

Australian **Gliding** **SKYSAILOR**

In this Issue:



**Almost Heaven
Barron Hilton 2000**

Flying in Tasmania



**State of Play
in WA**

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Almost Heaven

(aka Barron Hilton Cup 2000)



KERRIE CLAFFEY

Getting there

On Saturday, 1 July, the olympic city did itself proud when the whole baggage-handling system at Sydney airport broke down, leaving us sitting on the aircraft for two hours before take-off waiting for baggage to be loaded! At least that gave us two hours less chance of meeting George Speight at our Nadi stopover. Mind you, the former olympic city across the pond didn't do much better when we sat on the aircraft for another two hours after landing, waiting first for a parking bay then for immigration crowds to disperse enough to make room for us! Never mind, an afternoon soak in the hot tub at the Airport Hilton helped ease the rigours of 18 hours in an economy seat. And a Johnny Rockets burger under Barron's Libelle in the Reno Hilton eased the hunger pains after the coke and pretzels on the evening flight to Reno!

Sunday morning Bill Drury, the American we met in Poland in 1993, and his wife Trish picked us up for the one hour drive south to Minden. Bill made the first of many 500km attempts while Tom, Trish and I went hiking in the Sierra Nevadas – spectacular views over Lake Tahoe and the still-snow-covered mountains from 9,000ft!

Monday morning, after a trip to Reno to collect our FAA licences, Bill tried his 500km again, Tom and Trish went hiking again while I went in the Twin Grob with Pasi Pulkinnen,

Above: Janus wing over snow-covered peaks and lakes of Yosemite
Right: 'Gateway to Heaven'



the Finn who flew our nationals this year. We climbed in rotor and weak wave to about 12,000ft, just enough to see over the mountains into Tahoe, but not a true Minden day! Tuesday guess what, Bill tried 500km again; Tom flew the SZD55 with Pasi; while Trish and I did 10 miles of a five mile hike (the short-cut wasn't!). At one stage, when Trish was about to mutiny and backtrack if I didn't prove our destination was "just around the corner", we spotted some mountain-bikers to ask directions – one was wearing a St Auban World Championships T-shirt, and just happened to be the brother of local glider pilot Rick Walters – small world! With their directions we eventually found Showers Lake. The spectacular views were worth every mile! Our last dinner together was transported south to Lee Vining where Bill had outlanded. The 100 miles went slowly at 45mph (just below sway speed) in the old Jeep Cherokee and trailer which had seen better days – finally got to bed at 3am!

At 7:30am Wednesday Pasi knocks on the door – he has 13 gliders to ferry to the Flying M and wants an early start! The three of us made two ferry trips, on tow to about 12,000ft over the Pine Nuts and gliding the rest of the

78km to the south-east. In the huge expanse of desert, there it is, a green oasis in the valley (5,000ft) between Helmut's Peak (9,500ft) to the west and Mt Grant (11,300ft) to the east – and no finer way to arrive than by air! We were delivered back to Minden by Ted in the 185 in time for a last lunch with Bill – before his next 500km attempt! By the second trip, soaring was on though rough (rotor affected) down "low" (12,000ft) – but being tired and having no oxygen we hung around only a short while. We later learned that Chris Richards (a Kiwi) did 1,100km in a Nimbus 4DM! Unfortunately, Pasi was not staying so we saw him off to Minden in the 185 – then caught one of the suburbans from the strip to the ranch (walkable distance but we were warned about the rattlers!), moved into our motor-home with en-suite and air-conditioning, and went exploring to check out the rest of the toys...

Toys

Gliders:

Janus C, 3 x ASW20, Discus, SZD59 (Acro), Twin Grob 3, LS3a, 2 x SZD55, PW55, Schweizer 2-32, Mosquito, DG300, Ventus 2C-15 (Bob Semans own), Glassflugel 304 LS4

Other flying toys:

Cessna 185, Cherokee 140, Extra 300, Stearman Cessna Agwagon (tug), Pawnee (tug), Decathlon helicopters, balloons, Citation IV (not available for playing!).

Non-flying toys:

Fishing ponds, river, skeet-shooting, tennis court, swimming pool, gym, hot tub, bar.

Thank goodness one of us had the foresight to bring our swimmers in the glider so we could soak in the hot tub while waiting for our luggage to come by road with Tom Stowers. The buffet dinner made choosing between the salads, vegies and two gourmet dishes a difficult task - and it didn't get any easier through the week! We sat with our host, Barron Hilton, Chairman of Hilton Hotels and learned that he usually retires early so he can be up by 5:30am to go ballooning - we were tired enough to take a tip out of his book and not to wait up to meet the other players arriving late by bus from Reno.

Players**Barron Hilton Cup winners and guests:**

Gunther Jacobs, Germany, Open Class and Thomas Hoffmann (silver medal winner); Peter and Willi Flosbach, Germany, 15m Class; Eduard and Eva Supersperger, Austria, Standard Class; Uli and Manuela Gmelin, Germany, Two-seater Class; Dietmar and Anna Weingant, Austria, Sports Class; Tom and Kerrie Claffey, Australia; Michael and Kate Oakley, New Zealand; Allison and Rhonda Tyler, US East; Don and Kathy Ingraham, US East silver medal winner; Bob and Barbara Semans, US West.

World Champions:

Holger and Dagmar Karow, Germany, Open Class; Giorgio Galetto, Italy, 15m Class and Enzo Centofante (his instructor); Robert Scheiffarth, Germany, Junior Sports Class

VIPs:

Bill Anders, Apollo 8; Tom Stowers, Flight OPS; Jim Pake, Clarke Wade, Tim Shea, line crew; Carl and Laurie Herold, Nevada guru; Dennis Ivans, ferry pilot, computer whiz, all round good guy.

Diary of 10 days in Heaven

Thursday, 6 July: At last a "sleep in" (all the way to 7:30am) and leisurely breakfast. At the first briefing, after Barron's greeting, Dan (a professional met man) set the standard for the detailed met briefings to come - the essence being that it was unseasonably cool and would gradually improve, peaking mid next week. After an easy morning preparing maps and chatting to the other guests, in particular the Kiwis, we had our checks with Tim in the Janus (to satisfy legalities) - then flew two of Poland's best, Tom in the SZD59 Acro and I in the (oh so embarrassing) PW5. As we didn't launch till late we didn't go far or high.

Friday, 7 July: A pre-dawn fish in the ponds - caught a trout each - Tom correctly threw his back - mine escaped while posing for a photo (yes, I really had one). Second briefing introduced the next exciting item after weather - glider selection. Each pilot drew a number from a hat and in that order selected gliders from the list. Pilots would move up the list two places each day, and fall off the top to the bottom. When Kiwi Mike Oakley drew "sux", I translated to "seex" and even the Germans got the joke! Tom chose the S2, the SZD55 I ferried with scimitar winglets and an L-NAV with data-cable, the only glider so equipped. There were 16 gliders for 14 pilots - so two spare for the hangers-on - so Alf, Enzo and I were looking at lots of Peewee time! Not my turn today so I enjoyed a lazy afternoon by the pool. At 5pm the helicopter was taking photographers up the hill to capture fly-bys by returning pilots so I hitched a ride - wonderful to get effectively air-to-air shots from a stable platform. I snapped away while waiting for S2 to come whistling by - but a roll of film later and everyone packed up and still no S2! "Back at the ranch" I learned there had been an out-landing - guess who and where? S2 at Lee Vining no less - he must have taken a liking to it on our retrieve!

Saturday, 8 July: Another early start for ballooning. We helped "rig" the balloon - holding heavy wings has nothing on holding metal cables inches from the burner! We were chase crew as the balloon set off north along the runway, east across the alfalfa and garlic fields, back south over the ponds and finally west to land back on the runway - clever huh? Apparently the winds in the valley are usually circular. But once home, Ton didn't do a second ride - so we arranged to come back later in the week.

Gliders for the day were the SZD55 for Tom and the LS4 for me. We were hoping with compatible performance to fly together, but I soon learned that getting away from 7,000ft on an 17,000ft day is just like getting away from 2,000ft on a 12,000ft day here. After about an hour between 8,000ft and 10,000ft while I'm sure Tom did a quick 500km, he finally came back to rescue me - "you have to fly over the hills" he says - "well the land below me is lumpy and unlandable - isn't that hills?" I must admit the ground was higher than I was in almost every direction. The fact that I couldn't see the big picture (and there are no paddocks to aid orientation) was adding to my terror! I very tentatively followed him up Helmut's Peak until at last I could do a turn in lift all the way round, and eventually got away - phew! And isn't life easier up there - thermals bigger and navigation obvious - suddenly the earth is given direction by the landmarks - the Sierra Nevadas to the west, Mono Lake in the south,

the White Mountains to the south-east, Walker Lake in the east and the Pine Nuts leading to Minden to the north. Then there's the battle with oxygen - for a first time user, arranging the canula over ears and under nose and turning the knobs and dials and checking finger-nails every five seconds and wondering what colour they should be anyway is all a bit stressful! Just as I was ready to go somewhere, Tom's oxy ran out so he had to go back. Not to waste the effort to get up here, I followed a cloud street to Mono Lake then half way to Minden and back - all with hardly a turn. A soak in the hot tub eased stress levels. Maybe there was a remote chance I might eventually get used to this mountain flying!

Sunday, 9 July: Another sleep in! Tom wasn't even top of the list but lucked in and got the Janus. We headed straight for the Sierras to sightsee over the snow-covered peaks and turquoise lakes of Yosemite - then south along the Sierras, east to the Whites then north along them - did the last 200km home in just under an hour - and I threw up only three times in the 450km, averaging 150km/h a throw - but it made mountain flying look easy. A hot tub before dinner finished off a great day.

Monday, 10 July: A 6am departure to Bodie, the ghost mining town about 50km from the ranch house but still part of the property. Today was chosen because the weekend crowds were gone and the weather was not forecast to peak yet. So after a one-and-a-half hour ride in the suburban on a narrow rocky road, we arrived just in time to see the balloon abandon any attempt to fly because there was too much thermal activity! Then as we followed the tour through the town and mine workings, we kept an eye on the cu's popping at 8.30am! Not that we weren't interested in the prostitute thrown out of the town ball into the snow to die, nor the technicalities of the three stages of separation of the silver and gold from the ore - but oh that sky! By the time the tour finished around 11:15am, we spent a full 15 minutes visiting the museum and the rest of the town, then, with rally driver Oakley at the wheel, we raced back to the ranch in about an hour! The guys abandoned the car in the middle of the runway and ran to Hannes to request aircraft (there had been no orderly glider selection this morning) - only to find that those who didn't go to Bodie had already left in the best gliders on 1000km attempts. Tom had the '55 again and I was to have the '59 - but unfortunately its EDS oxygen system required a special canula (not the usual pink one) which was missing - so we missed another opportunity to fly together. But a dip in the pool and fishing with Allison and Rhonda passed the afternoon till we returned to the strip to welcome the victors - Barron poured champagne for three 1,000's - Holger's first in the '20, Uli's ninth in the Janus



Above: Barron pouring champers and Kerrie doing her best to catch it in the glass.
Right: Kate and Mike Oakley and Tom and Kerrie Claffey with the Barron Hilton Cup



in front of Barron's Discus which Mike landed in the paddock with the helicopter (just behind) – check the lennies!

and Don's first – even his logger failure couldn't wipe the smile off his face! And local Bob Semans broke a US 750km speed record. Well, good to see the Americans with all their hi-tech equipment still maintain gliding tradition – ie call a rest day on the best day in living history. Dan's excuse: "I'm really good at predicting bad weather, but really bad at predicting good weather!" And for those present, a "good" day will henceforth be known as a "Bodie" day.

Tuesday, 11 July: We originally planned to go ballooning but as Tom was on top of the list and wanted to attempt 1,000km in the Janus we thought a sleep was more important. Armed with sea-bands, plastic bags, two nappies and enough food and water to change the weight and balance I poured myself in the back seat. We set out on a yo-yo, north along the Pine Nuts past Minden to Dayton (near Carson City), back down the Sierras to just south of Lee Vining, then back north again. As we passed Reno it was strange to see jets passing below us. We continued north past Air Sailing and the beautiful Pyramid Lake to Armadée Airforce Base where the nearby restricted ammunitions area put on a floor show of about six spectacular explosions! By then we were a bit late to complete the 1,000km so just headed home but arrived back with so much height we decided to look at Bodie by air, adding another 100km for a total of 850km. Even then we had to pull brakes to get down as the day was still going. We could have stretched to 950km, maybe a marginal 1,000km.

Wednesday, 12 July: At last a balloon ride, straight up the runway and north over the desert – good fun skimming along just feet above the desert floor, but instead of curving round to the right and back down the valley as usual, we continued north. It appeared the wind was not co-operating today so we just landed in the desert and swapped crews. Last seen the other crew was still heading north – we told them we'd pick them up in Reno on the last day! Before we could sit down to breakfast, Mike Oakley had arranged the helicopter to take us for a tour of the area – neighbouring ranches and old mine workings. Having had his day of glory, Tom was now on the bottom of the list – so our gliders were the LS4 (dry – broken

dumps) and PW5. Being a gentleman he gave me the LS4 (actually he wanted to try the PW5). I did a mere 500km north to Air Sailing, where I passed Pasi flying in to instruct on a women's soaring seminar (you mean they have enough women to make a seminar?), and south to Boundary Peak at the northern tip of the Whites – from 17,999ft (limit is 18,000) the LS4 made the 100km jump across low ground back to the Ranch in one glide. While Tom did over 400km north to Dayton and south to White Mountain – even from maximum height, the Pee wee had to follow the convergence line curving round to the east to get home – but he still managed over 100km/h!

Thursday, 13 July: Another helicopter ride, this time down Helmut's Run, from the tip of Helmut's Peak down the slope then into the gorge, banking steeply through the snaking bends all the way back to the Ranch – not a bad heart-starter before breakfast! Then a Polish double again – the '55 and the Pee wee – no Tom didn't offer to swap again. So in the Pee wee I declared 500km out and return to Cero Gordo at the bottom end of the Whites. Launched at 12:17pm and after a bit of a struggle after the start I managed to climb up Mt Grant to about 17,000ft, follow the two or three cu's on track and then out into the blue over no-mans-land. But no problem, lift in the blue was good – so fell onto the Whites about 14,000ft – got good climbs at intervals but the lift didn't seem to be lined up like the day in the Janus. Was the pilot not as good at finding the right track over the mountains (in the blue), or was the glider finding it further between drinks, or was the day not as good – or all? Generally managed to work between 14 and 17. Approaching the turn I was keen to get there before Tom's deadline (4:30pm) or he'd hassle me to turn back – and I hate that. At 6km to run I was climbing through 14 but drifting back (southerly) so decided to round the turn and come back; turned at 4:37pm (phew) but now down about 13 – missed the 6kt thermal – drifting down, down. Tom says, "Stay above 14, there's a shear there" – great, now you tell me! Down to 11, carefully checking out strips at Lone Pine then Independence but trying to stay on the ridges – not easy getting blown around in the little Pee wee. Eventually got reasonable

climbs around White Mountain – back up to 17 – but by Boundary Peak back down to 14 – and can't find a climb. I did it comfortably from 17,999ft the day before. They say standard class can do it from 15,500ft, but in a Pee wee I needed 17 and all the 9's I could get. I struggled up and down, blew in and out, tried backtracking – 13, 14, 13, 14 – boring! Okay, decision time – where to outland – back to Bishop (50km SW) or Circle L (30km SE) – or the unmarked but satisfactory looking strip 10km north? I hate backtracking and needed at least 400km for the record so preferred forward. Then Tom suggested Mina, 65km due north (60 degrees right of track for the Ranch) – perfect as it would take me towards the convergence line, though this would be difficult to find in the blue. So I eventually set off at 14, peering into the distance trying to identify Mina. I hadn't gone five kilometres, still over the foothills, when I felt a bump, looked down (no audio) and whoopee – two, three, four knots – took it to 17 – that was the lid – oh well at least now I can dial in Hawthorn (85km only 20 degrees right of track) – left 95km at 17 into dead air with a tailwind – counted down 10km per 1,000ft until about 50km – with good air made a couple of 10k per 800ft – but then losing again. I actually had final glide by the numbers, but with the setting sun on the canopy, especially with a satin finish on the instrument panel (rather than matt) I couldn't see anything centre or left, only far right. I kept opening the clear view panel and could see the land to the left was low, but to the right was high and I needed to know what it was under the nose – and I didn't have too much height to turn – it's bad enough flying over flat country into sun, but over mountains it's the pits – it was so tempting to turn right down sun down hill for Hawthorn. But at about 25km Tom announced he had a couple of knots where he was parked over Lucky Boy pass relaying for me. I couldn't see, of course, but he said to turn towards higher ground – sounds scary but high ground was down sun so okay. There, a bump, and there, Tom turning – took another 1,000ft which gave a better angle to the sun – cleared the ridge comfortably and arrived back at the Ranch 3,000ft agl at 7:48pm. Dinner starts at

7:30pm sharp unless, of course, Barron has an excuse to pour champers – so he brought the whole crowd in their dinner best to the strip to pour champers in and over me. That last thermal cost me the world general 500km out and return speed record (broke it by less than two km/h – but after almost eight hours in a Peewee I wasn't thinking speed) – but it still made four world feminine and three Australian general records – not bad for someone who just a week ago hadn't flown a Peewee and was terrified of mountains! After we finally did get dinner, Barron invited us all outside to see the moon – like it was different from last night, yeah right – so I removed shoes and watch and was suddenly in the pool along with Giorgio, Mike, Uli, Holger and Thomas – not sure if they got Bob! Then started the paperwork, which was almost longer than the flight. Many thanks to Barron for the opportunity; to Bob Semans for his local knowledge and assistance with task planning; to Barbara Semans (former certificates officer) for her unending devotion to checking our paperwork until we finally got it right; and to Tom for winning the BHC in the first place, his encouragement, his logger, marking the homecoming thermal and rewriting the claim forms several times!

Friday, 14 July: Another balloon ride, this time the second ride returning over the ponds and a great opportunity to see Ton manage the winds at different levels to accurately position the balloon. First we tried retrieving the champers from the pontoon in the middle of the pond – close but not quite enough – then a splash and dash across the ponds – lift your feet up – then we dropped a marker just six metres from the target – not bad – then back around to land in the paddock next to the runway – very impressive for a bag of hot air we assumed just drifted with the wind! Motivation is a funny thing. I don't know whether it was the aftermath of a big flight or the beginning of wind-up mode, but we just couldn't get interested in flying; but the gliders had to be returned to Minden – all but Barron's own gliders, which one year had ended up in Minden as well! We had one last fish before lunch – I caught a three-inch (well maybe four-inch) baby bass which we put back of course. Then took a late launch in another Polish pair, the '55 and the '59 and went through the hour struggle to get out of the valley again (we were slow to learn to launch higher than 2,000ft agl!). It didn't help that I was in agony in the '59 – the extremely prone position seemed to put pressure on all the bits that were still sore from the day before! But we eventually climbed to about 16,000ft and crossed straight to the Minden Valley – one last look over the Sierras into Lake Tahoe in beautiful still air – then descended into the valley in a mixmaster – how can there be rotor with no wave? Obvious I still have a lot to learn about this country. Landed September 2000

in Minden about 5:30pm to find a long queue for the still unseen lift back to the Ranch – and warm beer! So we went with Mike Oakley to meet Chris Richards, the Kiwi who did the 1,100km in the Nimbus last week and who had cold beer – Mike was well-tanked and enjoying driving the golf buggy around the airfield, doing his best to throw Pasi off the front and Tom off the back! After two trips each in the Cessna 185 and Cherokee 140, the 13th pilot left over was to go back in the Decathlon with Dennis – I volunteered and got to fly most of the way back – just squeaked in to the end of dinner.

Almost heaven

*Almost Heaven – Flying M Ranch
Helmut's Run, Mt Grant and Walker River.
Life is good here, living in luxury
Flying anything that flies, soaring wild and free!*

*Boundary Peak take me home
To the place where I launched from.
Twelve knot thermals, seventeen nine nine nine
Take me home, to Flying M!*

(apologies to John Denver – wish he were here!)

Saturday, 15 July: Desperately tired, we rolled over at 6:30pm and tried to assess what we needed more – sleep or a ride in the Stearman – too many toys and too little time! Tom suggested we could eat and sleep later (this from the master of sleep!), so we crawled out of bed and sleep-walked down to the hangars. Tom got a ride before the 9am brunch while I packed, and I squeezed in a ride between brunch and the 11am closing ceremony – snaking along the river through the canyon was like being in an IMAX theatre (huh, if you were in an IMAX theatre you'd say "it was like flying through a canyon in a Stearman!") – then up to Helmut's Peak and down Helmut's Run – the wings are a bit longer than chopper blades but Art's handling instilled total confidence. Finish off with a loop, chandelle and barrel roll – what a way to end the week! Meanwhile Mike Oakley was flying Barron's Discus into the paddock next to the house so it could be used as a prop for the ceremony. We were all dressed in our Barron Hilton T-shirts and Barron Hilton/EADS (European Aeronautic Defence and Space Company – co-sponsors) hats. And we all had Barron Hilton posters signed by all the other players. During the ceremony the winners also received a gold medal, a leather bomber jacket, a model A310 and a key ring – some serious loot! Barron recounted how he'd been introduced to soaring by test pilot Hanna Reitsch and to the idea of the cup by World champion Helmut Reichmann. The EADS representative recounted their history of sponsorship since 1996 as Daimler Benz, then as Daimler Chrysler and since last week as EADS – but now they have the right to sponsor gliding since an A310 recently ran out of fuel and became a glider!

Getting home: After waiting for Mike Oakley to come down from his Stearman ride (and we thought we'd left it late!) the bus finally departed just after 1pm. We spent the two-and-a-half hours to Reno drooling out the window at the lennies, progressively stacking higher – we'd had brilliant thermal weather but hadn't seen good wave or a sky like this the whole time. We were first stop at Reno airport at 3:50pm – very hurried sad goodbyes as the bus drove off – then departed for LA at 4:10pm. Our tickets were for firm seats on Air Pacific but their Saturday flight had been brought forward to 15:30, already gone, and their Sunday flight wasn't till 23:30, a long wait. So in LA we asked if Qantas would accept our tickets on a standby basis for their flight that evening. After some discussion, yes they would – so a quick shower and change at the Airport Hilton and return to the standby counter. Not only did we get on, but we got business class – oooooe, were we ready to stack up some zzzzz's in those seats!

Significant flights

Monday

Holger Karow	1,000km ASW20
Don Ingraham	1,000km
Uli & Manuela Gmelin	1,000km (his ninth) Janus C
Bob Semans	US 15m 750km triangle speed at 134km/h Ventus2 C15

Tuesday

Thomas Hoffmann	German 15m 300km triangle speed at 143km/h ASW20
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Wednesday

Giorgio Galetto	Italian 15m 500km out and return speed at 130km/h ASW20
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Thursday

Holger Karow	German Standard 500km out and return speed at 138km/h DG300
Giorgio Galetto	Italian Open 500km out and return speed at 133km/h Janus C (with his instructor!)
Michael Oakley	NZ 15m 750km triangle speed at 106km/h ASW20
Kerrie Claffey	World Feminine World Class out and return distance, free out and return distance, three turnpoint distance, 500km out and return speed PW5 Australian General World Class x 3 Australian Feminine World Class x 4

Place of magic

As I waited for the plane to take me home, I felt a kind of sadness that it was over – this dream. For that was what it was. Really – a dream realised. I felt not unlike the character in James Hilton's "Lost Horizon". The story and the movie of a man who crashed in the Himalayas – and stumbled into a magical valley. A valley of continual peace – happiness and beauty where everyone shared a continual love of life. I had shared the love of soaring. Above "the cares that infest the day" – in a sky free. And I knew that some day I would return – that I must return – to this special place. This sanctuary – this "Shangri-La" – this Place of Magic. Cliff Robertson, 21 August 1994.





Editor's Word

Good to see some people are listening – a couple of technical articles have been submitted for this issue. Steve Donehue shares with us his wiring recipe for press-to-talk headsets, while Andrew Medew has been busy finding out how our GPS's know where we are when we don't (if only our retrieve drivers had the same knack).

This issue also sees the last installment of the novice series, Fledgling. Tex has written with great enthusiasm and passion (definitely symptomatic of a serious case of the flying bug – I'd get that looked at, Tex). I thank him for his time in writing the series, and now encourage someone else to take up the challenge he has set of writing an informative series for us all to enjoy. As we say here at AG/Skysailor, "Be Cool, Be a Contributor". (Can we get that into the OPS Manual somewhere, Craig?)

Richard Lockhart, HGFA Sub-editor



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A Most Extraordinary

ANDY WALLIS
(Courtesy of Skywings)

Sub-ed: Here Andy Wallis recounts last year's fabled wave day in the Dales, UK. What an incredible sounding experience! Have any hang/paraglider pilots in Australia experienced anything similar? Let us know through the letters to the editor column.

Hawes, North Yorkshire. With wind rattling the trees and low cloud scudding across the hilltops, pilots gathering for the final leg of the 1999 League have little grounds for optimism. As we make our way to the car park for the briefing, light drizzle dampens spirits further. Is this going to be another of those difficult days where all we can look forward to is a mass flop over the back?

The weather report does little to lift the mood. Met Man Dave Draper, interpreting the soaring forecast, informs us that at 5,000ft it is currently several degrees warmer than here! This strong inversion will suppress thermal development, but conditions are forecast to improve as the day progresses, with a moderate west-south-west wind. There are mutterings about rebriefing later, but this is the League and we competition heads are hungry for a task! Meet Head John Aldridge announces that the site for the day will be Wether Fell.

On top of Wether, with the sky still a blanket of grey and the gusty wind well off to the south, only the most enthusiastic pilots unload their gliders. Oliver Moffat rigs his Scandal and, launching into the rough air, can only manage 400ft above take-off. Slowly other pilots begin to assemble their wings as gaps appear in the cloud cover, revealing high level lenticular clouds – a common sight in the Dales. John declares an open distance task.

Directly above the pilots busy studying maps after the briefing, Dave Holbrook makes a top landing approach and finds smooth lift over the landing area. He quickly changes his plan to explore this unexpected lift. At 500ft and still going up, he radios to others: Wave! Directly above launch! No one hears him, but it doesn't matter. League pilots are opportunists and always have one eye on the sky, and this is the sign we have been waiting for. There is a huge scramble to launch, even though the wind is 30 degrees off the hill and gusting violently from 18 to 28mph. Wether Fell is unforgiving of a lazy take-off technique and plenty of

interesting launches follow. Mine is no exception, and I breathe a sigh of relief to be safely airborne.

After a bumpy first beat, I connect with the wave at about 100ft above take-off. The contrast with the hazardous launch conditions could not be greater – the air is as smooth as silk. Relaxing into the steady climb, I try to work out where the strongest lift is. There are perhaps a dozen gliders at my level, parked into wind and using one another to try to assess the orientation of the wave. It isn't really necessary; it soon becomes clear that the area of lift is in fact huge, with gliders well spread out around the valley in front of launch, all climbing at around 300 up. This is totally different to the usual League climb-out, where close thermal flying demands maximum concentration. Here I can slowly take in the panorama unfolding below me as I am hoisted ever higher, and mumble a few words of astonishment to the others on my radio channel. With over 40 pilots now established in the wave, our Dales host Trevor Birkbeck captures the mood perfectly with the words, Ladies and gentlemen, welcome to Wether Fell at its very best!

It never fails to amaze me that the air can actually do this, rising smoothly over a wide area as though there were an invisible ridge in the sky. As the ground falls away, the upwind ridges and valleys come into view, and I try to imagine the monumental forces at play as the air is alternately squashed and stretched as it bounces over them to create this unbelievable phenomenon.

This is flying at its easiest. All that's required is to stay almost completely still, making tiny weight shifts and avoiding any sudden or large movements. The glider can be flown with the VB full on, and so slowly that it almost refuses to stall in the laminar airflow. The air is so smooth, that the occasional sudden rocking motion of the bottom bar comes as a surprise until you realise that it's just the wake of a glider several hundred metres upwind.

