



Soaring AUSTRALIA

November 2003



Clio's Quiz



Triking around Coral Bay



Winter Refuge

November 2003

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Afternoon boat above Piedrahita, Spain
Photo: Tony Sandeberg



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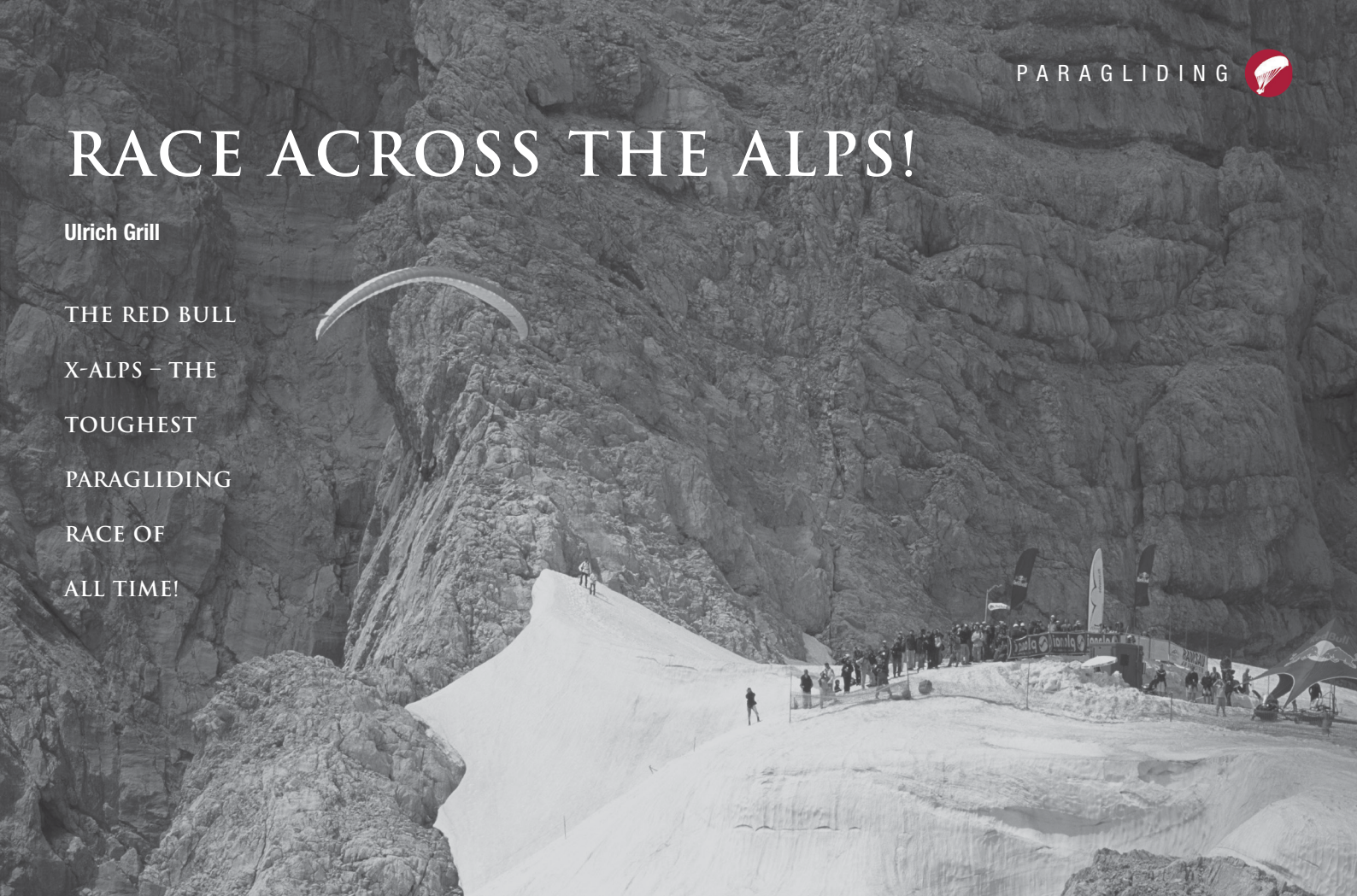
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RACE ACROSS THE ALPS!

