least two or three years.

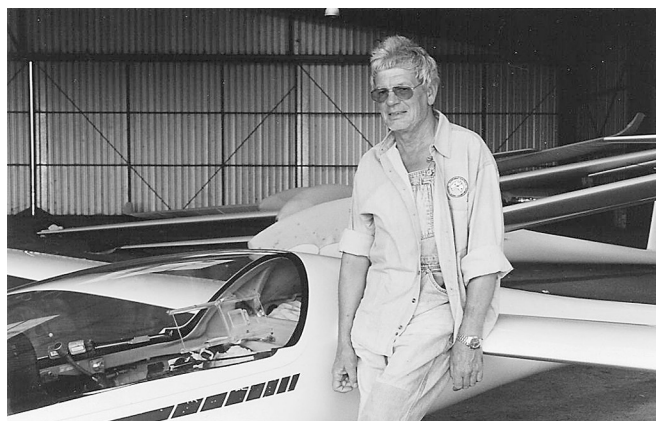
Edwin Grech Cumbo

### National Championships

Venues and dates have been set for the next FAI Australian National Gliding Championships and the Club Class Championships. Club Class will be held at Temora from Sunday 30 December 2001 to Friday, 11 January 2002. The FAI Nationals will be held from Sunday, 13 January to Friday, 25 January 2002 at Narromine.

### Orana Soaring Club

In February this year the club was delighted to join Peter Lenz in celebrating the 10th anniversary of his first flight in Narromine. Peter spends up to six weeks with the Orana Soaring Club every year and has made many friends in Australia during this time, as have the other German pilots he brings out. His gliding record is impressive – over 4,000 hours (840 of these have been flown in Australia), over 11,000 landings, and 40 years with the one German gliding club.



scene with all cross-country flying being banned (in case of an outlanding) until the disease has been eradicated.



▶ Peter Lenz celebrates the 10th anniversary of his first flight in Australia

▶ Paul Thompson's new toy – the mighty Stemme

Photos: Anne Elliott



Peter has competed in many National and State competitions over the years and is still an instructor with his club.

In other news, long-time club member Paul Thompson flew in from Mudjee early March in his brand new toy – a magnificent Stemme. Club members are hoping to see a lot more of Paul, always a strong supporter, now that he can fly in instead of having to make the long journey by road.

Anne Elliott

## Overseas News

▶ In Europe, a new ruling for Tosts releases will soon be in place. Instead of an overhaul each fourth year, future overhauls will be based upon a 10,000 actuation [2,000 launch] basis, independent of time. The period between overhauls for low-use aircraft will dramatically increase.

▶ Europe's equivalent to Oshkosh, Aero 2001 occurred in April. Only one new glider had its debut – the prototype of a new Standard Class aircraft, the 304C, built by the HPH company, which is currently responsible for a resurgence of the Glasflugel 304. Included in the many exhibits at the airshow were the ASW28 and the prototype LS8-18t (turbo non-self launching).

▶ Sportine Aviaciji of Lithuania is very happy with its LAK17a combination 15M-18M craft. Results from comparative testing by the Idaflieg summer groups were so encouraging that Sportine has made the data available for publication without reservation. Speed and lift-drag polars are shown.

▶ The outbreak of foot and mouth disease in the United Kingdom has had its effects in the gliding

scene with all cross-country flying being banned (in case of an outlanding) until the disease has been eradicated.



▶ Peter Lenz celebrates the 10th anniversary of his first flight in Australia

▶ Paul Thompson's new toy – the mighty Stemme

Photos: Anne Elliott



◀ Launch queue

## Corryong Cup 2001

TRACEY RICH

Please don't get the wrong idea. The fact that I am writing this article about the 2001 Corryong Cup does not mean I took part. Not as a pilot anyway. I was an onlooker. So this is not going to be one of those *"Day one dawned without a cloud in the sky"* type of comp synopses like you've read in *Skysailor* so often before.

**T**he fact that I'm writing this article at all is because someone twisted my arm and I gave in. Which is kind of why I landed up at the Corryong Cup 2001 in the first place. The comp committee needed a treasurer and someone to do the registrations, and they twisted the other one.

So seeing as I'm not qualified to give a "proper" run-down of the comp, you're going to have to be satisfied with a few non-pilot observations I made during the course of the week.

There are three types of people who go to the Corryong Cup. The first contingent are the "Towong Lowlifes". You can tell them by their earthy smell after about Day Three of the comp. This is because they spend the week free-camping alongside the Murray River at a place called Towong, about 10km north of Corryong. At Towong there are no washing facilities to speak of, except for the river. Which is great for those who feel a daily swim suffices, but not so great for the rest of the field who have to put up with their reek for the week.

The only ablution the Towong campsite does boast is the sturdiest long-drop toilet in the country – it's set in a hundred square block of concrete. (Although most of the Towongers don't have too much to do with this toilet – lowlifes that they are, they go early to the morning briefing sessions at the Courthouse Hotel in Corryong and use the dunny there.)

By far the largest group at the Corryong Cup are the "Legitimate Campers". They camp at the real caravan and camping parks because of the 'facilities' like electricity and running water. The bulk of the field with wives and husbands and kids falls into this category (the "Towongers" generally leave their loved-ones at home or don't have them at all – wonder why?)

The presence of 'facilities' means that the "Legitimates" can wash their kids' bums and brush their teeth without stepping on King Browns and poisonous spiders. It also means that they can come to the presentation night Dinner at the end of the week still looking relatively fresh, showered and ironed.

The "Towong Lowlifes" think the "Legitimate Campers" are a group of suburban woosies, too scared to leave their comforts at home. The "Legitimate Campers" think the "Towong Lowlifes" are a bunch of cheapskates, jealous of the fact that the "Legitimates" have charged radios for the entire week.

A third and almost insignificant group at the Corryong Cup are the "Townies" who stay in Hotels and B&B's in Corryong itself. You have to look hard to find them; their numbers are few. These are either foreign pilots who are able to live like kings during their stay in Australia due to the weak Aussie dollar, or poor bastards who are bribed by their wives and forced to fork out hard-earned cash for (apparently) unnecessary luxuries like spa-baths and real beds in exchange for a few days of recovery driving.

This lot are regarded with great suspicion by the rest of the field. They are setting a dangerous (expensive) precedent. Other partners could get similar ideas...

As far as I could tell it seemed that most were pretty happy with the Corryong Cup this year (which is the aim of the whole thing really, seeing as this is a fun competition). So if you missed out, you lost out. You need to be more on the ball next year.

The weather co-operated nicely. There was only one really dodgy day when wind forced a fairly large percentage of the field to have to drive back down the hill, and no rain at all. And heaps of pilots completely obliterated their previous personal bests which was a great excuse for accelerated beer drinking.

Who kicked ass? Well, the Topless Class was won by a foreigner who, to my untrained eye, flew bloody well – American Phil Ray won by force of his consistently outstanding flying. The three Kingpost Class prizes were won by, in order of excellence, Australians Greg Smith, Bruce Wynne and David Ferreira (Go Aussie Go!). John Sperring walked away with the Open Crossbar award, and Allan Bond finally received recognition of his Veteran brilliance. Most improved was Sarah Nicholas.

On the team side of things, a group of Swedish and Swiss pilots managed to pip the rest at the post. How they managed to find their way around that valley was astounding enough for me. They deserved a prize just for that.

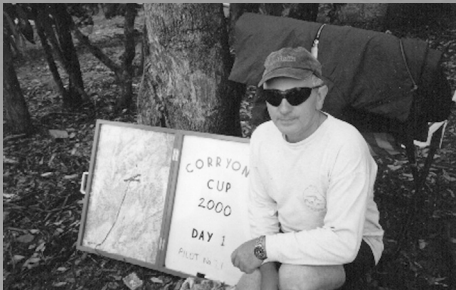
All in all my Corryong Cup 2001 experience has added a few perplexing questions to those "life" issues I've been mulling over since around the time I entered adolescence. These are:

1. What compels a bunch of people, who at first appear fairly normal and well-adjusted, to bash up to the top of a dusty, ant and fly-ridden mountain, stand around in the midday sun under a depleted ozone layer,

PHOTOS: COURTESY STEVE BELL



Waiting...



Comp organiser Steve Bell



Background: Away

Take-off gear up – the fun can start



The township of Corryong from its better angle

kit up and sit under their rigged gliders for at least half an hour (usually more) whilst waiting for conditions to come “on”, all the while sweating like pigs, in the name of “fun”?

2. What compels a bunch of people, who at first appear fairly normal and well-adjusted, to fly towards an insignificant intersection of dirt farm roads in the middle of nowhere, when the nearest pub is in a completely different direction?
3. What compels the same bunch to then fly in the opposite direction, directly over the pub, towards an equally insignificant intersection of dirt farm roads at the other end of the valley?

4. What compels a bunch of people, who at first appear fairly normal and well-adjusted, to spend all day attempting to fly a 90km course when they could just get into a car and drive it (and enjoy a nice cool swim in the river along the way)?
5. What compels a bunch of people, who at first appear fairly normal and well-adjusted, to jump off a perfectly sound mountaintop at all?

I have a feeling that these will remain unanswered questions unless I dare fly myself. But seeing as I’m not going to do anything silly like that, I’ll see you all at Corryong Cup registration – next year!

# Hang Gliding or Paragliding: Which to choose?

RON VAN BEMMEL

I am sometimes asked what I prefer, hang gliding or paragliding, especially by people who are considering signing up for a course but are unsure about which to learn. I have been flying for 15 years now. I first started hang gliding back in 1985 and took up paragliding in 1997, so I have experience in both. On that basis I have decided to write this article from my personal experience to give some food for thought to those deciding on which form of flying to pursue, hang gliding or paragliding.

Ask a hang glider pilot how they compare their hang glider with a paraglider, and you'll most likely get a response like, *"There is no comparison; a hang glider is high performance, has much higher speed, you can pull G's and perform wingovers."* Sounds like you are listening to an F/A-18 Hornet pilot!

A paraglider pilot might say, *"I wouldn't feel confident landing a hang glider,"* or *"They take too long to set up and pack up."*

The reality is that there is not that great a difference between the two. Look at it from the perspective of a sailplane pilot, a pilot in general aviation, or a real F/A-18 pilot. They would consider hang gliders and paragliders as being in the same class. One has a glide of say 1:8, the other perhaps 1:12, and the difference in sink rate might be 0.2m/sec. *"Not much to set them apart, is there?"* says the sailplane pilot with a glide of 1:50.

But there are differences between a hang glider and paraglider, apart from the obvious, and from my own experience I'll explain what the practical differences are without getting into a debate about performance issues.

The paraglider is easy and convenient to store at home, even in the wardrobe! When you decide to go flying it takes a few minutes to collect your gear and off you go; no messing with roof racks or needing a garage to store the hang glider. You can keep the paraglider in the boot of your car, which is convenient and secure, always keeping it with you for a quick flight after work. It's portable, easy to carry, and easy to take on an aircraft when travelling.

The range of sites you can fly with a paraglider is much greater. You can fly small

sites, or sites with very small landing areas which you wouldn't otherwise like to consider with a hang glider. You can easily get to out of the way take-off areas on foot which might otherwise be considered inaccessible with a hang glider. Because site options are more you can fly sites closer to home, so for married pilots who want to stay married, you can nick out for a few hours or half a day instead of it consuming all your free time on weekends.

The paraglider is very fast to set up and even faster to pack up if you just roll it up and stuff it into your car for a quick get away. A hang glider typically takes 10-15 minutes to set up and the same time to pack up.

How often will you sit on the hill waiting for the wind to pick up? With a paraglider it is an easier decision to have a few sled rides, something you might not be so enthusiastic about with a hang glider.

With a paraglider top landing options are much greater. Having brakes which act like "flaps" really makes top landings in confined areas not only possible, but a lot of fun. For that matter, any landing in a paraglider is relatively easy, without the need for much skill. The hang glider does require a coordinated and practiced landing 'flaring' technique, especially in lighter winds.

Flying small sites with short beats in a paraglider can be more relaxing because you are flying slower, allowing you to settle in and admire the scenery. In a faster flying hang glider you have to work harder, constantly turning back and forth.

The seated flying position in a paraglider is more relaxed and comfortable and gives a wider

field of view. Prove this to yourself. First sit in your nice and comfortable lounge chair at home and look around the room. Then get up and lay face down flat on the floor and lift your head up to look around the room. Note the lack of peripheral vision, and also see how long you can hold this position. Ergonomically speaking, prone is not the best flying position.

Paragliding is easier to learn. Some even get to fly on their first training day. In fact, perhaps it is too easy, as this can lead to problems later with over confidence, complacency or a lack of discipline and respect for what is potentially a dangerous activity. Learning hang gliding takes longer, is physically more demanding, requires a higher skill level and is not as forgiving as a paraglider. But like riding a push bike, once you have learnt it is easy and the rewards can be greater, especially if you like aerobatics.

A hang glider flies faster so it can fly in stronger winds, but I won't say that not being able to fly in strong winds in a paraglider is a disadvantage, because hang gliders are also limited in the wind strength they can fly. A paraglider may stay up in lighter winds, so it all balances out in the end.

There are advantages to flying a hang glider inland, especially when thermalling, such as you don't have to worry about canopy collapses. Other advantages are the ease of control of the hang glider at sites when winds may be gusty on launch, and also the ability to handle rough air, especially on a really booming thermal day. The hang glider handles changes in wind strength and conditions better because of the wide speed range. Flying prone may be more uncomfortable, but is designed for best control and least wind resistance for better glide and speed.

When on the hill with a paraglider, the temptation is there to fly in stronger winds which may be on the limit, which then becomes a safety issue. This is the time to get the hang glider out!

To summarise, in considering the advantages and disadvantages of each and if you are mostly going inland thermalling, then in my opinion the hang glider would be the preferred choice. For coastal/ridge soaring the paraglider has everything going for it. If you choose to do both inland and coastal flying, then ideally it would be great to have a hang glider and a paraglider, but otherwise it is a compromise and then you have a decision to make. That is why some hang glider manufacturers now

# HGFA Events Calendar

## Australia

### State of Origin 2001 PG Comp

#### Easter Long Weekend, 13-15 May 2001

Manilla, NSW. Fun comp for all levels. Registration: Friday morning 9-10am. Free entry, just turn up & fly for the glory of your state (& maybe some free beer). For any further info contact Enda Murphy 02 4294 2129 or email <endamurphy@ozemail.com.au>.

### Flatter than the Flatlands 2001

#### 13-17 May (Easter) 2001

Birchip, VIC. Entry fee: \$60 per person. Entries from teams only. Min. 5 pilots per team. Entries open 15 January 2001. For more info & updates visit [www.ains.net.au/~warwickduncan/].

### South Moreton Island Fly-in (QLD)

#### 28-29 May 2001

Koorngal "Baroco" airstrip on VTC. Fly to this beautiful island location and enjoy a weekend with other flyers and friends. Food and accommodation available if needed. For info call John Elcock ph/fax 07 5491 5571 or Graham Roberts 07 3267 6662. For accommodation call Phillipa Rigby 07 3409 0105.

### WA Hill Flyers Autumn Fly-in

#### 28-29 May 2001

Free event, open to all HG & PG pilots. Hill launch from Bakewell, Noondeening or The Range, for either out & return or downwind tasks set on the day. More details on the hotline (08 9487 3258) or <wshgc@listbot.com> or <skysailing@yahoo.com> during the week before the event, or contact Dave, Rick or Mike at the Hill Flyers Club.

### HGFA Fly-In and Awards Night

#### 28-29 May 2001

Canberra Area, ACT. All HGFA pilots welcome, bring your wing (& your friends) & have some fun. Awards Night in Canberra City. For more details phone the HGFA office on (02) 6947 2888.

### St Bernards Canungra

#### Hang Gliding Classic 2001

#### 13-20 October 2001

Canungra, QLD. Entry fee: \$150 (or \$120 if paid before 31 August) + \$40 site fees. Registration: 12 October. GPS mandatory. Int rating with inland experience required. Close of entry 31 August 2001. Late entry fee: \$30. Cheques/money orders to: Rod Stead, 9 Griffith St, Nth Tamborine QLD 4272. Entry inquiries to Rod ph: 0428 132 215 or 07 5545 0969. Comp info: Tex ph: 07 3901 7401, 0417 766 356, <TEXDOC@bigpond.com>.