Looking up, I can make out several gliders speckled out above me. I hear Allan Barnes say, 6,400 – climbing at four up, and my heart misses a beat. I've got three grand to go to reach that height, and they're still climbing! How high is it going to go? With no controlled airspace above us to worry about, we can milk this for all it's worth. Open Distance is the perfect task for the day. The higher we climb, the further we will go. What a pleasant change from full-on racing!

Day



Steve Cook at 9,500ft, about to depart for Filey

Photo: Trevor Birkbeck

The transition into that rarely explored realm above the clouds bombards the senses with spectacular images. Soaring up the leading edge of the windswept wave cloud a few feet from my wingtip, I am mesmerised by my shadow with its rainbow-coloured halo projected onto the brilliant white cloud. As I climb past the top of the wave cloud, I watch small clouds exploding into existence below me like anti-aircraft flak, growing until they merge with the main cloud.

Emerging into a dazzling blue and white arena, the constant lift tone of the vario punctuates the silence as I visually scan this new world. It is simply surreal. The ocean of cloud below me stretches as far as the eye can see, the undulations of the air moulding the clouds into the shapes of hills and valleys. The extent of the wave system is clearly visible from above, the lines of cumulus-like wave cloud extending for many miles crosswind, and the clear slots in between giving tantalising glimpses of the landscape far below.

Task, what task? I've almost forgotten it's a competition! Eventually, at 8,000ft asl, the monotonous sound of the vario suddenly gives way to complete silence. Unable to squeeze any more height out of this bar, it's time to move on. Before turning downwind, I do one slow 360 just to take in the stunning view. There are about five other gliders at my height, and we start the glide for the next wave bar over Addleborough, watching each other like hawks in an attempt to avoid the heavy sink. I try to glide above the fingers of cloud which almost form a bridge across the wave slot, where theory says the sink should be reduced. The sink smoothly increases to a maximum of three down, then slowly becomes two down, one down, zero, as the lift of the next bar starts to take effect.

With about 1,500ft height loss, we join the pilots already established in the next wave bar. The wavelength at this point seems to be around 6km. As we climb at a steady two up,

I marvel at the sight of sailing boats on Semer Water slowly receding below us. The wind lines on the water show that it's still very breezy down there. After 10 minutes we top out at nine grand – the highest I have been in the UK. No amount of bar shoving will get me any higher, but that doesn't stop me trying! I recognise Ron Richardson, Johnny Carr and others. I can't talk to anyone as my radio is playing up, but words are unnecessary. A mile above the clouds, nearly two miles above the most beautiful landscape, sharing this sublime experience with friends. This is why we fly. Not for the short-lived glory of competition success, but for moments like this which will be etched on our memories for a lifetime.

Big decision time. There are a couple of equally tasty looking wave clouds downwind and well below us. One is over the north side of the Wensleydale Valley, the other is sitting over Penhill to the south. Which one shall we go for? This is a rather unusual flying conundrum, and not the sort of decision we get much practice at making. I remember that other pilots have climbed even higher than this over the ridges on the north side of the valley, and I take the northerly route with Nick Pain and Malcolm Brown. The others go south.

Some of my most rewarding flights have been those where I have worked hard for every kilometre; on that scale, this flight wouldn't even register. The enjoyment of this flight comes from the fact that as the kilometres pass by almost imperceptibly, I can simply relax, and let the glider and the air do all the work for me. I am merely a passenger on an incredible journey.

This pattern is repeated for three more wave bars, but the climbs are becoming weaker and topping out at successively lower heights as the amplitude of the wave system decreases. As we pass Leyburn we get to see our glory again as we meet the cloud tops for the second time in the flight. Malcolm is a few hundred feet higher than Nick and I as we glide round

Hang Gliding

the edge of the last wave cloud and drop below cloudbase into the Vale of York. Normally I would be quite satisfied being at cloudbase at 4,000ft, but after coming down from nine grand it feels strangely low!

Around 30km into the flight, just south of Catterick, we find our first thermal. From this point the flight will be in more conventional XC conditions, but the thermals are weak as high cloud is cutting off the sunshine over a wide area. The wind is still a brisk westerly, so the tactic is to stick with anything which isn't going down.

Nick presses on ahead but is unable to find any more lift and lands on the north side of Northallerton. I pass directly over him at 1,000ft, clinging to some broken lift which I hope will drift me as far as the sunny ground a few kilometres further on. As I make a last ditch glide for the sunny ground I spot Malcolm circling low ahead. I am too low to make it to his thermal and land next to the A19 for a distance of 59km. I unclip and watch him climb back to cloudbase under a nicely building cumulus.

Meanwhile, ex-League pilot Dean Crosby is flying a sailplane near Masham when he spots a squadron of hang gliders approaching from the west. It is the lead gaggle of Steve Cook, Gordon Rigg and others who took the more southerly track out of the Dales. Dean is no stranger to the Wether Fell wave – in 1987 he soared his hang glider to 12,500ft there, almost equalling the 13,600ft site record set the same day.

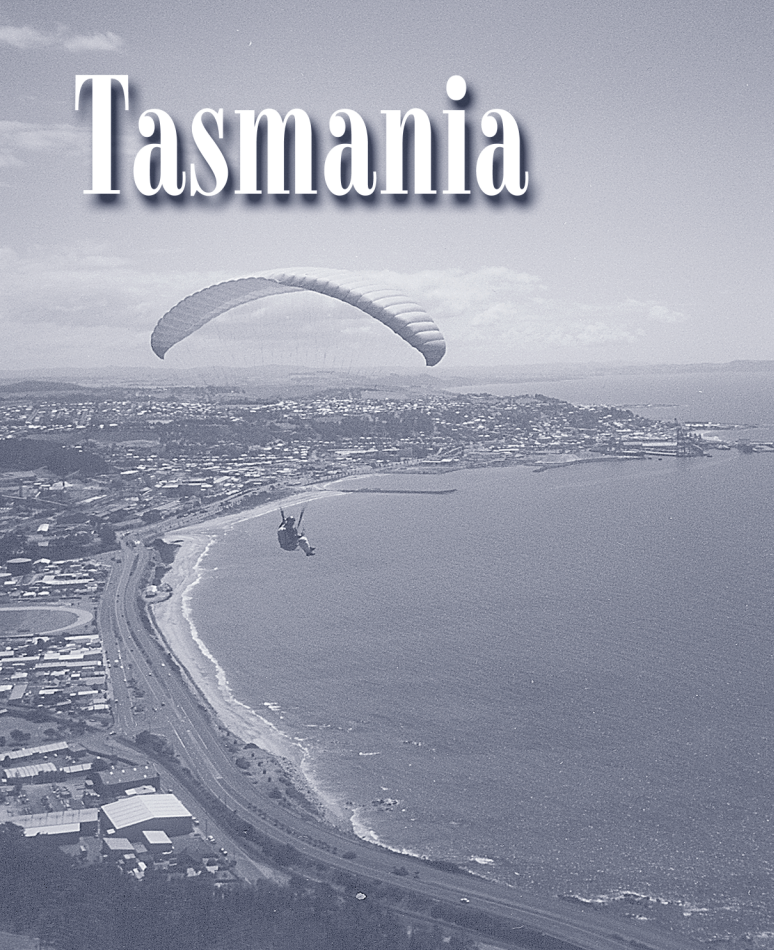
The lead gaggle continues its progress eastwards along the south-facing slopes of the North York Moors. Cookie, anxious to retain his overall lead in the League, beats Gordon into second place with a flight of 125km, landing at Filey on the East Coast. Thinking of his flying friends back home, Steve buys a bunch of seaside postcards to appraise them of the days events. Steve Elkins, who had decided to go to the Blore party instead of the Dales League, was the lucky recipient of one of them. Boy, would I like to have seen the look on his face!

I had flown under half the distance of the task winners. Was I disappointed? Not in the least! The images and memories of the flight were truly special. That is what hang gliding is all about. Back in Hawes that evening the beer flowed freely, but what we were all intoxicated on was altitude. For many this had been their first experience of wave. For others it had been one of their most memorable flights.

Contenders for the brick award include the pilot who launched half an hour after everyone else and missed the wave, and the pilot who got to six grand, became disorientated and landed in the middle of a moor two kilometres from take-off! But it really had been a most extraordinary day.



Tasmania



Left: Peter Duffy at Round Hill

Above: Brett Tooker soars above Pirates Bay at Eaglehawk Neck

BRETT TOOKER

In another part of the country a long time ago there was a billboard advertisement beside the highway of a major city. It occupied an in-your-face position on a parched and arid clay pan between the railway and the road. From this billboard gazed the wise and austere condescension of a fatherly small businessman, who wished a never ending stream of hapless southbound fools a safe and pleasant journey. For years I drove past his stern and furrowed gaze, and upon arrival at a huge and rather scary coastal hang gliding site stowed his patriarchal concern in the Valiant glove box next to the Bex Powders whilst I went flying. I believe this patron saint of small commerce and industry delivered me from peril. So long ago I wonder where he is now, I wonder if he still has offices in both Auburn and Heathcote.

Gad Zukes man, get a hold of yourself and report! (And, by Jove, I will.)

In my last report (April 1999) the heavily forested slopes of Mt Koonya were being drenched under a warm and humid sky that punctuated an otherwise unprecedented drought in Tasmania's south-east. It's now June 2000 and the rain has finally returned in a quantity matched only by the accompanying cold. Brrrrr. Never mind. If there's anything to be salvaged from this drought-stricken wreck it's plenty of good flying. Still without a major thermalling site (bar Mt Barrow) slope soaring continues to provide the prime medium for airtime in Tasmania.

The sea-breezes generally arrive in September. I remember once exploring an old sandstone gun battery on Hobart's magnificent foreshore while dozens of yachts rode the gentle morning northerly down as far as South Ann Peninsula, where they amassed in a silent wait. Sure enough, Hobart's southerly sea-breeze arrived and the yachts, perfectly positioned with spinnakers unfurled, rode the front northward and like wedding confetti were blown up the harbour into an eddy outside the



Dave Luttrell kicks back at Round Hill

Royal Hobart Yacht Club. But the sea-breeze didn't stop there. Cool, heavy and dense it snaked its way up the Derwent Valley, reaching along the way a perfect arc of ridge known as Winton Hill, where nowadays hang gliders and paragliders boat endlessly about. Site custodian and local Winton freak, Ben Kindblad, logged around 50 flying days last season as well as overseeing a hundred or more other flights.

Steve Bayley and Craig Semple have just completed their tandem certificates, and having acquired a suitably proportioned glider will be conducting tandem flights from the eminently suitable Winton Hill. This also gives me the opportunity to call the bluff of

many an aspiring passenger at the local pub.

Meanwhile, further east at Eaglehawk Neck, a sea-breeze of another sort blows. It's usually September before the gentle nor'east breeze begins to caress the Neck. However, last season they came with a vengeance. Many days were blown-out by noon, but in between there was some sensational flying to be had, *Aquila audax fleayi* notwithstanding (the largest and heaviest wedge-tailed eagle – Merchant and Higgin 1993). Yes, those two reality checks with claws were also back with a vengeance. Like two sentries, this intimidating pair guard the gateway south to the colossal sea cliffs beyond Waterfall Bay. If you venture down there you've got to want it bad. The last to try was Dave Lytton. The lure of grand coastal vistas beyond superlatives beckoned Dave south and he ran the eagles gauntlet, just scraping through for the 10km spinnaker run south to Fortescue Heads. As always it was a white knuckle headwind punch back north, perilously close to 300m cliffs and pounding

surf. Davo finally made it back around the Waterfall Bay

corner, way below 438m Cleme's Peak. But before he could loosen his grip and draw a sigh of relief those wedgies pounced – There he is! – and it was still another 4km back to the beach landing. Yes, you've got to want it bad.

Last article I mentioned a newly acquired coastal site, Clifton Bluff on Hobart's South Arm Peninsula. I finally got the chance to fly it. South Ann local, Mick Calvert, called me up one morning. He was heading up to Clifton and would set up and wait. It's a two hour drive for me, but with nothing happening at the Neck en route I pressed on. The sea-breeze kicked in just as I arrived. I set up next to Mick down in front of the farm house on a steep, grassy slope 100m above the beach. However, the sea-breeze mysteriously backed off and retreated around behind Cape De Slacs. After one and a half hours waiting I began to pack up. Not so fast, Mick advised. Sure enough, the nor easter bolted back around the Cape.

PHOTOS: DAVE LYTTON

Before I could get my wing battens back in Mick was off. We flew silky smooth coastal air for the next hour. While flying, Mick and I were harassed by yet another pair of wedge-tails, something Mick had never encountered on his previous dozen or so flights. Luckily, like the nor'easter, they mysteriously disappeared. It was after this flight that I earned the monicker, wedge-tail magnet.

The intrepid Mick Calved pioneered another site early last season. Bouganville Head on the east coast is a 150m coastal site very much like Clifton. It's special not so much by nature but by position, with great views of nearby Freycinet Peninsula and Maria Island. This time Mick, Ben and I teamed up and arrived mid-morning to set up and wait. The overcast sky dissolved into sunshine and the nor'easter kicked in. We launched into beautiful coastal air and flew for an hour or so between the bluest of blue sea and sky. Mid-flight I received a mental jolt as over my left shoulder I noticed a huge eagle. Whew! Only a white-bellied sea eagle. They're non-aggressive, but boy, do they get close! All things considered, Bouganville is a great site (and with passive locals) – Ill be back.

At the northern end of Bouganvilles beach is the 316m Mt Murray. Paraglider pilots Jayson Biggins and Rob Stein were the first to fly it last season, though in less than ideal conditions. Mt Murray is another nor east site, so there'll be plenty of opportunities to have a proper bash at it next season.

But none of this timid coastal stuff for some amongst our ranks. Thermophiles, Hugh Glen, James Freeman, Craig Semple, Steve Bayley et al nicked off over Bass Strait for their annual mainland fix of epic thermal battles, cross-country daring and competition intrigues. Hugo did particularly well in his class, and I believe James medical skills were at one point in demand. Needless to say, it was up to me and my ilk to hold the fort while others were at play. As if the skies aren't already uncrowded enough.

James and Dave have been beavering away at a huge new site just north of Hobart's Mt Wellington. Mt Faulkner is a 900m peak overlooking the Derwent Valley that would take any number of directions. However, after gaining access to both public and private land and preparing one or two launches, the previously enthusiastic key landholder got cold feet after receiving, dare I say, misinformed legal advice. This one will be a tough nut to crack.

Steve Bayley and Craig Semple have propelled the Mt Wellington launch proposal to approval stage. At this point the THGA has been granted approval to construct and conduct launches from a ramp structure within the Wellington summit zone for a trial period. But wait, there's more red tape. The summit zone is a heavily utilised tourist area, highly visible and subject to its own management plan, currently under review. The THGA has been advised to wait until the management plan has been ratified before proceeding further. Needless to say, everyone is covering their legal backsides.

Speaking of bums, we had an unprecedented number of them on seats at our recent Annual General Meeting. This year's was held in the midst of the antipodean divide twixt north and south within the sandstone confines of the historic Man o' Ross Hotel in Ross township. Twenty-six were in attendance with 10 or so apologies. A show of hands

revealed a dominance of paraglider pilots, particularly from the north, but a greater number of attendees overall from the south. Topics discussed centred mainly on site issues, after which Rohan Grant gave an informative talk on matters federal and their state implications. Darren Thompson reported on a dearth of sites in the Launceston region and a number of student pilots with new gliders stowed in their garages. This has been a perennial problem for Launceston and one that must be addressed. Fortunately, it was better news from the north-west. Over the past several seasons there has been a growing contingent of paraglider pilots in this region and they're definitely on the job. Bill Brooks reported on the acquisition of a number of great sites, most notably Round Hill at Burnie. Round Hill is in its second season and could possibly be the Winton Hill of the north-west, though, unlike Winton, flyable year round. The launch is 160m above the Bass Highway and overlooks Butte township and Bass Strait. However, as part of a former industrial site currently under rehabilitation, there are serious concerns over erosion problems exacerbated by the launch. Land administrators, Butte Council and the north-west pilots are negotiating a number of options, and hopefully this important site can be retained. Community support will no doubt be pivotal in the negotiations and may sway the Council in favour of developing the site. Don Heads is another great looking site west of Devonport, though Dave Luttrell thinks it may be too small for hang gliders. I'm sure there's room in that photo for mine. Table Cape, near Wynyard, is an exceptional site, once off limits due to air space restrictions from Wynyard Airport. Bill Brooks reports of flying there regularly nowadays, though VHF radios are mandatory. Table Cape provides classic rural vistas – a patchwork quilt of brick-red basalt soils, green clover and opium fields backed by a deep blue sea and sky. Also at the AGM I was gobsmacked to discover what are, I believe, Tasmania's first two female paraglider pilots: Kate Spencer, partner of Jason Biggins and Natalie Luttrell, partner of Dave. All of this and our swelling ranks (and a jug or two) proved too much for your timid state president and he gladly stepped aside in favour of sturdier material in the form of Craig Semple. Steve Bayley will continue as state secretary/treasurer.

Well, dear readers, there it is for another year, and now time to surrender to the velvet allure of the club lounge suite, recently procured after much personal angst. But before I nod off, just a gentle reminder that good flying can be had in Tasmania from September to April. And don't forget to contact us on arrival – we're in the back of the mag. But in the interim, take care, and by all means have a safe and pleasant fly.





The Franklin PS-2 was the most popular training sailplane of the 1930s in the USA



Assembling the Golden Eagle (left to right) Kevin Sedgman, Jan Scott, Peter Sellinger, Alan Patching, John Ashford, Bob Wyatt

Elmira Vintage Meet 2000

MARTIN SIMONS



A rare bird - the Schweizer 2-22 in its original form with open rear cockpit



The Australian Golden Eagle tied down outside the Harris Hill Soaring Centre, July 2000 Photos: Martin Simons

Five years ago an International Vintage Soaring Meet was held at Harris Hill, Elmira, in New York State. This first IVSM was very successful with several sailplanes coming from Europe to participate as well as Canada and others from states as far away as California and Texas. Although the weather was not brilliant, plenty of flying was done and it was resolved to repeat the exercise in the year 2000. Planning began immediately and most of those present (including me), promised to be there again five years later.

When it was first suggested that the Golden Eagle, designed and built by Geoff Richardson during 1934-37 in Victoria, should go to IVSM 2000, I was sceptical. It hardly seemed possible that this famous old wooden sailplane could be shipped to the USA, flown there for a few days and shipped back again. Probably there were many like me who doubted that it would ever happen. It did happen. Alan Patching's enthusiasm carried the project forward. He was tireless in organising and campaigning. With limited financial support from the Vintage Soaring Association and the GFA through several of the Australian State Associations, and from BHP following some vigorous promotion by Terry Cubley, transportation was arranged. The Eagle with its trailer in a small container was taken by sea to the west coast of the USA in a voyage lasting about 40 days, to be met there by Alan himself and John Ashford. Using a towing vehicle on loan from Geoff Byard, an extraordinary and generous Californian enthusiast, Alan and John towed the trailer across the entire USA to Elmira where Kevin Sedgman, Bob Wyatt and I met them.

Elmira town is in 'upstate' New York, south of the picturesque Finger Lakes region and close to the border with Pennsylvania. The very active, professionally operated gliding centre on Harris Hill is about eight miles west of the town in an upland area of great scenic beauty but, in the valleys, becoming increasingly built over. Harris Hill is to the USA what the Wasserkuppe is to the German gliding movement and Dunstable to the British. With support, both financial, moral and material, from the local county, soaring at Harris Hill has been going on since 1930 and the National Soaring Museum has been built close to the airstrip on this elevated site, about 1,750ft asl. Landing and taking off on the hill is rather like operating from a large aircraft carrier. Deviations too far to either side result in a damaged glider. To undershoot or overshoot is not recommended either although, as a rule, there is an escape down to the valley where there is an emergency landing strip well known and marked. Launches now are always by aerotow although, in the past, bungee and winch were used. Of the 35 or so vintage sailplanes gathered for the meeting this year, the Golden Eagle and the Schweizer SGU 1-7 were the oldest, both having made their maiden flights in 1937. The all-metal SGU 1-7 was always intended as a trainer and the Golden Eagle certainly has a much better soaring performance. More importantly, whereas the Schweizer had languished for many years un-flown and uncared for until a massive rescue and restoration job was carried out recently, the Golden Eagle has been well maintained and almost continuously in use since it was completed 63 years ago. It attracted a great deal of admiration

and comment from everyone. Some discerning observers declared the Golden Eagle was the best looking glider at the meeting. None of us felt inclined to dispute this. Amazement and delight at the Australian presence on the Hill was vociferous. Those who supported the project should draw much satisfaction from this.

That the Eagle could fly well was amply demonstrated by the Australian pilots who flew it on every suitable occasion. Only one day was completely spoiled by rain and wind. For the younger, and probably wealthier, pilots who on the good days were flying modern sailplanes including Nimbus 4, Discus 2, ASW 27, etc, it must have been a strange and sometimes salutary experience to find an old, gull-winged, strut braced wooden glider climbing up the core of the thermals while they were sweeping around the outside. No one would claim the Golden Eagle would keep pace with these magnificent monsters on a cross-country flight, but we didn't do so badly in local soaring and we enjoyed ourselves greatly. The meeting was a great social occasion as well as flying, a gathering of the clans, a renewal of old, even ancient friendships. Among those who arrived was Arthur Hardinge who built the Yellow Witch Olympia from plans in the immediate post WWII years. The IVSM ran from Saturday to Saturday. On Sunday for Alan and John the long trail home began. Their return journey was planned to take in a few days at the great Oshkosh aeronautical assembly, after which the Eagle will return to Australia as it left, by sea. Alan has been told firmly enough that if he returns without the sailplane, he will not be re-admitted to this country.

The Victorian Soaring Association and you, the members

EDWIN GRECH CUMBO, *Retired Secretary/Treasurer Victorian Soaring Association*)

Many gliding club members are not aware of the role that their State organisations play on behalf of the clubs and members. I come to this conclusion due to the number of phone calls I received during the term that I held the office of Secretary/Treasurer.

The past and present committees have developed a number of initiatives which should see both the clubs and their members benefit from their subscription, directly or indirectly.

Some of these initiatives include subsidies to train individuals to reach a Level 1 instructor rating. To date, four Victorian clubs have trained five individuals to this rating. The trainee instructors were subsidised to a maximum of \$500 each. The purpose of this subsidy is to reduce the current workload on many of our ageing instructors.

This subsidy is available to all the Victorian clubs until 30 April 2001. All a club needs to do is to nominate a person and forward a letter to the Victorian Soaring Association applying for the subsidy. The subsidy will be paid on receipt of a letter from the NGS instructor together with an invoice covering the costs incurred by the individual, whether the individual passes or not.

During the last two years, two pilots were subsidised to a maximum of \$1,000 each, to cover part of their competition expenses. This subsidy is intended to assist pilots competing in national and international competitions. All a club needs to do is recommend a pilot who they consider is competent enough to progress through the various stages of competition.

Many clubs are located in areas that are not readily found by the public. Two years ago the Victorian Soaring Association created a subsidy to encourage clubs to design and erect signs that would guide the public to their aerodrome. The subsidy was limited to \$500 per club. To date only seven clubs out of 23 have taken advantage of this subsidy. The newly-elected committee has decided to extend this subsidy for a further 12 months, up to 30 April 2001. To apply for this subsidy a club is expected to obtain three quotes and select the quote that provides best value for money. Just send copies of these quotes to the Secretary, who will then take the appropriate action.

The most exciting effort that the Victorian Soaring Association has taken to date is to organise the Youth 2001 scholarships. The scholarships fund four students from each participating school to receive scholarships, including some flying money to get them started. Twenty-three Victorian clubs are participating with 23 schools. Before September 2000, 92 students will receive scholarships to start flying training at their local club.

At the end of this season, 23 schools will be represented at "Youth Gliding 2001", a four-day camp to be held at Benalla one week after Easter for 92 students, along with their instructors and club twin-seater.

This camp is aimed at establishing a peer group from all over Victoria to grow through this scheme together, not necessarily identifying with the plethora of old blokes we have at every club. A big ask for 16 and 17-year-olds.

Victorian clubs were supplied with a kit containing presentation certificates, letters to the Principal, participating school registration forms, guidance information and a document outlining the whole scheme, including a disk copy for each club to personalise the documentation for their clubs.

Another initiative which has been established by the past and present committees is that all Airworthiness Courses conducted by the Victorian Soaring Association shall break even. The courses that have been conducted to date have been structured in a manner that professionals are conducting the lectures and supervising the practical application of the course.

The RTO/As and other volunteers give their time freely for the love of gliding and continuity. We have also taken the trouble to provide each student with Powerpoint presentations covering all aspect of the course. These presentations are forwarded to the candidates on enrolling to the course.

It amazes me when I hear individuals say that they are not aware of these initiatives. The Victorian Soaring Association forwards a copy of the minutes of meetings to each club Secretary and to the two delegates representing these clubs. Surely that with all the electronic technology available today we can pass this enterprising information around our members.



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- Task setting using a graphical interface
- Verification of IGC standard recorders, Joeys and Garmins
- Deals with multiple starts, different shaped sectors, start and finish lines
- Badge flights, fixed tasks, POST and Assigned Area tasks
- Verification Certificates including performance data
- Engine runs and airspace violations detected
- Generates and reads various formats of turnpoint data including Cambridge
- Interfaces with the GFA Scoring System to avoid double entry of information.

This program in prototype form was used successfully at several competitions last season including the FAI Nationals and Club Class Nationals, and the NSW State Comps.

The program runs on Windows 95 and Later. It uses a normal Windows style user interface and is distributed on CD-ROM. Price is \$120 including GST.

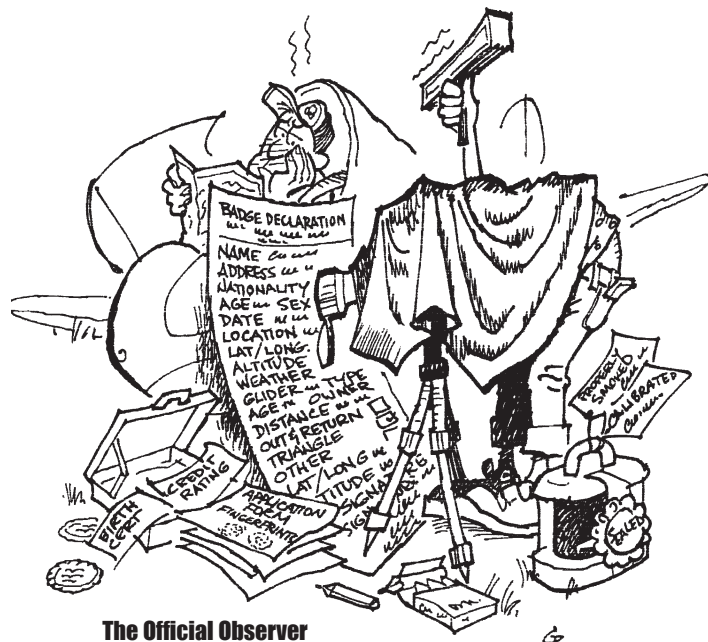
**For further details contact
Tim Shirley on 0417 268 073
or at
tsh@dynamite.com.au**



A Pilot Guide for Official Observers

BERYL HARTLEY

A Sporting Code Annex C has been published to assist Official Observers and pilots to interpret the rules which are set out in the Sporting Code Section 3 for gliders and motor gliders. The methods and interpretations presented are not necessarily the only correct solutions, but are in common use. The content of the annex does not have the authority of the rules, but can be used to help interpret them in normal situations.



The Official Observer

The Sporting Code

The re-drafting of the text in the 1999 Sporting Code for gliding was done with the goal of making it as understandable and simple in structure as possible. This was done by the re-making of the format and the re-writing of the content. Although simplicity was a goal, the code is complicated as it covers many badges and record types and allows the pilot to gather evidence in alternate ways. As a result, how one is to respond to the code requirements can be confusing.

A word on claims' processing

The introductory philosophy on the opening page of the code states: "When processing the evidence supplied, Official Observers and the NAC should ensure that these rules are applied in the spirit of fair play and competition." The homologation process determines if the claimed task conforms to the rules. Often, incorrect or incomplete evidence can be corrected. At times, although the supplied evidence cannot support the stated claim, the pilot may not have realised that it is sufficient for another category of record or badge.