Ulrich Grill

THE RED BULL
X-ALPS – THE
TOUGHEST
PARAGLIDING
RACE OF
ALL TIME!



© Red Bull/Ulrich Grill

Being extremely optimistic: 10 days. (Kaspar Henny, CH I)

Being very optimistic: 14 days. (Holger Herfurth, GER II)

From an optimistic viewpoint: two to three weeks. (Walter Holzmüller, AUT II)

No more than two weeks. (Stefan Bocks, GER I)

No less than two weeks. (Jon Shaw, UK)

So how long does it really take to cross the Alps with a paraglider and by foot?

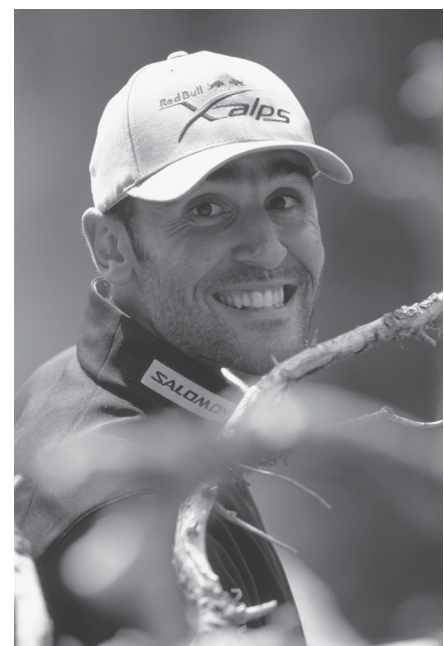
How many days of flying and walking is it from the easternmost Alpine glacier on the Dachstein Mountain range via a turning point by Verbier in western Switzerland to the beach in Monaco – exactly 772km as the crow flies or approximately 1,400km over roads, country lanes and mountain trails? Before the start, each of the 17 two-person teams – pilot and supporter – competing in Red Bull X-Alps had its own idea of how long the race would take. David Degault (FRA), test pilot and canopy designer for Ozone, thought a quick race would be possible: *“If the weather is perfect, you could finish in a week.”* But then there’s Slavi Vasilev, a Bulgarian oceanographer living in Switzerland, who took a more pessimistic view: *“I think 17 to 19 days to complete the distance is more realistic.”*

But no matter how long it was to take, all teams were in agreement that Red Bull X-Alps would be the toughest paragliding race of all times. The event, created by mastermind Hannes Arch’s organisational

team and race director Steve Cox in the tradition of bivouac flying and inspired by Toni Bender’s north-to-south Alpine crossing (captured in the film *“Ikarus”*), would not only be the ultimate challenge to the flying skills of the competitors: it would also put their physical endurance to the extreme test.

For reasons of safety alone, the selection of the contestants was very strict. As organiser Hannes Arch explains, *“In choosing the pilots, it wasn’t just about getting the cream of the paragliding scene into the race; we also wanted to include athletes who had demonstrated their toughness, stamina and spirit of adventure in other disciplines.”* In addition to World Cup pilots like Kaspar Henny, David Degault and Walter Holzmüller, and such professional adventurers as Will Gadd (CAN/USA, the two-time world-record holder in distance paragliding and world champion in ice-climbing) and Carlos Carsolio (MEX, the youngest mountain-climber to scale all 14 of the world’s 8,000m peaks), experienced and ambitious long-distance paraglider pilots also accepted the challenge. Like the Turkish paragliding instructor

and national champion Arif Kemal Buhara, who even before the start of the event had a feeling that *“Red Bull X-Alps is going to open up a whole new dimension for me.”* Or management consultant Jon Shaw, from Dunstable, England, who just last fall recovered from cancer and in this difficult period *“dreamed of doing something really demanding.”* Well, he found what he was looking for in Red Bull X-Alps.