We will be based on Mt Tamborine with HQ at St Bernards due to their continued generous support. Accommodation from the night of Fri 12th-Sat 20th at: Motel - \$450 double or \$500 twin (fully self-contained); Hotel - \$300 double or \$350 twin (share amenities); cooked brekkie for \$7.50, continental \$2.50, meals from \$5 nightly. Camping may be made available if required (\$50), but why bother at these excellent room rates? Call Ray at St Bernards to book, 07 5545 1177 or <sales@stbernardshotel.com.au>, web site [www.stbernardshotel.com.au].

## Overseas

### UK National Hang Gliding Championships

#### 2-11 August

St André-les-Alpes, France. The UK National HG Championships will again include an Open Competition for both Class 1 and Class 2 gliders. The FAI Category 2 sanction fee has been paid for both competitions, so this will give opportunities to gain eligibility for entry to future Category 1 championships. In addition to the usual trophies there is substantial prize money available in the Class 2 competition GB£1,000 for the winner, GB£500 for the runner up and GB£250 for 3rd place. Details of the competition can be found on the UK competition web site at [www.theleague.force9.co.uk/welcome.htm].

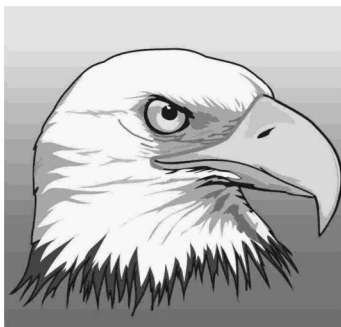
produce the so called 'skyfloater' or 'fun' models with which you can also use a paragliding harness!

But in the end are hang gliders and paragliders really that different? They are both gliding wings, each with harnesses, both foot launchable and foot landable and use the same airspace!

Some suggest that regardless of which discipline you decide to take up, there are benefits to first start learning paragliding, at least for the first few days. This will get you up in the air quicker with less frustration and help you decide first of all if flying off hills is really for you. If so, it will boost your enthusiasm and then if you still want to you can readily convert to learning hang gliding.

Most people refer to hang gliding and paragliding as a sport. Well, I guess for some it is, but for most it is best described more as a lifestyle. The majority of pilots are recreational. I have written this article with that in mind, as most pilots are out just for fun and to experience the pleasure of the purest form of flying with the freedom and now the choice of what to fly.

We are so fortunate to be in the first generation to have our own personal wings and to be able to fly free as a bird, which is something that was only dreamt about for the last two million or so years!



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# A Pleasant Saturday Afternoon

MARK BLAND

Adam and Mark Bland with Mosquito FQN after landing at Corowa  
Photo: Courtesy Mark Bland

The second day of January this year was a great day!

A great day for me anyway, because while attending the Leeton inter-service competition I completed an FAI 761km triangle of Leeton-Springhurst-Cootamundra-Lake Cargelligo-Leeton in a beautiful H301 Libelle (VH-GUK) in eight-and-a-half hours, without any water ballast I might add. However, in retrospect, although the flight was very rewarding and fulfilled a desire to push the boundaries of my stamina and capabilities it didn't provide the enjoyment of a much shorter flight that I recently made from my home club in Corowa.

Saturday, 3 February, Mike Pobjoy, myself and my son Adam turn up at the field about midday (late because I had to have a sleep after working night shift) to find no other members present and a blossoming sky. Hoping someone else will show, we drag out three gliders. Mike's Cirrus, the Libelle for me and the club's Mosquito for Adam.

An hour or so later with the thankful help of Ross Larcombe we're all airborne and heading for Mt Buffalo, 90km to the south. Mike and I arrive over the chalet first with Adam slipping back a bit, being more cautious heading in to the rougher terrain. The sky to the south-east looks inviting with Mt Bogong standing out like a beacon over in the Kiewa Valley.

After a short discussion on the radio I decide to back track to Mytelford to join up with Adam so he can accompany me to Mt Beauty and

the Kiewa Valley. Mike decides to venture back to the Corowa area as three outlandings and no crew could be a bit embarrassing. Topping up to 6,500ft north of Bright gives us stacks of height to cross the ridges to overly Mt Beauty airstrip where we know we could get a winch launch if required as regularly fly there also.

There's no lift crossing the valley but the eastern ridges around Mt Emu have good clouds all along them and as we climb away from 3,000ft a highway street forms nearly all the way north towards Wodonga where I live. Cruising between 6,000 and 7,000ft I contact Albury tower for clearance to enter their airspace for a track back to Corowa via the Hume Weir and Wodonga. They willingly oblige, giving clearance to operate between 7,500ft and 4,000ft and ask for a report at Wodonga.

The views flying along under the clouds are spectacular with the glistening water of Lake Hume ahead and the Mitta Valley to the east. As we approached Wodonga the tower advised that he was de-activating (going home) and that MBZ procedures would apply.

Topping up again we scanned the urban sprawl of a large country town and identified our house. I couldn't resist the temptation to contact my wife with the mobile and advise her that her husband and son were overhead. Another thermal and a leisurely glide back to Corowa via Howland resulted in smiles all round as we landed back not long after Mike.

How did you spend your latest Saturday afternoon?



## The late Cleve Gandy

EMILIS PRELGAUSKAS

One element contributing to the success of gliding is the sport's heroes.

Those people are now substantially unknown to a current generation of pilots, but their actions showed the way. These actions were devoted not only to personal outcomes but to benefit the sport as a whole.

This reminder was brought home to me in a recent project.

It began with a phone call. Robin Crouch is moving home, and he was looking for a place to shelter his ES52 rebuild project. The discussion brought to the surface, again, how much our sport relies on a few leading individuals.

The rebuild was made possible by the start offered by Cleve Gandy, who passed away some years ago. Cleve was known to me through his many acts of generosity in the sport generally, up to and including keeping clubs other than his own going by lending them his private gliders when the clubs were out of the air. He showed the way in which others in later generations might give practical help.

For the rebuild project he not only offered his considerable airframe engineering skills and space in his workshop, but also the encouragement necessary to assist the project's continuity, and practical advice. Not sur-

prisingly, the project languished after the mentor was no longer available. The syndicate also slowly dissolved, as happens so often with kit-build projects. That is sad to see, as is the more common glider pilot attitude of loading their club with expectations for access to ever better and more gliders and support facilities.

And the sport's bureaucracy, with the million reasons why things can't be done. Our phone discussion led to setting details for picking up the project, since I could borrow the GHN syndicate trailer for the trip.

I let it be generally known what I was up to. On the appointed day seven people, both from my own club and other clubs, turned up to lend a hand. The spirit of doing is obviously not yet dead in gliding, despite my sense of gloom above. As usual, the project had its moments. It turned out to be one of the hottest days of the period, on which to have a fully loaded car and trailer tracking through the mallee. The airframe was stored where it had been squeezed in out of the way years before; now much harder to extract and to manoeuvre to the trailer. This in turn, to be got out of a grove of tree trunks while the 12-metre-long wing swept around the outside of the trailer's curve. The 30-year-old fabric left a confetti trail as we sped down the highway towards home.

The success of the move was capped off at home, as in the cooling evening we did several thank you flights for the visiting helpers, using the gentle thermals as another day of achievement settled toward dusk.



# 'The Shed' – to be opened

EMILIS PRELGAUSKAS

A year ago began a little project at Monarto to put up a shed to house some of the answers to all those queries by members of the public which often consume lots of some glider pilots' time on the phone or face to face.

In time honoured gliding tradition, time supplants money in such projects. So this June it will be a year since we began to work toward the idea with some greenhouse frames and a quarry plateau.

In the interim period, glider pilots from a number of South Australian clubs have pitched in from time to time to help the local band of glider pilots raise this nebulous idea into a real world artefact.

This has included sitting on the curved roof in a gale nailing down the 11-metre-long curved sheets to create the shed's igloo form. Though in the modern world, 'nail' is an archaic term when talking about modern miracle items like the ubiquitous 'Tek' screw.

Through this a 200m<sup>2</sup> shelter has come together which we hope to 'open' in June, which is also my 51st birthday. Inside, over time, will accumulate a diverse collection of stuff collected from many sources.

The State association, through a few willing hands, years ago constructed a display trailer. Its display boards and cockpit mock up allow people to look at gliding without putting a real thing at risk of prying fingers.

Some believe that the display would only work if it had a current generation two-seat fuselage, virtual reality flight sim, and so on, built in.

But, as in many things gliding, the expressions of expectations don't contribute any of the funds, and so we make do with what we can scrounge together. At least now the display is under cover, and less subject to weather damage than in its original configuration. Even though it doesn't look like it in the way it is tucked under the bottom of the shed's roof curve, the trailer is able to be moved out for remote use.

Another 'work in progress' is a glider kit project begun by Trevor Smart and which, after many changes of hands, came to us. It will sit rigged across the display, still unfinished, so that the innards are visible to those interested in such things. The evolving repaired parts of a MkIV Kookaburra will form the next 'work in progress'; as will the wing straps and propellers for add-on to a Twin Astir as sustainer.

More complete and 'history' in character is the body shift glider built at Loxton in 1924 (ostensibly the oldest 'airframe' in captivity). It will be hung in the rafters as a signpost of our origins. 'Hippie' however, the modern carbon fibre and composite reincarnation of the primary glider, remains out of the public's reach in our operational gliders' hangar.

There is room in the shed to finally hang up the posters, and make up display cases to house the multitude of bits pieces pieces accumulated on an opportunity basis over the years - such as the collection of Schneider glider range of loose parts through to an early thermistor-driven electric vario from the 1950s.

But as said earlier, time has to stand in the stead of money in such things. So the evolution of this idea of a place where the public can touch and feel will continue to gradually come together. No doubt not fast enough and not well enough for some. But then we only have to put up with them fleetingly. Those busy doing stuff in the sport tend to have less time to talk; they're just around a lot making things happen.

My thanks to you all.



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# GFA Executive and Vice-Presidents' Meeting

BRYAN BLACKBURN – PRESIDENT WAGA

A meeting of the GFA executive and vice-presidents was held in Sydney over the weekend of the third and fourth of March this year.

**T**he executive comprises the GFA president, executive vice-president, treasurer and the chairmen of the three operating departments – operations, airworthiness and sport. The vice-presidents are the presidents of the Regional (State) Associations. The executive officer attended as minute secretary.

These weekends are held each year at this time and are really two meetings. The first is a regular executive meeting, where vice-presidents are observers, ie we can listen and make comments if we like. The second is a strategic planning session for next financial year, which for the GFA starts in May. This meeting involves everyone and ratifies the business plan, which the regional councillors have worked on following the annual general meeting in October.

## A summary of the weekend:

### Operations

1. The GA operators, ie the commercial flying schools for example, have pointed out to CASA that sports aviation has been allowed to operate pilot training programs without an Air Operators Certificate (AOC), which GA has to have. This was pointed out as
  - (a) unfair competition and
  - (b) illegal.

The driver here is probably that GA is concerned about competition for pilot trainees from ultralights, which are booming. However, (b) is correct and rather than change the Act an AOC – a proposal for flight training is being developed between the Australian Sports Aircraft Confederation (ASAC) that all sports aviation, including gliding clubs, will have to have.

The proposal is that the system will be administered by ASAC under delegation from CASA. For gliding it means that our operating procedures will be unchanged and the quality assurance inspections required for the AOC will be our established system of inspections of club operations by the RTOs, which will continue as is. They will put the paperwork through to ASAC.

The GFA sees all this as an overall benefit in that it will drive an improvement in our

quality assurance. Some RTOs are significantly behind with their operation checks, for lots of reasons.

The generally accepted TIF flight is no more. It is proposed to change the name to Air Experience Flight (AEF, pronounce it how you like but 'aph' as in aphid seemed to be the consensus), which includes the three-day Introductory GFA Membership.

So, the three ways of taking someone for a ride in a two-seater are:

- (1) Joy flight – in which case you need an AOC – Charter Operations and you need to be a charter pilot. Law limits your liability to \$500,000, which your club will have insurance for. The passenger may not touch the controls.
- (2) Private passenger – in which case you need to have a Level 1 or Level 2 passenger rating from your CFI and you must pay at least as much of the cost of the flight as your passenger does. The passenger is not covered by the GFA BBL insurance and neither are you if you don't share the cost of the flight, which would be illegal.
- (3) AEF – in which case you need to be an AEI or better and the flight has the same status as any other instructional flight with a GFA member, which is covered by the GFA BBL insurance. Short-term (three-day) membership entitles members to all membership benefits other than solo flight for the period of their membership.

### Short-term membership forms

1. The GFA has noticed big gaps in the serial numbers of short-term membership forms returned from a significant number of clubs. These are the forms used for TIF, sorry AEFs, to join the person as a three-day GFA member and remit the \$5 charge to the GFA. This can only be because
  - (a) forms are being lost in the pie cart, destroyed or used as scrap paper,
  - (b) forms are filled out randomly by whoever is in the pie cart at the time (a bit difficult because the forms are perforated and bound into a book),

- (c) forms are being filled out just in case but not remitted if the flight went off okay, to keep the \$5 in the club's coffers. A summary of the memberships is being sent to all clubs showing the missing forms, which in many cases is up to 50% of the forms that have been sent out.

(C) is a nice conspiracy theory but I'm not sure most gliding clubs are that organised. Anyway, whatever the reason it is costing all of us money because the books are expensive to produce and less \$5 from them means more fees from us to pay the insurance premiums and balance the budget.

As a result, GFA will be requiring prepayment for the books at \$500 each (100 forms) from now on. The alternative is to get an AOC – Charter Operations, in which case the passenger can't handle the controls, or operate illegally and/or uninsured, which is not recommended.

2. If you want an AOC – Charter Operations, there was a hope a few months ago that a generic AOC might have been able to be negotiated by GFA. This now looks unlikely is the short term. However, some clubs have been successful, with significant help from individual CASA officers. The GFA can assist clubs to use these applications as a template for new applications if required.
3. Accident investigation is a concern. Good investigations provide information we all need to know to improve the safety of what we do. However, BASI policy is not to investigate gliding accidents, even fatalities and GFA does not have the legal authority, resources or training to do it for us. Talks have been going on with BASI for some time to resolve this.
4. From now on, summary reports of accidents and incidents will be included in AG quarterly, similar to the HGFA reports, which are generally considered pretty useful in raising awareness. These will also obviously be a topic at the safety seminars this year. The timetable for these is being finalised with the RTOs.
5. Airspace concerns continue, with constant vigilance from Bob Hall, who continues to do a terrific job in this area. CASA still seems to be driven by requiring what is technically possible rather than justified on safety grounds. Debates about extensions to MBZ's and transponder airspace are the current examples. However, it was reported that there has been a nett gain in airspace available to gliding over the last 10 years.

### Airworthiness

1. There are some concerns about the legality of the various retro-fitted winglets that have

proliferated over the last few years. As well as the proper logbook entries by the installer, each one should have an Engineering Order verifying the design for the particular glider. See the March AG for details.

2. An approved modification is available for the ASK 21 to strap weights on its tail so it will spin properly. It involves weighing everyone then selecting the correct weight, which is then strapped to the tail like a tail dolly. Really.
3. It is planned to hold a technical conference for all the RTOs in Victoria in June.

## Sports

1. John Buchanan has resigned as chairman of the sports committee. Hopefully he will still be available for some coaching activities, following the excellent job he did for WA last year. The various members of the sports committee elected Tim Shirley to the chairman's job. This will have to be ratified by the council ie representatives from all the states, at the next council meeting.
2. Juniors' development is getting a big push from Beryl Hartley, who has negotiated some opportunities for skills development and participation in competitions. A web page and chat group has been started to get junior pilots talking to each other. Tim Shirley is coordinating. Juniors should give Beryl <hartley@avionics.com.au> or Tim <tsh@dynamite.com.au> a call for contacts for this.
3. The level of National competition entries is decreasing and is a concern (35 at Gulgong).
4. Ops checks are proposed for club coaches and club coaching programs by the RTO Sports in the same way that we have Ops checks for operations and airworthiness by the RTO Ops and RTO Air. This is already happening in some states.