Official Observer duties

The Official Observer has the very important responsibility of being the FAI's field representative. The observer guarantees that the requirements of the code have been met in a claim for an FAI award, badge or record. The observer ensures that the flight is controlled to FAI standards, and that evidence is gathered and prepared in such a manner that later study of it by a disinterested examiner will leave no doubt that a claimed achievement was met. The observer must act independently and without favour, and must be familiar with the basic definition in Chapter 1 of the Sporting Code. A sound knowledge of the rules is important – it is even more important to pay careful attention to details and have the integrity to never sign a claim unless satisfied it is correct

and complete, and to reject or refer to higher authority a claim which does not appear to fulfil the rules. An observer should not pass a poorly prepared claim to their NAC in the hope that it will be accepted. Performance standards are the foundation of recognised achievement in soaring, so a rejected "almost good enough" flight may be valuable experience for the pilot.

Pilot preparation

The most valuable thing a pilot can do to meet the requirements of a badge or record task is to make careful preparation. Lack of preparation resulting in weak evidence, accounts for most rejected claims, and may seriously delay or even cancel your planned flight. Your preparation of impeccable evidence requires some care and time, and time is invariably in short supply on the morning of the "big flight". Therefore, anticipate the day and prepare for it – this will go a long way toward a successful flight.

Consider the following:

- Study the current FAI Sporting Code to be aware of the requirements for a given flight and discuss your planned flight with your Official Observer. The Sporting Code is downloadable from the GFA and the FAI website: [www.gfa.org.au] and [www.fai.org/gliding].
- Always have a barograph or flight recorder prepared for flight, and always have a fresh roll of film available for the camera. Practise turnpoint photography to check out the camera and especially your own flying techniques around the turnpoint.
- If you are new to the GPS and are using a flight recorder for evidence, be completely familiar with the equipment and the loading of turnpoint data and use it on several local flights before trusting yourself to use it correctly for an important flight.
- Always have landing, flight declarations and the most current version of other badge or record forms. Keep all this material in a sepa-

rate container and keep it handy. Record forms are available on the IGC website. Badge claim forms are available on the GFA website [www.gfa.org.au] or from the badge officer.

- Study possible tasks beforehand and prepare maps for them or load your flight recorder.
- Prepare and use a task checklist.

What to send to the Claims Officer for your badge flight

Distance flight: Completed claim form, photographic and barographic evidence or flight recorder disk, gliding certificate and payment made out to the GFA.

Duration Flight: Completed claim form, barographic evidence if the flight is not observed by the ground-based Official Observer for the duration of the flight, gliding certificate and payment made out to the GFA

Height flight: Completed claim form, barographic evidence with gain of height certificate and calibration details, gliding certificate and payment made out to the GFA.

The GFA FAI claims office has a continuous flow of badge claims throughout the year and for the period of April 1999 to April 2000 Australian pilots applied for 431 FAI badges. I hope that the next year period will be as successful. There were 56 new Official Observers appointed. If your club has a shortage of Official Observers contact the office and I will be pleased to organise a training session for those interested in taking on this interesting task. There is no increase in the charges set for badge flights. GST is included in the charge.

A, B, C	\$15 each
Official Observers	\$10
Silver C, Gold C	\$10 each
Competition Licence	\$10
Diamond Leg	\$10 each
Renewal of Licence	\$8

Contact: Beryl Hartley, phone (02) 6889 2733; fax (02) 68 89 2933; email <hartley@avionics.com.au>.



Secretary and Delegates: All Victorian Soaring Association Clubs

VSA meeting dates for 2000-2001

Please note the VSA Regional Committee meetings will be held in the Uniting Church Hall, 329 Dorcas Street, South Melbourne. On the following Thursdays commencing promptly at 19:30:

14 September 2000	VSA Youth 2001
26 October 2000	Executive meeting
23 November 2000	Executive meeting
14 December 2000	VSA Youth 2001
24 February 2001	Executive meeting
18 January 2001	VSA Youth 2001
20 April 2001	Executive meeting

The VSA Annual General Meeting for 2000-2001 will be hosted by the Gliding Club of Victoria at Benalla. The date and time will be issued at a later date.

Edwin Grech Cumbo, Secretary/Treasurer

To all Gliding Clubs and Operators

Flight Manuals

In July, the GFA Secretariat received a number of phone calls from anxious GFA members who were concerned about a leaflet they had received in the mail from one Boyd Munro. The leaflet warned aircraft owners that, if the certificate holder of an aircraft did not replace that aircraft's flight manual before 16 August 2000, he/she could risk a fine of up to \$5,000. This article is to clarify the situation which generated the leaflet and to set people's minds at rest about the facts of the matter.

The issue is as follows:

It started in July 1999, when CASA decided that Australian aircraft would get rid of their CASA-produced flight manuals and replace them with manufacturers' flight manuals "in the interests of international harmonisation". The decision was contained in a document called Civil Aviation Advisory Publication (CAAP) 54-1(0). Hardly anyone got to see this document and CASA used no other useful method of communicating the decision to the industry. It appeared in a Flight Safety publication and in the Government Gazette, but there was no direct communication with registered owners of aircraft. This was a serious oversight.

As a result of this lack of an educational campaign and fuelled by the issue of a second CAAP, 54-1(1) in May this year, the sudden realisation dawned on aircraft owners that CASA-produced flight manuals would be illegal after 16 August and everybody had about six weeks to get their act together to assimilate the changes. There has been a storm of protest from the entire "light" end of the aircraft industry (hence the leaflet) and CASA personnel have been forced to accept that their failure to conduct any kind of educational campaign has backfired on them.

This is the current situation as far as the GFA is concerned:

1. *Gliders and motor gliders have never carried CASA-produced flight manuals and are not affected at all. The leaflet and the two CAAPs may be ignored.*
2. *Tug aircraft are affected, but the date by which to comply with the new flight manual requirement has been extended by CASA to give extra time. The leaflet may be ignored but the requirements of the second CAAP will need to be met by mid-2002.*

There will be further communication from GFA in the near future to assist those involved with tug aircraft to complete the necessary changes in good time and in an orderly manner. For those interested, CAAP 54-1(1) can be found on the CASA website.

Mike Valentine,
Senior Technical Officer Airworthiness

Airworthiness Directive

GFA AD 538 (Issue 1):

Types affected: KR-03A Puchatek, serial numbers 01-01 to 01-06, 02-01 to 02-15, 03-01 to -3-24, 04-01 to 04-20 with airbrake arms No AB.20.030.00.13 (LH)/23(RH).

Subject: Cracking of airbrake central actuating arms.

Airworthiness Advice Notice

GFA AN 151 (Issue 1):

Types affected: Janus, Janus B, Janus C, Janus Ce, all serial numbers.

Subject: Flight manual amendments.



Ron's Lament

Henry Leschen

*"Where have all the gliders gone?
It's only half past one!"*

*"I want to fly, just look at the sky.
Cumulus towering two miles high."*

"I hear what you say.

Don't you live miles away?"

"No! I'm 10 minutes walk from our club."

*"The earlier you arrive, the sooner you'll fly.
Can you help us to rig, or do the DI?"*

*"I can help you to rig, but I can't do a DI."
"If you're willing to learn, you can always try."*

Ron's now done the course.

Two days of DI's.

Passed theory and practice first time.

Now amongst the first to arrive.

You'll find him doing his share of DI's

If members complain

*"Who's that up there, soaring so early,
and hogging the air?"*

You could suppose,
It's Ron.



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Mosquito in Central Australia

ANGUS WALKER

Davenport Ranges,
Northern Territory
Photos: Angus Walker



Setting up

A strap on, a motorised butt plug, call them what you like, powered harnesses have huge potential in opening up areas to hang glide which would previously have been inaccessible. On appearance they remind me of the coyote in the Road Runner cartoon series, as he tries to outdo the bird with his various ACME devices.

I'm currently using a Swiss Aero Sport product called the Mosquito, which uses a 120cc two-stroke motor giving around 15hp – sufficient for launching a 75kg pilot using a 147 Xtralite in nil wind (admittedly the nil wind launch is more akin to an athletic event). Once airborne the unit climbs out at 250-300ft/min. Unlike a trike, you really need to seek rising air to avoid lengthy climb outs, and it is not unusual to enter sink which is beyond its climb rate.

The unit has given me access to some incredible terrain in the Northern Territory, where hill launches are not an option. On a recent work trip to Alice Springs I managed to sneak in an afternoon flight along the West McDonalds. Once airborne and on a ride of lift, I turned the motor off and cruised for 10km to a significant gap in the range

which would usually terminate the reach of the flight. Not a problem; with a pull on the starter we were once again climbing out over the gap with half throttle applied.

Australia has an infinite range of remote flying options accessible with the motor harness, including Finders Ranges, Bungle Bungles, and of course the big one, the Morning Glory roll cloud. With growing commercial pressure on some sites resulting in the introduction of fees and site congestion, the potential to fly some awesome landforms with a motor harness is a versatile option. On a finale note, a recent two hour out and return flight across the Davenport Ranges (NT) utilising light thermal lift used a respectable four litres of fuel.



The Pebbles, Tennant Creek, Wohaus dreaming area



Horse spotting

Fledgling • Part 3

DAMIEN 'TEX' GATES

So now you have thermalled high and seen a nice paddock you can glide to, then you got there and did it again. The best learning experience I have yet encountered is to go to a competition. Doesn't have to be a Cat. 1, AAA rated mega cross-country-a-thon. Why not even sign up for a week long XC tour that many schools offer? An excellent learning environment. I went to a competition to achieve a result I could have gotten at either: to learn, have fun, fly, and hopefully go far.

There you are in prime cross-country flying terrain, with many other experienced people to help. What is so different from what you have been doing? Mainly it is the psychology. Remember those days on the training hill, the high flights where your aim was to fly straight, do one 360 to the left, one to the right, set up and land? Strange how distant they seem. Now there is a new plan.

Hopefully someone of experience in the area will assess conditions and offer you a task commensurate with them. Think on why a particular course is set; it will help you to fly it, and you have made even more deposits in the bank. So here is the plan.

Launch when confident of getting up. Know where you are heading by studying a map beforehand, so referral to it in the air is less of a drama. Maybe a GPS is available to help, but still at this stage knowing how to read and navigate by map is essential. Be prepared to get high, and in doing so think on your next move. Be prepared to stay in the air for some hours. Open up the memory banks and use your experience to help you. All the while you are confident in how, when and where you are going, but flexible enough to change plans if needed.

Here again is the catch cry "Get up and go." At its base level this is what you are trying to achieve. Getting up in a thermal as high as you can and then going to the next one, all the while thinking on trigger points, clouds, other gliders and where you can get to if you need to land. No doubt you will put it together sooner or later to fly a reasonable distance, then a bad decision, conditions or inhospitable terrain will let you down. No problem, stepping up the distance is starting to come. All you need do is learn, experience and achieve.

At the end of the day you go back and give your GPS in as a record of the fun you have had. You get to see the points you scored and compare notes with the others who have flown and tell a war story or two of your own. This is what it is all about.

I managed to fly 20km, 50km, 30km, 100km and 30km in five days, only ever having flown three XC flights previously. The last flight of 30km I was happy to land on a good day, as my arms no longer wanted to play this game any more. **Too much flying.** Never thought I would be in that situation.

The next step is to go to goal. Yet again, as the experience increases and the potential becomes apparent, you know you can go further. You can go to goal. This goal may be to break your PB or go to the real thing.

There you are set up on launch. The jets are getting the after burners lit on gliders and another intermediate pilot approaches as you head towards yours. So what do you reckon? they ask. Well, we have two legs of 60km. First one downwind; second one cross, slightly tail, if the prevailing winds here are the same at height and at the turnpoint. Good for our ships. We have some nice flat farmland through which we can use the road as a course line, then jump a small ridge where the same road cuts through it. Some foothills leading into the turnpoint and right along the highway to goal with some small forest areas to get over high on the way. Should be good paddocks in reach the whole way, so no need to think about landing until we have to. Nice cycles coming up now, so let's get in the air together and work as a team. They reply, Well, I've only ever flown 20km. Cool, let's repeat that six times. Let's get up and go.

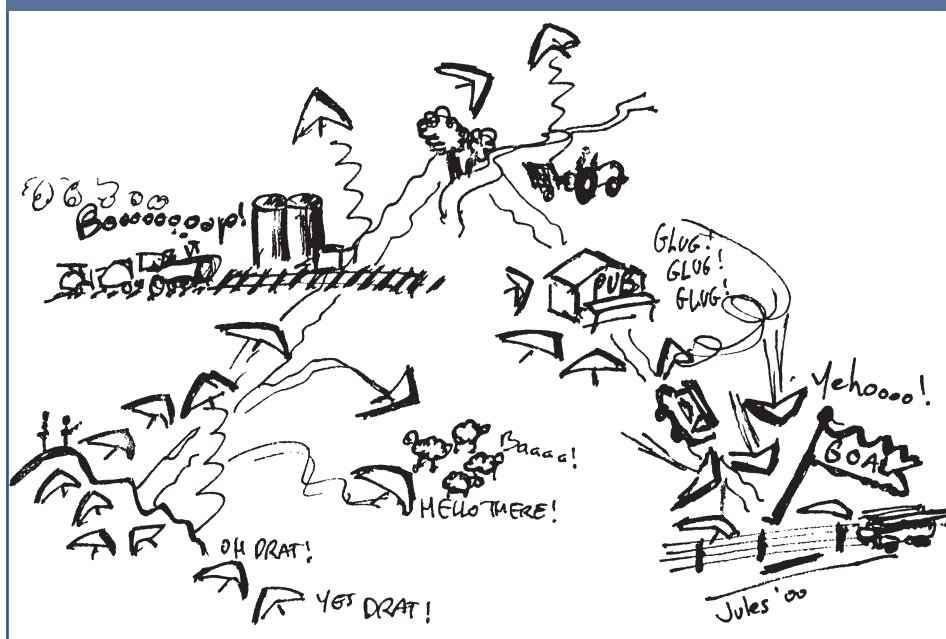
So we launch together as a glider climbs in front of launch and we go. Do we get to goal? Well, that bit I can't write about because I have never been there.

Now that we are flying distance, the obvious point I have overlooked is the glider. When I bought my Sonic I said that I would not upgrade until I had 100 hours or had flown 100km. Having achieved the latter I will still keep it, as it is a dream to fly and part of my success is the confidence in handling and landing that lets me concentrate on flying distance. I will upgrade because there are benefits to be gained by a high performance wing. But there is no hurry; I am still flying, still have much to learn and, most importantly, I am having lotsa fun. Now doing more towing and flying more sites. I will keep the Sonic though; gotta have a keeper. An advanced intermediate pilot on an intermediate wing will only initially be an intermediate pilot on an advanced wing.

You have run from a 30ft hill, dived off a 1,550ft cliff, had numerous landings in strong wind, nil wind and even tailwind. You have thermalled high and flown as far as you could see from the hill. Eagles have harassed you and the sun has helped you. You feel like you have come so far, and look back on so much, which seems like so little when you see where you have yet to go – it is time to get up and go, again and again. Everyday you curse the gods, as you have to work while the sky beckons.

100 hours in the air once seemed like so many; now it appears to be so little as I claw my way toward it. I think I will have made it somewhere special by the time I have 200. Let's hope they come with as much success and joy. Even the horizon is no obstacle.

CARTOON by Jules Makk





MARK PLENDERLEITH,
HGFA Board Secretary

Skysailor Survey

In April of this year the new management board of the HGFA identified communication within the organisation as one of the key areas that they would like to improve during their first year of office. Clearly, a key element in such communication is Skysailor which provides a regular and effective means of distributing information on operational, safety and training matters. In addition, Skysailor provides the membership with news, views and flying stories from an Australian perspective.

Obviously if the Board are to determine where Skysailor fits into the organisation's overall strategy for the next few years, we need a very clear picture of what the membership wants from their magazine. In April of this year the Board appointed an ad hoc sub-committee to survey the membership and make recommendations as to the future of the magazine. This sub-committee was made up of Board members Jeremy Torr, Mark Plenderleith (chairperson) and Skysailor sub-editor Richard Lockhart.

The first task of the Skysailor sub-committee was to prepare a questionnaire for inclusion in the May edition of the magazine. With the deadline rapidly looming we quickly decided that what we needed was something to determine the membership's overall opinion about Skysailor in its current form, assess which aspects they like/dislike and obtain some insight into changes members would like to see. With this information we believed that we would be in a much better position to make some informed decisions about the future of the magazine.

We then made a list of the key areas that we felt should be addressed in the survey and set about writing a series of scaled questions addressing different aspects of each key area. The nature of the questions were varied so as to avoid bias from a preponderance of disagree/agree options. Whilst this was going on, the debate raged as to how to encourage returns of the survey. We considered both the inclusion of reply-paid envelopes and offering a prize in a draw from the returned surveys. It was an interesting exercise trying to work out what would be the most effective method. In the end we decided to opt for the draw and offered a Garmin 12 GPS as the prize.

How much more effective the reply-paid option would have been we will never know, but 664 people responded to the questionnaire which constitutes just over 21% of the current membership. Clearly this is a large enough sample population to gain some insight into membership feelings on the issues. In line with the instructions, not all questions were answered by all people (although over 600 responses were obtained for most questions).

A detailed report of the entire survey is available from the HGFA office or by visiting the documents section of the HGFA website. What follows is a more concise summary of the major findings of the survey.

The first thing we needed to establish was just exactly who we were surveying. The HGFA is indeed made up of a heterogeneous bunch of people and we obviously needed to know whether we were getting responses from a representative sample of members.

The geographical distribution of respondents is summarised in Figure 1 and is compared to the distribution of the entire HGFA membership. This data clearly shows that all states and territories are represented in the survey with the proportion of returned questionnaires corresponding fairly well with membership in those areas. A similar analysis of types of wing flown by respondents compared to the distribution for the membership as a whole (Figure 2) revealed that all disciplines were represented in the survey and the proportions of respondents correlate reasonably well with patterns of membership. It was also pleasing to see that we had a nice mix of relatively new members as well as a significant number of people who have been with the organisation for more than 10 years. Finally, only 17% of those surveyed were regular contributors to the magazine, so our sample was quite clearly biased towards readers of the magazine.

Happy that we understood the demographics of those participating in the survey we then set about analysing their responses to each of the key objectives of the survey. In the following analysis, unless otherwise stated, the numbers refer to the proportions of all respondents to each question (regardless of where they come from, what wing they fly, etc.).

One of the key questions in the survey asked for the members perception of the overall quality of the magazine. We decided to place this question late in the piece so that the reader had the chance to reflect upon specific aspects of the magazine before being asked to make an overall judgement. Analysis of responses to this question revealed a high level of satisfaction with the current magazine with 61% of respondents considering the magazine good and just over 18% rating the magazine as excellent. The magazine in its current form is clearly to the satisfaction of the majority of members surveyed.

A number of questions addressed the issue of production of the magazine in order to establish what aspects the membership considered important. Clearly the current format is highly rated by the respondents with over 58% of those surveyed rating the presentation and layout as good and nearly 23% as excellent. This is high praise indeed and acknowledgement of the high standard of work performed by the magazine's designer Suzy Gneist. More specific questions about aspects of the presentation

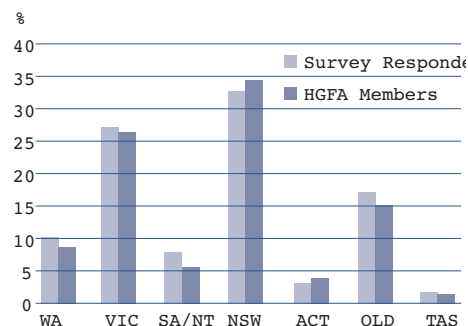


Figure 1: Distribution of respondents and HGFA members according to location

revealed that whilst colour (either on the cover or inside) was a desirable feature, opinions were fairly evenly spread upon the requirement for the magazine to be printed on quality (glossy) paper. Whilst one of those surveyed didn't like the gloss as it made the magazine difficult to read in the toilet, a number of people indicated their preference for what they considered to be more environmentally-friendly paper.

There were a number of questions designed to establish the memberships opinions concerning the content of the magazine. Whilst the vast majority (nearly 78%) of those surveyed felt that the quality of the articles pertaining to their discipline were good/excellent, almost 72% of people felt that there were not enough of these articles. Interestingly, whilst this general trend was observed in respondents from all three disciplines there were quite marked differences in the strength of feeling between disciplines.

Comparing the responses to the quality/quantity questions from pilots flying different wings it was obvious that weightshift microlight and paraglider pilots are less satisfied with the quality and quantity of material related to their disciplines than hang glider pilots. The reason for these differences may well be related to the larger proportion of hang glider pilots within the organisation from which to source articles, but it is one of the areas where analysing the responses from the different disciplines revealed differences.

In an attempt to establish exactly what content the membership would like to see in the magazine, we asked a number of questions concerning the types of articles that often find their way into sports aviation magazines. From these questions it was fairly obvious that the membership as a whole would like to see more technical articles, more equipment reviews, more articles from overseas magazines but were a little less enthusiastic about competition reports, with the majority of respondents feeling there are enough/too many of these already. Finally, the vast majority of those surveyed were satisfied with the quality of photographs, news and events calendar.

The current format of the magazine came about during the proposal to merge the HGFA and the Gliding Federation of Australia (GFA). Since the merger didn't go ahead it was obvious that we needed to examine the issue of the joint magazine. One approach we took was to ask, *'what parts of the magazine do you usually read?'* in order to establish how much of the magazine in its current form was of interest to HGFA

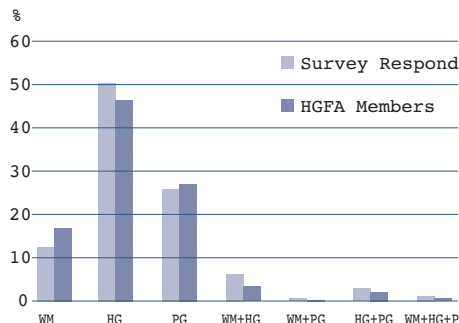


Figure 2: Proportion of pilot types in survey and HGFA

members. The distribution of responses is shown in Figure 3 with just over 52% of those surveyed reading everything whilst nearly 46% only read material pertaining the HGFA or their own specific discipline. So regardless of how they feel about the joint magazine just over 50% of the membership actually read it cover to cover. However, whilst just over 60% of those surveyed found the gliding articles in the combined magazine interesting, only 37% of respondents were of the opinion that the merger of AG and Skysailor has improved the magazine overall (with 29% unsure and 34% believing the magazine has not been improved with the merger).

Another key area which was addressed in the survey related to the frequency of publication. Here the results were fairly clear cut, with over 67% of those surveyed expressing their preference for a monthly magazine, but just over 80% willing to accept publication of the magazine less frequently if necessary.

Producing a monthly magazine like Skysailor is not a cheap business. As was outlined at the beginning of the survey the magazine in its current form costs the HGFA in excess of \$87,000 pa which accounts for roughly \$28 of the \$110 annual membership fee. Armed with this information the majority of members felt that in comparison to other magazines they subscribe to, Skysailor was good value for money. In addition, only 23% of those surveyed expressed an interest in not receiving the magazine and having their HGFA membership fee reduced if this option were available. So overall people seemed reasonably happy with what they were getting for their membership dollar as far as the magazine is concerned. However, a fairly strong message emerged from questions in the survey designed to determine how members felt about increasing costs to improve either the quality or frequency of the magazine, with just under 17% of those surveyed feeling that more money should be spent on the magazine. Interestingly, non-flying related advertisements as an alternative source of support for the magazine met with the approval of just under 50% of those surveyed but was not popular with another 40%.

Given the escalating cost of producing a high quality printed version of the magazine it would have been remiss of us not to consider delivery of the magazine in other formats. Interestingly, less than a third of those surveyed were interested in receiving the magazine via the internet (although a significant number indicated that they would like to have this option in addition to

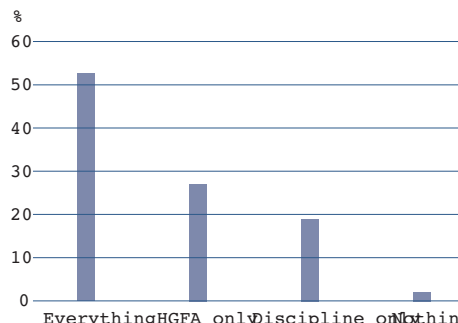


Figure 3: Parts of magazine read by respondents

the printed version). Surprisingly there seemed to be a higher level of acceptance for a lower-quality magazine produced in-house by the HGFA with just over 42% in favour of this option (but 34% against). In addition, the majority of members expressed concern about the loss of editorial control that could result from outsourcing the entire magazine to a large publishing company.

One of the few concerns of the membership which has been raised publicly in the letters to the editor section of the magazine has been what some see as the relatively long time between the deadline for submission of material for the magazine and it appearing in print. As the principal conduit for communication with the membership this point clearly required further investigation in the survey. We asked two specific questions to address this issue. The first asked whether the members felt that some of the news items in the magazine are published too late to be of any interest. Nearly 41% of respondents agreed whilst just under 34% disagreed with this statement. Clearly the lead-time is an issue with some members. The second question asked, 'whether as a contributor to the magazine I think that the delay between the deadline for submission and publication of the magazine is too long.' In this case only the surveys from respondents who were regular contributors to the magazine were analysed and interestingly around 43% of them agreed with the statement whilst 23% disagreed. Given that regular contributors are the life-blood of the magazine their concerns clearly need to be considered.

On behalf of the other members of the Skysailor sub-committee I would like to thank all the members who took the time to complete the survey. Your contributions provide us with a detailed view of the opinions of the membership on this very important issue and no doubt will contribute significantly to the shape of the magazine in the near future. The sub-committee will be making a series of recommendations to the full Board at their next meeting, and of course you will be advised of the outcomes of our deliberations as soon as possible after that date.

The draw for the Garmin 12 GPS was made at the Canungra Hang Gliding Club meeting on the 22 July in the presence of three Board members and a large contingent of pilots from the South East Queensland region. The winner of the draw was Paul Ryan from Victoria who will no doubt be enjoying the benefits of his new toy by the time you read this.

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Long Ears

EMILIS PRELGAUSKAS



In Europe, Open Class sailplanes have long attracted this colloquial appellation. In more recent times, sailplane modification technology has moved onward to even more closely align with that nickname. This short piece is my public thank you to the wide-flung people who have helped me with a set of winglets.

In the same realm as fluffy dice for the wind-screen rear view mirror of a car, winglets on a sailplane may not make it go better, but they make a glider look prettier (now there's an opening statement to start a whole new pilot debate). They help the pilot believe the glider goes better. And they certainly throw the handicappers into a tizz.

Current generation contest ships now sometimes come that way complete from the manufacturer. Haidyn Dunn, Alex Kreti, Phil Hearn and others have brought winglets to the fore in older sailplane types used in contests.

Tracey Tabart, Joe Luciano and others make such things for the interested.

In my case I was able to draw on wide-flung skills via email with regard to my '32. Consistent to a metal ship, the tip of what otherwise is a fairly carefully crafted wing is ended with a vertical narrow plate skid, which underpins urban legends about the ship's ostensible tractor factory origins.

The ship's ex-factory 'interesting' handling is traceable back to tip drag spilling along the wing's trailing edge from the tip plate and over the outer part of the aileron. On a 20 metre plus span, with aileron inter-connected to flap on a wing with less than half a metre chord and thin control surface section, the result is wing drop whenever positive flap is applied. That means on take-off and whilst thermalling, and leads to the understandable urgency by the pilot to get into negative flap on landing.

Ron Baker was able to offer suggestions about winglets from his work on his Club Libelle, including papers on how winglets work. Johnson tests from a number of issues through the 1990's 'Soaring' magazine helped

fill in who has tried what, and supports Ron's proposals on associated fixtures like turbulator tapes, and their varied thickness in relation to wing and winglet.

Peter Holmes offered advice on how to build winglets from scratch, and was persuaded to build a set for the '32 at his own time-frame. This opened a succession of issues for me to attend to.