David Degault

© Red Bull/Ulrich Grill



© Red Bull/Ulrich Grill

The rules were deliberately kept simple: take-off from the Dachstein Glacier, two turning points to be passed (Croix de Coeur by Verbier and Mont Gros near Monaco), and otherwise the pilots were free to choose their own route through the Alps. Breaks? Camps? No. The teams were to rest at their own discretion. (The sole stipulation: no flying during the night.) Permissible means of transport? For the athletes, their glider and their own two feet. And anything but motorised aircraft for the supporters, whose job it would be to supply his or her pilot with food, weather data and encouragement. The winner? The first to land on the beach in Monaco.

14 July, Day one: Take-off from Dachstein

Two days ago a depressing rain front hung over the valley; yesterday it was gusting from the north-west like blasts from a wind tunnel. But today, the scheduled launch day for Red Bull X-Alps, the bluest skies imaginable

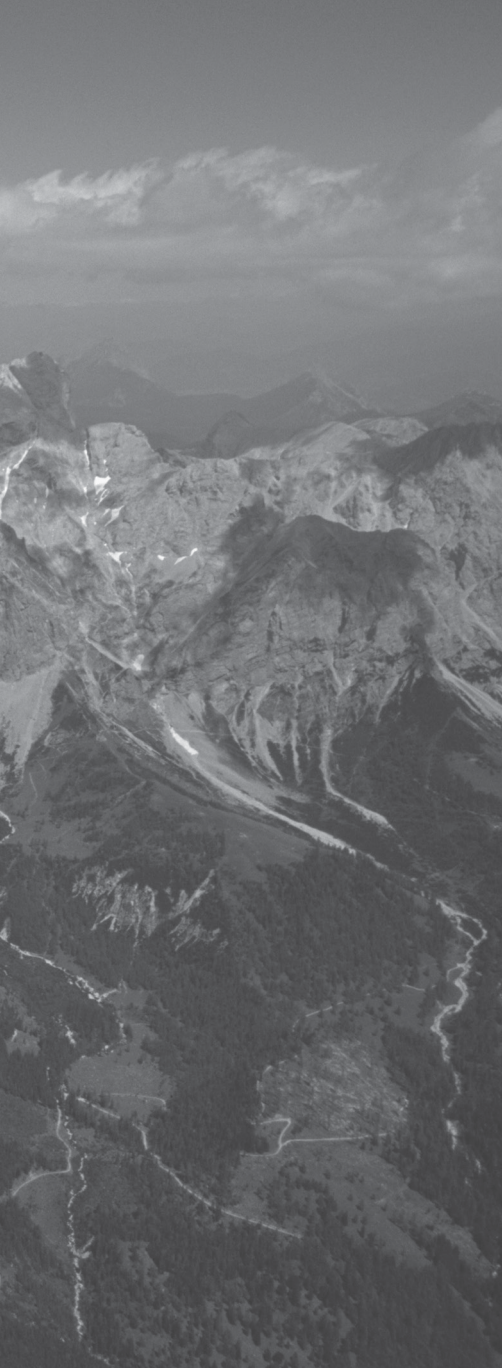
are spread out above the Styrian resort town of Ramsau.

Up on the Dachstein Glacier, there is still a prevailing tailwind, but it should be stopped by the thermals by early afternoon. Race director Steve Cox announces a one-hour launch window: the pilots can get into the air starting at 1:20pm, and the signal to go – three red rocket flares – will be given at 2:20pm.

On the glacier the final preparations are being made. A crowd of over a hundred family members and fans has come up to this cliff of ice and snow to see the athletes off. Rucksacks are unpacked, flight suits are wiggled into, instrument bags are strapped on, a last equipment check is made, sunglasses are cleaned, and masks and helmets are donned. It is 1:20pm. Local hero Walter Holzmüller is the first pilot to lay his wing out. To the applause of the crowd he pulls on his lines with his back to the valley, forces up the canopy, waits until the wing fills with air, turns quickly, takes three or four steps

and launches. One by one all 17 pilots take off, and by 2:10pm all are circling approximately 300m above the glacier's restaurant to jockey for a good position behind the imaginary starting line (the wires of the cableway). At 2:20pm the starting signal sends the 17 pilots on their long journey to Monaco.