## GFA re-structure

You will remember that this is the proposal to change the legal form of the GFA from a company to an association, to trim down the GFA Council and to make the whole representative process more open, democratic and directly accountable to the membership. The vice-presidents came to the meeting primed with feedback from their regions on these proposals.

The objective of the meeting was to firm up on the various options so they can be translated into revised Articles of Association and Regulations. These will then be presented to the next annual general meeting, where they will need a 75% majority of the members and the regions (states) at the meeting or by proxy to pass.

The executive and vice-presidents believe that it is essential for the GFA's future for this re-structure to pass, so expect to be harassed for your vote when the time comes.

Here are the decisions:

1. A two-body system will remain, ie a council of elected glider pilot representatives to set policy and an elected/appointed executive to carry it out and run the GFA from day to day.
2. The format of the GFA council came down to a debate between
  - (a) the regionalists, who believe that gliding is a regionally-based activity and should be represented regionally on the council, and
  - (b) the nationalists, who believe that we are all one big happy family of glider pilots and it doesn't matter if the council consists of (say) all competition pilots, or all NSW people or some other group.
 In the end the regionalists prevailed. It was agreed that the council should consist of up to 10 people with at least one per region up to a maximum of three from any one region, plus the executive. The nationalists still grumbled about this but it was generally accepted that anything less would have no show of getting through the annual general meeting.
3. The executive would consist of the president, vice-president, treasurer and three CTOs as present, with the President and VP elected from the Councillors.
4. CTOs would be elected by the RTOs as at present, but it was recognised that this was highly dependent on an acceptable and open system for appointing RTOs, which was pretty ad hoc in most regions. This will be considered for writing into the regulations.
5. A quorum would be 50% of the voting members of the council.
6. Terms would be four years, with half elections every two years.
7. State operations panels are proposed, which would be made up of all the CFIs and chaired by the RTO Ops, to assist the RTO and to get closer to the clubs, where the action is. The present system allows RTOs to delegate the tasks of operational checks to other Level 3 instructors. However, this practice is not widely used. The move to use all club CFIs should increase the pool of qualified pilots to assist the RTO to complete the operations checks in a timely manner where the workload is high.

## Development

1. The draft business plan developed at the last annual general meeting/annual council meeting was accepted. South Australia

wanted to tidy up the wording, which they are doing.

2. It has been agreed to use some of the GFA reserves to fund a development officer position for 12 months with the specific objective of increasing membership. The appointment would be extended depending on results.

The March AG reported that the HGFA has just appointed a similar position.

Of course, any membership increase has to necessarily come from the clubs. A position description with goals and objectives is currently being written that will be used to request applications from organisations or individuals.

Applicants will be asked to state their proposed approach to the task as part of their submissions.

3. Joint publication of Australian Gliding/Skysailor will continue for at least another two years.

Henk Meertens and Beryl Hartley are part of a magazine development group with two people from the HGFA. The role that the magazine needs to fulfill is being debated. It is recognised that its original purpose of providing information to members is getting increasingly less valid. At least five weeks lead time is required for a magazine of this type, which is unacceptable for information purposes.

The long-term objective is to move the magazine to a news-stand quality, commercial publication with more advertising, less direct costs and of more interest to the general public, as a promotional tool for soaring sports. This will need it to have an editorial plan for 12 months, not just wait for ad hoc contributions as now.

4. GFA is looking for a GFA member with a suitable background to act as the GFA insurance officer. The job involves continuous overview of all the GFA insurances to ensure that they stay adequate and value for money and negotiation of new contracts as required. Insurance currently costs all of us about half our total GFA fee so this is an important issue. Henk Meertens currently handles negotiations with advice from Kevin Chamberlain, who provides the covers. Contact Beryl Hartley if you have expertise in this area and would like to contribute in this way.
5. GFA communications came in for some discussion. The tortuous GFA organisation structure doesn't help here, which hopefully the re-structure will improve. However, the main problem is that no one on the executive is responsible for communication so it just doesn't get done very well. Hitler had Goebbels, John Howard has a battery of press secretaries but GFA has nothing.



# A Mother of a Convergence

GRAHAM SUTHERLAND

I had spent the night in Brisbane, and on heading back north to go flying I was impressed by the incredible cu's over the ocean. In autumn and winter a bank of early morning cu's out over the ocean usually means good flying. As the ocean is warmer than the land, it produces it's own thermals if the lapse rate is good. These cu's were so impressive that I began thinking that it could be epic. Where is my camera? Damn, I left it on my paramotor at home. By 9:30am there still weren't cu's over the land, and around here in autumn that's not good. Hmmm, either the north-westerly is so dry that cloudbase is very high and the thermals haven't reached it yet, or it's a convergence out over the ocean. Those cu's do seem to be coming closer.



Carl and I lob off in our paragliders at The Towers, and my hopes are shattered. The thermals are weak and not going high enough to get away, and the big bank of cumulus clouds over the ocean seems to have decayed as it came closer. I hang in there for an hour or so hoping for a good enough thermal to be worth committing to and going over the back. Finally, the best of the day thermal arrives and I'm climbing fast enough and high enough to go over the back. As I'm climbing through 800 metres I notice that I've just passed cloudbase. The cloud a kilometre or two to the east is very low. The cloud above me is still well above. This could be convergence, I'm thinking as I reach base at 1,400m. Unfortunately the convergence is still far enough to the east over the tiger country such that I'm forced to fly south rather than east to the suspected convergence. I get low over Peachester and am scratching like mad trying to hang in there long enough to at least reach Buchy's place. Carl has also got away but has followed the more normal south-westerly line and is just about on the deck.

I scratch past Buchy's place still at about 200-300m. Again I can't go in the direction that I would like to, but I compromise and slide low over a pine plantation just maintaining height, and just within glide of a landing

in amongst baby pine trees. Then, still over the forest, I hit a good thermal (where did that trigger from?) that takes me back to cloudbase. I look east at the vertical wall forming below me and realise that the convergence has caught up to me. Yeehaa!

Now I have to go a bit further west and around the last of the tiger country. The convergence seems to be of the type that enhances thermal activity rather than be broad areas of gentle lift. It hasn't formed a long unbroken wall of cloud either. Instead it is forming fingers of cloud that reach out perpendicularly from the main cloud bank. So, rather than go in toward what has become a rather dark and knarly main cloud bank, I stick out near the tips of the fingers, jumping from finger to finger. I'm climbing at up to three m/sec, flying up around the sides of the fingers and getting up to four metres of sink in the gaps between them.

Just past Woodford the gap between fingers is a bit too wide and I get drilled. I'm figuring out my landing while trying to maximise my distance when I hit the thermal/convergence that has come almost right to the ground under the next finger. I'm yelling and screaming as I climb out from less than a hundred metres above the farmhouse. Yeehaa!

I'm now experimenting and exploring the convergence. If I fly too far west I fly out of the lift and hit a westerly headwind. Most of the time I have a good northerly tailwind that picks up and drops with the fingers. Other times I



seem to hit bits of easterly wind. I figure the convergence is lifting air to the point where it becomes unstable and it is forming convection cells that create the fingers of cloud. I've seen these fingers occasionally on the edge of thunderstorm creating convergences and always dreamt of being there. Well here I am, and it's awesome! I'm kicking myself for not always carrying a camera.

Going past Mt Mee the fingers break up and shorten and there is more of a sloping bank of cloud beside and below me. At one point I'm so far over the cloud bank that the only ground I can see is well to the west, yet I'm still in clear air. Just as I start to worry about keeping a safe landing in sight I get a little break in the cloud below and see some clear ground. Of course, I'm always maintaining legal distance from cloud. I wouldn't dream of scraping through the edges of the cloud wall and flying through the wispy bits extending out from the tips of the fingers. Honest.

At this point I realise that the convergence could beat me by racing in front of me around the southern side of the Mt Mee range. So it's no more playing around and turning, from here on I'm only heading south or south-west. Once before I've been in a convergence on the lee side of the Blackall Range and have headed out in front of it only to hit another convergence head on that has come around the northern end of the range and come back south to meet itself.

The clouds to the east are looking nastier all the time, with big areas of rain under them. I head over Mt Pleasant and into the Dayboro valley, only to discover that as feared the convergence has beaten me into the valley and is already up against the Mt Samson range. If

A Complete Guide to  
Cross Country Paragliding

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I want to follow the convergence any further I'd have to go over mega tiger country. So, after the last fifteen to twenty kilometres without turning, I push out of the convergence and into the south-easterly that is blowing up the valley, to land just north of Dayboro.

About an hour or more later big thunderstorms hit. There was local flooding and also flooding in Brisbane where two people were

swept away and drowned. This was an unusual convergence formed when a low pressure area evaporated. The low had been sitting near Brisbane causing torrential rain in northern NSW, but only northerly winds on the Sunshine Coast. When the low evaporated the normal easterly airflow pushed in against the remaining westerly to temporarily cause awesome flying, later followed by record storms.



Photos from Manilla Paragliding Open 2001: Courtesy Godfrey Wenness





## NSW Personal Insurance Scheme

NSW pilots are reminded that they must be registered members of the HGFA and of a club affiliated to the NSW.HGPA to be considered for compensation if they have an accident. We have to pay the premium for club members in April, and if pilots want to be countered in they should register with a club and join in the fun.

Steve Hocking

## Club News

### Sky High Paragliding Club, VIC

Due to recent incidents Sky High committee has decided to introduce a top landing ban at Flinders, Melbourne.

- 1) Maximum of four vehicles at the take-off. If you arrive at the take-off and see four vehicles, drop your gear and keep driving into the next saddle and park there.
- 2) Try to keep away from the top landing approach side of the hill. Remember, hang gliders require far more room than paragliders for landing.
- 3) After landing at the bottom of the hill, don't start packing up your glider in the middle of the landing paddock. Pack your glider near to the fence.

Late last year we had a meeting with some hang glider pilots regarding safety in flight at Three Sisters. At the end of the meeting we arrived at the following conclusion.

- 1) Not top landing at Flinders. No landing at the clearance just behind the bowl in front of the power lines. No landing above the steps. BEACH LANDING ONLY!
- 2) All take offs are from the official launch only.
- 3) No aerobatics over or in front of the launch. No touch and goes.
- 4) The road behind the launch is one way; driving the wrong way around is strictly forbidden.
- 5) A warning will be issued at the first offence. On the second offence you are out and will not be allowed to fly at the site until further notice.

Most of the above rules are common sense and applicable to other sites too.

Hakim Mentès, Sky High President

## WA All Clubs Meeting

HGAWA will be hosting an All (WA) Clubs meeting from 7:30pm, on Thursday, 17 May 2001 upstairs at "Cascades" bistro & function centre, 231 Guilford Rd, Maylands. Light refreshments will be served free, bar facilities and bistro meals available downstairs from 6pm.

### Hill Flyers Club, WA

The autumn season of flying started with a week of very hot temps (40°C and over), and 100 year record high for March followed by record lows (7°C). The flying weather has been excellent though, with Bakewell showing off some of its best. Late March saw out and returns, even in the strong winds of 20kt or more, to Mt Brown and beyond, and to Goldfields Road and beyond with equivalent downwind distances (for the same 1<sup>1</sup>/<sub>2</sub> hour flight with best glide flying speed and 20 knot tailwind) – 80-100km. There are only four pilots who have met the challenge so far (end of March) but maybe during the Autumn Fly-in held on 28-29 April we will be seeing a few more joining the ranks of the exclusive "Mt Brown Club".

The Winter Fly-in at Noondeening and the Range is coming up in June, details next Skysailor.

See you in the air, Rick Williams

### Eastern Hang Gliding Club, VIC

So much has happened since the last report. We have exploited the best of the flying season by getting heaps of good quality airtime. The club is just about to begin networking for weekend flying with an SMS text messaging service for mobile telephones. The idea is that advanced pilots decide an appropriate time and place to meet for a fly and all subscribers get an invite to attend, saving a lot of ringing around. We hope that it helps bring novices out of their shells and as an added bonus, if they miss a day, teases them into making an effort to come flying the next time knowing what they have missed. The concept has sparked great interest from novice flyers and is designed to serve them with invites to fly, supplementing our frequent flyers and email networking. I hope to provide further feedback as we gain experience with this system.

We have had pilots flying locally, enjoying flights from Landscape, Mt Donna Buang and numerous gatherings with good flying on the east coast. A contingent of four also made a weekend of it flying on the west coast; congratulations to Vlado for doubling his airtime on this weekend with his new glider and gaining four hours – a happy man. Other reports have included flying in Bright and Manilla. There will be a slow transition into winter flying over the coming months and there are plenty of

opportunities to continue with consistent airtime with the local sites consistently offering flying throughout this season. Some work best in this weather.

The club has put in considerable effort to improve Mt Dandenong, our 1,400ft WNW site forming the eastern boundary of Melbourne. We have succeeded in gaining the use of a suitable landing field, since building development encroached on our old landing paddock. Our new landing site is closer to the hill than before. Site maintenance plans are now under way to improve the launch area for better set up, to allow for use by intermediate hang glider pilots and to enable paragliders to fly there for the first time. Keep you posted on the progress of that one.

Our flying stories and further club news is available in our club newsletter available from our web site at [www.vhpa.org.au/Clubs/EHGCINFO.htm]. This is a good way to keep up with the most recent happenings and planned club events. As always, if you would like to join us for a fly or attend a club meeting you are most welcome; please refer to the club contacts page of this magazine or get a list of our frequent flyers from our web site.

Scott Barrett

Some disturbing information came to light at our last meeting regarding some tree pruning at the set up area of Mt Donna Buang. This site is very sensitive and tree clearing is to no advantage to anyone as it puts at risk everything the club has achieved in its association with Parks Victoria. Those responsible, if caught, should receive the harshest penalty the HGFA can hand out. I hope those who carried out this crime will take heed of this warning and STOP any more clearing.

All site management is to be negotiated through the Eastern Hang Gliding Club as managers of this site.

Andrew Wicks, President EHGC

## FAI News

### Class 2 versus Open Class

During the last CIVL meeting it has been clearly adopted that the Atos-like gliders will not compete in the same class as the Swift-like gliders, with implementation date May 1st 2001.

For that purpose a definition of caged and un-caged glider has been drafted and Class 2 is limited to un-caged gliders.

During the WAG 2001 in Algodonales, only the un-caged gliders will be accepted (including Millennium rigged with control bar.)



Thermalling above the snow in winter at Mt Buffalo

Photo: Kevin Grosser

The only body empowered to make such a decision is the CIVL Plenary meeting, thus things are frozen until next year.

A discussion has been initiated on the CIVL info email list that could perhaps result in a future review of the Open class. Such a decision can only be taken by the CIVL Plenary meeting next year in 2002. The Class Definition Working Group is welcome to continue the debate on a discussion forum and to come up with clear proposals submitted to the Bureau or the President by the October 1st 2001. This proposal, after being considered by the Bureau, will be distributed together with the Agenda of the next CIVL Plenary meeting.

The class definitions are an important part of CIVL's responsibility. It is our interest to serve the sport and pilots in the best manner possible. The operating procedures of the CIVL consist of adopting rules and measures in a democratic manner. The only reasonable way to exercise this process is at the Plenary session where each delegate votes according to his or her country's position. Therefore, the only way to affect the class definitions is to influence the vote of the individual delegates by convincing the pilots of the various countries to change the vote of their delegate.

Olivier Burghelle, CIVL President

### FAI World Record Ratifications

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

#### **Sub-class O-3 (Paragliders) – Multiplace**

##### **Claim number 6767:**

*Type of record:* Straight distance to declared goal

*Course/location:* Quixada-Holanda (Brazil)

*Performance:* 156.7km

*Pilot:* Richard Westgate (UK) *Crew:* Jim Coutts

*Paraglider:* Prime *Date:* 28/11/2000

*Previous record:* 142.3km (27/12/94, Bernhard Schilling, Switzerland)

##### **Claim number 6768:**

*Type of record:* Straight distance

*Course/location:* Quixada-Bom Principio (Brazil)

*Performance:* 220.4km

*Pilot:* Richard Westgate (UK) *Crew:* Jim Coutts

*Paraglider:* Prime *Date:* 30/11/2000

*Previous record:* 213.7km (2/12/99, André Fleury, Brazil)

FAI congratulates the pilots on their splendid achievements.