To supply the existing tip wing form against which the winglets could be sized, and through this I learned that the '32 has different wing sections port and starboard. Not intentionally I should think, more likely the outcome of folding a metal airframe.

But it did mean that this winglet set became in effect a deliberately odd pair (much like the several pairs of socks that I have), which I'm sure didn't help their construction.

Next to consider, the mount system between winglet and wingtip to suit carbon fibre blending to alloy. In composite structures, a dummy spar built-into the winglet fits into the wingtip and is held by a spring-loaded clip and/or seal tape.

In alloy, that approach isn't possible. The wingtip spar is I shape and surrounded by riveted rib and skin structure.

The original ship helped here with a substantial existing box section structure formed by wing skin, main spar, aileron spar and ribs. This box section formed at the tip one bay outboard from the control surfaces, complete with end ribs with fixed nuts for original substantial bolts for the original tip-skid. Through years of wingtip descending to ground the fixing alignment had, of course, changed, and had to be straightened.

Long Ears Photo: Simon Hackett

In the end, holes had to be cut in the outboard end of the winglet to lead in support washers, bolts and the allen key handle to guide these remotely inside the structure. (Complete with intense concentration and tongue held at just the right angle while swilling loose bits around into place before trapping these with the bolts and then offering the whole up to the tip.)

The matter of winglet airfoil alignment to the airstream was eased by a mass of set-up strings taped in all directions to the floor, wall and roof inside the hangar to relate to the ship's flying attitude rather than its wing sweep forward and up. A week of trials led to confidence that the set-out was correct, the first tip took a two-person day to install, the other went on in hours. Here I was helped with various club members making themselves available with a hand, advice, and independent check at each stage.

The outcomes include that the sailplane is now somewhat more docile in operation, particularly in thermals and on landing. Now there is less panic about putting on negative flap to maintain control authority during ground roll. But the '32 still exhibits the occasional wing-drop during initial climb out on winch, which counteracts any nonchalance the pilot might start to develop.

And there is a will to believe that the ship goes better (by setting the cruise director percentage up a notch). But since I have never trusted the numbers to begin with, and give myself another 500ft safety height above anything the electronics say, I have yet to reassure myself of this over distances greater than 10km final glide.

Most importantly, the paint scheme extends the ship's original faded yellow to the winglets, but with bright blue turbulator tapes on the winglet centre chord line each side. That must make it go better.

Now if only I could find a fluoro orange set of fluffy dice...



Using Automotive Engines in Glider Tugs

DAVE SHARPLES

There are thousands of auto engines powering aircraft in the world today. The desire to switch to such engines is largely driven by economics rather than a desire for performance. Very few suffer premature failures, and if this does happen the cause is usually attributed to incorrect installation, badly designed and incorrect fuel and spark management systems, and modification of critical components without sufficient knowledge or training in these areas.

The advancement in computer-designed components in the auto engines in the last 25 years is far superior to the 50-year-old design of the aircraft piston engines of today. Modern auto engineers who design these power plants utilise the latest in computerised technology to optimise everything from port flow, port resonance tuning, combustion chamber characteristics, vibrational node analysis and mechanical stresses. Machining and metallurgy technology is far superior to the old days when air-cooled aircraft engines were developed.

We still hear comments that auto engines were never designed to withstand continuous high output situations such as demanded in aircraft. Nothing could be further from the truth. Auto engines are routinely tested during development at full power and maximum RPMs for 400 continuous hours on dynometers. These engines must be able to withstand any stresses a customer might inflict on them in unusual situations. Many millions of dollars are spent on testing before they appear on the market as a batch of defected engines would destroy the market potential for that model or make of car for years to come. Fierce competition in the auto industry dictates this situation. Yet we often hear of certified aircraft engines having major problems resulting in grounding of that aircraft for months at a time. We recently read of several crankshaft failures on new aircraft piston engines which caused the FAA to issue an AD on the matter. As many as 3,200 engines could be effected, all manufactured in 1998. All these reported crank failures occurred with less than 200 hours on them. "Aircraft certified" does not mean top quality, it means there is a long paper trail somewhere which can track down the source of defective parts, but "certified" is no guarantee of quality, only a guarantee of astronomical costs.

A new certified aircraft engine of the size and output we require for glider towing costs in excess of \$50,000. A well-proven auto engine with thousands of hours of gruelling track race testing behind it, and capable of putting out more continuous power than the comparable certified aircraft engine, would be about one-third of that cost, including dual ignition or any other modifications required for aircraft use. In addition, fuel costs are reduced by 40% and maintenance costs by an estimated 70%.

One of the most popular auto engines used in aircraft today is the EJ20 Subaru engine. In 1989 three Subaru cars fitted with these engines were driven at full throttle and maximum RPM for 17 days straight, averaging 230km/h for the entire period on the Arizona testing track. Chevrolet, Ford and Toyota have achieved similar test results. Can you imagine a modern piston aircraft engine doing 400 hours at take off power, and all at ground level where maximum power can be continuously achieved. Of the hundreds of Subarus now flying there has not been a single report of structural failure in any of these engines that has been properly installed.

Just consider the stock blocked NASCAR V8 engines of today. They produce amazing performance and reliability, running at 8,000rpm producing 600hp. Take this engine de-rated to, say, 250hp and running at 4,000rpm and you must have very good reliability at a fraction of the cost of a comparable certified engine.

The money spent by the auto engine manufacturers of today in design and development is far greater than that spent by aircraft piston engine manufacturers. Quality control in the automotive industry is of the highest level. As an example, I know of a case recently where a batch of cars were recalled to check on the tightness of some screws in the

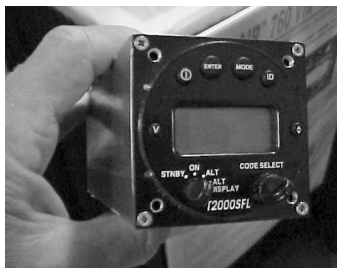
clove box. The reason was because a computer had registered a slight drop of pressure for a 20-minute period in a compressor which supplied pressure to that particular air gun wrench which positioned the screws. All cars that went through the assembly line during that 20-minute period were recalled. No effected screws were found. I recently suggested to an engine manufacturer in Australia that a certain small modification to their engine would be desirable. The answer was yes, that could easily be done but the whole engine would have to go through their rigorous testing program again and that would cost them in excess of five million dollars – an example of the severity of their testing requirements.

Another example is the waterski boats of today. Hundreds of them are powered by the 350ci V8 Chev. I have been following one near where I live for years, towing high performance racing skiers. It operates at full throttle, revving at 6,500rpm for up to 10 minutes, shuts off, hooks up another skier and off again. An identical situation to towing gliders.

Cheap parts do not reflect substandard quality, the numbers manufactured have a major bearing on the cost. The major part of an items cost is in the design and testing. If many thousands are produced then that cost is spread over a larger number. Take, for instance, the engine in autotug. In its full production Ford was producing 2,100 per day. One auto engine manufacturer in the States produced 16 million engines over a 25-year period, but during that same period Lycoming reported 750,000 engines produced. It's easy to see why these aircraft engines are so expensive compared to high production auto engines. In cases such as this, price has no relation to quality.

Another advantage in using engines where parts are available at a reasonable cost is that there is no need to risk a suspect part which may not have reached its time in service or expiry date, and is not replaced because of economical restraints. If in doubt just replace – it is relatively cheap insurance. With the advancement of CNC machining in the auto industry in the last decade comes the availability of super-strong forged and billet components for most popular auto engines. There is no excuse for using a marginal part any more and such items and engines are reasonably priced.





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Casey at the Nats

The outlook wasn't brilliant for the SOSA team that day,
T'was the last task of the contest, just one more chance to play.
Yes, it was the National contest, "The Nats" as it is known,
Where daring sailplane pilots soar far away from home.
But dawn saw humid, clag-filled air – we cried like soggy cats,
"The game is lost, there is no chance, for SOSA at these Nats."

But then the cold front rumbled through, to wonderment of all,
The sky had cleared, the wind was right, the cu was rising tall.
And when the scud had lifted, men saw what now occurred,
There was Jimmy rigging, and Flynn said, "Have you heard?
That, table full of tephigrams and weather charts galore,
Our proud and mighty Casey plans six hundred 'K' and more."

When Casey had announced this goal, there was a muffled roar,
The crowd went wild, as they realised, it had ne'er been done before.
Defiance gleamed in Casey's eye, a sneer curled Casey's lip,
As one by one his flying foes said, "Man, that's quite a trip."
Four hundred eyes were on him as his contest launch got started,
Two hundred tongues applauded as the radio said he'd departed.

The crews all knew, to make it back, and win his fame eternal,
That he would simply have to find the country's biggest thermals.
For Reichmann says don't waste your time in thermals that are light,
You really must avoid them, if you want to do it right.
Stop only for the 'Big Ones', to get on final glide,
But too much speed, too little lift, will quickly end your ride.

Yes, flying fast, avoiding sink, is how you win the game...
Wait! Cooney was reported down, then Barrows was the same.

"BALD EAGLE"

with sincere apologies to the memory of Ernest Thayer.

The home club of "Bald Eagle" is SOSA Gliding Club, a large club in Ontario, Canada, which is very active in competition and cross-country soaring.

The SOSA team, the crowd now saw, was down to one alone,
Could valiant Casey save the day, and would he make it home?
With a smile of expectation, great Casey's visage shone,
His nose went down, his speed went up, like Striedieck he pressed on.

Cloudstreets came, and turnpoints passed, ignoring his MacCready,
The lust for speed, and fame at last, had made him much too greedy.
Casey had been running fast, his working band now thinning,
But flying like George Moffat, his only thought was "Winning".
The question to be answered now that 'rose in Casey's thoughts,
Is whether he should stop and use that measly two-plus knots.

"No, by truth, that ain't my style", our scornful Casey said,
While through the gently rising air, his sinking glider sped.
He spied a circling gaggle now, but on and on he flew,
The crowd of faithful held their breath, the late day sky was blue.
The sneer is gone from Casey's lips, his teeth are clenched in hate.
How did he get below glide slope, enroute to finish gate?

Wait – was that a beep he heard from the sullen vario.
A little surge, a final chance, "Which way, which way to go."
Quick, which way to centre it, should bank be right or left?
Casey, with a mighty oath, gave the stick a mighty heft.
If choice was true and pull-up deft, he'd soon have height to burn.
And so the air was shattered by the force of Casey's turn...

Oh! somewhere in this favoured land, the sun is shining bright,
The band is playing somewhere, and somewhere hearts are light.
And somewhere teams are laughing, and somewhere crews do shout;
But there is no joy at SOSA – mighty Casey landed out.



Site fees

EMILIS PRELGAUSKAS

In parallel evolution, paragliding and hang gliding are now following sailplanes into the complex area of FBO's. That is 'fixed base operation' for those not up to date with TLAs [three letter acronyms]]!

Money begins to be invested in things not central to the flying craft, like take off/landing prepared surfaces, launch equipment, and then pilot-focussed things like eskys which grow eventually into club-rooms, hangars, and four-star motels and restaurants with a view over the flying site and scenic terrain.

Such things require funds to build, they need maintenance, and eventually staff to operate.

But long before it is possible to get to the surplus income situation of the full staff complement and fancy buildings, every site goes through the intermediary stages including the beach blanket and esky.

And while it is practical to fly from borrowed sites while everything is portable including the ground facilities, this becomes less tenable as effort is invested in fixed assets (be they a gravel runway or a timber launch platform).

Just as the biggest resident disputes in the suburbs are about boundary fences and overhanging trees, the biggest aviation disputes are between landowner, resident aviator and visiting aviator about the impact of the flying on the land.

I remember long ago (put on geriatric wig and beard) a visiting pilot at an embryo gliding site we were building on a tenuous lease, suggested in the hearing of the landowner how the land, crop, stock and machinery would have to be altered to suit a 'proper' gliding operation. We came perilously close to losing the whole site from that chance comment; and had to show the landowner the strung up remains of the outside expert before over the months the resentment settled down (ie, that person was never allowed on that site again).

Aviation sites are rare things. They are often very specific in their siting needs. They consume

land area and create access wear and tear that the landowner realistically doesn't need, can make greater profit from in other ways, and not everyone likes aviators overhead.

Apart from the ever imminent risk of their falling, there is concern about them snooping from their perch. And everyone knows about the legendary social misbehaviour of aviators when they aren't in the sky.

In essence, we are a class of undesirables on the scale aligned with car salesmen and politicians.

The mobile phone at least has reduced the frequency of such hobos trudging up to the front door.

So, costs accrue which are both in dollars and in social terms.

Any flying site used routinely involves the aviators in bridge building with landowner and neighbours including land lease, insurances, repair of wear and tear; even before any aviation related improvements can be contemplated.

Power pilots routinely query why they should pay landing fees. Airport operators put it thus:

- *you expect us to keep the airfield open to operations for whenever you might come by*
- *you expect us to have fuel there and then*
- *you expect to leave your aircraft here and for us to keep an eye on it while you are gone*
- *if outsiders are around, you expect us to secure your aircraft*
- *if you have a problem, you expect at least a phone and possibly on site spares and repairs*
- *all that costs money whether you use it or not.*

Sport aviators tend to be more forgiving. Pilots can access some sites because the resident pilots enjoy the company. That doesn't stop the costs from accruing. Visiting pilots' expectations of an FBO rise over time.

There is even the proposition that outside income can be generated by the peripheral facilities for the benefit of the pilots. From this the anecdotes of the Grogalong Gliding Club have developed.

Where the resident club also controls the launch facilities, the site fees may well be embedded in the launch fee.

Where accommodation is integral to the pilot use of the site, the site fee may be included in the fees paid by all, including non-pilots.

Where others provide the launch, it is more likely that a stand alone site fee to cover site improvements, maintenance, lease and insurances will apply.

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Farewell to Jarso

JEREMY TORR

I remember first meeting Ian Jarman at an instructors conference, way back in the dim days of 1995. The thing that struck me most about Ian was his enthusiasm for the sport. He didn't just talk about the subject, he gesticulated about it. He slapped overheads on the projector with furious energy, and he challenged his audience to be as keen as he was. Ian was a full-on flying missionary, and he certainly converted a hell of a lot of people to the religion of flying.

Before Ian came along and started trying to get some kind of training and organisation into flying, most of what went on was pretty much do or die, says Rob de Groot, Ian's partner in his original Sydney-based venture, Cloudbase Hang Gliding School. Rob and Ian had spent a couple of years in San Francisco and Colorado during the early 80's, working as instructors at the Chandelle flying school. *"Ian was special; teaching and flying safely was very important to him. Previously there had been nothing, just people flying and hurting themselves on sand dunes,"* says Rob.

After returning to Australia, Ian established a very good reputation for himself in the following years, flying in the world-beating Australian hang gliding team and coaching other pilots as well as teaching. As well as all this, he was still happy to spend as much time as he could scratching the sand dunes when thermal flying wasn't possible – now and again demolishing the occasional ornamental cactus plant in somebody's front garden.

As the sport gained in popularity, Ian found himself increasingly tied up in helping organise the various clubs and local organisations that were proliferating around the country. Meantime, because of the increased demand for flying space, Cloudbase had moved south of Sydney where Ian continued to preach his particular safe flying gospel in an era when lunge and crash was probably the most common form of instruction. By 1989, he had decided to throw all his efforts into the co-ordination of the sport on a national basis. As a result, the HGFA as we know it today was formed – but not without a huge amount of effort on his part.

"Ian always had a very determined approach to the task he was doing – he was always full-on to get things done that had to be done," says Margaret Crane, HGFA's admin manager at Tumut, *"Although he used to drive us mad pacing endlessly up and down the office talking on the phone, or groaning all Monday long after he'd had a hard day playing soccer on Sunday,"* she adds. Despite these uniquely Jarmanesque traits, Ian's determination and perseverance through both popular and very trying



Ian Jarman at an HGFA training seminar

times enabled him to implement many of the concessions we take for granted today. Such as recognition for the HGFA as a genuine and responsible sport aviation body, such as relatively unrestricted height limits, such as some very useful grants for a range of official bodies.

Ian has dedicated himself to the sport of flying for the last 20 years, and has done without a break, any other income or occupation. Most others that were around in those early, heady days have dropped in and out of the sport. Ian hasn't, adds Rob de Groot. Which is probably why, in July this year, Jarso (as many of us know him) decided it might be time for a change. Having dedicated what one of his close associates describes as his five stone, wringing wet body and soul to flying for two decades, he decided to make the move away from the HGFA and Tumut, back into the hurly-burly of city life and closer to the everyday lives of his family.

There is no way anybody that met Ian could describe him as a half-hearted operator. If he thought an idea had merit, he would work tirelessly to see it come to fruition. And as an admittedly disparate bunch of ego-driven, seat of the pants, independent and highly opinionated people, the HGFA has been unbelievably lucky to have somebody like him working on its behalf. Admitted, there have been times when he has infuriated some people with his total commitment to a particular idea – but at least he had the vision and drive to make things happen. As Rob de Groot puts it, Ian's unique. He brought out that untold potential hang gliding had, he worked on it, formulated methods and perfected the organisation. Previously there was nothing. But he realised what we could do.

Which just about sums up the Jarman experience. He realised things, he made a huge amount of them happen, and we all owe him a great debt. Well miss you, Jarso. Good luck wherever you go, and keep up the enthusiasm. Just don't overdo the soccer on Sundays...



From Latrobe Valley to Bright

MICK NORTH

900 km return cross-country is a daunting task for any ultralight, let alone a two place trike with a two stroke engine and no ground back-up crew. This was the ultimate challenge that faced Marc Verheyden and myself as we set off at first light early in January.

As we climbed away from runway 21 at Latrobe Valley at around 4:30am the air was very smooth and cold. All the lights from the dredgers in the open cut were still burning quite brightly as the morning twilight was just starting to brighten the sky. We were bound for the Porepunkah Airstrip around 10km from Bright, via Pakenham and Benalla. We knew a cold front was approaching from the west but thought we could outrun it as we turned and tracked north. We had plenty of weight on board with the two of us, 15 extra litres of fuel, two carry bags, gear, video equipment and a flask of brandy (for medicinal purposes only, of course!).

Crossing the mountains north of Pakenham we knew the southerly was approaching as we were flying at 90 knots on the GPS. Suddenly the unthinkable happened! We were lost. We were flying just below a 3,000ft cloudbase and the tops of all the mountains were in cloud, and guess what? They all looked the same. We decided to track north north-west, and if worst came to worst we would eventually cross the Hume Highway. Pretty soon the countryside below became familiar as Marc spotted some hang gliding sites near Yea. From there we could see the "Paps", Lake Eildon and the Strathbogie Ranges looming.

As we slowly tracked northward Marc became disoriented and the visibility, due to bushfire smoke, deteriorated. By now we were down to around 1,500ft and flying due north by the compass. I assured Marc that I knew where we were, as I had once flown this exact route from Mansfield to Benalla back in '93 when I was doing training with Benalla CFI, Tony Dennis, riding pillion. We had Mt Samaria on our right (at around 3,000ft high) and Mt Strathbogie behind us on our left (at around 3,500ft). Shortly we spotted Benalla Airfield and landed just as the rain started to fall. After a brisk walk to the service station and back carrying our measly 10 litre black fuel container we were airborne again.

Marc flew the last leg to Porepunkah (around 60 miles or one hour). The country leading up to the start of the Ovens Valley was magnificent. We had Brown Brothers Milawa Winery on our left and the ruggedness of Mt Buffalo looming ominously to our right. Soon the countryside became very lush as we flew down the Ovens Valley along the Ovens River above the tobacco and hop fields and onwards towards Bright.

Soon it was touchdown in brilliant morning sunshine at Porepunkah. We had made it! We had landed at around 11:30am, just as the thermals were starting to kick in. All the way from Latrobe Valley to Porepunkah in a morning. Boy, these trikes really are a great cross-country machine. One thing I forgot to mention is that cross-country triking without a back-up crew really keeps you fit with all the walking from landing strips into town. Next time we'll be carrying fold up bikes! After walking from the strip to the Porepunkah Post Office, a quick phone call had Geoff White from the Bright Hikers out to pick us up and take us to our accommodation quarters – thanks Geoff. We spent several days enjoying all the great scenery of the country around Bright, Mt Beauty and the Kiewa Valley.

The trip home was quite uneventful to start with. The first leg was up the Ovens Valley, down the King Valley and a rest at Mansfield. From there with a compass reading of 210 degrees we flew beside the picturesque Cathedral Ranges to a landing at Pakenham. Another 6km walk to a fuel

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depot with out 10 litre drum and McDonalds for lunch. With enough fuel for the last 60 miles to the Latrobe Valley and our tummies full we prepared for take off for what was to arguably be the roughest flight of our lives. We sat waiting on the strip for around 15 minutes for the 90 degrees, 20 knot, gusting crosswind to favour either east or west. It is times like this when you wish you had a cross-strip. Each time we would taxi to the other end of the runway the wind would change direction. Lucky the trike had training bars fitted so we could both hold on to the lifting wing. Eventually we were able to take off. What a harrowing experience. We were airborne, middle of January, middle of the afternoon, 60 miles to fly, gusting 20 knot crosswind, flat GPS and radio batteries and an outside temperature of 38 degrees. This was the type of day when even flying a 737-300 would be uncomfortable, let alone a 350kg microlight. The lift and sink of the thermals was so strong they threatened to snatch the bar from my white knuckled hands on many occasions. I thought of what my instructor had told me; calm down, slow down and let the machine fly through it. I did, and the Quantum did. What a fantastic aircraft!

We landed at Latrobe Valley about an hour later. We actually landed on the grass beside the 1,600 metre (one mile) long tarmac runway – so glad to be back on terra firma. We taxied to the main hangar to pack up the trike, and guess what? An identical Quantum 462 trike, piloted by Laurie Armstrong, had just flown in from Warragul and was sheltering in the lee of the club hangar. He asked how our flight was, and we replied, "We'll just go visit the loos and we'll be back in 10 minutes."

Author's note: Marc Verheyden was my co-pilot on the trip. Marc is in the process of purchasing a side by side trike with a view to possible flying instruction in the future. Marc worked with the Eagle School of Hang Gliding, run by Steve Ruffels, in Bright for many years. I am a member of the Southern Microlight Club and also into my second year as President of GULF (Gippsland Ultra-Light and Leisure Flyers). GULF has over 150 members who own and fly ultralights, including about 10 trikes, 20 gyrocopters, an aerobute, a homemade sea plane and many others. Club headquarters is at Sleepy Parkside Aerodrome at Yarram, and welcomes any trikers to fly in at any time.

Accidental Hero

JORJ LOWREY

It was twelve noon on Day One of the Birchip Comp, 2000. I struggled to get my stiff, new pack up gear into the harness. Witnessing this, Tanya Toogood suggested, *"Is it really worth bothering? It's not like you're going anywhere."*

Immediately defensive I protested, *"Hey! I may be a girl, I may have broken both my arms, but I'll have you know I flew 86km a couple of weeks ago in this Fun!"* "No," she said, upset shed offended me, *"I meant because the day looks so ordinary."* "Oh."

Yes, the day had looked pretty ordinary in the morning; overcast and drizzly, but as we set up our gliders it became more promising with cu streets starting to form. At 12:30pm goal was declared. I probably should have paid more attention, but I'm just a novice at this competition caper; my goal was to get out of the paddock! Some place called Pira. Not shown on the map. West of Swan Hill, north of Ultima. Got the general vicinity. Somewhere near some silos. (Right!)

As it happened, I was one of the first out of the tow paddock. Now, you may think this wasn't the smartest of moves considering I didn't know where I was going. But I had a plan: plod along, let lots of other gliders pass me by and let them show the way. Good idea, huh? Well, maybe not. You see, I lost sight of the other two gliders that made it with me past the first thermal when I sank down to 600ft. I had the harness unzipped and was planning my landing approach. Amazingly, I stumbled into some lift and scratched my way back up to 3,000ft. Now I couldn't see another glider anywhere. So much for my plan. Oh well, I thought. I'll just drift along and enjoy the scenery. From my bird's eye view, the gently undulating fields resembled a beautiful, intricate patchwork quilt of different hues, shades and textures. Thirty minutes later, I remembered I was in a competition. (*Comp-e-ti-tion. n. Contest. Situation of rivalry where object is to*



Jorj Lowrey

beat opponents. See winning.) My mood changed. Let's face it, if you've seen one great big, brown, dusty, treeless, barren paddock, you've seen them all. Time to concentrate on flying.

I wondered if the piddly lift I had was the best on offer. The clouds were streeting beautifully. There must be better lift. I started to take a few risks searching for it. At this stage, I convinced myself I couldn't be too upset if I landed as I'd just clocked over 100 hours total flying time! Needless to say the private party in my head ended abruptly when I found myself once again sinking out and desperately praying to stay up. Please. Any kind of lift. I don't care if it's piddly. I promise I won't leave it again.

I managed to find something like the 50-100ft per minute up I had before so, I stayed with it and just kept blundering along. One hour: I could hear the rest of my team on the radio taking tow after tow back in the paddock. One and a half hours: radio went flat. Two hours: still couldn't see any other gliders – I figured I must be well off the track. Thoughts of a long walk and a cold night out in the boonies distracted me. A couple more low saves – the thermal gods must have been watching over me.

I kept bumbling along, using the towns to navigate by as best I could. I was starting to realise that knowing the general vicinity of goal isn't really good enough when you a) have never flown in the area before, b) rarely flown to a map before, c) don't have a GPS or anyone handy to confirm your location (let alone the location of the bloody goal!).

Figuring I was now too far west, I had to leave my lift. I made a 90 degree turn east. Then the inevitable happened; my luck was up and I was going down. Big time. Just then, I caught sight of a single glider in the middle of a paddock to the north. Thank God, someone else who's lost. I'll try and land with him – at least I'll get a ride back to Birchip. I changed tack again and turned north. Using the trusty old

is-the-horizon-sinking-or-rising? method of judging my glide, I thought I might make it.

Random thoughts drifted lazily through my mind; the middle of a paddock is a bit of an odd place to leave your glider, hmm, there are a couple of people down there with him and there's a car next to the glider, geez, good retrieve crew those two big silos I'd noticed a while back are a lot closer now wait a minute unless could it be? I desperately checked my sink rate, don't rush it, best glide, best glide, oh my god, there they are two tarps denoting, hallelujah, what a bloody fluke a goal line! I started jumping up and down (difficult, but I discovered entirely possible in a hang glider), laughing with joy, watching my sink rate, praying, pointing my toes, holding my breath, how's my sink rate? Will I make it? I think I can, I think I can. Yahooey! I'm over the goal line with about 400 feet to spare.

Fantastic! I had somehow, accidentally, stumbled into goal. I was ecstatic. Luckily the pilot who was already there, Tim Osborn, knows me quite well because he got one hell of a hug. I jumped around in a Cheshire cat stupor repeating, *"I can't believe it. I can't believe it."* Ordinarily I hate beer, but I happily consumed one from the goal beer esky. After all, you can't make goal and not have a beer.

Then they started coming Mark Pike, Rohan Holtkamp, Brent Telford, one after the other I kept looking up expecting to see my fellow team members: Husband Tony Lowrey, Beavo, (both regulars at goal), Curtis Greenwood or Paul Rundell but unbelievably, they, along with half the pilots that day, didn't get out of the paddock. I remember someone taking me aside and quietly, carefully breaking the bad news to me I'm sorry Jorj, Tony – he didn't make it. Bit like surviving a war, this goal business. Our poor driver Andrea Hall did 21 tows that day! (Thanks again Andrea!)

Others to goal were Ross Wilkinson, Ray Cassar, Warwick Duncan, Trevor Sangster, Wes Hill, Lee Patterson, Phillip Campbell and Mike Escourt. There was cheer, excitement and congratulations all round. Wow, Jorj – second into goal on a Fun. You're such a gun, they said. But hang on, how come you're in a singlet when everyone else is freezing cold? Turns out cloud-base was 6,500ft and I only got to 3,500ft – once! Okay. Maybe not such a gun. Out of the 13 pilots who made it into goal, I actually came last time-wise. It took the day's winner an hour less than me. Yep. Definitely not gun status. My luck was still running strong however – I won a prize for taking 13th place for the day. And hey, I'm happy. I'll live off the excitement of that flight for a while until next year's comp!