By the end of the first day there is already a clear leader: while many pilots are bombing out due to the difficult conditions – weak thermals, a low cloudbase and unpredictable valley winds – the Swiss Kaspar Henny makes an important discovery. During a launch in Altenmarkt he notices a spot that is wind-sheltered and getting very intense rays of sunshine. He takes advantage of the thermals there and flies 12km farther than his closest rivals, Thomas Friedrich (GER II) and Holger Herfurth (GER III). Kaspar lands 15km short of Zell am See and decides not to walk to the Schmittenhöhe, the next logical launch point, but rather to hike through the night and the next morning to the Wild-



kogel, a mountain some 40km away that was the take-off point for the rained-out 1999 Paragliding World Championships.

Day two: Drama in the Pinzgau

This time, however, the spoiler on the Wildkogel appears to be not the rain but the wind: Kaspar Henny is prevented from launching by a crisp breeze from the north-west gusting up to 45km/h. As supporter Maja Walther comments: *"When we saw the local pilots pack their wings back up, we felt a little uneasy. We were afraid Kaspar's monster trek of the previous night was going to be in vain."* A small consolation for the leading team is the fact that the seven pursuers who have gathered near the Schmittenhöhe by Zell am See are also being kept on the ground by a strong headwind.

In the end, it is the topography of his location that lends the Swiss frontrunner a helping hand. Kaspar hikes up from the launch point all the way to the summit, where he is able to launch towards the north – an opportunity that the competition at the November 2003

Schmittenhöhe is denied. Kaspar lets the wind carry him around to the south side of the Pinzgau, gets over the Gerlos Pass with no problem and leaves the Ziller Valley behind.

In the meantime, the competition at the Schmittenhöhe is resorting to acts of desperation. Holger Herfurth, Thomas Friedrich and Andi Frötscher (ITA) take up the battle against the headwind and land back at the foot of the mountain, almost exactly at the spot where they started their climb. Will Gadd, Tomi Cocone (RUM) and Uros Rozic (SLO) take the scenic "Pinzgau Walk" along the 2,000m high ridge, and shortly before sundown, when the wind dies down, they glide down into the valley. Among the field of pursuers, Urs Loetscher (CH II) escapes the farthest from the Pinzgau stranglehold: he launches from the Schmittenhöhe at 12 noon, has to land after only 12km, climbs up again and flies 15km more, moving into second place behind compatriot Kaspar Henny.

Day three: As far as your wings will carry you

A big flying day at Red Bull X-Alps: Walter Holzmüller, David Dagault, Krzysztof Ziolkowski (POL) and top-ranked Kaspar Henny make over 100km today. Walter Holzmüller flies from Zell am See to within 20km of Innsbruck, soaring from last place to sixth spot. He could fly even farther, but – as with the other pilots – he is stopped by a storm.

By evening Kaspar Henny is only 20km away from the Swiss border. Some 60km behind him, Urs Loetscher, Thomas Friedrich and Holger Herfurth are fighting it out for second place in the pouring rain.

Bad luck for the Romanian Mihnea Chis, Tomi Cocone's supporter: in the afternoon



Gadd Will

© Red Bull/Florian Moser

he crashes on the Wildkogel, plummeting 40m with his glider. The innkeeper from the Wildkogel takes Mihnea down to the valley on the cableway, and from there the Romanian is taken by ambulance to the hospital in Mittersill. The diagnosis: a severe concussion and a fracture of a lumbar vertebra. The latter is a very painful injury, but Mihnea will not suffer any lasting damage. It's a difficult situation for Tomi Cocone, though: he must find a replacement for Mihnea within 48 hours.