### World Record Cancellations

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

#### **Sub-class O-1 (HG with a rigid primary structure/controlled by weightshift) – General**

##### **Claim number 6772:**

*Type of record:* Speed over a 100km triangle

*Course/location:* Riverside (Australia)

*Performance:* 40.37km/h

*Pilot:* Tomas Suchanek (Czech Republic)

*Hang glider:* Moyes Litespeed

*Date:* 10/12/2000

*Current record:* 36.04km/h (30/5/99, Hans

Bausenwein, Germany)

*Reason of cancellation:* Claim submitted twice (claim 6770 remains pending)

##### **Claim number 6773:**

*Type of record:* Distance over a triangular course

*Course/location:* Riverside (Australia)

*Performance:* 300km

*Pilot:* Tomas Suchanek (Czech Republic)

*Hang glider:* Moyes Litespeed

*Date:* 14/12/2000

*Current record:* 224.5km (20/6/00, Josef Brandner, Austria)

*Reason of cancellation:* Claim withdrawn by pilot.

##### **Claim number 6774:**

*Type of record:* Speed over a 300km triangle

*Course/location:* Riverside (Australia)

*Performance:* 45.80km/h

*Pilot:* Tomas Suchanek (Czech Republic)

*Hang glider:* Moyes Litespeed

*Date:* 14/12/00

*Current record:* none

*Reason of cancellation:* Claim withdrawn by pilot.



# 39th FAI Australian National Championships – Gulgong 2001

PETER HOLMES AND BRENDA WOODS

Cudgong Soaring excelled in both its organisation and as a soaring site.

Within an easy 10-minute drive of the local town, the soaring site has

been developed to retain an “Aussie” bush feel. It is a fine example of great forethought, planning and execution, for which a large slice of credit must go to site manager Ian Harris and architects Donald Wyllie and Henk Meertens.

**T**ake the smallest Australian club to have ever held a Nationals competition, combine with a small but well-seasoned blend of officials, add a small hard-working core group of club men and women, and blend that lot together with a site boasting 7,000ft of grass runway and you have the venue. Then mix in some top ‘tuggies’, a site that was well-managed on the ground and an organisation directed very capably by Paul Matthews. Finally, add weatherman Miles Gore-Brown, with a rate of success to be envied, and the 32 pilots from as far afield as Western Australia nationally; plus three from New Zealand; two from the United Kingdom; one from the Netherlands and one from Spain. The result was a most impressive and successful 39th Nationals 2001.

The championships were contested in Open Class, 15 Metre Class and Standard Class plus a combination of 15 Metre and 18 Metre ships to make up the inaugural 18 Metre Class. Additionally, contesting the prestigious Tasman Trophy (our gliding version of the Bledisloe Cup) were Matt Anglim of Warwick, Australia and Richard Downer of Wellington, New Zealand. Also great to see at the nationals were two LS 3as, one Jantar 3 and many pilots there simply to enjoy themselves. Hopefully this can become a trend.

## Practice Day 1: Saturday, 10 February

**Task: The same triangle of 186km for everyone.**

An inauspicious start to proceedings. Briefing was held and, despite the threatening weather a small task of just under 200km was set. Paul Matthews and his team needed to test their operation and scoring system. The weather closed in and the day was declared a non-flying day. Ground level at the strip is 1,500ft QNH.

## Practice Day: Sunday, 11 February

**A small task was set. Open – 282km; 15/18M – 251km; Standard – 235km.**

Conditions were cu's of four to five knots to 6,000ft QNH locally, with the best at five to six knots to 7,000ft to the west. The last leg and final glide had a sea breeze strengthening from the east to contend with and stragglers were caught short in getting home. At the time, we did not know that this was to be an increasing trend over the days to come.

## Practice Day 2: Monday, 12 February

**Tasks: Open – 267km everyone else 204km.**

Thermals of four to five knots to 7,500ft QNH with the best at 8-10kt. The day turned out better than forecast. No outlandings occurred. Thermals were lumpy and disorganised low, so it paid to stay high, which was a precursor to the next few days.

## Race Day 1: Tuesday, 13 February

**Tasks: To the north to Binnaway and Coonamble and then home via Eumungerie and Gilgandra: Open – 372km; 15/18M – 333km; Standard – 309km.**

Thermals were predicted of four knots to 4,500ft QNH with the best at seven knots to the west.

Speeds were slow due to upper atmosphere cloud (part of the jet stream from the tropical low to the north), which caused large shadowed areas and cut off convection in those areas. Those who managed to stay in the sunlit regions completed the task and the others outlanded – 12 in total.

In the Tasman Trophy Richard Downer flying an LS4, was second fastest to Miles Gore-Brown at 93km/h in Standard Class, and really threw the gauntlet to Matt. Pam Kurstjens (UK) was fastest in Open Class at 105km/h

and showed the lads how it was done. Graham Parker showed what was to be his consistent winning form in 15M Class at 97km/h. Tracy Tabbart won in 18M Class at 99km/h.

## Race Day 2: Wednesday, 14 February

**Tasks: Open – 282km; 15/18M – 298km; Standard – 273km, all set into the north-west sector.**

Thermal prediction was for three to four knots to 5,000ft QNH. A nice start to the day quickly turned into overcast conditions which shut down convection early, causing several outlandings (10 in total) and some on their first leg. Those who started early, or were able to keep pace with the sunny areas, got home.

Day winners were in Standard Miles Gore-Brown at 89km/h; in Open Gerrit Kurstjens (Ned) at 106km/h; and in 15M and 18M Graham Parker at 88km/h.

Tasman Trophy: Richard Downer again won, which edged him 349 points ahead of Matt.

## Race Day 3: Thursday, 15 February

Blue thermals of three to four knots to 6,000ft QNH with the best at eight knots to the west was the prediction, however over-development prior to launch caused the contest director, Paul Matthews, to go to B task.

**Tasks: Open – 277km; 15/18M – 258km; Standard – 246km set in the general area of Tooraweenah and then down towards Wellington**

A strong easterly sea-breeze colliding with the general westerly airflow created a strong convergence line on the western edge of the task area, such that it paid to go well off track to connect with it and then use the strong climbs and good streeting that it presented. The strong easterly created a significant headwind on the last leg and caused massive outlandings with less than half of Standard Class and only Bob Ward and Graham Parker in 15M/18M Class making it home. All pilots in the Open Class got home.

Day winners were in Standard Matt Anglim at 86km/h for his first ever win in an FAI Nationals, and then in Open Dion Weston at 113km/h, also for his first win. In 15-18M Graham Parker won at 96km/h.

Tasman Trophy: Matt Anglim swung into action and won the day. Richard was close behind and maintained a points lead of 153.

## Race Day 4: Friday, 16 February

Conditions were predicted to be weak so tasks set were only: Open – 283km; 15/18M – 222km; Standard – 203km to the north and west

Thermals of two to three knots to 4,000ft and the best at five knots to the west.

Weatherman Miles Gore-Brown was predicting the local conditions with great accuracy with the aid of the cu sonde. Conditions were reasonable to the north and west but coming home was still a battle against the easterly sea-breeze on the last leg. Late starters had the worst of the easterly and several were forced to outland. Some of the competitors had then had four outlandings in a row. Speeds tended to be below 100km/h and caution was the order of the successful flights.

Day winners: Standard David Wilson at 97km/h; Open Pam Kurstjens at 106km/h; 18M Bob Ward at 93km/h; and 15M David Speight (NZ) at 86km/h.

Tasman Trophy: Matt Anglim again won the day, however Richard was once more close behind and still maintained his lead of 106.3 points.

## Race Day 5: Saturday, 17 February

Tasks: Open – 313km; 15/18M – 250km; Standard – 255km to the west and south-west.

The day proved to be under-set producing blue thermals of four to five knots to 6,000ft with the best at seven to eight knots to the west. It turned out to be the best day so far. Much to the delight of the officials, and pilots in particular, everyone got home. Small cu domes, good streeting and a subdued sea-breeze were a bonus to all. Speeds at last exceeded 100km/h.

Day winners: Standard Ingo Renner, who was starting to come into contention at 108km/h edging out Miles Gore-Brown who was a close second. In Open Class John Buchanan at 124km/h had his first win; but in both 18M and 15m Graham Parker at 113km/h just kept forging ahead.

Tasman Trophy: Richard won the day, stretching his lead back to 130.3 points. This time Matt was close behind. The battle between these two was close and engrossing.

## Race Day 6: Sunday, 18 February

Tasks: Open and 15/18M – 316km to Binnaway and Gular to the north-west; and in Standard – 297km in the same general direction.

Blue thermals of three to four knots to 5,000ft with the best at five knots to 6,000ft to the west was the prediction. This day also proved to be better than forecast in the western part of the task and speeds were high.

Day winners: Standard Bruce Campbell for his first win ever in an FAI Nationals at May 2001



**Alexander Schleicher**  
Ultra High Performance Gliders  
and Training Sailplanes

# STOP PRESS

## WINNING ALL 4 CLASSES AT 2001 NATIONALS

### OPEN CLASS

1<sup>ST</sup> Place John Buchanan ASW 22BLE

### 15m CLASS

1<sup>ST</sup> Place Graham Parker ASW 27  
(Also winning 18m Class)

### STANDARD CLASS

1<sup>ST</sup> Place Ingo Renner ASW 28

- Winning margins ranging from approximately 250 to 2100 points.
- ASW 28 clearly ahead of its competitors in first major competition.
- ASW 27 winner of 15 m Class at the last 4 Australian Nationals.

Congratulations to all pilots from staff and management of A. SCHLEICHER in Germany and Chris Eckey as our sole Australian agent.

117km/h; Open John Buchanan again at 125km/h; 18M Bob Ward at 114km/h; and in 15M Graham Parker won at 112km/h.

Tasman Trophy: Once again Richard won the day, stretching his lead to 312.7 points. An outlanding by Matt cost him dearly.

## Race Day 7: Monday, 19 February

**Blue thermals of three to four knots to 6,000ft were forecast locally with six knots to the north to 9,500ft. As a result, tasks were set across the Liverpool Ranges into the northern task area with Open being set 470km to Coonamble and Barradine; 15/18M – 379km and Standard – 381km being tasked respectively to Tambar Springs and Premer.**

Another accurate forecast from Miles. Apart from some shade, which slowed things at times the day was as forecast with only a few pilots having difficulty crossing the hills.

Day winners: Standard Peter Buskins coming in for his first ever FAI Nationals win at 102km/h; Open Class Dion Weston at 113km/h, 18M Bob Ward at 97km/h; 15M Graham Parker at 96km/h.

Tasman Trophy: Matt Anglim won the day, although Richard was so close behind they almost landed nose to tail. Richard maintained a points lead of 300.3 at this stage.

## Race Day 8: Tuesday, 20 February

Tasks: Open – 312km; 15/18M – 343km; Standard – 289km.

Blue thermals of four to five knots to 6,000 ft QNH with cu at eight to 7,500ft to the north was the forecast.

The day began looking better than forecast, but then looked weaker as it developed prior to launch. Before launching task B was called on. As it turned out, the day in fact lived up to the forecast and a decent day with good speeds was had by all classes. Cu's with good streeting were prevalent in much of the task areas, however the dreaded easterly strengthened for the last leg home resulting in several outlandings. Of particular consequence was an outlanding by Bob Ward which cost him any real chance of gaining the 18M title. As Bob so aptly put it after several wins and then an outlanding: *"What a sport! A rooster one day; and a feather duster the next!"*

Day winners: Standard Bruce Campbell at 115km/h; Open John Buchanan at 124km/h; and the consistent Graham Parker 123km/h in both 18 and 15M.

Tasman Trophy: Richard Downer won the day to take his points lead over Matt to 351. Matt was doing his best, but Richard seemed capable of pushing that LS4 along at a great pace – a very canny driver.



Photo: Kerry Sunderland

## Race Day 9: Wednesday, 21 February

Thermals of two to four knots to 5,000ft with the best at five knots was Miles' prediction, but with over-development, storms and showers likely. Prior to briefing, low scudding cloud and clag came in from the east and prevented any part of the day from developing.

As a result, day nine was declared a rest day. Most pilots enjoyed a well-earned rest and a day at the local wineries or a shopping trip to Mudgee.

## Race Day 10: Thursday, 22 February

Frontal conditions had passed through and a good day was expected. Unstable air from the south mixing with inland warmth was predicted to create good cu's. Thermals with cu's five to six knots to 7,500ft QNH with the best at 8-10kt to 9,000ft to the west was the call.

**Tasks: Open – 465km; 15/18M – 446km; Standard – 412km to the south-west.**

The day was a good one with excellent streeting and climbs. Early starters were penalised with a slow first leg, and late starters had the best conditions. The easterly flow, which had been dogging final glides most of the week, was not present. The speeds of the daily winners tell the story.

Day winners: Standard Bruce Campbell at 138km/h got the money; Open Dion Weston at 140km/h; and again in 15M and 18M Graham Parker nailed the day at 131km/h.

Tasman Trophy: Matt Anglim won the day, although Richard was close behind and maintained a lead of 277.8 points. Matt was finding it hard work to haul Richard back at this late stage.

## Race Day 11: Friday, 23 February – the final day

**Thermals with cu's of seven knots to 8,000ft with the best at nine knots to 9,500ft to the west were predicted. Tasks were set again to the west but were shortened with an early gate closure due to the usual last day restrictions. Open was set 407km; 15/18M – 372km; and Standard – 355km.**

Again another great day, short and fast to end proceedings. Good streeting from the start made for the best times. Those who missed the better streets, although fast, were simply not fast enough to get into the action. Again, a non-existent sea breeze allowed for long final glides with little or no error factored into the glide.

The day winners were in fact all of the eventual champions. In Standard Class Ingo Renner was first at 140km/h; John Buchanan won Open Class, narrowly, at 148km/h; and once again the ever-consistent Graham Parker at 137km/h took out both 15M and 18M.

In Standard Class Ingo Renner won the Doc Heydon trophy. Second was Bruce Campbell and third Miles Gore-Brown. John Buchanan won the Dr Mervyn Hall trophy to take out Open Class, followed by Gerrit Kurstjens in second place and Pam Kurstjens in third.

Graham Parker took home the 15 Metre Cup and the new 18 Metre Roger Woods Trophy, which was presented by Brenda Woods, one of the Gulgong organising team. Second in 15M was Arnie Hartley followed by David Speight. In 18M Class Tracy Tabart was second and Trevor West third.

In the wrap up of the Tasman Trophy Matt Anglim again won the day, but Richard

Downer, never far behind, kept his lead of almost 200 points to win the contest.

Congratulations are due to Richard for a determined and consistent performance. In keeping with this challenge, both pilots showed resilience and good sportsmanship. The flame has once again been rekindled for an Australian pilot to travel to New Zealand and try to bring the trophy back.

In the League II contests Bruce Campbell was a most worthy winner in Standard Class with Richard Downer second and Matt Anglim third. David Speight of New Zealand took out the 15M Class by a sizable margin, with Mick Webster and Geoff Nicholls second and third respectively. Pam Kurstjens was a popular winner in Open Class followed by Dion Weston and Pepe Valerez.

Bruce Campbell was awarded the Sir Donald Anderson Trophy for the best result by a pilot in their first or second Nationals. Gerrit Kurstjens took out the Gulf Air Trophy for the best result by an overseas pilot and the Schneider Trophy was awarded to the best battler, Garry Stevenson. The GFA Teams Shield went to the NSW team of Dion Weston, Miles Gore-Brown and Shinzo Takizawa.

A young up-and-coming Ingo Renner proudly took home his first Masters (or Codgers) Cup.

The final two days were a wonderful ending to the competition. As had been predicted in an earlier article in Australian Gliding/Skysailor, the site at Gulgong presents superb challenges to competition pilots. Some days it pays to stay on track and on other days to travel well off track to use the streets, clouds and convergence lines.