Thanks to Warwick Duncan for organising such a fantastic comp and making flights like this for pilots like me possible!



PPT Headsets

STEVE DONEHUE

Probably like most of you, I've had various problems with my radio. Sometimes with the battery, but mostly with the headset.

I started with the Icom handheld speaker mike. This was difficult to use if you were scratching or getting tossed about. I then bought a you beaut PTT/Vox unit. It worked for a while, but then started to fall apart. Also I've heard curses on too many occasions at people who forgot to unlock their Vox unit after a tow. I then bought a Tandy headset and put it together with the PTT switch and the Icom plug from the handheld speaker mike. The PTT is held by your fingers when towed. This lasted a couple of years, but periodically needed pulling apart and re-soldering. It got to the stage where I was running out of wire to solder.

So I thought I'd start afresh. I realised that there were a few criteria:

- *Minimal wiring. I already had one incident of having to land belly first on a beach (into the wind) because radio wires, VG cord and pod strings got tangled with the pod zip.*
- *Robust, ie hard to stuff up.*
- *Modular, ie easy to fix/replace bits.*
- *Cheap.*

I hunted around in Dick Smiths and found:

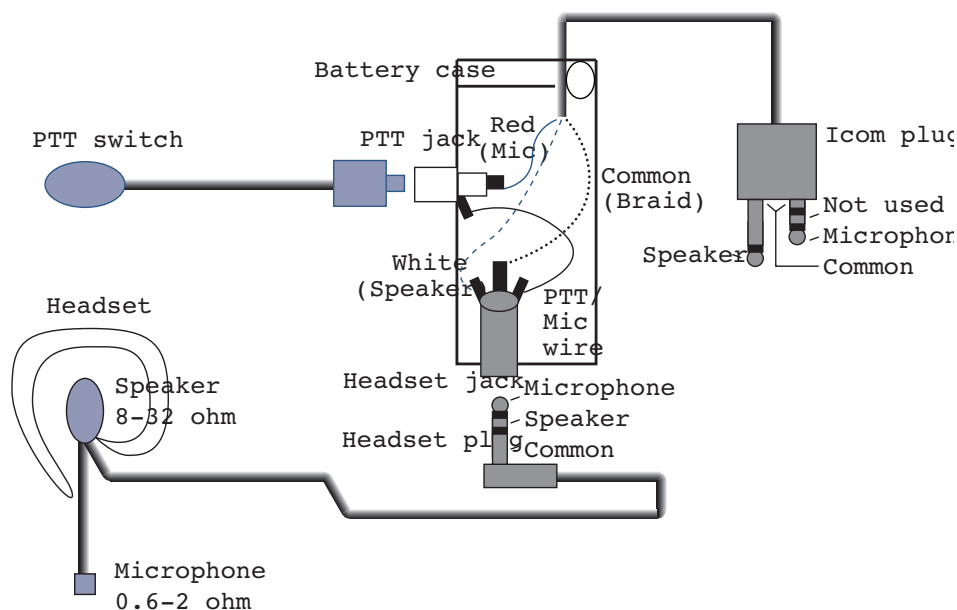
1. *Telephone (call centre) mono headset (~\$30, I later found a \$15 hands free kit at Jaycar).*
2. *Plastic double AA battery case (~\$2) to use to mount jacks and Icom plug lead.*
3. *Jack for PTT (~\$1).*
4. *Jack for headset (~\$2).*

And I already had:

5. *Push To Talk (PTT) switch on a lead with an RCA plug end.*
6. *Icom plug on a lead.*

So I put them together:

1. *Battery case – break out the battery separator, remove the wires and battery pick up plates, drill two 1/4 holes (for the jacks).*
2. *Strip back the Icom plug lead ends, cut off the green (unused) wire.*
3. *Thread the Icom plug lead through the battery case where the battery wires used to go.*
4. *Fit the RCA jack.*
5. *Fit the headset jack.*
6. *Solder wires.*



I then stuck velcro on the battery case to mount it on the radio pocket. The PTT switch gets hooked to my wrist so I can retrieve it easily. First trial went okay.

If you know where to get PTT switches and Icom double plugs (I know you can use two singles) perhaps you could let us know through *Letters to the Editor*.



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Who checks the Checkers?

JOHN WELSH WITH KEVIN OLERHEAD

The answer to that question was given in Western Australia when the first of the biennial National Gliding Schools (NGS) was run on the weekend of 3 and 4 June at the home of the Gliding Club of Western Australia, Cunderdin airfield. Attendees were Kevin Olerhead, GFA Chief Technical Officer (Operations); Peter Fauser, Regional Technical Officer (OPS) Western Australia; and the following revalidating Level 3 Instructors: Kevin Saunders (CFI GCWA), Henry Egan (CFI Narrogin), Dick Sasse (CFI Morawa), Bryn Howe, Doug McLennan and John Welsh (Beverley).

The format of the NGS was conference sessions in the mornings, followed by flying activities in the afternoon associated with what had been discussed in the morning.

The CTO opened the first day with the welcome news that Mike Valentine is to rejoin the GFA secretariat in the role of Chief Technical Officer (Airworthiness).

CASA's NPRM on Parts 103/149 on Sport Aviation Administration have been withdrawn "pending further consideration".

The CTO then went on to give an analysis on the accident/incident trends which led to the following agenda items: Lookout/mid-air collisions; stall/spin awareness; outlandings; club safety cultures.

Lookout

As around 75% of gliding fatalities in the last 10 years have been in mid-air collisions, it was felt that lookout techniques be taught in the very earliest ab-initio flights to ensure the importance and primacy of the task is established. Peter Fauser has prepared and distributed a paper promoting these techniques to be taught to trainees prior to control introduction. This has been trialled by Peter and found to be practical. The CTO described the progress of the professionally re-made video of the 'Lookout Lecture' by John Buchanan. It is hoped that GFA will complete the production and distribution of the video to all clubs by the end of this year.

Discussion followed on how lookout can be promoted and injected into clubs' culture. Instructor candidates can be expected to fly the first flight of their training from the front seat so that the Level 3 can check that the candidate's lookout techniques are sound. All instructors are advised to check that their seating

position in the back seat is sufficient; for example, it might be necessary for some appropriate back cushioning in Blaniks to move the instructor slightly forward to see the wingtips.

Ways to encourage good lookout is to make it enjoyable. A friendly competition with the other pilot as to who sees things first, encouraging good situational awareness. Circling birds or other gliders can lead to better climb rates. More flying without ASI should be encouraged – the best equipment for that is soap sucker pads which are only a dollar or so from your favourite supermarket, and are easily applied or removed quickly.

Some "war" stories were swapped, and from that it was determined that care should be taken that someone should be looking outside the cockpit, no matter what the experience level of the training pairs airborne, or how complex the training sequence is. Observation of "bad" lookout techniques by a club pilot should be referred to the club's instructor panel.

The instructor manual content was reviewed, and found to be specific enough. Strict enforcement of lookout should be carried out, with immediate instructor take-over and correction of any lookout error. However, it was recognised that a broader lookout must be engendered.

Spin Awareness

The importance of recognition of spin symptoms was discussed, and it was agreed that more emphasis and practice should be given in the incipient spin area before full spin is introduced. This should build more confidence into students in this area, as learning tends to be inhibited by premature introduction of full spin, which upsets most students. The GFA standard spin entry off a turn was discussed as it was felt

that in some aircraft it was not as effective as other techniques for teaching pre-spin symptoms. It was stated that some gliders reach high angles of bank prior to breaking away, with trainees being unable to follow what was happening due to the rate of action, and subsequent disorientation. This leads to pilots being fearful of spinning rather than regarding it as a controllable situation.

Flying Programme

The afternoon flight programme was for participants to fly with each other and explore how the lookout, incipient and full spin areas are taught and how they could be enhanced. The aircraft used were Blanik L13, VH-GGG and IS28, VH-HNN, nightmares for anyone with tendencies to stutter under pressure. Cunderdin is a CTAF, so the "joining downwind" call was mandatory. Some puffy cumulus at 4,000ft gave participants the opportunity for extended flights for some experimentation.

Discussion après-flight recognised that it is appropriate a more gradual exposure to the pre-spin area be given after stall consolidation. After the trainee is comfortable with full nose-high stall recovery, they should be led through the gentle nose-low stall recovering with minimum attitude/speed change, through doing it with bank on with exactly the same recovery action of stick easing forward to recover with minimum speed/attitude change. This simulates what happens in thermalling. Once the trainee is comfortable with that, the incipient spin is let develop into a wing drop, but keeping the bank limited to around 30 degrees, which will slow down the action on most aircraft to a rate that the trainee can assimilate. When the wing drops, the stick is eased forward again to restore the lateral damping and the trainee can see the wing drop stopping as well as the stall recovery. More exposure and practice in this situation should be given until the trainee is competent and comfortable with this before proceeding into the full spin and the standard GFA entry. It was recognised that this may take time with some students. It was also identified that it is in this area that trainee instructors have the most difficulty matching actions to patter, and that instructor training should also be extended in this area until competence and confidence is achieved.

Not unexpectedly at this level of experience, it was found that the lookout techniques observed were well established and effective.

The participants then adjourned to the "Highway Diner" for food and refreshment, as the town now has no pub! The gliding community, especially those who have attended Cunderdin Nationals, will be sad to mark the passing of the Cunderdin pub, which burned down several months ago and is not to be rebuilt. The passing of the establishment was made sadder by the loss of the bar decorations of model

gliders and the fine photo collage of historic WA aircraft created by the late Neville Wynne.

Sunday Session

Ab-initio lecture presentation

John Welsh demonstrated an ab-initio lecture programme collated from "Basic Gliding Knowledge" in MS Powerpoint Software. The idea concept came from a Maurie Bradney article in AG, saying that we had to provide better quality training for ab-initios. The syllabus is 14 lectures in slideshow format accompanied by lecture notes for each slide, and student hand-outs for each lecture. This provides instructors with professional-level presentation support. The package comes on CD-ROM and has been developed over four recent ab-initio courses at Beverley Soaring Society. The preferred delivery method is by laptop facing the instructor, driving a computer monitor facing the trainees or a Litepro for bigger groups. However, the slides can be printed on A4 card and used one-on-one with no electronic aid, or printed on transparencies to be used with an overhead projector. A timetable has a suggested syllabus for morning and evening sessions around a five-day flying programme designed by Maurie Bradney, which is also included in the package. Beverley delivers the course over two weekends starting Friday, Saturday and Sunday of the first weekend and Saturday and Sunday of the next weekend, but it could be used as a Monday to Friday course. The advantage of such training is seen as an integrated package that will give trainee satisfaction in continuity, professionalism and value for money; participating instructor(s) will be also be very current in the full flying and theory syllabus. The package was presented to the CTO for evaluation and further development by GFA at the next OPS panel meeting, with a view to being distributed to clubs.

Accident/incident reporting

The conference session then moved onto the sobering (no pun intended) subject of accident/incident investigation. It was recognised that there is a need for recent reports to be de-personalised and distributed widely with the object to learn and prevent similar occurrences, not to blame or shame. The CTO described some GFA administrative problems experienced over the last few months, which have resulted in a delay in the collation and distribution of the accident/incident database. These are in the process of being addressed, with the hope of an early resolution. It is then hoped to have a regular posting of all updates. The matter of archiving GFA records is receiving priority.

A review of the MOSP is underway at present – all outstanding OPS Directives will be incorporated in the rewrite. A CFI's Manual is to be prepared.

The differences between the statutory reporting requirements and investigation procedures

were discussed. It was emphasised that the two areas are distinctly separate. Reporting should be done without delay to the Australian Transport Safety Bureau (ATSB) on 1800 011 034 (new name for BASI). The duty officer has a checklist of the areas that are to be reported so can guide you through it. Reporting can also be done securely in the same format on the web on [www.atsb.gov.au]. The cause of the incident/accident is to be given only "so far as can be determined", a detailed investigation does not have to be carried out at this stage. ATSB will usually release any wreckage at this stage to the owners, if they are not to investigate it. However, if a fatality is involved the matter may be referred to the State Police for coronial investigation, and the wreckage not moved until released by the police. The Regional Technical Officer (Operations) should also be contacted with the details specified on the standard GFA form. If the matter is not involving injury and the police are not interested, then it is up to the RTO(OPS) or delegate to investigate the matter. The matter may or may not be delegated, but if so, could be to a CFI or Level 3 Instructor from within or outside the concerned club. *(Author's note: Search and Rescue assistance for missing pilots is still available from AUSSAR on 1800 815 257).*

The context of investigation was discussed in length, as ATSB may only investigate occurrences with what they consider "systemic" implications. This throws the RTO (OPS) into the arena with legal and insurance issues present. There may be training available in accident investigation – the CTO will follow that up. It was noted that any charge of criminal negligence is difficult to establish except in the most extreme and deliberate cases. There is also an emotional response from bystanders and other club members, which has to be recognised for what it is. 'Duty of Care' was discussed and identified as reasonable actions taken to prevent the re-occurrence of the circumstances. There is case history establishing the principle in common law. The emphasis should be on education of pilots rather than the blame or shame of individuals.

Outlanding

The CTO opened the discussion with some examples of very experienced pilots still managing to wrap aircraft up on outlandings. Experience is no immunity against stupidity. Discussion ensued on factors in clubs that can promote such crashery. This can come about through some negative peer pressure, such as teasing or taunting someone who makes a successful outlanding (performance punishing) or bar talk glamourising or making an attribute of making low saves (rewarding bad performance). Level 3 instructors should endeavour to reverse the pressure by praising successful outlandings and being critical of low saves.

Currency can also apply to outlandings, as sometimes it can be a couple of years between outlandings if the pilot only flies on the good cross-country days. Worthwhile activities prior to the commencement of the season could be encouraged, such as outlanding refresher training, which could be organised as "paddock parties" away from the home airfield, or using a motor glider to shoot multiple practice outlandings.

A problem that was identified was "C" outlanding checks being completed at the end of the season without consolidating sorties prior to the next season commencing. Level 2 and above instructors should be reminded of their responsibilities in authorising "C" pilots for cross-country to check for outlanding currency.

General issues

A matter arose concerning as to when a "C" certificated pilot can exercise the privileges of the certificate. The CTO confirmed that the logbook entry is sufficient to enable the pilot to start using the privileges, but the FAI Certificate had to be obtained "within a reasonable period". It was noted that the GFA FAI Officer is very prompt in the return of certificates after claims, so there should be no excuse for a lengthy period without full certification.

Some anomalies were reported in AEI renewal procedures, but the present situation is that only the CFI can renew ratings at biennial AEI checks. This is to be clarified in the MOSP rewrite.

Another problem was raised in the issue of passenger ratings. The CTO confirmed that passenger ratings must be obtained by all pilots wishing to exercise passenger-carrying privileges, irrespective of their instructor rating level. Several comments were aired as to the sense of this situation and the meeting asked that this anomaly be addressed at the next OPS panel meeting.

Peter Fauser emphasised that instructors be encouraged to spend more upper air work with pre- and post- solo students with blocked off ASI and altimeter to develop attention outside the cockpit rather than instrument fixation.

Bryn Howe raised the issue of tow position. It was agreed that the only point of reference that should be taught is just above and below the slipstream. Bryn reported finding students referencing the tow position with tug tailplane/cockpit relationship rather than the correct method. Level 3s should check that trainee instructors use the correct tow positions.

A light afternoon flying session finished the NGS to enable participants to complete the flying programme. Peter Fauser demonstrated his lookout lesson patter to Kevin during their flight together.

A review session was held, during which the CTO thanked everyone for their time and input into the weekend and renewed Level 3 ratings for another two years.



Caboolture Gliding Club's Winching Report

The Caboolture Gliding Club committee realised some time ago that it should make some serious attempts to secure its future by establishing an alternate permanent gliding base. This alternate site is located near the small town of Toogoolawah in the picturesque Brisbane Valley and is formally known as the Watts Bridge Memorial Airfield. It is actually an ex-WWII site. The airfield is home to the Queensland Vintage Aircraft Group and through their efforts the airfield is progressing at a furious rate from nothing more than a simple airstrip to a substantially appointed airpark.

At our last visit we noted the installation of on-site refuelling, which means we no longer need to carry drums of fuel over for aerotow operations. Hangars also seem to be popping up like mushrooms and chalet sites were all snapped up without any advertising.

We acquired our winch from a defunct club in central northern NSW around the Wialda area. Some history on the origins of this winch would be appreciated, as it is obvious that a great deal of thought went into its construction, in particular the design of the level wind mechanism. So if anyone recognises this "Mad Max" beast I would be interested to hear from them. The winch is powered by a Ford 351 driving a standard three speed automatic gearbox directly onto a drum with a minimum diameter of 460mm and a fully spooled diameter of 920mm.

Our first winching efforts conducted in January 2000 weren't exactly an unqualified success as the winch had trouble developing sufficient power. Only two launches got off the ground, and when the glider signalled for more power the winch was unable to deliver. Subsequent fiddling about with the ignition system only made things worse. In desperation the carburettor was removed and taken away for overhaul. The winching efforts were terminated and we reverted to aerotow.

The weekend wasn't a complete failure however because we successfully proved the concept of the operation to the satisfaction of the acting RTO (OPS). Our ability to operate in conjunction with other users of the airfield seems assured as well as the apparent success of the multi-strand winch wire.

Some notes on the winch wire. The primary reason for the selection of an alternate to mono-strand wire was essentially one of safety. We are by no means the only users of the Watts Bridge airfield and we need to work in concert

with vintage aircraft, GA aircraft, ultralights and gyrocopters.

Even though we will be operating on a separate parallel runway, the prospect of a metre high "birds nest" of broken high tensile fencing wire, lying virtually invisible in the centre of the runway to greet the arrival of an unsuspecting gyro, was not acceptable. Various substitutes were considered and the opinions of the wider gliding fraternity were canvassed via the Australian Soaring news group on the internet. Responses were received from as far afield as New Zealand. This was quite productive and I thank those involved for their input.

The only two viable substitutes were multi-strand steel wire and synthetic rope in its various forms. The use of exotic man-made high tech filaments would prove too expensive and probably are not obtainable in this country anyway.

There are a number of different synthetic rope possibilities ranging from quite expensive woven or braided products to conventional stranded polypropylene in various diameters. The braided ropes are very strong for their diameter. Suitable strength with sizes of around 6mm are available. Cost is prohibitive and no one has any data on how it wears. Also it would have to be knotted when joined, as it cannot be spliced in the conventional manner and a knot provides a point source for wear, which is undesirable. For these reasons braided rope was not considered viable. The next candidate was 10mm three-strand poly rope. There are a number of relevant factors. Firstly, we were using an existing winch drum that was originally intended for 3.15mm wire, so space presented a problem. Those with drums built around 2.8mm wire would have a greater problem. Secondly, the cumulative elastic compression of layers of stretched rope has to be considered. Our drum is pretty robust in this regard, but I would imagine that it could present a problem for a less rigid drum assembly. Try wrapping a broken rubber band around your finger. Finally, I found it very difficult to find a supplier capable (or willing) to supply a 2,000m unbroken length of rope. The best I could do was 200m rolls. Though I'm sure a supplier could be found.

The reports received about poly rope were very favourable. Cost is acceptable and joining does not present a problem. A straightforward knot can be tied to get operations up and running in the shortest amount of time, which can be spliced at a more convenient time. The behaviour of the rope on the ground is also

much more benign. Handling the rope is much less frustrating. Another apparent bonus is a much smoother launch, a result of the elasticity of the rope no doubt.

With these points in mind the research turned to multi-strand steel wire rope. I discovered an article in an old AG (October 1982) written by a member of the Australian Wire Rope Industry in which he was asked to comment on the relative aspects of using wire to launch gliders. His recommendation was that multi-strand wire offered some distinct advantages over single-strand. Our primary concern was its behaviour in the event of a cable break or stalled winch. Due to its flexibility, wire rope lays flat on the ground. It doesn't exhibit any inherent springiness, nor does it develop a "memory" and it was considered probable that the resulting tangle from a wire break could simply be retrieved, slowly and carefully from the tangled mess on the ground. It was also believed that the multi-strand wire offered a significant safety aspect in the way it showed signs of wear. The Australian Wire Industries technician surmised that wire rope could withstand a high percentage of broken individual strands and still retain sufficient strength for its intended task. The broken strands would be easily detectable (gloved hand of course) and offer a convenient early warning. It has also been suggested that wire rope may show an initially high rate of wear followed by a long period of reduced wear. The reason being that as individual strands break and curl, they provide a buffer between the body of the rope and the ground, thus slowing the abrasion process. I have noticed a similar effect on aerotow ropes. Sounds good in theory, time will tell.

Joining wire rope also presents less difficulty. An interim measure would be to join it quickly by swaging, similar to aircraft control circuits. The process would take only a few minutes once the two ends have been located. The advantage of this over single strand cannot be over emphasised when you consider that we are about to embark on a training programme for a club membership raised solely on aerotowing. Ease of joining is a must. When convenient the joins can then be spliced.

Ultimately we chose 5mm 7 by 19 galvanised steel wire rope. Cost was 79 cents per metre plus tax in December 1999, though prices were quoted as high as \$1.20 plus tax! Total cost \$1,927. This is almost five times the price of 2.8mm tempered spring steel wire. The wire is sourced from Korea and it would have taken six months and a special order to get a 2,000m length (probably in two pieces anyway advised the agent), so we opted for two 1,000m coils ex-Sydney. A club member who is a yachting type spliced the two together in about 15 minutes.

An additional cost that must be factored in is a good set of wire cutters for around \$290, plus a crimping tool (marine style), about \$185 (Nicopress not really an option at around \$500!). A common reaction from experienced winch operators was the obvious bulk of the wire rope, which appears to be overkill. The mass of the wire in round figures is about 10kg per 100 metres. If we estimate (ballparking here) say 2,000ft of wire deployed on an 1,800ft launch, then we end up with about 60 something kilograms on the glider hook. Of course the only relevance the mass (weight) of the rope has is on launch height. The ultimate stress on the glider being determined by the pilot and limited by the weak link. As an aside, this topic is worthy of an article in itself as I have heard too many people comment that the additional weight of wire must be an additional strain on the glider.

Half a year after our first winching attempts I am able to sit down and complete this report. In mid-July we dual towed a Blanik and Club Libelle the 50 odd kilometres to Watts Bridge to commence winch conversions for instructors and solo club pilots. Major teething problems have been solved and we were reliably attaining around 1,400ft agl in nil wind conditions. We feel that the additional weight of the wire rope is costing us about 200-300ft. With a head-wind we might see 1,800ft or so. Both aircraft were able to get away, so the system works! Considering that there was a high pressure system parked over south-east Queensland producing stable conditions we were very happy with the result. For the record we are using about one statute mile of runway, so the one-third height to cable length rule of thumb seems about right.

With two tugs, a winch, two gliding sites and a healthy membership the outlook for gliding at our end looks pretty good. ✂

GFA Soaring Calendar

Queensland State Gliding Championships – 23-30 September 2000

Held at "the friendly club": Southern Downs Aero and Soaring Club, Warwick, Queensland. Practice and registration day is Saturday, 23 September, followed by seven competition days which will be contested in Open, 15m and Standard Class. Separate prizes are also awarded in "Club Handicap" classes.

The competition organisers are keen to receive applications as early as possible to facilitate the provision of adequate tugs and appropriate catering. Please contact Michael O'Brien, 12 Playfair Street, Tarragindi 4121, ph: 07 3892 3473 (h) for an information pack, or email <mob@ieeee.org>.

Australian National Gliding Championships – 10-23 February 2001

Gulgong NSW. Enquiries to Christine Meertens, ph: 02 9452 2777, fax: 02 9453 0777, email <hkmxor@msn.com.au>.

Australian Grand Prix Championships 10-23 February 2001

Gulgong NSW. Enquiries to Christine Meertens, ph: 02 9452 2777, fax: 02 9453 0777, email <hkmxor@msn.com.au>.

Position Vacancy

Waikerie International Soaring Centre Pty Ltd

of Office Manager

Basic work skills required are:

Public relations and Accounting

Taking care of the booking side of business

resumés to Mark Morgan @ <wgm@riverland.net.au>

or snail mail to PO Box 320 Waikerie SA 5330

or for more information phone 08 8541 2644 BH

NSW State Championships – FAI and Sports/Two-seater to be held at Lake Keepit

WENDY MEDLICOTT, *Competition Organiser*

Lake Keepit Soaring Club, Keepit Dam will be hosting the FAI and Sports/Two-seater Championship over the Christmas/New year period. This will allow as many pilots as possible to compete in the holiday season and still have time to get to Gawler for the Sports Class World Championships starting 8 January 2001.

A practice day has been set for Wednesday, 27 December with the first competition day to be held on Thursday, 28 December. The last competition day will be held on Wednesday, 3 January, so this gives everyone who wants to get to Gawler four full travel days.

Lake Keepit has completed a great deal of capital works on the upgrading of the airfield. The many tonnes of top soil (about 400 truck loads) dumped and graded over the rough areas, and then grassed, has given us a strip not known in Keepit for many years.

We now have the main runway 14/32 and three cross-strips all in good condition.

Accommodation at the Park Trust, Lake Keepit is already heavily booked and I have reserved what is left in the name of the gliding club. It is suggested that you tentatively book a caravan or cabin at the Park Trust caravan park as soon as possible, if you wish to stay by the lake – phone (02) 6769 7605; fax (02) 6769 7547 and let them know you are from the gliding club. Limited camping

facilities will be available on the airfield and can be booked on a first-come first-served basis. Camping is also available beside the lake. Other accommodation alternatives such as the fitness camp and local motels in Gunnedah and Manilla should be available. A list of these is being prepared.

These days smaller clubs have great difficulty in staffing competitions and Lake Keepit is no exception. This competition will be a "self help" one and pilots are being asked to lend a hand with operations. If you think you would be able to help the club on one of the management positions you will be most welcome. Helpers don't have to be competitors.

You may wish to lend a hand and join in the fun on the field in a competition atmosphere. Having said that, Lake Keepit is committed to giving all competitors and visitors the best competition possible and we look forward to welcoming you at our airfield.

Further information will be published in the next issue of AG, but in the meantime don't forget to book your accommodation early.

If you wish to be on our competition mailing list and/or wish to lend a hand please contact me by phone (02) 4365 3626 or email <hwmedlicott@bigpond.com>. I look forward to hearing from you. ✂



The HGFA is extending its website!

The HGFA is looking amongst its members to find website developers who would be interested in working with the HGFA to further develop its website. The HGFA is looking for professional developers who have capabilities in development of medium size websites. This would include experience in:

- Site concept and design
- Web graphics design and implementation
- Web technologies such as CGI, DHTML and Java

The person/company would work with the HGFA in developing the core of the site, with other HGFA staff/volunteers taking over the porting of content to the site, as well as the ongoing administration and content development.

As ever the HGFA budget is very tight so we are firstly interested in enthusiastic volunteers who could offer professional expertise, however commercial proposals are also welcome.

If suitably qualified and interested, please contact Michael Bruce on ph: 03 9809 2483 or email <mike@thebruces.org> within two weeks of the publication date of this issue.

Please provide contact details and the URLs of at least two medium size sites you have developed.

We, as organisers, would like to thank all the national aeroclubs, CIVL and FAI, the teams that participated, the Hellenic Aeronautical and Airports Federation and all the Greeks that worked before and during the championship for all their help in making this event a success.

We wish the next organisers of the 2002 championship in Chelam the best of success.

The Organising Committee of the 7th Women's World Hang Gliding Championship

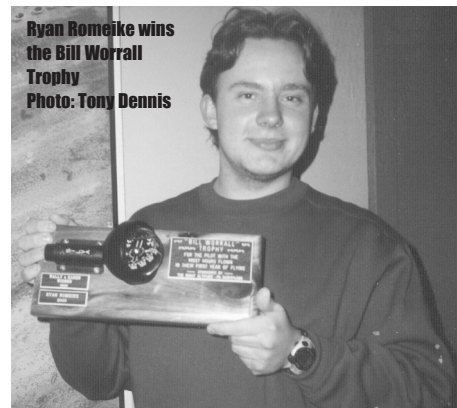
Interworld Aviation – India

Interworld Aviation, an up and coming aerospots institution in the Indian region, invites and seeks the joint venture/collaboration, as well as sponsored packages, from PG and HG equipment manufacturing companies and from institutions engaged in various aerospots activities. This is to assist in starting our regular operations/activities in PG and HG, offering various aerospots packages and courses to enthusiasts in the Indian region.