Day Four: As far as your feet will carry you

Take a hike! A rain front moving through rules out any flying today. Despite an inflamed ankle-flexor tendon, frontrunner Kaspar Henny covers 45km on the ground and is the first pilot to cross the Swiss bor-



Gadd Will hiking

© Red Bull/Ulrich Grill
Soaring Australia 3

Heading West with EAST

A new online tracking system celebrated its premiere at Red Bull X-Alps: EAST provided an overview of the racing action via the Internet.

Day nine of Red Bull X-Alps. Frontrunner Kaspar Henny (CH I) has covered an extremely tough 60km today and is camping next to a field south-east of Turin. Supporter Maja Walther has made him his favourite meal in the on-board kitchen: fried macaroni with egg, apple sauce and a meat stew. While the two are eating, there is suddenly a rustling in the thicket: a hand holding a GPS receiver is thrust through the bushes, and then appears a friendly face, whose owner asks in a shy voice: "*Kaspar Ennnni?*"

Red Bull X-Alps set completely new standards in adventure sports not only as an event but also in terms of the high-tech visualisation of the race action: internet users were able to call up the current position of every competitor at any time on the event's home page [www.redbullxalps.com]. Never before had it been possible to experience a race with such immediacy and at such a great distance from one's home. And sometimes the experience was extremely up-close and personal, like in the case of that Italian paraglider pilot who correctly interpreted the co-ordinates from the internet and simply had to shake

Kaspar Henny's hand.

This 'overview with a mouse click' was made possible by a device developed especially for Red Bull X-Alps by the Swiss aviation and aeronautics company RUAG Aerospace: EAST (Equipment for Airborne Storage and Transmission), which features both a GPS and a GSM module. This enabled it to determine and register the position data of a pilot every minute via satellite. This information was then transmitted every 20 minutes by SMS to a web server.

There the data was processed and transferred to a map showing the current position of each pilot and the route he had travelled – with a maximum lag time of 20 minutes. Internet users thus had the opportunity to get updated at any time on the race progress, distances covered, intermediate times, speeds and the estimated arrival time in Monaco. At the same time they could see whether the pilot was currently flying, walking or resting. An additional benefit of the system was that the race committee was able to determine if a contestant was really travelling solely via glider and foot.

The fact that the race was followed intensively via the internet was confirmed not only by the numerous encounters à la "*Kaspar Ennnni?*" reported by the other pilots. In Verbier, for example, paragliding legend and restaurant owner Philippe Bertrand kept an eye on the race, and every time an athlete passed the Croix de Coeur turning point, he was there waiting – with a four-course meal. The competitors at the Paragliding World Championships in Portugal, which was taking place at the same time, were also staying updated on the race action at Red Bull X-Alps and called in to give the teams tips and to convey their congratulations.

Even the event organisers hadn't anticipated such interest. On the very first day, the server handling the internet traffic was already running in the red zone. A second server was installed, but the 12,000 hits recorded between 10am and 11am on the third day was too much for that one as well, and subsequently two more were put into action. In the end, it took six servers to handle the incredible deluge of online queries: in 14 days the X-Alps map server recorded an unbelievable 500,000 hits.

© Red Bull/Florian Moser

der. He spends the evening in the spa town of Scoul, where he tries to relieve his tendonitis a bit in the thermal baths.

Tendon pains are plaguing other pilots as well. Walter Holzmüller's diagnosis: "*We trained wrong. In practice we always trained hiking uphill. We never thought we would be walking long, flat stretches through valleys in this race.*"

Thomas Friedrich and Holger Herfurth have left Landeck behind and occupy second and third place. Urs Loetscher, held up in Sellrain because of rain, has fallen somewhat behind.

Tomi Cocone's cloud of misfortune has taken on a silver lining: a network of Romanian and Austrian paragliding friends produce a replacement for the injured Mihnea Chis. Claudio Dusa flies into Innsbruck in the evening and will support Tomi to the best of his ability.

Days five and six: On the Swiss Autobahn

Kaspar Henny is in his Swiss element: in two perfect flying days the leader moves more than 200km closer to the finish, cruising over his home in Obersaxen along the way.