It is pleasing to see that some new young talent has surfaced with the likes of Bruce Campbell and Matt Anglim. Along with other young talent present in standard class, the future looks bright for this class. Both Pam Kurstjens and Kerry Claffey (who pulled her first day's win in League II) have shown that they can mix it and beat the best of the boys, which should bring great encouragement to aspiring ladies.

And finally, to the Gulgong team of Paul Matthews, Donald Wylie and all of the crew, congratulations from the pilots in running a relaxed yet superbly managed event.

Anyone who missed the Dalby Nationals in Queensland some years ago missed the best Nationals ever. Similar memories will be had of the Gulgong Nationals – a mixture of marvellous and relaxed organisation, a great site, variable task terrain plus some challenging and variable weather. All this combined to make a most memorable Nationals.

If you weren't there you missed a 'goodie'.



## GFA Airworthiness Directives

**GFA AD 511 (Issue 4):**

*Type affected:* Stemme powered sailplanes of the following models and serial numbers, fitted with propellers 10AP-V and 11AP-V/Project No 14-006, S-10V: serial numbers 14-001 to 14-030 and 14-012M to 14-063M S-10VT: serial numbers 11-001 to 11-037.

*Subject:*

1. Replacement of the propeller fork P/N 10AP-V08 with new fork P/N 10AP-V88 on all aircraft with propellers 10AP-V and 11AP-V.
2. Modification of the gearbox suspension of propeller 10AP-V and spacer tubes of the suspension.
3. Performing extra dynamic propeller balancing.

**GFA AD 545 (Issue 1):**

*Type affected:* DG500M.

*Subject:*

1. Lubrication of ball-bearings and articulated rod-ends in cockpit area.
2. Checking the rear seat head-rest retaining cables for correct length to avoid blockage of aft control stick.

**GFA AD 546 (Issue 1):**

*Type affected:* Mistral-C.

*Subject:* Residual momentum of ailerons.

**GFA AD 547 (Issue 1):**

*Type affected:* Stemme S-10, all models.

*Subject:* Review of permissible operating times of all parts subject to service life limitations and associated amendments to maintenance manuals.

## GFA Airworthiness Advice Notices

**GFA AN 56 (Issue 6):**

*Type affected:* DG-100 (including Elan); DG-100G (including Elan). DG-200; DG-200/17; DG-200/17C.

*Subject:* Miscellaneous airworthiness information.

**GFA AN 74 (Issue 7):**

*Type affected:* DG-400.

*Subject:* Miscellaneous airworthiness information.

**GFA AN 154 (Issue 1):**

*Type affected:* DG-800A, LA, DG-800B.

*Subject:* Miscellaneous airworthiness information.



# A New Club Glider

EMILIS PRELGAUSKAS

**The discussion has begun once again in the club. We need a new club glider is the cry. The current generation of recently solo pilots see the logic of this demand. The club is losing money by pilots sitting around waiting to share the single middle order glider. And the senior pilots recently got a newer top end glider.**

The older hands look back two years when the extra middle order glider in the club fleet had been sold. The group of recently solo pilots at the time rather waited their turn for the other one glider available. It was favoured for its better performance. Meanwhile the extra glider languished in the back of the hangar, covered in dirt, falling apart because it wasn't wanted. True, it didn't have the performance, it was older, didn't look as smart, particularly as the circuit bashing and no TLC took its toll. Some heads are shaken. It foreshadows that the club's current middle order glider will decline the same way if the club gets another middle order glider. And in a few years time the club will then again make a loss selling the unwanted airframe after it, in its turn, has sat unwanted in the back of the hangar for some time.

An external observer has said to me that this chain of events should not be unexpected. It is endemic in the 'social welfare' nature of how the sport of gliding has evolved in Australia. That historically, the isolation, small populations, and low personal wealth saw glider pilots band together into clubs to get money to get the gliders. Other aviation sports don't behave this way. The flying equipment is expected to be owned by the pilots, while the support facilities, extending on to the land and airspace, are secured communally. Some gliding clubs overseas behave in parallel with sports like yachting. Clubs supply the entry point, the training and then encourage syndication by not providing follow-on gliders. In this way a number of huge cost centres on clubs are avoided. The rapidly decaying asset value of the flown, but uncared for, club glider. The purchase cost premium of the rapid replacement cycle to get the better club glider. The income foregone where the club glider is left unused while the call is for something better again.

That call is of course based on ostensibly sound grounds. The lack of performance stops pilots from flying cross-country, or entering

contests. Yeah, right. Several gliders of similar but better performance in the club fleet will make lead-and-follow coaching possible. Yeah, right.

The same calls were used to have the Grunau replaced with the Olympia, then that with the Ka6, that with the Libelle, that with the Discus. And the amount of club-based cross-country flying, coaching and contest flying remained almost unchanging throughout that period. The substantial performance oriented flying beyond local soaring was throughout done predominantly by the privately owned equivalents throughout those decades. The glider performance itself was never the barrier, nor the controlling issue.

Pilots of club gliders were always disadvantaged because they didn't accumulate the flying hours in the one glider to develop the honed skills to optimise that glider in their hands. Their mount could never be assured of being set up to their comfort because of the large diversity of bums taking it in turns in that one seat. They could never be sure it would be available, rather than being in the workshop repairing someone's latest fumble. Nor that it would have serviceable trailer, battery, tow gear, let alone data logger, needed to fulfil the performance-flying role.

And even when provided with all that gear by the club, pilots have good reasons why they can't apply the resources to the task just now – I have to be home on time, can't afford to outland, I forgot to bring my lunch, my drink bottle, my maps, I feel sick, but, but... The glider's performance was never the barrier.

So acceding to the requirement for the better next club glider will assure only one thing. That the current glider begins the trip to the dust at the back of the hangar. And in a few years the same reasons will be trotted out by a new generation of pilots who want to fly locally and look good in front of their family in something better.



# Winter Flying



## KEVIN GROSSER

**A** little over an hour's drive north-east of Melbourne is a site known as Three Sisters. This site is rated novice and is hang- and paraglider-friendly. As the name suggests, the Three Sisters is a steep hill with three high points. Take-off is on the middle point. The hilltop is smoothly rounded and grassy and provides the easiest of launches on the north side into north-west to north-east winds. And just for good measure, it also has a launch on the south side. The north side take-off is 750ft agl and the south side is 900ft agl. Landing on the north side is into a slightly downhill paddock, which is large enough to land a high performance glider in. Landing on the south side is into an ample sized flat paddock. Top landings are one of the many attributes this site has, and allows pilots to take a break and have lunch or coffee. The nature of the hill makes top landing fairly easy, as

many pilots have found out recently, doing their first top landings. A top landing can also save a walk up the hill or the need for a driver, as the hill is steep and the access track is four-wheel-drive only.

Victoria's winter weather pattern and geography play a large part in the flyability of this site. In winter the weather pattern in Victoria is dominated by high pressure systems interspersed with cold fronts which sometimes develop into low pressure systems. In a nutshell, northerly winds become the prevailing wind direction, and needless to say, north is what we want. The geography plays a part in the fact that Three Sisters is located just north of the divide and that can mean even if it rains in Melbourne it may actually be fine and sunny at Three Sisters. This is a phenomenon which occurs fairly regularly.

Last winter was kind to us with Three Sisters having been flow every weekend from the start of June to the start of August. And

I'm not talking about sled runs here. I'm talking about flights of a minimum of one hour, with some sky pigs staying up for three hours (not mentioning any names, Mal). Some may think that ridge soaring is pretty boring, but that is not the case here with lots of fun to be had. To an outside observer it would seem that some hang gliders fly upside down, but that's just Wicksy and Co fine tuning their flying skills in the mild air whilst others are choreographing their own dance of flight on a gorgeous winter's day. The lift band extends far out in front of the hill which enables pilots to move away from the hill and have a good look around. With 10-14 pilots (both hang- and paragliders) in the air at once you would expect this site to be congested, but this is rarely the case.

With winter temperatures at around 14°C, some would be discouraged from flying at all, but when you are on the hill with your thermals on and the breeze is coming up,

you can't help yourself but want to fly. Strangely enough, with such low temps it's not just ridge lift but also convective lift that we fly in winter, and some pilots get gains of 1,500-1,700ft above launch. Last winter saw lighter winds than normal at this site. 15-20mph is ideal, but on many occasions we fly 8-12mph and 10-15mph. But you won't find anybody complaining, just enjoying the flying and having a great day. On the odd occasion a glass-off is also experienced at this unique site.

When the flying is over for the day, it's time to debrief at the Glenburn Hotel, where you warm yourself next to the roaring open fire. There is lots of hang-yakking and beer and great food also.

I'm a firm believer in flying during winter to maintain flying skill currency and avoiding the spring time rusty feeling of not having flown for four months or so. It is for this reason that Three Sisters and other similar sites are so important. The fact that this site is so close to Melbourne leaves no excuse.



## PHOTOS: KEVIN GROSSER

- ▲ A view to the north of Three Sisters: The north landing zone is at harness foot
- ▶ Kevin and Andrew Wicks soaring
- ▼ A perfect winter's day



# Some Reflections on Using Feelings as a Resource for Pilots

MAX BROADWAY

I have been a sailplane pilot for many years in the past, but for a while now I have been re-training for hang gliding after a break of a few years from gaining my restricted hangie qualification. During the period of my re-training, I have spoken to a few other pilots and ex-pilots about their experiences. In addition, I notice articles in Skysailor lamenting the loss of pilots through waning interest or through incidents.

In my professional work I act as Chaplain in the Building and Construction industry, and deal frequently with men confronting personal issues. And I think there's connection. In the same way men in crisis are often taught to tune in and name their feelings, I think that pilots could use a higher level of sensitivity to their emotions and feelings as tools to assist them to enjoy flying more, and to make flying safer.

There seems to be two kinds of feelings we as humans experience. First of all feelings about the "state of the machine" – hunger, thirst, pain and so forth. I will call these "biofeedback". Then there are the emotional feelings such as concern, worry, anxiety, fear, exuberance, satisfaction, boredom. I will refer to these as "emotions". As flyers, we ignore any of these feelings – both biofeedback and emotions – at our peril. Feelings such as these are accurate indicators of how we as pilots are travelling. We would be foolish to ignore our flying instruments – ASI, altimeter, compass, vario, etc if they were giving us a warning that we were flying too low, slow, in the wrong direction, or in sink. In the same way, our feelings warn us of impending risks that we ignore at our peril. The safety literature is legion with incidents involving pilots who ignore their more subtle emotions or biofeedback and who fly when over-stressed, tired, dehydrated or otherwise in poor physical shape. Strong emotions are ignored at a similar cost.

Emotions are fuel for action. When allowed to become strong, emotions can motivate correspondingly strong actions. These feelings can be a positive, as in the case of strong desire motivating us to fly in the first place, but they can also be negative, and I think such negative emotions can ultimately prove fatal to flying careers. How about acknowledging negatives when they are more mild, and can be used as tools to prompt a re-evaluation of your approach to flying before you do serious damage – either to your career, or to yourself?

It seems to me that often blokes stop flying for two main reasons – they lose interest or motivation, or they suffer a major scare and conclude flying is too risky.

In relation to the first reason, loss of interest or motivation, these emotions may be prompted by a long-term involvement that is allowed

to "go to seed". After reaching a certain point, a plateau is reached and further development is neglected, or new challenges are not sought. Either that, or family life intervenes, and a decision is made to "second rate" the aviation career in favour of the family commitments. In such cases, wouldn't it be better for pilots to acknowledge their lowering enthusiasm, and to question their reasons for this? Perhaps a new direction – aerobatics, cross-country navigation, new challenges or skills to develop, or even a new site to fly, may cure the blah's. Or in the case of family matters intervening, negotiating with the partner on ways to include aviation on the agenda without adversely affecting family commitments. But no one can read your mind. Unless you acknowledge to yourself and discuss your growing disenchantment, nobody will be able to assist you.

In relation to the latter, I think there are some constructive suggestions that could come from accepting the emotional early-warning signs and addressing the causes before they prove fatal to the aviation career (or even to the pilot!). I think it's a mistake either to ignore more subtle emotional warnings when they could be a resource, or through denial, allow them to grow to the point where emotions become overwhelming and panic results.

Let's look at the two extremes in a bit more detail. It is often said that a certain level of fear (healthy respect) is good for flyers. Without a natural appreciation of the risks involved in flying, you can become blasé about it, and thereby become a danger to yourself and or others. This was the subject of a recent article on safety in Skysailor ("*Why can't we get a handle on this safety thing?*" by Mike Meier, December 2000 issue). The author detailed how ignoring risks can prove fatal, and how pilots need to make proper risk assessments in order to fly safely. I agree with him. Pulled off a successful landing that nevertheless gave you the shudders? Why not use those shudders as a prompt to re-evaluate your skills rather than just ignore them and move on? Did you mis-read the conditions? Did you flare too early or too late? Did you tense up on the controls while landing and become ham-fisted? Didn't pull on enough airspeed to counter wind gradient? Any of these faults could be rectified by devoting a bit more attention to building your skills. Consult your friendly local instructor for a "polishing up" lesson. A work-out on the training site may be the cure for such potentially fatal problems.

Emotions are generated by our thoughts and values. It is normal to experience the "butterflies" before launch. Flying is not natural to human beings! There was a really good description of these "butterflies" in another recent Skysailor article when the author described his launch from Buffalo. He also described well the cure – logical reassurance (see: "*Mind over matter*" by Phil Lewis, January 2001 issue). However, it is not good emotional medicine to ignore feelings that are fuelled by good reason! To reassure yourself when there has been a real mistake made, conditions are marginal (or extreme), or before you have adequate competence, and to ignore the emotional warning signs, will only result in increased levels of anxiety. The cure here is to identify what has fuelled your thinking, and pay attention!

My own experience speaks here. Early in my re-training I took a flight from a higher coastal ridge site after a morning's launch and landing practice. I was tense and gripping the control bar strongly, pulled in too hard on launch in my desire to gain lots of airspeed, juuuuust



Looking east towards Bogong and Hotham

Photo: Kevin Grosser

scraped over some bushes beyond launch before relaxing my death grip and allowing the bar out, and then went on to land hard after flaring late – again because I was tense and, well, scared! Well, I walked away okay – no damage to man or machine – but it could easily have been a different story! I ignored my anxious feelings that were the result of knowing I hadn't yet devoted enough attention to take off and landing skills, and it could have cost me dearly! I would have been much wiser to have heeded my inner warnings, and to have postponed the high flight until my confidence was greater and I had polished my launches and landings more thoroughly.

My flying career could easily have been the victim as well. How many pilots walk away from the sport after one or more scares like this? I know a pilot who almost threw in the towel after a few flights in a poorly trimmed glider. He was aware that his strong feelings of "fighting" with the glider were destroying any enjoyment he may have had of the actual flight, but also, because he was keeping it to himself, he was blaming himself for this state of affairs. He had reached the point of almost persuading himself that hang gliding was not for him. Fortunately, he opened up about this when spoken to, and realised that the problem was with the glider rather than himself. A relatively minor adjustment to the hang point cured the problem, and a session on the training slopes followed by a successful high soaring flight restored his confidence and enjoyment.

Men in difficulty are acutely aware of painful emotions: mainly, they want painful feelings to stop! However, in the lead-up to this situation, they often ignore less painful, but nevertheless significant, emotions that may have clued them up that there are issues that need addressing. (Perhaps in former incarnations, men learned to overlook their painful feelings up to a point – after all, to be a successful warrior or hunter, you need to overlook your more tender feelings, like compassion for the enemy or your prey, and to use fear as a resource to fuel courage – but that's another story.)

The question is: *"How many pilots find themselves repeating a variation of these stories, and are lost to the sport?"* Ignoring their emotional "warning lights", or keeping their misapprehensions to themselves results in a lose/lose situation – the pilot loses his enjoyment of the sport, and the sport loses another otherwise successful pilot. Wouldn't it be preferable for pilots to be more alert to their feelings, to speak up, and to go on to use them as tools to improve their situation? Discussing them with a fellow pilot or an instructor, and potentially finding a solution, could allow them to recover their confidence and enjoyment of the sport. Perhaps we could also promote a mentoring system, with more experienced pilots taking their less advanced/experienced colleagues "under their wing" on a more consistent basis than currently occurs. That way, our feelings could result in winners all around!