Any interested company/ies or similar ventures and institutions can visit our website [www.iwav.homepage.com] or contact us on email <interworld@mailcity.com> to discuss future course of action. Our address: Interworld Aviation, Kiran Sweets Complex, Gopalpura Circle, Tonk Road, Jaipur 302 018 (Rajasthan), India, ph: 91-141-514466 and 514691, fax: 91-141-515367.

With best wishes, regards and lot of thanks.
Happy flying always!

Anurag Pandya, Executive Director



Ryan Romeike wins the Bill Worrall Trophy
Photo: Tony Dennis

Bill Worrall Trophy

Congratulations to Ryan Romeike from Wodonga who was the winner of this year's Bill Worrall Trophy, awarded at the National Trike Gathering, 27 May.

This trophy has a Silva 70UN compass feature, and each year is awarded to a new trike pilot with the most hours clocked up in their first year of flying. It's sponsored by The Right Altitude Microlights, Benalla.

An engraved plaque with the pilots name is attached each year to the trophy base. Last year it was awarded to Wally and Karen Weiner, who fly from Barwon Heads.

Ryan has reached 170 hours trike flying in 12 months! He is already on to his second trike! All this and a day before his nineteenth birthday! Congratulations Ryan.

Tony Dennis

Nowra Air Traffic Control

As of 1 July 2000, the phone numbers at HMAS Albatross will change to all be prefixed with 4424, and the extension remaining the same. For your information, Air Traffic Control may be contacted on 4424 1821 or 4424 1155. Also, the new liaison officer for para/hang gliding, ultralights, model aircraft etc is Flying Officer Maree Rice, available on the above numbers.

Ginette Yee

7th Women's World Hang Gliding Championship

On 25 June the 7th Women's World Hang Gliding Championship was completed.

Our new World Champion is Kari Castle (USA), 2nd place Françoise Moçellin (France), 3rd place Neva Bull (Australia). Full results can be found on [www.hang-gliding.gr].

We had a very successful championship with 31 ladies from all over the world. We had five valid competition days. The competitors said and looked like they had a very good time. In fact, quite a few of them were still in Greece enjoying the islands.

It seems that the Women's World Championships have been given another boost and presently there is no interest in doing away with them. We are very happy that we played a big part in this, as the ladies told us.

Satellite Processing of 121.5 MHz Emergency Beacons to be phased out

The International Cospas-Sarsat Program, a program that uses a satellite constellation to relay distress alerts to search and rescue authorities, has announced it will terminate satellite processing of distress signals from 121.5/243 MHz emergency beacons. Mariners, aviators, and individuals using emergency beacons will eventually need to switch to those operating at 406 MHz if they want to be detected by satellites.

The termination of the 121.5/243 processing will happen over a period of time. It is expected to take place far enough into the future to avoid a crisis for persons now using these beacons. The Cospas-Sarsat Program is currently working on the details of the transition, including the time frame. Although no effective date has been set, the Cospas-Sarsat Program has decided that the 121.5/243 MHz instruments will not be carried on the next generation of satellites, starting in 2006 for Russian satellites and 2009 for the US satellites operated by the Commerce Departments National Oceanic and Atmospheric Administration.

The Cospas-Sarsat Program made this decision, in part, in response to guidance from the International Maritime Organization and the International Civil Aviation Organization. These two agencies of the United Nations are responsible for regulating the safety of ships and aircraft

(respectively) on international transits, and handling international standards and plans for maritime and aeronautical search and rescue. More than 180 nations are members of IMO and ICAO.

Another major factor in the decision to stop processing 121.5 MHz signals is due to problems in this frequency band which inundate search and rescue authorities with false alerts, adversely impacting the effectiveness of lifesaving services. Although the 406 MHz beacons cost more, they provide search and rescue agencies with more reliable and complete information to do their job more efficiently and effectively.

The implication of this Cospas-Sarsat decision is that users of beacons that send distress alerts on 121.5 and 243 MHz should eventually begin using beacons operating on 406 MHz if the alerts are to be detected and relayed via satellites. Meanwhile, anyone planning to buy a new distress beacon may wish to take the Cospas-Sarsat decision into account.

The three types of beacons in use are: emergency locator transmitters (ELTs), used on airplanes; emergency position-indicating radio beacons (EPIRBs), used on boats; and personal locator beacons (PLBs) used by land-based persons such as hikers.

Club News

Hill Flyers WA

Looking forward to some great spring weather and flying. This year in Perth the winter seems to have had less flyable weather than usual, hence very little flying this winter. There have only been a few keen pilots braving the elements and being in the right place at the right time between cold fronts and managing a fly at The Range in mid July or on the Perth coast.

The series of hang gliding lectures held through winter were well attended, providing an excellent forum for both new and experienced pilots to exchange and pick up new ideas, and to improve our flying skills, our weather knowledge and our site knowledge. Much thanks to those volunteers involved in organising and delivering the lectures: Mark Thompson (Bomber), Mike Dufty, Rick Williams, Daryl Speight and Keith Lush.

A feature of Hill Flyers meets of late has been our guest speakers. A word of thanks to all our guest speakers. At the last Hill Flyers meeting (June) our guest speaker was Sam Blight, who delivered a very interesting talk on his flying, especially those early days some 25 years ago, and closed his talk on some spiritual insights to hang gliding and flying in general. Remember we meet the LAST Thursday of each month at Cascades (check inside back cover of Skysailor for details).

Always a great night had by all at the annual Western Soarers Barmitzvuh social event. Thanks to Krista for organising a great venue.

The Spring Fly-in is coming up (mid-September). Check the Skysailor calendar and our hotline for details – don't miss it. We usually have a BBQ at the campground near Noondeening launch, hosted by and courtesy of the farmers, Caroline and Bruce Smart.

See you in the air, Rick

Australian Paragliding Centre

Attention all paraglider pilots!

Ground handling practice and kiting is recommended over the winter months. I'm sure that a lot of paraglider pilots have already put their wings away for the winter months. Don't! Get them out and play with 'em! Practice your ground handling till it hurts, and who knows, you may even be able to go for a fly.

Never think that you are too good to practise your ground handling – there's no such thing.

We're still flying most weekends and I've heard of good flying all over; from Blackheath, Manilla and Stanwell Park to Canberra and further south in Bright. Sure the good days are few but they are out there. We can't all afford to go to Europe for their summer. Pity that!

Something else worth a look at over winter are the new Para foil kites available from most

HGFA pilots now have the opportunity to apply for American Express credit cards.

Those of you interested in applying for an AMEX card, please contact the girls at the HGFA office for further information on rates and/or application forms.
Margaret, Colleen and Nicky

major paraglider manufacturers. They are great fun and the four control line models stall, spin and pull you off your feet just like a real glider can. Go on, get out there and have a go! I guarantee you'll be a much safer pilot on launch and in the air than the pilot who drags his glider out for the first time on a booming day having not flown for 3-5 months. See you out there, brrr.
Fly Hard but Safely!

Regards, Peter Bowyer,
Safety and Operations Committee member

Western Soarers Hang Gliding Club

July AGM – New Committee

The July AGM saw the election of a new committee, and a welcomed break for the old committee, whose hard work and dedication over recent years was nothing short of inspirational.

The new committee comprises: Pres: Mark Bomber Thompson, Vice-Pres: Daryl Speight, Sec: Geoff Smith, Trs: Graeme Sharp, Social Events Co-ordinator: Krista Gaunt.

Take Off and Landing Clinic(s)

This event was a first for us. The aim was to encourage safe launch techniques, along with pre-planned landings using the downwind-base-final approach. All launches and landings were videoed and viewed at the pub at night. This was an extremely useful instructional tool, showing pilots the strengths and weaknesses in their individual styles. Due to the popularity and success of the clinic, another is set to run in the near future.

Cross-Country League and Winners

The WSC Cross-Country League is an open WA based comp running twice per year at six-month stretches. HG and PG pilots of all skill levels record their XC flights, which are allocated points according to a handicap system.

The winners of the first 2000 XC League were: Open: Mike Dufty (Adv PG); PG Advanced: Mike Dufty, PG Intermediate: Berne Lindahl, PG Novice: Sylvie Lindahl; HG Advanced: Mark Bomber Thompson, HG Intermediate: Des Hill, HG Novice: Gary Spranaitis.

Trophies were awarded at the WSHGCs Fifth Annual Barmitzvuh-Dinner and Awards Evening in August at the Sandringham Hotel in Belmont.

Soaring Lecture Series

A series of lectures were run through winter on various flying techniques: Bomber – Flying Further, Not Faster; Mike Dufty – Getting Started XC Flying; Rick Williams – Hill flying in WA; Daryl Speight – Flying Weather, Thermalling and In-flight Decisions.

Spring Thermalling Week

The Annual Spring Thermalling Week at Wyal-katchem will run again this year, 30 September to 8 October. The week is designed to shake off cobwebs, and get some launch, tow and landing practice during the gentle spring conditions, in preparation for the summer flying season.

Krista

Canungra Hang Gliding Club

The Canungra Winter Sunday Series is still going strong with another round of the new comp just started. Task was set for a short one from Tambo to Witheren, then goal at the Training Hill. It turned out to be a good day, though blue skies all round. Speedy Gonsalves, I believe, was the winner of the day on his second lap around the course, beating Jon Durand Jnr. Jon had set the fastest time first time around in a borrowed Rage (he sold his Litespeed while mixing it up at the Pre-Worlds). Congrats on getting third in Spain, Jonny. Apparently there were plenty of eagles enjoying the air also. Get results at [www.triptera.com.au/canungra/csw2000/index.html] Thanks to Dave Sakrzewski (T-Bone) for ongoing organisation. Of note is the good flying of now local pilot Hikobe Junko, an excellent female Japanese pilot.

Word is that on 21 July with moderate WNW on Tambo and a few pilots ridge soaring who were soon to land, a lull came through with other pilots launching to catch a climbing glider. A short time thereafter a strong SW air mass moved in and developed a serious convergence that turned into a shear wave. Those who were in the air started climbing at alarming rates and realised that winds were increasing with altitude and time, resulting in much height gain and little penetration. Bars were stuffed to nether regions and two pilots managed to edge out the front and get to the bomb-out paddock. A local tandem pilot with passenger found little relief from the headwind, turned and went over the back without any problem (landed in a nice 5kt on the ground at a local UL pilots property).

The Classic is again drawing closer with major sponsorship coming in from St Bernards on Mt Tamborine. Get more at [www.triptera.com.au/canungra/classic2000/index.html], kindly mastered by D Tim Cummings. Canungra Cup PG comp will occur shortly after the St Bernards Canungra Classic. More to come on this.

Thanks also to Dave Pearson and all responsible for what is said to have been an awesome night at the Land Owners Party. A worthy celebration and thanks to those people who make hang and paragliding possible.

Apologies to our PG brothers and sisters – I was late getting this in and have not caught up with the gossip since getting back from NZ. Keep me posted and I will pass it all on.

Hooroo, Tex <TEXDOC@bigpond.com>



Product News and Reviews

GIN Gliders: Bandit

A glider for a wide range of pilots, from the up and coming beginner to the experienced XC pilot. Ideally suited to the experienced weekend pilot.

Responsive and sporty handling, high degree of passive safety, triple diagonal cell technology from the Boomerang, this glider has already got all the attention in Europe. You can check the DHV report and all the details at [www.gingliders.com]

You can try the Bandit at your nearest GIN dealer. For QLD call The Paragliding Centre of S/E QLD (07 5543 4000) and for NSW call Wind Works (02 9913 9086 or [www.windworks.com.au]).

Review of Hangsim by a novice hang glider pilot

Hangsim is a PC computer flight simulator which simulates the flight of hang gliders, paragliders, sailplanes and three-axis ultralight.

I have read unfavourable reviews of this simulator by non-pilots; they seemed to find it boring and pointless. Personally I found it sufficiently realistic and detailed enough to be educational as well as fun. I am a restricted licence hang glider pilot with no natural aptitude for various important aspects of flight such as estimating glide angle and optimising airspeed for various combinations of headwind and/or sink. Hangsim simulates these situations realistically and effectively. I was able to spend several happy hours with the simulator practising assessing and improving my glide path to a distant landing zone in a headwind with varying degrees of lift and sink. In real life the journey to bomb-out is over in several minutes for better or worse, which usually doesn't allow me enough time to relax and consider these details. At my local high sites Beechmont and Tamborine (near Canungra in Queensland) several HG and PG pilots have failed to reach the bomb-out paddocks. I believe many pilots would find this simulator useful.

I also found Hangsim useful for practising centring thermals, another aspect of flying in which I lack skill. I didn't need to use the option available in Hangsim of making thermals visible.

I found the interface surprisingly good; the mouse acts as the hang glider basebar. The main deficiency is that unlike a real hang glider basebar, the mouse doesn't try to return to trim position. I think a student pilot would need to master the basic control of a hang glider in real life before benefiting from this simulation. The paraglider simulation uses the joystick for control, which is obviously a lateral concept compared to brake handles. A paraglider pilot would still benefit from the wind/sink/lift/glide training aspects of the simulator.

The scenery is more detailed than Microsoft flight simulator. Hangsim uses photo-generated

scenery of some glorious parts of the world, notably the Chamonix region in France, which is a beautiful and dangerous place. I found it very enjoyable to fly the Hangsim hang glider in simulated weather and terrain that would be stupidly dangerous in real life. The designers of Hangsim have made editing information available so enthusiasts can add their own choice of scenery using aerial photos. I'm secretly hoping someone will create Hangsim scenery of my local mountains – it would be handy for a budding cross-country pilot.

The wind sounds are good, as is the variometer. Note that Hangsim does not attempt to accurately simulate take offs and landings (maybe that would be too daunting for non-pilots?). Note also that I couldn't demonstrate a convincing difference when trying to perform slipping turns versus co-ordinated turns on the simulator.

Be warned: Hangsim only works properly on a computer with 3D hardware installed, and like any visual game the bigger the screen and faster the computer the better.

Hangsim is made by Wilco Publishing. There is a useful demo downloadable from the internet at [www.pcgameworld.com/gamedemos/h/hangsim/index.htm].

John Tree

FAI News

FAI Class O Records and Claims

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

Sub-class O-2 (HG with a rigid primary structure/movable control surface(s)) – General
Claim number 6230:

Type of record: Straight distance to a declared goal
Course/location: Segeletz Airfield (Germany)
Performance: 273.5km
Pilot: Claus Gerhard (Germany)
Hang glider: Flight Design Exxtacy-160
Date: 1/8/1999
Previous record: 170.3km (26/6/93, William Woodruff, USA)

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

Sub-class O-2 (HG with a rigid primary structure/movable control surface(s)) – General
Claim number 6638:

Type of record: Straight distance
Course/location: Hobbs, NM (USA)
Performance: 415km
Pilot: David H. Sharp (USA)
Hang glider: Atos Class II
Date: 10/7/2000
Current record: 404.7km (3/7/98, Ramy Yanetz, Israel)

Claim number 6642:

Type of record: Straight distance
Course/location: Zapata, TX (USA)
Performance: 500km
Pilot: David H. Sharp (USA)
Hang glider: Atos Class II

Date: 20/7/2000

Current record: 404.7km (3/7/98, Ramy Yanetz, Israel)

Claim number 6643:

Type of record: Straight distance to a declared goal
Course/location: Zapata, TX (USA)
Performance: 325km
Pilot: David H. Sharp (USA)
Hang glider: Atos Class II
Date: 20/7/2000
Current record: 273.5km (1/8/99, Claus Gerhard, Germany)

The details shown above are provisional. When all the evidence required has been received and checked, the exact figures will be established and the record ratified (if appropriate).

World Pilot Rankings Update

The latest WPRS sees changes to HG, PG and speed gliding but none to Class 2 or PG Accuracy.

Hang gliding sees the addition of the Finnish Open, the Slovenian Open and the Spanish Open and there have been no competitions deleted.

Andre Wolf (BRA) remains in 1st place (273 points), having increased his lead ahead of Betinho Schmitz (BRA). Oleg Bondarchuk's (UKR) win at the Spanish Open has moved him to 3rd (from 5th) pushing Manfred Ruhmer (AUT) to 4th (225 points) and Alan Barnes (GBR) to 5th. Richard Walbec (FRA) maintains 6th place ahead of Joel Rebbechi (AUS) 7th and Jim Lee (USA) 8th. Steve Moyes (AUS), Nene Rotor (BRA) and Pedro Matos (BRA) are equal 9th. Françoise Moçellin (FRA) still leads the female rankings in 47th place overall (100 points), with Kari Castle (USA) 2nd and Kathleen Rigg (GBR) 3rd. There are 464 pilots ranked from 32 countries.

In speed gliding the Red Bull Speed Run has been added and John Smith's (NZL) 3rd place extends his lead in the speed gliding rankings, with 2nd to 6th positions unchanged. Christian Ciech (ITA) moves into 7th equal with Callum Fisher (NZL), and Robert Reisinger (AUT) and Max Wiener (GER) share 9th place.

The PG rankings see the addition of the Pre-PWC Austria, German PG Open and the PWC Granada, Spain. Steve Cox (SUI) has maintained first place since March this year and has extended his lead to 11 points ahead of Christian Tammeger (AUT) who climbs to 2nd place. Kari Eisenhut (SUI) drops to 3rd ahead of Martin Brunn (AUT) who has climbed from 10th to 4th. Michael Orolin (SVK) moves up to 5th (from 8th). Peter Von Kanel (SUI 6th), Kaspar Henny (SUI, 7th), Stephan Stieglair (AUT, 9th) and Bodo Genz (GER, 10th) all return to the top ten. Tibor Berki (SWE) has dropped from 4th to 8th. Petra Krausova (CZE) still leads the female rankings but has dropped to 42nd place overall, with Andrea Joubert (RSA) 2nd (86th overall) and Noriko Mizunuma (JPN) 3rd (99th overall). There are currently 585 pilots ranked from 34 countries.

Paragliding Country Rankings

Switzerland still dominates the PG country rankings (excluding precision events) ahead of Austria. Germany have moved up to 3rd place pushing Japan into 4th. The Czech Republic move up to 5th (from 7th) ahead of Slovakia 6th (from 9th) and Italy 7th (from 10th). France maintains 8th place ahead of South Africa who has dropped from 6th to 9th. The USA complete the top ten moving from 13th to 10th.

Full details of the nations rankings can be found on the World Pilot Ranking System website (found through the FAI/CIVL website at [www.fai.org/hang_gliding/rankings/]). Pilots should check that their personal record shows the correct nationality, particularly as there are a few pilots of unknown nationality. All amendments should be emailed to Sarah Fenwick <civl@ukonline.co.uk>.

Press Release: The Big Jump – A World Record Event

A little off-topic, but I thought this was worth a read – Sub-ed.

At the end of the year 2000 an incredible challenge is to be attempted: man free-falling through the wall of sound from the stratospheric height of more than 40,000 metres. A man is going to actually experience supersonic speed. Michel Fournier is going to try the Big Jump.

Michel Fournier, 56 years old, is a top multi-disciplinary athlete and an ex-parachute officer (with more than 8,000 jumps to his name, of which more than a hundred from high altitude). He also holds the French record for free-fall flight from 12,000 metres. His performances have earned him the Gold medal for Youth and Sport and the Aeronautics Medal, as well as the title of Officer of the National Order of Merit.

This extraordinary project has been in preparation for more than 10 years.

During November 1987, the Ministry of Defence decided to back a project for a free-fall flight from 38,000 metres. Two years of study, ground and flight tests, including the launch of a model, were carried out, confirming the jump's feasibility. The S38 project came under the European space project 'Hermes', now abandoned.

Michel Fournier, a fanatic of aerospace adventures, decided to "personally defend the project". The total budget was 20,5 million French Francs, but Michel was not deterred. In order to buy his equipment he sold everything he had – his house, arms and insignia collections, furniture. He spent all his time and money on the project. Part of the finance came from private companies. This constant investment also covers very intense physical training managed by a team of specialists led by Professor Paul Vanusen (scientific director of the project).

Jean-François Clervoy, an astronaut for the European Space Agency, is sponsoring the challenge and enthusiastically says "You will, in a way, carry out one of my fantasies as an astronaut – that of

coming back to earth 'on foot'. There is no doubt that this jump will go down in the history of aeronautical and space adventures and will contribute to the development of the techniques and security of future stratospheric flights."

With only a few months to go before the big day, a faultless organisation has been put in place. The feat will take place in France, on the Crau plain. On the day of the jump a weather probe will bring in the last details needed to plan the exact trajectory for the stratospheric balloon which will be taking Michel Fournier up.

Less than 50 minutes before the launch, the balloon will be filled with helium. The pod will be held down on the ground until the last second before take off. The climb will last about 2 hours 30 minutes. In case there should be a problem during the climb, a remote controlled canopy liberator, linking the balloon to the flight chain, will be operated by the ground computer in order to parachute the pod back down to earth. A machine in the pod will regulate the pressure.

Once at the ceiling height, Michel Fournier will unpressurise the pod, pressurise his suit, open the glass door and accomplish his life's dream: admire the roundness of the planet before plunging out to break the wall of sound. It'll only take him 30 seconds to hear the double "bang", 51 seconds to reach the speed of 1,782km/h (1.67 mach), a speed never achieved by man so far.

After a free-fall of 6 minutes 25 seconds, he will open his parachute at 1,000 metres and reach the ground four minutes later. It'll be the accomplishment of 10 years of preparation for a few historical minutes and four world records.

Patricia Lamy

12th European HG Championship Results

10 to 22 July 2000 – Innsbruck, Austria

Final Results

Class 1 (flexible wing), Individual, Men:

1	Manfred Ruhmer	AUT
2	Robert Reisinger	AUT
3	Oleg Bondarchuk	UKR

Class 1 (flexible wing), Individual, Women:

1	Kathleen Rigg	GBR
2	Corinna Schwiengershausen	GER
3	Françoise Moçellin	FRA

Class 1 (flexible wing), Team:

1	Austria	2	France	3	Italy
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Class 2 (rigid wing), Individual:

1	Matrella Gaetano	ITA
2	Marcus Hoffmann-Guben	GER
3	Diego Bussinger	SUI

Class 2 (rigid wing), Team:

1	Germany	2	Switzerland	3	Austria
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The full results can be found at [http://events.fai.org/hgpg/eurohg2000/].

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Letters to the Editors



Recreational Tandem Ratings

► I wish to bring to the attention of the Board and the HGFA rule-makers some problems with the current system for recreational tandem ratings ("Passenger Carrying Endorsement (Sport)").

Firstly, the high cost of maintaining a rating: currently \$175 p.a. (+ GST), on top of the standard HGFA membership. This is regardless of how many recreational flights/passengers you have in a year. Being only a recreational rating, it prohibits you from gaining any financial reward (even expenses/cost sharing?) from the flights.

I realise that the current endorsement includes some insurance (but how effective it is, I don't know). However, there currently isn't even the option of opting out of the passenger insurance part. It is nearly eight times the cost of (for example) the powered operations insurance levy (\$20). Have there been eight times the value of claims in the past from HG/PG tandem passengers, compared with all powered operations? Is it HGFA or their insurer who sets these fees?

The current membership renewal form also calls for a "medical statement" regarding the holder's health being of PPL standard. There are no guidelines as to who can issue such a statement, but presumably it would have to be a CASA-registered doctor. This puts the price at about another \$100 a time.

On top of the cost of owning/maintaining a second glider and equipment, these can add up to be very costly per hour of tandem airtime for the recreational/occasional pilot. This is compounded by the fact that it is impossible to predict how much use you are going to get out of your various ratings in any one year. The safer/more cautiously you play it, the costlier it is per hour.

At the same time, it has seemed unreasonable that the approved method of gaining such a rating is to have an instructor watch you do an illegal tandem flight (no rating, no insurance etc) – if you can find a willing passenger! It is also inevitably not in the financial interests of most instructors to approve ratings for other pilots in their area. (I'm not saying none of them will ever do it, but it's another hurdle for the recreational pilot to overcome).

Also, there seems to be an unwritten rule that you don't need a rating at all if you're over 6ft tall!

P.S.: What does PAX/PAXSPT stand for? (this isn't mentioned in section 7.4 of the OPS Manual). Could we have a listing of all the codes used on the HGFA membership cards printed in AG/Skysailor soon?

Peter Bolton

► Thank you for your letter and the opportunity to respond to the concerns you raise.

By way of clarification: the HGFA passenger carrying levy is to cover the cost of passenger insurance. If a member operates any powered aircraft (whether it is a microlight, motorised hang glider or motorised paraglider) the \$20 powered

levy is payable on top of the passenger carrying levy – so if you fly a microlight with a passenger endorsement you pay insurance levies of \$195 plus GST.

The HGFA Management Board sets these levies after considering feedback from our insurers regarding their risk assessment. The insurers have identified that passenger carrying operations are an area of high risk. In recent years we have had three double fatalities in microlighting, and though to date there has been no claim result, these occurrences have been of great concern to our insurers.

I agree that the cost of passenger insurance is not cheap, though for \$10 million cover in today's market the cost is most reasonable. It would be impossible to go out and buy the same cover without our group purchasing power.

The CAOs under which we operate are quite specific: other than for pilot training our aircraft can only be used for private operations. Nevertheless, a passenger can assist a pilot to share the costs of a flight, though any such financial arrangement cannot be advertised or solicited.

I find your description of the endorsement process alarming. The syllabus for passenger carrying endorsement training in a hang glider or paraglider is quite specific. It begins with the pilot flying as a passenger to an instructor, then flying a minimum of three times with the instructor as passenger in a variety of wind strengths. The subsequent 15 flights must be conducted under instructor supervision or with a qualified pilot as the passenger. A pilot carrying a passenger without being endorsed places him or herself at risk of legal suit in the event of an accident (no matter how tall he or she may be).

The HGFA has adopted the general aviation abbreviation for passenger PAX. Hence PAXSPT refers to a Passenger Endorsement – Sport.

Craig Worth, HGFA General Manager



Skysailor Survey

► After reading Keith Lush's letter in the July Skysailor I am glad that I didn't vote for him. What he is effectively saying is that we, the HGFA members, are not capable of knowing what is good for us. We should be taken care of by our elected and employed HGFA elite, as they know better than we do what is good for us. Whether we like it or not!

Maybe Keith should consider that this sort of condescending attitude from the previous administration is why there are so many new faces on the new board.

His reference to business management is flawed, in that a business manager is a professional who is given the job based on previous proven management ability. No such stringent criteria is used for our board members. Not only that, but businesses are not, and never have been, democratic; whereas the HGFA supposedly is.

I heartily approve, and would like to congratulate the new Board for their 'ask the plebs' attitude. Granted, no questionnaire is perfect. There are likely to be many conflicting replies, and only a relatively small fraction of the members are ever likely to respond. However, it can be considered a survey of opinion, where those who care about the outcome have responded. For those with an opinion, but who don't respond to such polling, they get what they deserve. Those who don't have an opinion are likely to be relatively happy whatever the outcome.

The only thing that I do agree with, is that it is possible to create surveys that are loaded towards a particular outcome. In this we must trust that the Board do try to be as impartial as possible when framing such questionnaires, and that they be open minded as to the results. No system is perfect. Trying to give people what they want, gives people the chance to learn what really IS good for them, and to care about the outcomes. Otherwise you just encourage apathy.

Such surveys must be a very useful tool for the Board to be able to make informed decisions on our behalf. It also shows us that they care about us and are not just following personal agendas and power trips. (Sub-ed admission: I have personal agendas, but it usually involves an open fire, a bottle of red and the offer of a massage.) No doubt it will be a difficult task trying to make sense of the replies to the questionnaire. I wish the new Board the best of luck, and I for one appreciate your attitude and dedication.