Photo from Manilla Paragliding Open 2001: Courtesy Godfrey Wenness





# 160 Badge Claims Processed

BERYL HARTLEY

Since 1 January 2001 this office has processed claims for 103 Australian pilots and 57 international visitors. The majority of claims are well presented with all flight evidence supplied, which has allowed us to manage a fast turnaround in processing the claims. Thank you to all the official observers who ensured the claims met the sporting code requirements.

There has been a trend over the last few years for the rules applicable to regatta-type competition to vary from the sporting code. This has been driven by the change from camera-type verification to flight recorders.

Many organisations find that the old technology of developing film, time consuming and expensive. Most pilots have some form of navigation equipment with the introduction of inexpensive hand-held GPS units. The regatta competitions are usually very social events and there is no real need to obtain FAI approval to run a small friendly week -long competition. Flight verification varies from site to site but most organisers will now accept any GPS presentation for verification of the flight. In many cases the local rules will accept a turn point as a circle around a physical feature.

These rules are not in keeping with the FAI sporting code under which all gliding badges are awarded. The sporting code sets

out a criteria under which pilots from all countries are awarded badges for the same flights. This summer I have had a number of flights presented for verification which do not meet the sporting code in the turnpoint rule or the flight recorder evidence.

All FAI badges are flown with the FAI sector turnpoint as has always been the rule. The listing of acceptable flight recorders is listed on the FAI web page and accessible through the GFA web page <www.gfa.org.au>. In an FAI-approved championships the contest director may act as the official observer.

## GFA Badges & Certificates



### FAI Report – March 2001

#### A Certificate

WATSON Kenneth Robert	10486	Boonah
WILLEY Adrian	10487	NSW AIR TC
ELLERTON Claire Therese	10488	Byron Bay
STEWART John L. McKellar	10489	Lake Keepit
HOGARHT Benjamin	10491	NSW AIR TC
GODDIN Graham Russell	10492	Lake Keepit
WILLIAMS Robert Arthur	10503	Byron Bay
ATKINSON Matthew R.	10510	Lake Keepit
HUGHES David Michael	10519	Darling Downs

#### B Certificate

WATSON John Howard	10341	NSW AIR TC
McGrath Aaron James	10461	NSW AIR TC
MUSTO Henry Allan	10478	RANGA
MAGUIRE Jeffery Robert	8128	Bathurst
NEWTIN Mark	10466	Adelaide Uni

#### A and B Certificate

SPAIN Anthony John	10500	NSW AIR TC
ABRAHAM Arthur Richard	10501	Hunter Valley
WITHAM John Graeme	10507	Byron Bay
HUNT Rodney Laurence	10508	Beverley
KING Robert George	10509	Grafton
KEMPTER Linda	10512	Narrogin
HAYWARD Leslie	10515	Central Coast

#### C Certificate

IANSON Adam	10313	GCV
TORRINGTON	10412	NSW AIR TC
JOHNSON David Keith	10354	Mangalore
POONPOL Jonathon	10368	NSW AIR TC
MATHER Albert Ernest	10049	Central Coast
WILKES Darryl Ronald	10366	Beverley

#### B and C Certificate

CLEMETS Claire Deidre	10231	Adelaide Uni
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#### A, B and C Certificate

ASTILL Eric Thomas	10484	Murray Bridge
ARTHUR Alan John	10485	Narrogin

#### A, B and C Certificate continued

SPENCER Derek James	10490	Adelaide Uni
ANDREWS Evan William	10493	Nthn Tasmania
HALL Ross Brian	10494	Boonah
SANDERS Norman Karl	10495	Canberra
FUKUKAWA Shingo	10496	Southern Cross
GRIMSHAW Frank Richard	10497	Canberra
MARTIN Peter Leslie	10498	GCV
DEWEY Sidney Richard	10499	Beverley
LAIRD Sonja Jane	10502	Barossa Valley
TERAMOTO Tsuyosh	10504	Orana
EGASHIRA Soichi	10505	Orana
KAWAI Takanori	10506	Orana
WELLE Ingo Christian	10511	Orana
BURGESS Peter William	10512	Balaklava
BERRY-BROWN Steven	10514	GCV
GRAY Steven Vernon	10516	Adelaide Uni
STEHLI Helmut Phillip	10517	Lake Keepit
GERUS Gerry Brian	10518	Lake Keepit

#### Silver C

HURN Nick Delacey	4340	Barossa Valley
HUDSON Garry Deane	4341	Caboolture
LEWIS Scott	4342	Adelaide
SANDERS Norman Karl	4343	Canberra
LUMB Geoffrey	4345	Beaufort
TULLY Zane Evans	4346	Gympie
SHEMTOB Meir Richard	4347	Sthn Riverina
ITO Masayuki	4348	Stirlings
MILLARD Trevor Ross	4349	Hunter Valley
CAMPANGA Raul Luis	4350	Narrogin
ROCKETT Georgina M. Inett	4351	GCWA

#### Gold C

SANDERS Norman Karl	1536	Canberra
PAUKOVICS Geza	1537	VMFG
McLAUGHLIN Roy Hamilton	1538	Caboolture
O'BRIEN Fergus	1539	Mangalore
PICKLES David Harold	1540	Hunter Valley
SPROGE Richard McPherson	1541	Bathurst

#### Diamond Goal

CHAPMAN Peter		Southern Cross
SANDERS Norman Karl		Canberra
PAUKOVICS Geza		VMFG
COOK Richard		Kingaroy
O'BRIEN Fergus		Mangalore
YODALE Leigh Malcolm		Bathurst
McLAUGHLIN Roy Hamilton		Caboolture
BELY Jean Jacques		Sthn Riverina
SIM Alister		Darling Downs

#### Diamond Distance

ROCK Graham Fredrick		RAAF Richmond
MAGGS John Stuart		Bathurst
HANLEY Christopher Eric		Adelaide
McDONALD Robert James		Bathurst
BELY Jean Jacques		Sthn Riverina
CAWSLEY Richard		Sthn Riverina

#### 750 Kilometres

BLAND Mark Ward	95	Albury/Corowa
WOOLEY Christopher John	96	Central Qld
ANGLIM Matthew	97	Sthn Downs

#### 900 Kilometres

HOKKANEN Pekka	8	GCV
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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

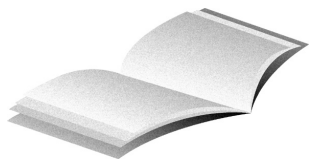
Decentralised Competition entries to:

Chris Stephens

PO Box W48 Wanniasa ACT 2903

Ph: 02 6231 4121

Email: poboxw48@dynamite.com.au



# Book Review

ALLAN ASH

**"The Great Adventure"** by Bertrand Piccard and Brian Jones. Published by Hodder Headline, London 1999 – 438 pages with colour photographs.

**T**his is the detailed true story of the first round-the-world flight in a balloon, made in March 1999. It will be enjoyed by all who are involved in sporting aviation.

Bertrand Piccard is a medical doctor, specialist in psychiatry. He is Swiss and an experienced balloonist, hang glider pilot and parachutist. Brian Jones in British (ex-RAF air crew), an experienced balloonist and balloon instructor.

Piccard's grandfather, Auguste, was the first man to reach the stratosphere in a balloon. His father, Jacques, went to the deepest part of the ocean in a bathyscaphe and developed the world's first passenger submarine.

The round-the-world balloon adventure was sponsored by the Swiss company Breitling, maker of fine watches, aviation chronometers and other instruments.

The balloon envelope was designed and built by Cameron Balloons of Bristol, England. It was made of mylar coated with aluminium foil, it was 170ft (57m) tall (higher than Nelson's Column), had a volume of 650,000ft<sup>3</sup> and weighed 9.2 tons. The envelope was inflated by a combination of helium gas and air which needed to be heated regularly by burners.

The gondola was a horizontal cylinder, two-and-a-half metres in diameter, about five metres long, with domed ends. It was made of carbon fibre and Kevlar, with foam insulation.

Throughout the narrative great emphasis is placed on the fact that the flight was not made simply by the two pilots. An essential element was the support of the extensive crew in the control centre in Geneva, which comprised a flight controller, several meteorologists and a team of technicians, computer operators, radio operators and secretarial staff. Close contact was maintained throughout the flight between the pilots and control centre.

The flight began in Switzerland on 1 March 1999 and lasted three weeks. The balloon's only source of power was the wind and the only means of steering was by gaining or losing altitude to encounter winds that provided the speed and direction required.

It was the task of the met men in the control centre to guide the pilots into the appropriate streams of air around drifting high and low pressure systems. Information about these systems was provided through contact with the European Centre for Weather Forecasting

in England and the American National Oceanographic and Atmospheric Administration in USA.

During the flight the balloon travelled at speeds between 20 and 120kt at altitudes between 6,000 and 37,000ft. Most of the flight was made between 25,000 and 30,000ft with severe icing conditions for much of the time and outside temperatures as low as minus 35°C. Even inside the insulated gondola, the pilots operated at temperatures close to freezing level.

It was not always possible to keep the balloon on its planned track and they drifted towards international 'no-go' areas on many occasions – over Egypt, Yemen, India, China and Myanmar (formerly called Burma). Air Traffic Control in several countries failed to understand the operation of the balloon. Approaching India, one controller demanded to know how many engines the aircraft had. As they entered Myanmar airspace the controller asked the usual questions about point of departure and destination, and when this information was given, there was a moment's stunned silence before the controller asked *"If you are flying from Switzerland to North Africa, what the hell are you doing in Myanmar?"*

The flight appears to have had a profound emotional effect on the pilots and there are some beautiful descriptions of the passing scenery. Mountains, deserts, forests and oceans are described in terms of sincere admiration and respect. There are also some passages of philosophical comments on the reasons people undertake hazardous pastime and adventures.

Technical problems also added to the stress in the gondola. Radio and instrument failure, severe icing, malfunctioning alarms and gas burners were among the items that were loaded onto the burden of navigation and safety.

Understandably, emotions fluctuated during the flight from confidence to depression, hilarity to anger, determination to fear. As the balloon left Asia behind and faced the 13,000km crossing of the Pacific Ocean, Piccard recorded that he was both excited and frightened by the prospect of what lay ahead.

And well he might! Soon after passing over Taiwan the pilots realised that the balloon was drifting off track, taking them towards a large "no-go" area where the Japanese Air Force was carrying out night military exercises. Frantic

efforts to reach the exercise commander by radio were a failure. Though they had some response to their calls, they found that nobody who heard them could speak or understand English or French. Despite this, they survived the passage through the danger zone.

The southward drift continued with the result that the balloon crossed the North American continent over Mexico instead of the USA. But after passing the West Indies, the balloon encountered a jet stream that carried them across the Atlantic at speeds up to 12kt.

Floating across North Africa towards their planned landing place near Cairo the pilots were shattered to be told by Egyptian Air Traffic Control that permission to land in Egypt had been refused and they were requested to fly on to some other (any other) destination. But with their burner fuel supply virtually exhausted, the pilots had no option but to come to earth, in a desolate desert area far from civilisation.

The final chapter of the book highlights the reaction of two very modest men who suddenly found themselves to be worldwide celebrities, feted by governments, presidents and royalty.

Most of the prize money of one million US dollars was used to set up a charity fund "to provide concrete, lasting assistance to child victims of catastrophe, disease or conflicts."

This is without doubt the most interesting and exciting book I have read since "The Cruel Sea". If you love air adventures, don't miss it.



## GFA Soaring Calendar

### Victorian Soaring Association Incorporated

#### Amended Meeting Notice

19 May 2001 Executive meeting

To be held at 329 Dorcas Street, South Melbourne. This meeting will commence at 1930 and conclude at 2200 hours.

### FAI Australian National Gliding Championships and Club Class Championships

#### Club Class:

30 December 2001 – 11 January 2002

To be held at Temora.

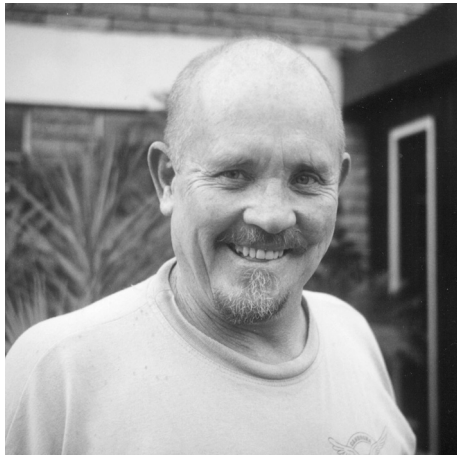
#### FAI Nationals:

13 January – 25 January 2002

To be held at Narromine.



# HGFA General Manager's Report



Having recently met with our Competitions Committee and Safety & Operations Committee in Sydney, I must sincerely thank the volunteers on both of these committees. These committees work tirelessly, often with little recognition or thanks. The HGFA could not survive without the efforts of our volunteers, from Board members to Club executive members – thanks to all of you – your efforts are greatly appreciated.

## Insurance and Membership Fees

The HGFA insurance policy has recently been renewed, though not without considerable difficulty. Our insurance broker, Kevin Chamberlain secured several quotes, all of which were far higher than our previous premiums. Until the last few days prior to renewal it looked as though we would not be able to offer insurance to our instructors at all. However, at the last minute Kevin was able to secure an offer from Tryg-Baltica Insurance (TBI) in the United Kingdom which will enable us to continue to provide the broad cover of our past policy, including Third Party cover, Passenger Insurance, Member-to-Member cover and Professional Indemnity insurance for instructors. TBI are the company that insure the British Hang Gliding and Paragliding Association (BHPA) and therefore understand the nature of our sports and the insurance needs of the HGFA. The cost of this policy is almost three times the previous premium; once stamp duty is added it will be nearly \$345,000.

The large increase in premium was not due to the spate of fatal accidents last year, but as a result of our history of claims over the past six years. The estimated claims costs have far outweighed premiums, and these estimates continue to increase. Over the past year the total of estimated claims has jumped from 1.1 million dollars last year to almost 2.1 million dollars this year. It must be noted that these are estimates of claims only, as most of these are yet to be settled. The way in which these estimates have been increasing naturally made potential insurers very nervous.

Thirty percent of claims have come from third party and member to member claims. Eight percent have come from passenger insurance claims and the other sixty-two percent resulted from training injury accidents, despite a marked decrease in these accidents over recent years. Though injuries to students have been reduced considerably, the number of claims has not. This continuing trend for claims to be lodged, despite the participant's supposed acceptance of the risk, is indicative of the current belief within our society that when someone is injured, someone must pay. This mindset results in claims against our instructors, usually despite them providing as safe a training environment as our sports will allow. It is also frustrating that though participants are told that there will be some degree of risk given the nature of our sports, and though they accept that risk, the lure of a big insurance payout still leads to a claim.

To cover the huge hike in premiums we will be forced to increase membership fees and insurance levies. The exact level of these increases will be determined once the Board and I are able to set the budget for the coming financial year. We will strive to ensure that fees are set so that both members and instructors cover their fair share of the costs. Having done some preliminary calculations, I estimate that the membership fee rise may be around \$50 for individual members; and we may need to introduce a "facility approval" fee similar to that applied by the BHPA to cover the instructors' share of the increase. Once the new fees are determined they will be reflected in membership renewal invoices, most likely during June next.

## CASA Approvals and Exemptions

I ask that members or clubs wishing to conduct displays or fly-ins discuss their plans with me prior to applying to CASA. Usually CASA inspectors will ask that applications come through me anyway. I am able to ensure that an application is worded to maximise the chances of gaining approval; as well as identifying which regulations may need to be

varied or have exemptions granted against them.

## Motorised Paragliding Water Landing Incident

I pass the following on from an overseas pilot. I have done some editing to the original story – yet it is still quite lengthy. I believe that the incident warrants passing on as an example of the dangers of flying low over surf and landing in the water.

The pilot had spent hours flying low over boats racing off an ocean beach – we pick up the narrative after the pilot had landed to rest and refuel: *"I just made it back to the race in time to catch the finals, and again did some really fun flying, often flying low over the wave tops as the boats leaped alongside higher than my eye level.*

*Now I can hear everyone groaning, "but why fly so low over water?" Well, I had carefully considered all the implications and weighed up the risk-and-reward ratio.*

- *There were two fast, well-kitted rescue boats on hand, motors ticking over.*
- *The surf was relatively small (less than two feet)*
- *The water was warm and clear, and calm behind the surf*
- *I know my paramotor floats for at least an hour*
- *I had packed extra floatation into the harness*
- *I was mentally and physically prepared for a water landing and went over the procedure in my mind countless times during the day*
- *I had meticulously completely overhauled the engine specifically for this day's flying, expecting to be over water. New reduction drive, new drive belt, new ignition system, new plug, new fuel hose, new tank, new propeller, even a new frame.*
- *The beaches were too crowded, so even if I had a high engine out and could easily reach shore, a water landing was still a real possibility by choice.*
- *Special event, camera's rolling, and trying to give the brand manager something for his very high investment into paragliders and paramotors.*

*All in all, after considering all the aspects, I deemed flying over water to be an acceptable risk for the day.*

*Back to the third flight of the day. After over five and a half hours total airtime over three flights, I could feel my concentration was not as sharp as it should be, so I took longer and more frequent breaks between display sequences, and began easing off on the more mentally intensive moves.*

## ACCESSORIES



After completion of the last race, I decided to just cool off and enjoy the view, so I started doing some long beats along the beach front, straight and level, starting about 50ft asl and gradually working my way lower. Each beat was about one kilometre or so.

Eventually I was flying right down on the deck, running along diagonally in front of each wave much like a surfer would, then popping over the top back to the next wave.

Occasionally I would dip the soles of my boots onto the surface where it was smooth, like aerial skiing. My normal flying boots have a smooth sole from toe to heel, but the boots I was wearing had the conventional stepped heel. This step or ridge occasionally caused a bit of water to splash up around me, nothing to worry about (or so I thought), until suddenly a larger splash caught me by surprise (lagging concentration, slower reactions to changing water surface), and some water must have splashed onto the spark-plug (or into the ignition), instantly killing the engine.

OH SHIT! That was the only thought that rang out loud through my mind... it happened so quick, that I was completely underwater before the echo died... I would say less than one third second from ignition-out to totally submersed!

I did not even have time to take a breath, that's how quick I went in... I was about 30ft from dry land, and in about 7 or 8ft of water with very small surf rolling slowly through.

Well, all plans went to hell instantly as I desperately needed a breath of air. The first wave surge pulled the wing towards shore, turned me that way too, and due to the wing being attached at the top of my shoulders, pulled me completely head-down with an almighty force impossible to resist. Swimming was impossible, and I could not reach the bottom. The next wave washed me forward into my own lines and immediately I started tangling in them. There was no time to unclip, no time to get out of the harness, all that mattered was getting some air RIGHT NOW!

I was seriously hypoxic and desperate for air. It was frantic, chaotic and seemingly pointless even bothering to struggle when suddenly my elbows hit the bottom... my hands were tangled and useless... I tried getting a purchase against the bottom with my feet to kick up to the surface, but this was proving impossible, so I tried driving closer to shore into shallower water. I was about to expire when I got my first breath, but not even a half lungful before another wave knocked me over flat, face-first into the bottom. Another kick off the bottom to the surface for a quick breath, and I saw about five guys running in, almost within reach.

I had to stop the frantic struggling to allow them to get to me safely. Within moments five powerful pairs of hands were trying to lift me, my motor, and a bunch of lines, but the surf and the tangling lines made things difficult. I was still seriously short of air, trying to keep my head out of the water.

It was another few minutes before I could get onto my feet properly, stand up and breath again. From here, I unclipped the wing from the harness, and carried the motor out of the water from about waist depth.

I was lucky in that all the rescuers/helpers were hardy, experienced boaters comfortable in surf and surge. Even with more helpers arriving, we could not budge the wing without tearing it, so we stopped trying to drag it out, and changed tactics to stretching it out to sort out what was where. In waist deep water we eventually formed a line along the trailing edge, lifted the trailing edge high for the water (and sand) to run out the front, then ran it up the beach fully spread out.

All this took less than 3 minutes! I did not have time to think, or to realise just what had happened or to realise the danger I had been in.

We were still working hard to get everything higher above the waterline, so we started scooping sand out of the wing. I estimate over 200kg of sand was inside. Eventually we got the wing bundled into a manageable ball but it still took about eight guys to carry it up to the carpark.



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## HGFA General Manager's Report continued

We carried the motor up next, where I pulled the spark plug to find the entire combustion chamber had filled with sea water, so I guessed the crankcase was filled too, bearings and all. The motor needed URGENT intensive care to save it, so still I could not rest and recover.

**After reviewing the incident, I have the following conclusions:**

A landing in deeper water behind the surfline may have been safer than landing in the surf. An engine out above water from a respectable height is probably safer still, providing enough time to unclip the harness buckles and slip out just before splashdown.

I did not count on a very low level engine out in the surfline, especially from such a freak cause as a water-splash!

Aerial water-skiing over deeper than standing depth water is foolish – the slightest lapse in concentration could be most unforgiving.

I suspect that even a full life jacket may not be sufficient safety measure in surf. In deep water, this should be more than enough, but the power of the surf against such a large surface as the wing will pull even a life jacket underwater.

Unclipping harness buckles sounds easy, but in the heat of the moment, it is basically impossible once in the water with the surf thrashing you around.

Even a hook knife would have been useless, as my arms were pretty entangled in the lines almost immediately.

Perhaps wing quick-releases such as used on some tandem gliders may help separating from the wing quickly and easily, but what about the speedbar connection to the risers?

**Big lesson:** Boots are useless for swimming!

I survived, but the next time I may not be so lucky again.

I am pretty sure I will not fly low over the surf again, until I have thoroughly reviewed protocols and addressed each aspect."

### Lucky Escape for US Pilot

The following report came from Davis Straub's Oz Report; it highlights the dangers of high nose attitude manoeuvres. The pilot was Joe Bostik, a former US team pilot.

"When I saw him, Joe he was rotating quite quickly under a glider that was doing its best to resemble a maple seed with only one working wing. There was a twisted and partially inflated parachute entangled in the tip of the most broken wing. After a couple of revolutions it seemed like the parachute was finished wrapping up, and that it would not get any worse. The pilot was five feet below the twisting wrecking twirling toward the

ground just behind us. It looked like the glider was actually the parachute as the wing that still resembled a wing was flying in circles and Joe was coming down pretty slowly from about 300 feet. Still he was horizontal and completely exposed. He landed and was fine but we sent him to the hospital for a check up right then. There were medical personnel who attended to him immediately.

Apparently Joe was doing whip stalls. He did one and then he did another. Nothing bad happened. He liked it. He was feeling very good about the glider (this was his first flight on it). He was feeling a bit too good. Each whip stall was progressively stronger. On the third whip stall, he held the nose up for a count of 4 seconds. When the wind started coming from his back, he pulled in.

The glider didn't go straight over, one wing went down first, and Joe was now above the glider. No one is quite sure what happened then; Joe either lost the base tube at that point, or after one more tumble. When he lost the base tube, he slipped down and back over the trailing edge. After a day's worth of detective work, it was determined that Joe's harness straps came over the trailing edge and started a rip there. This rip quickly spread to the Mylar sail pieces and the sail ripped in half to the nose. The right wing with nothing to hold it back swung forward causing the right leading edge to fail in compression about four feet from the nose, as the wing continued to swing forward the thicker side wire connected to the cross bar junction put stress on the thinner right side rear wire. This stress broke this thinner wire at the nico at the keel.

It is clear that this accident like almost all hang glider accidents was a case of pilot error (hubris). The glider failed in a manner that was to be expected given where Joe fell.

Joe also screwed up his parachute deployment. He reached for the parachute and got it out, but then just mildly tossed it into the air. He said it was floating out there about 10 feet from him still in the deployment bag until the bad wing came around and hit it. The lines were immediately tangled up in the broken wing. Joe was lucky that it inflated at all. He needed to get that bag out there twenty feet away from the wreckage. He needed to grab the bridle and pull on it to get the bag off, but the wing got the parachute before he could. Finally, he had checked his deployment bag and rubber bands, but one rubber band was melted into the hole and didn't release. Joe didn't notice this problem with the rubber band. The parachute came out of the bag through a reduced orifice."

**Fly safely,  
Craig Worth**



## Unreal gliders for unreal glider pilots?

► I have just read the article "Triangular Madness", and I think this really deserves some sort of response, as for me it helped tie together a whole lot of ideas about this great sport of soaring.

Firstly, I would like to thank Ron Baker for those great and provocative words of his in the April 1999 AG/SS, where he said he was only interested in "a breakaway organisation for real glider pilots who prefer to fly real gliders!"

There is a method in logic called "reductio ad absurdum", which the Oxford dictionary defines as "proof of falsity by showing absurd logical consequence." I think we can apply the technique here. If we assume hang gliders are not real gliders, how can we explain Tomas Suchanek's flights?

I propose we should have a simple pre-qualification test for those who choose to criticise the hang gliders. Tomas did 357km, as a triangle, in a hang glider. I suggest anyone who flies "real gliders" and has not done at least this distance, and as a pre-declared triangle, really has very little authority in being critical of hang gliders. This test should eliminate 95% of the knockers from the argument. For the few knockers who remain, it should be mentioned that Tomas also flies "real gliders", and I believe he has done a 1,000km flight in one. In the same issue of AG/SS, we find Tomas came third in the Club Class World Gliding Championships.

Is it just possible there might be some skills that Tomas has managed to transfer over from hang gliders to sailplanes, and vice versa? Can any of the knockers explain why, having experienced the great pleasure of being a real glider pilot flying a real glider, Tomas, like many others, still chooses to fly hang gliders also?

We have an 18-year-old pilot in our club who just flew his first 500km in an Astir CS, and has just purchased his first paraglider. Isn't he lucky he only has to read one magazine to stay in touch? Isn't he lucky to have an Australian role model like Godfrey Wenness, holder of the world distance record for paragliders, solo and dual?

How can we explain all of these unreal glider pilots wanting to fly unreal gliders? For me the challenge has always been to extract the maximum possible out of the machine I have, and the weather that I have been given. AG/SS remains a great magazine, and I read most articles every month.

Happy landings to all the unreal glider pilots out there.

**Michael O'Brien (LS1-f, GWR)**

*PS: I hope we see Bernard Eckey's photograph of Uluru reprinted in colour on the cover at some future date. It looks spectacular. Another "unreal" glider?*



Tomas Suchanek

## Elephant Research

► I have just received your February issue and was very interested to read that there is another Airborne trike on the West African block! I live in Lome, Togo, a bit to the south of Timbuktu in Mali, and I bought my trike with me in 1999 along with my vehicle and so on. I belong to the Aero du Golfe and fly out of here in the early mornings.

Is the author one of the active participants in the program, and if so could I make contact with her and or the group? I am interested to know how they came by an Edge. Did they import it? There is only one French Trike in our club (besides mine) and the consensus here is that you would not fly the "Air Creation" if the Edge was available. It is so much more solid and robust than the French trike and having seen the way Airborne goes about building their trikes at Newcastle, I can readily understand that an Airborne would be more suitable for their job in Mali.

I have been here a little over two years and work as an organiser of funds in Australia to build and install school desks in remote area bush schools in Northern Togo. I originally come from Griffith in NSW. I would be grateful if you could put me in contact with the group, provided they are willing, that is.

Thank you for your help in this matter,

**Adrian Cruickshank**

*(Sub-ed note: Adrian and Anne are now happily conversing by email.)*

## Wake-up Call

► Having just returned from a club fly-in at Corryong, two things stick in my mind. First was that our club could convince over 40 members to drive several hours to Corryong for the pleasure of flying together in a non-competitive atmosphere (which was incidentally excellent, thanks to Richard Worton). Second was that several of the pilots attending expressed the view that the HGFA was not fulfilling their needs, and that it was likely a separate paragliding organisation would do it better.

Our club (Skyhigh Paragliding) has grown from around 80 to over 200 members in just a couple of

years. This growth has boosted our ability to offer funds for site improvement, install weather stations, hold competitions and social events. As a result, it would probably be fair

to say Skyhigh is probably one of the more successful flying clubs. This success is due principally to our committee and members all being active, committed flyers who turn out every weekend to encourage new pilots, run events and attend site maintenance sessions. They don't hold long planning meetings. They don't talk about strategic directions and political issues. They get out there and get things done when they need to be done. Most importantly, the committee communicates regularly with the members through both email and the club magazine, it listens to what the members say they want, and it does its best to make them happen.

In comparison, the HGFA seems almost incapable of either listening to or responding realistically to what its members say they want. Issues such as the Skysailor/GFA magazine link, the World Series Hang Gliding videos and the reappointment of ex-board members all raise serious issues about how accountable the board sees itself and its actions. As one member recently put it to me, the major asset of the HGFA is its members. If those members don't have confidence in the people managing their sport, they could well form a separate organisation. Then those assets will disappear.

Personally, I feel this would be a backward step given the long and productive history both hangies and paragliders have behind them. But unless the current board (which I recently resigned from on principle) listens to a wake-up call from its members, the HGFA could well have even less assets than the dwindling ones it has now. Please consider.

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# HGFA Classifieds

CLASSIFIEDS ARE NOW FREE OF CHARGE to HGFA members up to a maximum of 40 words. One classified per person per issue will be accepted.

Classifieds are to be delivered directly to the sub-editor, by email or post, not by phone. The deadline is 25th of the month, for publication five weeks hence. Submitted classifieds will run for one issue. For consecutive publication, re-submission of the classified must be made, no advance bookings.

When submitting a classified remember to include your contact details (for perspective buyers), your HGFA membership number (for membership verification) and the State under which you would like the classified placed.

(Note that the above does not apply to commercial operators. Instructors may place multiple classified entries, but will be charged at usual advertising rates.)

## Hang Gliders & Equipment

### New South Wales

#### East Coast HG and PG Centre

For the below equipment, please contact  
Jason Turner, 0419 997 196 or  
email <5djason@usa.net>.

**Fun 220** nov, fat boy/tandem/foot blender/thermal-ling machine. EC, 60 hrs, red L/E, fluoro yellow/white US. New reflex bridles, \$3,200.

**Fun 190** nov, coastal cruising, dune soaring, top landing or thermalling, it's FUN all the way. 30 hrs only, lavender LE, fluoro yellow/white US. Built Dec '00. \$3,000.

**Mars 170** nov, old glider, new sail. Straight, solid, no turns or flutter. Blue LE, fluoro yellow/white. \$500.

**Apron Harnesses** (with stirrups) 2 x Dynamic Flight (sml/lge) as new, \$150 each. 2 x Moyes, \$100 each. **Stealth II Demo**, suit 173-177cm slim/med, \$950.

**Airborne Blitz 146** adv, sidewires replaced last mth, new cover. Currently flying, upgrading.  
Ph: Carl 0416 212415.

**Airborne Fun 160** nov, GC, low hrs, spare DTs, \$2,800 ono. Must sell! Possible delivery Canberra, Sydney & Blue Mtns. Ph: Kath or Lee 02 6456 2785 (w – Kath); 02 64561590 (h); 0427 220764 (m).

**Desire 141** adv, good inland or coastal glider in GC. Aqua LE, orange US, no reasonable offer refused. Ph: Paul 02 95211033; 0418 646085.

**EW Combat 2 (152)** adv, EC, new 'PX' LE by Moyes in Feb '99. Pink/purple US. Best offer around \$1,000 will buy it. Ph: Martyn 02 9955 9211 (w); 0411 877745.

**Harness** with reserve and Uvex helmet, 5-10 hrs airtime, tailored for 6' (1.85m) skinny person, \$800 neg. Ph: Holger 02 95183339 (w); 02 9556 3640 (h); 0414 411248.

**Moyes CSX4** (149ft2) adv, purple US, Power Rib TE, GC, \$2,500. Ph: Collo 02 49636262 (h); 02 49858301 (w); 02 49295133 (fax).