Graham Sutherland

The Amalgamation

John Norton

To me we shouldn't hesitate
Let's get on and amalgamate
And fly the skies as if owned by all
So let us not just legislate
and twist and bend and irritate
and push each other round until we fall

We need each other to co-operate
And hope it's all not left too late
'Coz we all know it's flying that it's all about So
if we work together and communicate
Instead of a feeling to dominate
I'm sure the end result will bring it out

So let us fly beyond the pearly gate
And treat each discipline as if it's ya' mate
Surely we can learn from each other's ways as
well Let us not on thin ice skate
Let's get on and amalgamate
Get on and fly the pearly gates of hell



April Issue and a New Name

► Firstly, many thanks to GFA for reprinting the April issue. There is a lot of good reading in it that I would not like to have missed.

Secondly, a suggested name for the combined magazine. Not very original perhaps, but simple and inclusive of the main activity pursued by all three disciplines – “Australian Soaring”.

Thirdly, I'd like to support the comments by Levin Barrett on safety. I work as a professional safety consultant to industry and many of the things he speaks about, especially management leadership setting the culture, are exactly the same issues faced by the organisations I work with. I also would have been appalled at the comments he reports. Complacency is a killer.

Leigh Youdale, Bathurst Soaring Club



Peter Sheard's Accident

► I am trying to make things clearer for myself, and perhaps for other glider pilots too, in what we need to learn about Peter Sheard's accident, as described in an article written by himself and published in the April 2000 edition Australian Gliding/Skysailor.

I, the one who is writing to you, am just an inexperienced glider pilot, currently trying to break into the exciting world of cross-country flying. So I have nowhere near the 38 years of gliding experience, nor did I captain 747s (although, I confess, sometimes in my deepest dreams, I contemplate with that) as I understood Mr Sheard did in his impressive aviation career. So, clearly, I am in no position to give advice or make any suggestions to such personality.

However, with all that I have been taught so far by my club's instructors I can see a striking mismatch between the description of the accident and the advice Mr Sheard is giving to himself in the conclusion to the article to which I am referring. Namely, there is no word written there about the interruption of his outlanding final approach at no higher than 340ft to chase a half knot thermal!

This accident, as I see it, is the clear consequence of breaking two of the golden rules of cross-country gliding and, perhaps, of aviation in general:

1. Below a certain height be fully committed to prepare and execute the landing circuit. Do nothing else!
2. Once engaged in the landing circuit, do not interrupt it (apart, evidently, from an imminent collision with other aircraft or unexpected blockage of the runway).

In my view, breaking the above rules is the main cause of what happened. The entire rest, things like he didn't have a low speed warning installed in his glider, or a pee tube and consequently did not drink enough water, or he didn't sleep enough those days, or the accidental banging of his head on a wall which he experienced

that very morning, etc, are surely important but neither of those are the real cause.

In such a classic case, by telling a story like this and not stressing the real point, apart from superficially, sounds to me like sending a wrong message to the readers of this magazine. Am I very wrong in saying that?

Marin Danciu,

Gliding Club of Western Australia



Re: "The way we were"

► I learned to fly in 1969/70 at the Namoi Gliding Club (or The Namoi Aero Club Gliding Wing as it was originally called. The club was based at the property "Plainacres" situated a few kilometres south of the small village of Bellata or about 45km north of Narrabri, adjoining the Newell Highway. The property was a black soil plains wheat growing holding owned by Lyn and Ursula Garden, and the gliding field comprised a runway approximately 6,000ft. A truly great place to fly from – when it was dry.

The photos in the June AG were taken at the NSW comps in either 1970 or 1971 (October, I think) and obviously after a severe rain event. Lyn Garden is pictured in the top photo driving the tractor. I can recall a couple of gliders outlanded nearby and were unable to be retrieved before the rainstorm. I think the glider in the top photo was being retrieved from one end of the strip to a gravelled area near the clubhouse.

I remember assisting with one glider that had to be carried manually from a paddock on an adjoining property only about a kilometre from the club's strip as there was no way even a tractor could get close. This may be the glider pictured in the centre photograph. The bottom photo shows a glider being towed from "Plainacres" to the highway nearby. The foothills of the Nandewar

Range can be seen in the background. It was surprising just how much water could be sent across the plain from those low hills. Ironically the boggy creek being crossed is in fact "Boggy Creek". Despite the name, the crossing itself wasn't boggy.

The Namoi Gliding Club ceased operations in the 1980's after moving from "Plainacres" following the ill-health of Lyn Garden and the subsequent sale of the farm. It operated for a time near Moree then at Warialda before being wound up.

Peter Sheils



Feather-shaped Cloud Formation

In the June issue of AG/Skysailor a photo was published, sent in by Andy Logan. The photograph was of an unusual cloud formation taken at Caboolture airport in south-east Queensland. Andy asked if there were any similar photographs out there in the gliding community.

In the June-September issue of Australian Geographic a similar photo appeared, taken at Kilcoy, Queensland in July last year and a question asked of how it was formed.

The following answer was given by Dr Bill Downey, Bureau of Meteorology, Melbourne and is reproduced courtesy of Australian Geographic:

The cloud is actually the remains of a contrail (short for condensation trail) formed by a jet aircraft. All aircraft engines emit water droplets from their exhaust, and when a plane flies into higher levels of the atmosphere, where temperatures are well below zero (perhaps minus 30°C or minus 40°C), these droplets freeze to form ice crystals and create an artificial cirrus cloud. Kilcoy is under the flight path of aircraft leaving Brisbane, one of which left the contrail that spread out to form a delicate, feather-like cloud.



GFA Badges & Certificates



FAI Report to 20 July 2000

A Certificate

MOUNTFORD Rick	10435	V.M.F.G
MOUNTFORD Tom Roger	10439	NSW AIR TC

B Certificate

TORRINGTON David Trevor	10412	NSW AIR TC
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A and B Certificate

VAN KEMENADE Josephus	10433	Hunter Valley
ANDERTON Paul Anthony	10437	Lake Keepit

A, B and C Certificate

PERHAM Graham Frederick	10431	Mangalore
KROEGER Tim	10432	Geelong
ARMYTAGE Philip Thomas	10434	Warrumbungle
ANDERTON Philip James	10436	Lake Keepit
HAVAS Andrew Frank	10438	Caboolture
BUTTERWORTH Norman Robert	10440	Warrumbungle

C Certificate

CAMPAGNA Raul Luis	10407	Narrogin
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Claims for all badges and certificates to:

FAI Certificates Officer:

Beryl Hartley

106 Meryula Street, Narramine 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



Decentralised Cross-Country Event

Revised rules from 1 October 2000

CHRIS STEPHENS,
*GFA Decentralised Competitions Committee
Convenor*

Since the original inception of our decentralised cross-country competition in 1974, many alterations have been made to its format and rules. This particular set of changes result from comments, criticisms and suggestions from many GFA members on how to improve the event and ensure its future. Almost as soon as I posted the DCE site on the GFA homepage after taking over as decentralised competitions committee (DCC) convenor in September 1999, pilots started emailing ideas how to improve the cross-country event. These new DCE rules grew from pilot interest and demonstrate the continuing place of a decentralised cross-country event in the Australian cross-country soaring scene. Endorsed by the Sports Committee in February then ratified by the National Competitions Committee in May, the new rules come into effect on 1 October 2000.

Aim

One thing that has never changed is the DCE aim. The aim of this event is to encourage cross-country soaring across the whole spectrum of glider pilots living in or visiting Australia. The only eligibility requirement to win one of the four DCE trophies is to be a member of GFA normally resident in Australia. The highest scoring foreign pilot will receive a special GFA certificate.

Name

The first obvious change is the new name. It's now called the Decentralised Cross Country EVENT; no longer Competition. A number of pilots suggested using the word competition was a disincentive to many cross-country pilots and gave the wrong impression of the aim. Also, the resulting acronym DCC led to some confusion between the (now) Decentralised Cross-Country Event (DCE), the Barron Hilton Cup (BHC – which really is a serious competition) and the GFA Decentralised Competitions Committee (DCC) that administers them both on your behalf.

Summer and winter sections

To encourage pilots to keep flying and stay current through the cooler months, the DCE has both a summer (1 October to the end of February) and a winter (1 March to 30 September) section. The inclusion of September and March in the (new) winter DCE is intended

to give a boost to the winter section. In most years, quite respectable cross-country flights can be made in these months. Tasks of 300km plus are not unusual; enough to take the prize. However, September and March have never been high scoring months for the summer session.

Four leagues

There are actually four events in one. Four leagues intended to give each pilot a fair chance both in relation to his or her peers and also to win the overall summer or winter session. Additionally, a handicap is applied to each sailplane type.

League 1: Pilots listed in the first 50 on the GFA ranking list or overseas equivalent, world record holders, national record holders, pilots who have flown in international teams during the past 10 years and past summer session DCE overall winners.

League 2: All other pilots, especially including those in League 4.

League 3: For two-seaters as a club rather than an individual pilot event. The aim is to encourage instructors and other cross-country pilots to take lesser experienced club members away from their home airfield in two-seaters.

League 4: Pilots with less than 200 solo hours on 1 October for the summer section and 1 March for the winter one. If using a pre-revised 2000 entry form, please make it clear in the "comments" part that this is a League 4 entry.

Entering the DCE

Entering the event is simple. Using the DCE entry form, pilots send as many entries as they wish, within one month of each particular flight. These entries are progressively totalled using their highest scoring three flights. At the end of the event, pilots and the club with the highest score receive the awards. All entries will be acknowledged either by post or email. Each year revised 2000 entry forms will be sent to all clubs, past entrants and are also available from the address below by post and by email. An entry form is available electronically from the Decentralised Competitions link on the GFA homepage. Regularly updated DCE results and news will also be available at that site.

Methods allowing electronic and other forms of streamlined entry are being examined but are not yet available.

Scoring

Scoring is based on the type of flight undertaken and handicap of the sailplane used for each flight. Pilots are not restricted to a single class or type of glider. Entrants may use differ-

ent sailplanes to build their best three flights' total score.

Points are scored on distance, using the following points allocation system:

- Free distance, distance to a goal, cats cradle, TOP or POST type tasks and multiple circumnavigation of a minimum 200km triangle – 1 point per km;
- Goal and return, non-FAI record triangles (including those with a remote start/finish), FAI zigzag or three turn-point tasks – 1.1 points per km;
- FAI record triangles (including those with a remote start/finish) – 1.2 points per km;
- Incomplete b) type tasks will be scored as b) tasks for legs actually completed and a) tasks for incomplete parts or distance to the landing point; and
- Incomplete FAI record triangles will be scored as b) for completed legs and a) for the incomplete part or the distance to the landing point.

Flights during club regattas, camps and competitions are eligible.

Only flights made in Australia are eligible.

The FAI great circle formula will be used to calculate distances. When a known fixed feature is specified in the entry form (eg a named silo) standard GFA coordinates for that feature will be used when calculating distance, where these are available.

Motor gliders

Motor gliders are eligible. The motor may only be used for launching and/or self-retrieve. An engine use recording device must satisfy an official observer when the engine was actually in use and that it was only used for launching and/or self-retrieve. Any other engine use will disqualify that flight.

Verification methods

As the aim of the DCE is to encourage cross-country soaring the level of proof required is not as rigorous as for some other flights (eg FAI badge claims and BHC flights). Neither pre flight declaration nor barograph is necessary.

FAI photographic or datalogger evidence rules apply.

In addition to all IGC approved GNSS instruments, the Borgelt instruments manufactured Joey and Garmin GPS recording units are accepted as dataloggers for this event. No other types of dataloggers or GPS recording units are acceptable.

Entry forms must be certified as complete and correct by an official observer. Proofs from the winning pilots and club may be requested.

Pilots and official observers may be contacted to clarify details of flights. However, whenever reasonable, pilots will be given the benefit of any doubt. In the case of dispute, the decision of the DCC shall be final.

Awards

Summer: The pilot from either League I, II or IV with the most points is the overall winner and will be awarded the Australian Gliding Trophy.

The pilot with the next highest score will be the runner-up and awarded the Sportavia Shield, subject to the following condition. AG Trophy and Sportavia Shield winners may come from the same League, provided that is not League I. Where the two highest scoring pilots come from League I, the third highest scoring pilot not from League I will be declared the runner-up. The aim of this provision is to ensure the more accomplished pilots comprising League I do not dominate the DCE.

The club with most points wins League III.

The pilot with less than 200 hours solo and the most points wins League IV, in addition to any other DCE entitlement.

Awards: Overall winner – the Australian Gliding Trophy

Runner-up – the Sportavia Shield

League III winning club – the National Two-seater Trophy

League IV – the Corfu Accommodation Trophy

Foreign pilots – the highest scorer receives a GFA certificate

Winter: For the winter session, a GFA certificate will be awarded to the overall winner from Leagues I, II and IV. The winning winter League III club also receives a GFA certificate. The highest scoring foreign pilot receives a GFA certificate.

Points of contact

Address for entries, correspondence and email: Convenor, GFA Decentralised Competitions Committee, PO Box W48, Wanniasa ACT 2903, Australia.

Correspondence and entries from Australia can be faxed to (02) 6231 4121, international + 61 2 6231 4121. By email to <poboxw48@dynamite.com.au>. Email is the preferred means of communication.

Handicaps

The same sailplane handicaps are used for the DCE and BHC. These may be found on the Decentralised Competitions site accessed through the GFA homepage.



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The State of Play in WA



MIKE THORN, President Hill Flyers Club

It may be surprising to many of you to read that hang gliding in WA is enjoying a sustained period of growth and advancement for many of our pilots.

What's happened so far this year is a pretty good indication. In January we had our WA State Soaring Competition. After the usual spate of crazy weather we had five great days of flying with tasks ranging from 85km to 107km. Thirty-one pilots registered and many novice and intermediate pilots achieved personal bests.

Sam 'Chopper' Blight had been encouraging me for some years to get into competition flying; I wasn't disappointed. The team approach, organisation and general camaraderie amongst the pilots was superb. The final day was awesome. A high cloudbase of 9,000ft and instability from an approaching storm made for exciting flying. I managed to get airborne via aerotow (thanks Syd) only a few minutes before the launch window closed; I flew about 40km. The over-development and light winds meant slower climbs late in the day. Knowing there were no other gliders closer than 10km, I tried thermalling for quite a while with my eyes closed. This helped me focus only on the variometer audio. It's something I would recommend to all pilots when you are in the right conditions.

The competition ended with Mark Bomber Thompson narrowly winning over Phil Frilly Knight. Considering Bomber was in a CSX and Frilly was flying an SX5, Bomber will have to watch his back in future meets.

Other notable efforts were Des Hill winning the intermediate category and Jason Kath the novice section. The paragliding team showed exceptional skills and great team flying to out-fly most of us on most days. Congratulations to Mike Dufty, Dennis Smith, Dave Humphrey and Chris Stevenson. There are sure to be more PGs attending next year.

The only breakages were Jamie Oorchot's arm (in three places) and Gavin Nicholl's keel from a dustie. Being only 10 metres away I saw Gavin hold onto the keel, tail to the wind, only to see the down force snap it like a toothpick.

Another big development this year has been the number of pilots getting into aerotowing. Syd and Gina's base at Carters farm is becoming a mecca for cross-country flying. Over Easter no less than eight novice pilots became aerotow endorsed, and Jamie showed he has fully recovered with a couple of excellent XCs. Pilots are now going there almost every weekend.

Our hill sites have been pretty active too. The Hill Flyers Club is introducing many new pilots to our sites. We've had a few good days at Mt Bakewell. In early April, nine pilots did a lot of scratching in light winds and waiting for the wonder wind to come on. On this occasion the wonder wind launch window was about two minutes long. I launched spot on time and scratched towards the summit, not getting lift of any sort until under the towers. The lift then gradually improved to get me up to 1,500ft above launch. Being the sky pig that I am I landed very late. To cap it off, Steve Duncan got some awesome photos – thanks Steve! The next day was a boomer at Noondeening Hill with Gavin Nicholls and I getting to 2,800ft amsl before it OD'd. Jamie did well, having his first fly since breaking his arm.

Rick Williams and Dave Eckersley had a great day at Bakewell in mid-April with Dave getting to cloudbase and doing a 16km out and return.

Whitman Hill is a new site showing great possibilities in an east-south-east to east wind. We flew there in January and March. I met the local eagles at about 2,000ft and found numerous thermal triggers for about 3km left of launch. The major asset of this site is the superb top landing where, with a bit of breeze, you can do a vertical decent from about 500ft to a pin-point landing.

Noondeening was on again on 27 May, so we called the hotline to announce a fly-in. The low turnout didn't dampen our enthusiasm. Rick, Dave Longman, Steve Duncan, John Spike Orders, Jeff Smith and I had a great day. I spent 2 1/2 hours up there checking out the ribbons of thermal lift out to the farmhouse and then circling back above the hill. In the end Steve and I had the sky to ourselves and really started carving up the air. A bonus was both getting our FAI Bronze badges. I heard the next weekend was huge with 10-15 pilots getting plenty of airtime. Many of these pilots were flying Noondeening for the first time.

Another positive development is Simon Simple Shuttleworth getting his tug endorsement and also getting things happening down South at Albany. With three new pilots coming on with his new Wizard Wing many pilots will be looking forward to an aerotow tour to the Stirling Ranges soon.



The weekend of the 17 and 18 June will see a lot of flying going on. Gavin Nicholls, Jamie Oorschot and myself will be aerotowing at the Porongurups. Our Hill Flyers winter fly-in and launch and landing clinic will have happened at Wylie by the time this goes to print. Bomber is organising all pilots to be filmed taking off and landing, check the Club News section in the issue for details.

In late spring the 333 event will be on again. This is where pilots will attempt to break the 13 year old state distance record of 297km – and fly 333km. Three tugs will be on site and up to 30 pilots are showing interest. (Sub-ed note: Please see next issue (October) for an article on the 333 event. This years event is currently planned for 18-26 November.)

So far it's been an amazing summer and autumn with just about every weekend being flyable since the wet in mid-January.

Now a comment on the cultural aspects of our flying community.

Reflecting on my 23 years involvement in hang gliding it is fair to say that we are in the midst of a golden era where pilots are advancing more easily than ever before.

There are three main factors that have brought this about.

- *The professionalism of our dominant flying school – Sky Sports. The quality of their training has had a huge impact on the skill level and attitude of beginning pilots.*
- *The Western Soarers Club have created a much stronger culture of inter-dependence amongst pilots through their towing activities and well run competitions. Towing demands that you are well organised and look out for each other.*
- *The birth and growth of the Hill Flyers Club.*

We now have an atmosphere where anyone who wants to fly has multiple options of where to fly and who to fly with. With the development of the HGAWA hotline, the York and Toodyay weather stations, open membership phone lists in both the Western Soarers and Hill Flyers clubs, the choice of ground tow, aerotow or hill flying on almost any weekend, no pilot can now say it's difficult to participate. As a Dutch pilot, Case Bakker said to me the other day, "Gee, you guys are really organised." I wonder if his tune changed after waiting another four hours for his retrieve?

At our last Hill Flyers meeting we had our first guest speaker, Shaun Wallis – an instructor with Sky Sports who's seen and done it all over 17 years of flying. He was warning us of the critical mass of involved pilots needed to keep the schools and ultimately the club's State and Federal bodies solvent. He referred to the abysmal response rate to the strategic plan survey and the recent HGFA elections. (Sub-ed note: Should we add the Skysailor Survey to that list? A 21% response rate isn't all that crash-hot either.) He also expressed his hope that all pilots who love this sport will get more active in securing the future of our sport. Although the national figures show a declining participation rate, hopefully the developments in WA will help keep pilots in the sport and continue growing against the national trend.

A final word of thanks to Keith Lush for all his good work during his time on the HGFA Board, and for initiating the excellent AIRMANSHIP Safety Plan. Hope to see you flying soon, Keith! Fly high – go far!



Pilot Profile

Phillip Campbell

Phillip Campbell, best known as the illustrious leader of the Western Victorian Hang Gliding Club, is one of the true outstanding characters in our flying community. As well as being many things to the club (club philosopher, the subject of many jokes and recipient of many fruit bat awards), he's also the sort of person that holds a local flying community together – the sort of person who is generous with his time, advice and friendship. Many a novice pilot has been grateful for his enthusiasm and encouragement, and to all other pilots he is a great flying friend. Phil has been the backbone of the WVHGC, being its President for five out of the six years of its existence. Underneath all the joking, there is an enormous amount of respect for him and the work he has done – the WVHGC just wouldn't be the same without him.



Name: Phillip Campbell

Age: Forty-two

Flying hours: Around 450; there are some gaps in the log book that relate to slackness with the pen, not lack of flying.

Club: Western Victorian Hang Gliding Club

Occupation: Operations Manager at the Ballarat Livestock Saleyard. Not, as Mark Pike so gleefully told his sister when I was chatting to her one night, "killer of cute woolly little lambs". I wasn't in luck that night after all.

Place of abode: Recently purchased house in Ballarat. Lovely brick veneer constructed one year before I was.

Reason learnt to fly: Looking in the Yellow Pages for a hardware store to buy bits to fix a toilet and happened upon the hang gliding section. Toilet still broken, lack of flying fixed.

Favourite flying moments: One that sticks in my mind is my feet touching the ground at Lorne after they left the ground at Bells Beach (beat Mark Pike that day – that'll teach him for scaring his sister off).

Favourite flying site: The one that I am flying at the time. Actually, that sounds a bit lame; it would have to be Ben Nevis in Victoria.

Interests outside flying: A 1984 model BMW R80 GS motorcycle, beer and trying to keep my bike license.

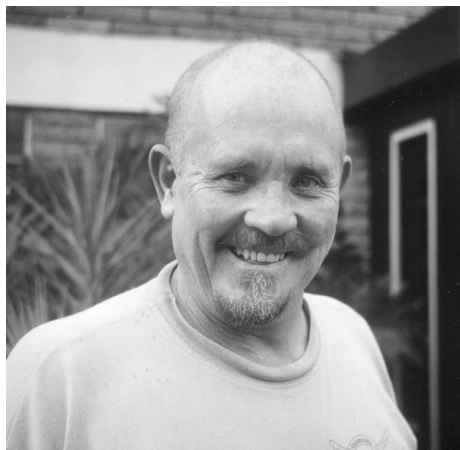
Career/life goals: Happiness, fulfilment and trying to keep my left leg working well enough to take off.

Favourite non-flying moments (there must be some): Becoming an A grade Polocrosse player after six years of work, and beating the Victorian Open team with a scratched up team of B grade players at the Smythesdale Polocrosse tournament. Leave me out of the team you bunch of pricks – we showed 'em. Then there was that other thing where I got married, that was a good day as well.

Some of my material possessions include: The 1984 model BMW R80 GS motorcycle. Brick veneer house in Ballarat (I think I own the door handles at this stage of the mortgage). John the cat.

When asked by my spouse/partner whether flying or 'the relationship' is more important I usually reply: Love me for what I am which is a selfish, obsessive prick that can't abide doing things like going to craft markets, dress shops and the like unless it is pouring with rain and blowing about 60 knots. Or to put it bluntly, "I'm off. See you later".

HGFA General Manager's Report



As you receive this magazine the HGFA Board will be looking at applications from persons interested in assisting me with our Active Australia projects. It is hoped that through these projects we will be able to increase participation in our sports by increasing club activity and making access to our sports easier for new participants.

Car Towing

Following a recent tow accident that resulted in injury to a very experienced tow pilot there were some very good points raised on our HGFA Safety and OPS Discussion List.

Firstly, Tove Heaney:

What worries me, is the following trend I see amongst my experienced hang glider pilot friends. They are getting slacker and slacker with communication. A lot of pilots don't tow with their radios locked on any more. And when the shit hits the fan, like James Freeman so delicately put it, going for that transmit button, (or that release) might not be as easy as you first thought. I've witnessed a serious accident as well as very close calls, I'm convinced could have been avoided with a radio being used! Leading to the pilot being able to communicate with the driver/tug pilot. I think every bridle has the potential to fail, regardless of its superb design! Sometimes due to pilot error! (Like my incident at the WA Nationals, when in the hustle and bustle of changing ends, the dolly rope got tied through my release. I had my radio locked on so I could communicate with the driver 100% in this rather stressful situation, and got away with it (minus one dolly that I eventually ended up

dropping from 500 feet!). Let's leave the radio locked on! That way the pilot can quickly inform the driver/tug pilot (yes I also lock my radio on when I aerotow, and we use a radio in the tug; I have asked the tug pilot to release me, as well as being asked as a tug pilot to release the HG pilot I've had on tow). The only thing that can replace the radio is an observer! So please, my fellow pilots, remember: IF IT'S NOT (LOCKED) ON, IT'S NOT ON.

Jeff Rickard also had some words of wisdom: The HGFA distributes its tow manual, which provides guidelines about how we can tow relatively safely. However, in practice many of the guidelines are ignored for reasons of practicality. I am primarily considering static line car towing, as this is what most of us use in this country. In particular there are three guidelines which are often ignored which I would like to mention with the aim of addressing one of the associated risk increases:

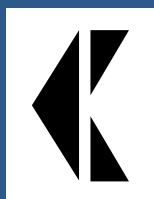
1. There should be an experienced observer in contact with the driver.
2. The driver should be experienced.
3. There should be a reliable rope release at the car end.

A release at the car end is often not used, partly because the driver is often not experienced enough to know when to operate it. The reason the driver is often not experienced enough is because experienced drivers know better than to spend their free time towing up hang gliders, thus are hard to come by. The reason experienced observers are often not used is because this would necessitate finding two experienced people with nothing better to do, which is harder than finding one, which is hard enough.

When using a winch, the driver and observer can be the same person. With static line car towing I have heard the claim that the driver can adequately observe the glider on tow via the rear vision mirror. I have even heard the claim that it is sufficient to observe the rope in the rear vision mirror once the glider has risen out of view. I'm sorry, but I've done a lot of towing (from both ends) and I just don't buy this.

A partial solution would be for the pilot to tell the driver when to release the rope. The problem as I see it is that in this situation the pilot is unlikely to have enough time or wits about him/herself in those couple of seconds between when it is realised that the rope needs to be released, and when it is too late, to explain this to the driver unless there is a predetermined command.

Radio communication is also often far from the ideal, with wind noise and excited pilots and bad car sets. When teaching a driver (or a pilot) I tell them there are basically two words they need to know – go and stop. If the pilot says anything



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else whilst on tow there is a good chance the driver will not understand it.

I propose we agree on a word which the pilot can use to tell the driver to release or cut the rope. It should be clear, obvious, and not easily able to be confused with anything else likely to be said. I suggest the word release is not appropriate since this word is often used anyway, like, I'm going to release soon. I suggest the word cut would be appropriate. If the pilot was to yell, "Cut! Cut! Cut! Cut!" I don't think it would be confused with anything.

Drivers and pilots often mix and match. The system we use is good because everyone basically does it the same way with the same commands. What I'm proposing would best work if everyone agreed on a word, and pilots and drivers were taught to use it in an emergency.

I invite comments from other pilots who car tow regularly (or their drivers) in the hope that we can increase the safety margin of the system which, in reality (like it or not), often gets used

– one (often not experienced) driver and no observer. (You'll still need a reliable car end rope release – that is a different topic!)

I invite your comments. The Tow Manual actually states that there should be an experienced person on at least one end of the rope; and an experienced driver should accompany an inexperienced one.

Harness Safety Alert

The following safety advisory from the DHV applies equally to all parachute compartment restraints. Relying on velcro to retain your chute is inadequate; a cotter pin restraining system should be professionally added to preclude accidental deployment.

Following a fatal aerotow accident the initial investigations into the accident have yielded the following course of events which led up to the accident: Shortly after take off, at a height of approximately 20 metres, the external parachute container, which is integrated in the harness and only held closed by velcro strips, came open. The parachute fell out over the front of the control bar. The tightening connection bridle pulled the control bar backwards and the hang glider crashed to the ground. The harness was an OK Integral (fish-type looking) from the company Keller Martigny, South Africa. There are well founded doubts as to the airworthiness of this harness with regards to the integrated external parachute container. According to today's construction regulations it must not be possible for the parachute to become free on its own. A simple velcro closure cannot provide this guarantee.

Accident Statistics

There have been no accident reports recently received that warrant inclusion in this months report, so I include some stats for last financial year and compare them to previous years. There September 2000

Performance Indicators

Reduction in total number of all accidents/incidents – per discipline. Target reduction of averages by 10% annually.
Reduction in total number of serious injury accidents per annum – per discipline (only Doctor & Hospital treatment & fatalities). Target reduction of averages by 10% annually.
Number of deaths per annum per 100,000 hours.
Target equivalent or less than General Aviation average of < 2 per 100,000 hours.
Number of serious injury accidents per annum per 100,000 hours (only Doctor & Hospital treatment & fatalities).
Target reduction of averages by 10% annually.

	Last 7 years Average at 30 June 2000	1999/2000 Financial Year
HG	– 43	HG – 37
PG	– 23	PG – 16
WM	– 10	WM – 8
HG	– 28	HG – 20
PG	– 13.5	PG – 7
WM	– 2.5	WM – 2
HG	– 3	HG – 0
PG	– 1	PG – 0
WM	– 4.7	WM – 0
HG	– 51.7	HG – 39.7
PG	– 90.7	PG – 28.9
WM	– 10.7	WM – 6.7

has been a reduction in the number of reported accidents, which certainly is encouraging, though I suspect this is due to a drop in reporting rather than a drop in actual accidents.

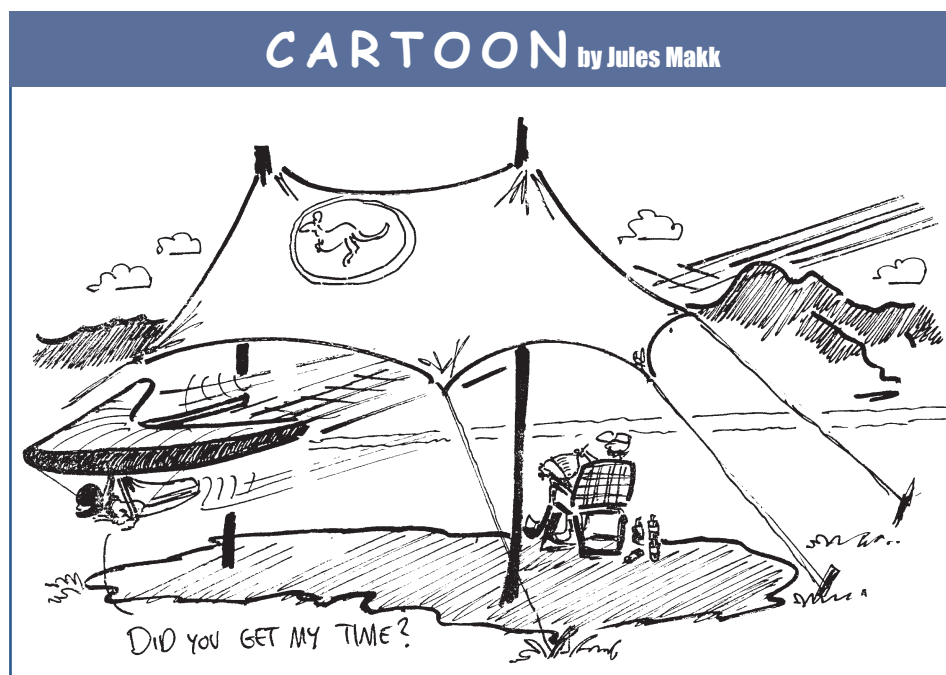
We have introduced several performance indicators into our Strategic Plan to measure our sports safety. The validity of these indicators could be questioned given that reporting levels can greatly influence results, nevertheless reported accidents is all we have to assess. To measure safety versus accident numbers, we use the following:

When applying last year's figures to past averages there has been a reduction across all indicators. Comparing reported injury accidents to flight phase (launch, in-flight and landing), past trends continue. In hang gliding, half the injuries resulted from in-flight causes (such as stalls, drifting too far behind the hill or not allowing sufficient height to make a safe landing). The remainder were split evenly between launch and landing accidents. Other than one reported landing injury, paragliding injuries resulted from in-flight causes (such as deflations from over-controlling, attempting to top land, when flying in strong turbulence or when flying in too strong a wind).

The two microlighting injury accidents resulted from one landing short of the runway and a stall in a turn after take-off.

Looking at pilot experience versus injury accidents, the past year has seen a pleasing reduction in student accidents. The only two resulted when a paragliding student suffered an in-flight collapse and a microlight student landed short of the runway, both suffered minor back injury. Hang gliding injury accidents were evenly spread between restricted, intermediate and advanced rated pilots. Paragliding accidents reported injury to 1 student, 1 restricted, 2 intermediate and 3 advanced pilots. Microlighting injuries were to one student and one pilot with 250 hours experience. These figures indicate that no matter what level of pilot experience, an injury can still result. No accidents resulted through aircraft or equipment failure; therefore it follows that all causes were due to poor airmanship.

Please be cautious in your decision-making,
Craig Worth





National Competition Committee (NCC) News

MILES GORE-BROWN

As mentioned last month a NCC website has been established for open forum discussion. The number of discussion topics and participants has increased gradually.

There are many discussion topics currently active, but the issues of most interest have been:

1. 18m Class
2. Team selection
3. Scoring system, and
4. FAI Rule changes.

Briefly, with respect to 18m Class the main discussion has involved the acceptance of the class for National champion status. Currently the rules require a minimum of eight gliders to enter and six gliders to take a competition launch in order for a class to be valid. Some concern has been expressed that unless the number of 18m class gliders increases then there will be no option but to task them with open class. A suggestion was made to task and score 18m gliders with 15m such that 15m Class could help make up the numbers. This generally did not receive favour so it seems that 18m Class may well be tasked with Open Class. If there are insufficient 18m Class gliders to meet the rule requirements (8/6) then there will be no alternative but to task and score the 18m Class in Open Class.

Team selection has become a popular discussion topic. In particular the manner in which the National team has been selected in the past. Ron Sanders is the pilot representative for the International Team Committee (ITC). Ron has been very active in trying to get as many ideas as possible such that he can represent the general feeling to the ITC with possible suggestions. There have been many views but what seem to be the general trend is that what has been done in the past may not be acceptable for the future. It is understood that previous committees involved in team selection have done a great job, ie how many time has Ingo been World champion along with Brad Edwards. From the discussions it appears that pilots want the selection system to be completely based on National championships' results, subjective selection seems to be unpopular. This will be a discussion to watch with great interest.

Scoring system discussion has gathered pace. It was noted from previous nationals that many pilots are unhappy with the current system. In order to change a system that has been in place for over 20 years will require a conservative and complete study

of the implications. The current system has been "massaged" to cater for irregularities that can occur, such as a very slow finisher destroying outlanding points, commonly called the "flop over the fence" problem. No real solutions have been suggested yet but much discussion has been about the general philosophy. It will be important to determine the philosophy required to be addressed by the scoring system, then the formulae can be developed. If you are a mathematician and feel like you want to be involved in the formulation of a scoring system, then log onto the chat page and let us know your ideas.

FAI rules changes have been discussed. Since the NCC meeting in May the following rule changes have been made:

Maximum weights:

Maximum allowable weights in any class is as recorded in that aircraft's Certificate of Airworthiness or Permit to Fly. Pilots should be aware that either tug or operational limitations may affect their launch capability. The limit for 15m and Standard Class shall be 525kg. The limit for Open Class shall be 750kg except that two-seater self launchers not carrying disposable water ballast may self launch up to 850kg or their C of A weight, whichever is less.

18m Class:

Introduction of 18m Class into the eligible classes.

Verification:

Primary verification will be accomplished by FDR. Cameras will not be accepted for verification. Garmin type GPS equipment will be acceptable for back-up equipment. All FDR approved by the IGC for FAI record and badge flights will be acceptable. Other equipment that is capable of downloading or generating a file in IGC standard format and whose operation can be demonstrated to be secure will also be accepted.

Radio procedure:

Radio procedures have been changed slightly. It is intended to try and eliminate team flying and promote individual competition. In previous competitions there have been several occasions where the standard gliding frequencies of 122.7, 122.9 and 122.5, are very congested. As such it has been suggested to use other frequencies for the general "gaggle" frequency. It has become a requirement prior to starting to remain on the launch frequency until above 3,000ft agl. Above 3,000ft it is required to maintain a listening watch on the start frequency until a valid start has been made and proceeding on track.

Turnpoint sector for fixed tasks:

The turnpoint sector will be the familiar "Thistle". However it has been agreed that the "in sector" portion behind the turnpoint has no outer limit.

Previously there was a penalty outside 10km. As such you can travel as far as you like past the turnpoint as long as you remain within the required 90 degree sector. There is no other penalty sector- you have either passed within the required sector or you will be scored as outlanding.

Club Class:

On other NCC issues Club class has also included many changes. I briefly mentioned these in last month's NCC news. I will however expand on these issues.

A new class is to be introduced from next year's Nationals for lower performance gliders. Named "Sports Class", this class will be restricted to gliders of Foka 5 performance or below, including eligible two-seaters, and will be handicapped using the current GFA handicap list.

The tasks set for sports class will follow a similar format to those flown in club class. The new class will give tasksetters greater flexibility, for example on windy days, when the performance of these gliders may restrict their ability to complete with higher performance gliders with the present handicap system.

It is possible the new sports class could form the basis of pilot selection for world class (PW5) events in the future. Pilots flying gliders eligible for sports class may elect to fly in club class if they desire.

As with the FAI Nationals' rules, cameras have been withdrawn as a means of verification. Club Class Nationals will accept Garmin track logs as a form of primary verification for future nationals. Due to the added complexity, and the fact that Garmins are most commonly in use, other GPS types will not be accepted at this time. The exception to this is that IGC approved data loggers and Borgelt Joeys will be accepted. To reduce the workload of the competition organisers, and due to the widespread acceptance and affordability of Garmin GPS units, cameras will no longer be supported as a means of verification, either as primary or as a back-up.

Lastly NCC ratified the continued availability of mandatory turnpoints as an option available to club class and sports class tasksetters.

If you get the chance visit the NCC website and pass on your ideas.



Murray Trike Safari 2000

TONY DENNIS, *The Right Altitude Microlights, Benalla*



Participants (from left to right), rear: Oliver Rennert, Peta Rennert, Therese Dennis, Tony Dennis (organiser), John Waite (aka Diesel), Karen Weiner, Wally Weiner, Ryan Romeike, Robin Purdey, Russell Purdey, Ben DeJong. Front: Frank Buccheri, Ian Rees, Mark Ogle
Photo: Tony Dennis

The Murray Safari is an annual event for trikes, organised by Tony Dennis in May/June each year. The first Murray Safari was in 1997, and a total of approximately 75 microlight pilots have participated over the last four years. There were 14 trike pilots taking part in this years Murray Safari – 10 trikes and one Drifter. Tony Dennis had organised the group into pairs – everyone with a buddy pilot. Oliver Rennert (from northern NSW) flew his new Airborne Edge X trike with Streak wing, and his wife Peta was his passenger. Ben DeJong flew his Quantum Trike. Ian Rees flew his Airborne Edge trike.

Ryan Romeike flew his Airborne Edge X with Streak wing. John Waite flew his Quantum, Frank Buccheri his Pegasus Q, Mark Ogle, from Darwin, flew his Pegasus trike. Wally and Karen Wiener together piloted their Airborne Edge X with Wizard wing. Russell Purdey flew his Airborne Edge with his wife Robin as passenger. Shane and Paula Gleeson together piloted their Drifter. Tony and Therese Dennis led the group and together piloted their Airborne Edge X with Wizard wing.

For the fourth Murray Trike Safari this year we planned a different course for our group of 10 trikes and one Drifter, taking us over the Murray to Forbes and Parkes. We planned to fly back through the scenic areas around Corryong. Well, this year the weather was against us! What's that saying – you can't help the weather? An arctic blast hit us at Benalla on Saturday 28 May and continued for the next three days. We had decided to bring this years trip two weeks forward compared to previous years – not a lucky decision, as the weather two weeks after was just right. Can't help the weather!

September 2000

Tuesday 31 May. The weather was eventually fine for flying, but not really having enough time to leave on our trip we decided to run a small cross-country competition from Benalla. The task was for pilots to calculate the estimated time for their flight and the amount of fuel they would use, flying a small triangle course around 40nm north of Benalla. It was neck and neck between John Waite and Ben DeJong, both achieving the task within a few minutes of their expected times, and pretty much guessing the fuel spot on! They shared the prize of a bottle of port.

On Wednesday morning we were ready to depart, though we still had some showers coming through and a very low cloudbase. We eventually got under way around 11am on our first leg to Corowa. A quick thaw out and we departed Corowa for Lockhart, with a shower of rain hot on our tail. We all climbed above the clouds and enjoyed a stiff tailwind to Lockhart.

Thursday was fogged in and again telephone calls were made to find a clear airfield ahead. By 10am we were on our way. Off to Ardlethan – the airstrip is part of the towns racing track. After Ardlethan we shot off to West Wyalong. Most pilots found this part of the flight to be the most enjoyable as we got to sail above the clouds in nice sunshine. Eighty knots plus again on the GPS – we were in West Wyalong in no time. Thanks to Mark Worner, and Paul and Sue Reedy for their hospitality in opening up the clubhouse for us and supplying some warmth and a cuppa.

We pushed on to Forbes while we had a good tailwind. The local RPT was quite surprised to see eleven microlights in the circuit! The Forbes Aeroclub was very happy to accommodate us and gave us a very warm welcome.

On Friday we decided to start making our

way home. We departed Forbes and decided it might be best to stay away from the hills, so heading back through West Wyalong was the best option. We landed at West Wyalong airport, downed a hamburger-with-the-lot each, and then flew to Temora.

At this stop, with the day getting on, we decided our last leg would be to Wagga MBZ. Organising into two groups we flew in formation (as much as trikes get) into Wagga.

Saturday morning the fog had rolled in very thick over Wagga, and some stratus cloud had rolled in over the top as well and had decided not to clear. By 2pm that day we knew we weren't going far, so that afternoon we were off together in the bus to town.

Sunday morning we ventured out to the airport before dawn. Wagga area looked good, but some mobile phone calls ahead to Benalla and Albury and Corowa put an end to our planned departure. It was raining everywhere we wanted to go. So plan B – pack up and drive home.

It was a 2.5 hour drive to Benalla in our minibus to retrieve our cars and trailers. If there is any major advantage of all this, at least you can easily pack-up your trike up and take it home. We made the right decision in not flying, as it rained the whole day and cloudbase was no more than 200ft.

A few days later a couple of us drove to Wagga from Benalla and flew our trikes back to Benalla. On the way we had a food and fuel top-up at Bunns, a private airstrip Ryan knew of on the way.

It was a very enjoyable week away with nice people, and four good flying days. It was great to see some new areas and airfields, and experience the universal hospitality of aeroclubs and the airports. It was a fun week.





Australia

WA Hill Flyers Spring Fly-In

16-17 September 2000

Social event open to all HG & PG pilots. Hill launch flying from sites within 100km of Perth. FAI Bronze Badge tasks will be set. More details to be published on the HGAWA message bank 08 9487 3258 during the week before the event, or contact David Longman on 08 9385 9469.

Annual Picolight Flying Club Fly-In

23-24 September 2000

This unique event is on again, this time at Lockhart (close to Wagga Wagga) in southern NSW. Jeff Hoffmann has kindly allowed the use of one of his paddocks. All paramotor & hangmotor enthusiasts are invited. Come & see what everyone else is flying. Some may even like to swap motors/wings, just to see what a different motor/wing is like. All will want to compare notes & help each other out. Others may have discovered useful things that you should know about. Have a good time in like company, make good contacts, get some air. Prospective picolighters are welcome: talk with pilots, see & hear opinions on different motors & wings. Contact Jos Weemaes ph: 02 60265658 (h) or email <jweemaes@albury.net.au>.

Eungella Hang Gliding Comp

25-30 September 2000

Remember the good old days of Eungella? We are hoping to have the same once again. Pilot rating: Int & Adv. GPS or camera turnpoint. Nomination fee: \$100. For further information call Ethel on 0427 831797. For accommodation call the Chalet on 07 495854509.

Laurieton Fly-in

30 September - 2 October 2000

The October long weekend HG, PG & ML fly-in extravaganza will be held at Laurieton. The event is organised by the Mid North Coast Club & there will be aerotowing by High Adventure & Airborne Windsports. Advance instruction will be offered to nov pilots by HAA instructors. Camping will be available for free at HAA. Other accommodation can be acquired in Laurieton at the motels & caravan parks (call Kew Visitors Information Centre 1800 025 935). Some hangar facilities available for microlights at Camden Haven Airfield (ph: 65594281). No entry fees, so come along. Prizes given to the best organised club of the interclub friendly comp. Bring your families, canoes, surfboards & anything to have fun with in our area. For further information contact Lee Scott (Club Event Co-ordinator) on 1800 063 648 or <info@highadventure.com.au>.

Canungra Classic 2000

21-28 October 2000

Entry fee \$120 + \$35 site fees. Registration &

Calcutta: 20 October. PGs & Floaters welcome. GPS mandatory (Garmin or Aircotec). Camera back-ups can be used every day except last day. Intermediate rating required. Closing date for entry 31 August 2000. Late entry fee: \$30. For more info visit [www.triptera.com.au/canungra/classic2000], email <tim@triptera.com.au>, ph: Dave Staver 07 5543 5953 or mail: Canungra Classic PO Box 116, Canungra 4275.

Canungra Cup

4-11 November 2000

The Canungra HG Club invites PG pilots to the inaugural Canungra Cup (QLD State PG Championships). With AA sanction & CIVL Cat. 2 status this will be the first sanctioned PG event of the Australian season. All sites are accessible by 2WD. Prizes & trophies awarded in all categories. You'll need: GPS (for flight verification), UHF radio, int rating, \$140 registration fee (\$170 after 30 September) incl. sites, maps, a T-shirt & a presentation dinner. We'll also throw in a bunch of National Ladder points. For more info visit [http://home.iprimus.com.au/plenderleithm/canungracup.htm], email <canungracup@hotmail.com>, ph: Keith Allen 07 3378 2149 (fax: 07 3876 7988).

Gillies Hang Gliding Competition

11-12 November 2000

Round 2 of the North QLD Championship (Eungella is Round 1). For more details contact Bernie Zwahlen <zwahlen@ledanet.com.au> or Ian Graham 07 40954466.

333 Week 2000

18-26 November 2000

Cunderdin, WA. It's on again: your chance to break the WA Open Distance State record of 297km. Places limited to 18 pilots with 9 places taken already. Venue: Carter Farm Cunderdin. Requirements: aerotow endorsement. Driver wanted. For further details please contact Mark Thompson ph: 08 9491 3076, 08 9368 4474, email <mark.thompson@team.telstra.com>.

WA State Soaring Competition 2001

Jan/Feb 2001 (dates to be finalised)

Open to all HG & PG pilots. Venue: Wylkatchem (200km NE of Perth). Ground & aerotowing based comp. Pilots to compete in the Open, Advanced, Intermediate & Novice Classes plus the coveted Teams Trophy. Main emphasis for the comp is fun & safety. Mandatory requirements: GPS/databack camera, parachute, tow endorsement & UHF radio. For further details contact Mark Thompson ph: 08 9491 3076, 08 9368 4474, email <mark.thompson@team.telstra.com>.

Laurieton Fly-in

2-6 January 2001

Run by the Mid North Coast Club for nov to adv pilots. The fly-in will be open to both PG & HG pilots who want to get some airtime flying a

range of sites incl. 2,000ft inland to 120ft coastal. Entry fee: \$40. All pilots just need airworthy gliders & radios. Prizes will be donated for all licence categories. Come & join the fun! Contact us for more details on 1800 063 648.

Corryong Cup

13-21 January 2001

Registration & practice day Saturday 13th. Registration & start day Sunday 14th. Last competition day Saturday 21th. Contact Steve Bell, ph: 02 4294 1268, email: <spbell@earth.net>.

Forbes Flatlands 2001

14-21 January 2001

Practice day: 13 January. Presentation night: 21 January. Rating: AAA & FAI Sanctioned WPRS. This will be a Flatties with a difference: it will be an all aerotow meet. That is, we will supply the tows, you just have to show up with a glider, tow release & retrieve. Tow organiser: Bill Moyes (we will be very organised in the paddock!). Meet organiser: Vicki Cain (contact Moyes Gliders, ph: 02 93164644). Essentials: aerotow endorsement, HGFA membership, GPS (Garmin or Aircotec). Entry fee: \$500, incl. unlimited tows, unlimited flying possibilities, presentation dinner. Last Forbes comp in '99 had three World Record days! \$100 deposit is required by 30 November to secure a spot, & the balance at registration. Send cheque payable to Forbes Flatlands 2001 or register online at [www.moyes@moyes.com.au]. Postal address: Moyes Delta Gliders, 1144 Botany Road, Botany NSW 2019.

Bogong Cup 2001

23 January - 2 February 2001

Registration day: 23 January. Last competition day: 2 February. Entry fee: \$150. Rating: AA plus FAI Cat 2. For more info contact Phil Lahiff 03 57544247, email <mountaincreek@netc.net.au>.

Overseas

2000 International Open PG Championship of New Caledonia

27 October - 5 November 2000

This event will take place at the flying sites of Ouazengou & Katepaik (Northern Province) & Dzumac near Noumea (Southern Province). As every year, we expect pilots from the Pacific area (French Polynesia, New Zealand, Australia, Japan) & pilots from France or other European countries to come & discover New Caledonia with this friendly competition. If you are interested or want more information, in English or French, contact: AVLNC, PO Box 11281, 98802, Noumea, Cedex, New Caledonia; ph/fax: (687) 411015, email: <jacquesle4@mls.nc>



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 prospective buyers) and your HGFA membership number (for verification of membership).

(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

Aero 150 nov, orange LE, blue/orange US, rubber-backed faired uprights, speedbar. Easy, light, delightful to fly, GC \$750. Ph: Helen 02 42943333.

Aero 170 nov, EC, \$1,500. Ph: Nigel 02 65854723; 0419 442597.

Airborne Shark 144 adv, superb cond., 25 hrs only, handles beautifully. Good looking sail with purple/light green US, folding base bar & spare DT. If you want an as new Shark for \$3,800 ph: 02 66891085, email <ashley@lis.net.au>.

Airborne Sting 154 int, dark blue L/E, orange & fluoro yellow US, GC, can be inspected & test flown. Newcastle area, \$1,800. **Wanted:** glider cover bag to fit Moyes XT 165. Ph: 02 49347917.

Moyes XT 165 int, fluoro red, green/yellow US. Manual & batten profile, new side wires, VGC, has been to 10,000ft, \$1,800 ono. Ph: Craig 02 69291956, email <hoppy1@actonline.com.au>.

Mosquito motorised harness, brand new, never flown. All the latest modifications: improved choke, cut-off switch, lightweight carbon prop, etc. Owner needs quick sale. Ph: Antony 02 62642484 (w); 02 62882669 (h); 0409 780504 (m).

Go to [www.highadventure.com.au/SkyShop] to buy & sell new & secondhand gear. This is a free service supplied by High Adventure Airpark for all pilots. Advertise your gear online for FREE!!!

Queensland

Sjöström vario 90Q1B, \$300. Icom radio IC40G, \$250. Original Icom headset & PTT, \$50. These accessories belonged to Dick Lys that 'Gentleman flyer' remembered fondly by many of us for his quiet & unassuming manner. Ph: Mrs Carmel Lys 07 33991958; or Andrew Kennedy 07 38922753; or Peter Beard 07 33487150. Also, Dick's glider is available again, XS 155 (adv) suit adv pilot looking for a bargain priced glider in fair to good cond., \$500. Ph: Andrew 07 38922753; 0411422926.

Blade Race 141 adv, low hrs, \$1,700. Ph: Darren (Gold Coast) 0418 170620; 07 55285316.

ACT

Moyes XT Pro int, 10 hrs, blue/red US, white TS, crim LE, speedbar, UV bag. EC, wheels incl., \$2,500. Ph: 02 62498671.

Sting 154 int, flies well, OK cond. Likes to fly XC. Batten profiles, manual, new side wires & speed bar. Spare DT, wheels if needed. View & fly at Canberra, Bright or Stanwell. Consider swap for a good Mission 170 or similar. \$1,100. Ph: John 02 62816830; 0412 159472.

Victoria

Combat 2 152 adv, late 93, white TS, purple LE, orange/white/lime US, fluoro pink batten pockets. Approx 100 hrs. Clean, colourful, easy to handle, \$1,200. Ph: Steve 03 98766227.

Garmin eTrex, new, still in box, used twice (not on HG), \$290 + p&p. Ph: Damien 0417 438557.

Moyes X2 int, the big guy's glider! Complete with undercarriage, batten profile & bits, \$1,500. Ph: Peter 03 59629371, email <peter@sensair.com>.

Moyes Xact harness, black/blue c/w, good quality chute, suit 5'5-8, \$850. Flytec 3010 vario, \$350. Icom IC40 G handheld, \$320. Ph: Tony 0418 574068.

Western Australia

Moyes Xtreme harness, suit pilot 5'4 to 5'8, perfect cond., \$700 ono (cost \$1,195 new). Ph: Rick 08 92943962; 0427 057961.

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Queensland

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Queensland

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Wanted

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Paragliders, Firebird Matrix: fastest DHV 1-2 glider, 52km plus we have them in stock, test fly today! The price is exceptional, check out the DHV results on [www.dhv.de]

High Adventure paragliding harness: we have new harnesses in stock with 20cm back protect and built-in speed systems. Common price for this style harness \$900, we sell them for \$710.

Flytec Varios: new in stock, \$490 for PG, \$510 for HG with bracket.

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Other

Free-Flying Magazines

Cross Country Magazine subscriptions
Carol Binder 0417 311360.

GPS Satellite Information

STEVE DONEHUE AND ANDREW MEDEW

We recently had a GPS night at the Eastern Hang Gliding Club. We started with the below theory, which some readers might be interested in. The info was gleaned from the internet (as found by Andrew Medew):

Existing (April 2000)

Our GPS uses US Navstar satellites. The European Union is planning its own GPS-Galileo which may use Russia's satellites or build 21 of their own.

Hardware

Navstar satellites (@ \$40M), 4 in each of 6 planes, circle earth every 12 hours (not geosynchronous) at 20,200km. Tracking ground stations send satellite position data to a master control station at an air force base in Colorado (US). The control station makes corrections and sends data to satellites via ground stations.

Software

The satellites send encrypted data on a military band and unencrypted data on a civilian band. US and Europe want to use the same frequency (1,176.45 MHz). The data is a 1,023 bit code repeated each millisecond plus 50 bit/sec of navigation data. The 1,023 bit code appears as noise and is reproducible by GPS receivers. The codes are transmitted in a Code Division Multiple Access (CDMA) scheme. GPS acquire satellite data when the satellite and GPS signals match. The GPS needs signals from four satellites to be able to calculate its latitude, longitude and height co-ordinates.

Accuracy

Accuracy depends on measurement accuracy (delays, selective availability (SA) factor – military degradation – change satellite clock data) and configuration of satellites. As of midnight (US time) 1 May 2000, SA was stopped.

Quoted Best Case: +/- 8m (Military +/- 1m)

Trial (95% of points, over 24 hours) +/- 6.5m

Quoted Worst Case: +/- 75m

Future

The satellites send out 50W of signal – 1/2 military – evenly over the earth's surface. The low power received is a worry along with other systems trying to use the same bands/spectrums. To improve GPS accuracy by 2003 two new civilian band signals are to be introduced. By 2006 18 more satellites are to be introduced.

GPS Uses

Aeronautical: hang gliders, planes (augmented by private ground stations to improve accuracy); **Cars:** navigation, theft/location, emergency service vehicle tracking; **Marine:** navigation; Civil works: guided bulldozers; **Personal:** eg Casio watch; cellphone timing, to be able to use CDMA with transmitter selection land survey.



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Victoria



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General

Waikerie International Soaring Centre is looking for tuggies to tow mid-week from Monday, 6 Nov until 30 March. This need not be one person but comprise several persons who will tow in allocated blocks. Accommodation provided. Enquiries to <wisc@riverland.net.au> or ph: 08 8541 2644.

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