**Moyes Max** int, with VG, as new, purple & yellow sail, flies beautifully, spare DTs, speed bar, wheels, \$3,750 ono. **Moyes Xtreme harness**, as new with ROO chute! Suit 5'10" +/- a few inches, blue & yellow, \$850 ono. **Flytec 2020 vario**, as new, with mounting bracket, airspeed indicator, \$400 ono. **Charley Insider helmet**, med/lge, as new, silver, speaker & mic fitted, no dings! \$275. Ph: Peter 02 62950881 (h); 02 62775290 (w); 0403 254475.

**Moyes Sonic 165** int, blue/black US, VGC, speed bar, 2 spare DTs, \$2,600 ono. Must sell! Possible delivery Canberra, Sydney & Blue Mtns. Ph: Kath or Lee 02 64562785 (w – Kath); 02 64561590 (h); 0427 220764 (m).

**Moyes SX4** adv, brand new, zero hrs, never been flown. Dark blue/fluoro/orange US, \$5,000. Ph: Paul 02 94561903.

**Moyes Xtralite 164** adv, fluoro orange/yellow US, in EC, <100 hrs airtime, one owner, manual, spares & spare DT. Suitable for 80-120kg weight range, reluctant sale, \$1,800. Ph: 0419 643900; email <jdnathaniel@bigpond.com.au>.

**Xtralite 164** adv, VGC, new sides wires, comes with brand new unused spare sail, \$3,500 ono. Ph: Alan 0408 470544; 02 98995351 (h).

### Victoria

**Moyes XT 145** int, 75 hrs, GC, white with fluoro yellow LE, speed bar, \$1,800. Ph: Darren 03 63264473 (h); 03 63825258 (w); 0407 515572.

**Moyes CSX5** adv, as new cond., low airtime, TS white PowerRib, red/white US. Flies extremely well, suit pilot wanting topless performance, \$4,250 or best offer. Ph: 03 97621364.

### Queensland

**Airborne Fun 160** nov, 11 hrs, brand new cond, mint green LE, yellow US. \$3,500 ono. Ph: Akiko 07 55647226; email <akigram@ausinfo.com.au>.

### South Australia

**Desire 151** adv, in real GC, plus **Combat 152** adv, GC, plus Moyes front entry pod harness, plus Sjostrom altimeter, clip-on wheels & Uniden UHF 40ch handheld. All for \$1,500, will separate. Ph: 08 81520415 (h); 08 82622321 (w).

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**Sting 154XC** int, 31 hrs on logbook, faired DTs, speedbar, mitts, pneumatic wheels, harness, tow bridle, \$2,200. Going to paragliding. Ph: Chris 08 97343206.

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**Ozone Proton** DHV2-3, med, blue, 20 hrs, EC, \$2,000. Ph: Keith 0418 244673; email <kpisan@hotmail.com>.

#### East Coast HG and PG Centre

For the below equipment, please contact  
Jason Turner, 0419 997 196 or  
email <5djason@usa.net>.

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### Victoria

**Edel Quantum** DHV1 med, nov, 50 hrs, GC, Profeel harness, Charly Reserve, \$1,600 ono. Aircotec Alibi vario, \$150. Icom IC40G, \$230. Avocet Vertech altimeter watch, \$100. System X flying suit, small, \$100. Ph: David 0402 823042.

### ACT

**Edel Quantum** DHV1-2, 100 hrs, large, 80-120kg, EC, great first glider, \$1,400. Ph: Bruce 0402 462392.

## Trikes & Equipment

### Victoria

**Airborne Edge 582** T2-2792, Executive wing, 110 hrs TT. E-type gearbox. Wing & pod blue, green trim. ALT, vario, airspeed, tacho, EGT, water temp, clock, volts, fuel gauge. Electric start, ICOM A22E VHF radio, flying suits (S,L,XL), helmets (S,L,XL), headsets, covers, custom galvanised trailer. Many other extras. All VGC. \$19,990 the lot. Ph: 03 97621364.

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## Queensland

**Airborne Edge** two-seat trike with NO engine or wing, otherwise complete. Was powered by Rotax 582 & believed to be '92 model with upgraded mast. \$2,900. Ph: 07 33416268.

## Western Australia

**Wanted:** Western Soarers Hang Gliding Club & Sky Sports Flying School require a trike pilot with trike for aerotow operations at Wyalkatchem, tugmaster training & free hangar available. Ph: Gordon 0419 942645.

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Ads for AUSTRALIAN GLIDING can be placed with the GFA Advertising Contact Henk Meertens, PO Box 352, Frenchs Forest NSW 1640, Fax: 02 9453 0777, Email: <hkmxor@msn.com.au>.

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**The Bathurst Soaring Club** is seeking expressions of interest from clubs or individuals interested in buying the club's IS28 or Puchacz. For more information, please call Bill Tugnett on 02 9899 8779 (h), email <billtugnett@filchem.com.au>.

The Gliding Club of Victoria offers for sale the following items due to a fleet restructure & to make way for new gliders:

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  5. **IS28B2 (2 piece)** canopy front piece little used, main piece as new never used \$700.
  6. **Kestrel canopy** front piece \$400.
  7. **Hornet canopy** front piece \$500.
- For further details contact Bob Gray, ph: 03 5762 1058, email: <gevbob@hotmail.com>.

## Gliding Publications

### AUSTRALIAN HOMEBUILT SAILPLANE ASSOCIATION:

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

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

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**SAILPLANE BUILDER:** Monthly magazine of the Sailplane Homebuilders Association. \$US29 (airmail \$US46) to 21100 Angel St, Tehachapi, CA 93561 USA.

**TECHNICAL SOARING/OSTIV:** Quarterly publication of SSA containing OSTIV & other technical papers. Annual subscription: 70DM. OSTIV c/- DFVLR, D82234 Wessling, Germany.

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1 Perry St, Kings Langley NSW 2147, ph: 02 9674 2551.

### Bathurst Soaring Club

PO Box 1682, Bathurst NSW 2795, ph: 02 9750 0209,  
email <pbowring@bigfoot.com>.

### Byron Bay Gliding Club

PO Box 815, Byron Bay NSW 2481, ph: 02 6684 4244.

### Central Coast Soaring

PO Box 1323, Gosford South NSW 2250, ph: 02 4977 2740.

### Concordia Gliding Club

231 Stanmore, Stanmore NSW 2048, ph: 0412 145 144.

### Cudgegong Soaring

199 Stucco, Gulgong NSW 2852, ph: 02 6374 2444.

### Forbes Soaring Club

PO Box 267, Forbes NSW 2871, ph: 02 6852 2329.

### Goulburn Gliding Group

PO Box 69, Goulburn NSW 2580, ph: 02 4821 4271.

### Grafton Gliding

11 Lighthouse Cres., Emerald Beach NSW, ph: 02 6654 1779.

### Harden Gliding Club

PO Box 24, Harden NSW 2587, ph: 02 6886 2275.

### Hunter Valley Gliding

PO Box 9, Newcastle NSW 2300, ph: 02 9534 2884.

### Kentucky Flying Club

PO Box 43, Newport Beach NSW 2106, ph: 02 6778 7345.

### Lake Keepit Soaring

PO Box 152, South Tamworth NSW 2340, ph: 02 6769 7514.

### Leeton Gliding Club

PO Box 607, Leeton NSW 2705, ph: 02 6962 7210.

### Orana Soaring Club

PO Box 240, Narromine NSW 2821, ph: 02 6889 2733.

### RAAF Richmond Gliding Club

RAAF Base Richmond NSW 2755, ph: 02 4579 1165.

### RAAF Williamtown

RAAF Base Williamtown NSW 2314, ph: 02 4964 5062

### R.A.N.G.C.

PO Box A37, Naval Air Base Nowra NSW 2540,  
ph: 02 4421 1333.

### Soar Narromine

PO Box 56, Narromine NSW 2821, ph: 02 6889 1856.

### Southern Cross Gliding Club

PO Box 132, Camden NSW 2570, ph: 02 4655 8882.

### Temora Gliding Club

PO Box 206, Temora NSW 2666, ph: 02 6977 2733.

### Tumbarumba Gliding Club

Mundaroo, Tumbarumba NSW 2653, ph: 02 6948 5283.

### Tumut Gliding Club

PO Box 112, Tumut NSW 2720, ph: 02 6947 1148.

### Wagga/Lockhart Gliding Club

PO Box 68, Lockhart NSW 2656, ph: 02 6925 2276.

### Warrumbungle Gliding Club

Kirriwa Gilgandra NSW 2827, ph: 02 6795 4333.

## ACT

### Canberra Gliding Club

PO 1130, Canberra City ACT 2601, ph: 02 6231 1995.

## QUEENSLAND

### Boonah Gliding Club

PO Box 107, Boonah QLD 4310, ph: 07 5463 0190.

### Bundaberg Gliding Club

PO Box 211, Bundaberg QLD 4670, ph: 07 4155 3158.

### Caboolture Gliding Club

PO Box 920, Caboolture QLD 4510, ph: 0418 713 903.

### Central Queensland Gliding Club

PO Box 953, Rockhampton QLD 4700, ph: 07 4937 1381.

### Darling Downs Gliding Club

PO Box 584, Toowoomba QLD 4350, ph: 07 4663 7140.

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PO Box 103, Gympie QLD 4570, ph: 07 5486 7247.

### Kingaroy Soaring

PO Box 91, Kingaroy QLD 4610, ph: 07 4162 2191.

### Moura Gliding Club

PO Box 92, Moura QLD 4718, ph: 07 4773 3542.

### North Queensland Soaring

PO Box 5790, Townsville 4810, ph: 07 4773 3542.

### QAIR Training Corp

PO Box 698, Booval QLD 4304, ph: 014 984 752.

### Southern Downs Soaring

PO Box 144, Warwick QLD 4370, ph: 07 3378 1717.

### Tarwan Soaring

PO Box 34, Wandoan QLD 4419, ph: 07 4627 4080.

## VICTORIA

### Albury Corowa Gliding Club

PO Box 620, Wodonga VIC 3689, ph: 018 691 611.

### Beauford Gliding Club

7 Chapman St, Footscray VIC 3011, ph: 03 9687 6691.

### Bendigo Gliding Club

62 Lawson St, Bendigo VIC, ph: 03 5443 9169.

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Kurweeton, Derrinallum VIC 3325, ph: 03 5593 9277.

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PO Box 197, Bacchus Marsh VIC 3340, ph: 03 5369 5125.

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PO Box 46, Benalla VIC 3672, ph: 03 5762 1058.

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PO Box 80, Avenel VIC 3664, ph: 03 5798 5512.

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44 Roper St, Mount Beauty VIC 3699, ph: 03 5754 4096.

## RAAF East Sale Gliding Club

9 Weir St, Sale VIC 3851, ph: 03 5144 2362.

## South Gippsland Gliding Club

PO Box 475, Leongatha VIC 3953, ph: 03 5664 2300.

## Stawell Gliding Club

20 Jones St, Stawell VIC 3380, ph: 03 5358 2713.

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PO Box 78, Tocumwal NSW 2714, ph: 03 5874 2063.

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PO Box 647, Mildura. Vic 3500, ph: 03 5025 7335.

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PO Box 160, Nyah Vic 3594, ph: 03 5037 6688.

## Victorian Motorless Flight Group

GPO Box 1096J, Melbourne 3001, ph: 03 5369 5125.

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PO Box 158, Horsham. Vic 3402, ph: 03 5382 3491.

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### Adelaide Hills Soaring

PO Box 1, Bridgewater SA 5155, ph: 08 8534 4011.

### Adelaide Soaring

PO Box 94, Gawler SA 5118, ph: 08 8522 1877.

### Adelaide University Gliding Club

Sports Assoc. Uni of Adelaide SA 5005, ph: 08 8826 2203.

### Balaklava Gliding Club

PO Box 257, Balaklava SA 5461, ph: 08 8864 5062.

### Barossa Valley Gliding Club

PO Box 123, Stonefield via Truro, SA 5356,  
ph: 08 8564 0240, email <brynw@senet.com.au>.

### Blanchtown Gliding Club

12 Altona Road, Modbury SA 5092, ph: 08 8556 2240.

### Bordertown-Keith Gliding Club

PO Box 377, Bordertown SA 5268, ph: 08 8752 1321.

## Gawler Gliding Club

PO Box 274, Lyndoch SA 5351, ph: 08 8524 4595.

## Lake Bonney Gliding Club

PO Box 243, Barmera SA 5345, ph: 08 8588 2758.

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PO Box 194, Millicent SA 5280, ph: 08 8739 3235.

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PO Box 1277, Victor Harbour SA 5211, ph: 08 8554 3543.

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PO Box 450, Renmark SA 5341, ph: 08 8585 1422.

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PO Box 2000, Salisbury SA 5108, ph: 08 8258 8026.

## Waikerie Gliding Club

PO Box 320, Waikerie SA 5330, ph: 08 8541 2644.

## Whyalla Gliding Club

PO Box 556, Whyalla SA 5600, ph: 08 8645 0355.

## TASMANIA

### Tasmania Soaring

PO Box 24, Ross TAS 7209, ph: 03 6255 2191.

## NORTHERN TERRITORY

### Alice Springs Gliding Club

PO Box 356, Alice Springs NT 0871, ph: 08 8952 6384.

### North Australia Gliding Club.

PO Box 38889, Winnellie NT 0821, ph: 08 8985 5330.

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### Beverley Soaring

PO Box 136, Beverley WA 6304, ph: 08 9646 1015.

### Gliding Club of Western Australia

356 Abernethy, Cloverdale WA 6105, ph: 08 9635 1023.

### Morawa Flying Club

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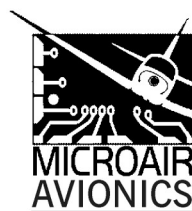
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## THE GLIDING FEDERATION OF AUSTRALIA

Please note: all prices include GST

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Aerotowing Manual	\$22.00
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# FLY BALI

**Deadlines for entry May 20th!**

**ONLY 10 PLACES LEFT FOR PILOTS!!!**

**Tour Dates for Licensed Pilots: 21st-28th July 2001**  
**Ridge Races, Cash and Prize Giveaways and Great 4-Star Resorts for You and Your Family!**

## **CLIFFS AND TRADE WINDS AWAIT!**

Fly the beautiful and panoramic coastal sites of Bali with 15-kilometre ridges up to 1,000 feet high, soar past the towering resorts built on the Bali cliffs, view the coral from the sea eagles' perspective.

During the months of June to September the trade winds blow in like clock work from the south-east, ensuring flying nearly every day and this being the dry season makes it an ideal getaway from the cold in the southern hemisphere. Average daytime temperature is 30 degrees Celsius and at night 25°C.



## **MORE THAN FLYING!**

But this tour offers more than just flying, We will run ridge races with cash and prize giveaways each day and you can bring your partners or family along that are wanting warmer climates as well. We will be staying in one of the 4-star resorts not too far from the flying sites ensuring time back at the resort after a fun day of flying.

We Guarantee with our group booking to supply you with cheapest airfares on the market! **There are 10 places left for pilots on the Tour, so don't hesitate!**

## **INCLUSIONS:**

The Bali Tour from 21st-28th July will include airfares, transfers, taxes, accommodation, transport and handling of flight equipment, plus hired help to pack and carry your equipment from flying locations, and of course professional guiding will cost an incredible **\$1,990!**

If you wish to stay another week to fly other locations such as the Bali Volcano we can arrange this for a very minimal fee of \$250, please ask! Airtickets valid 30 days... and conditions apply!

## **FAMILY WELCOME!**

Anyone wishing to bring their wife, partner or friends is more than welcome!

Non-flying persons will only be charged **\$1,390** per head for the 8 days including airfares, transfers, taxes and 8 nights 4-star resort accommodation.

**Remember this is peak season and these prices are exceptional!**

**Children packages are at an even cheaper rate.**

**Maximum number of pilots for the tour is 20.**

Meals, shipping cost of hang gliders or excess baggage costs are not included.

If you want to book the tour without airfares or accommodation the cost is **\$890.**

**FREE:  
45-MINUTE  
TANDEM FLIGHT  
FOR EVERY PARTNER  
THAT TAKES THIS  
OFFER!**



If you require further details please contact

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**tedjenkins2000@hotmail.com OR phone (0407) 573 879**

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