His fan club and his supporter Maja Walther can barely drive fast enough through Valais Canton to keep up with Kaspar's ferocious flying pace. By evening the front-running team is less than 50km away from the Verbier turning point.

Kaspar now has a 80km lead. His closest rival is compatriot Urs Loetscher, who isn't following the "race track" in Valais so popular with paraglider pilots: he has found a lesser-known route farther south. Will Gadd and David Degault are flying these two days as a tandem and succeed in squeezing past the duo of Holger Herfurth and Thomas Friedrich. Friedrich, however, was overtaken only because he suffered an upper-body contusion after a hard landing and had to sit out nearly half of Saturday. It is uncertain whether he will be able to continue to fly or walk at all. Supporter Markus Harpf, who also has a car accident on this day, tries to get Thomas back on his feet with lymph-drainage massage.

Day seven: The turning point is reached

For the third day in a row the pilots can enjoy a high cloud base and good thermals.

Kaspar Henny was the first to pass the turning point by Verbier and today can even leave Aosta behind him. Trailing Urs Loetscher is the trio of David Dagault, Stefan Bocks (GER I) – who has made up an enormous amount of distance in the past two days – and Will Gadd, engaged in a fierce battle in Valais for third place.

In spite of his hard landing, Thomas Friedrich wants to get back in the race, but he isn't able to put on his harness due to the severe pain in his upper body. He decides to walk, though, because Tom is optimistic he can recover while he's hiking. The determined German makes nearly 30km today.

One thing is becoming very clear: Red Bull X-Alps is definitely a flying competition and not a foot race. The athletes at the front of the pack have covered most of their routes by air. Kaspar Henny has flown 84% of his distance, Urs Loetscher 74% and David Degault even 90%.

Days eight to ten: An exercise in patience

First rain, then wind: very few pilots can achieve a flight of any distance in these three days. Kaspar Henny studies the weather fore-

casts and decides to take the route through the Po Valley. He's playing it safe: in this miserable paragliding area he'll at least be faster on foot than his pursuers.

His decision appears to pay off. Some 100km behind Kaspar, in the French Alps, Stefan Bocks, Urs Loetscher and David Degault are locked in an exciting race for second place. Unfortunately for these three, the weather isn't permitting any long-distance flights, and as Urs Loetscher says, *"We're in a region where you've got to fly, or you'll walk your feet off. You have to hike 10km to make one kilometre towards Monaco!"*

Day eleven: Thermals wanted

For the fourth day in a row, the weather is preventing long flights, and the athletes again have to resort to their own two feet. Thomas Friedrich, who made 45km over asphalt yesterday, hikes 35 more today and at Croix de Coeur overtakes Holger Herfurth and Will Gadd, who have been waiting nearly 24 hours for suitable flying weather. Tomi Cocone is a marvel: after covering 60km yesterday (80% on shoe-leather), the Romanian makes another 62 by this evening!

Tomorrow could be the decisive day. Kaspar Henny's disadvantage: he's currently 60km outside of Monaco in a poor flying area. Stefan Bocks and Urs Loetscher are trailing Kaspar by less than 100km and closing in on the city of Briançon from two side valleys. Their advantage: under ideal conditions, they could fly very far tomorrow. Even as far as Monaco? David Degault is also someone to keep an eye on: although the Frenchman is 130km behind Kaspar Henny, he knows the shortest route to the finish line. In any case, the weather is promising: a ridge of high pressure should ensure thermals. Now it all depends on the winds.

Day twelve: The suspense grows

Kaspar Henny launches from the Tenda Pass but has to land after only eight kilometres. The flying area is unfavourable, and he's not able to locate another launch point. He learns from supporter Maja Walther that Stefan Bocks and David Degault are in the air eating up the kilometres. That decides

Monaco

matters for the leader: yet today, in the sweltering heat, he must hike through the narrow, heavily travelled Roya Valley to Mont Gros – the final turning point before Monaco.

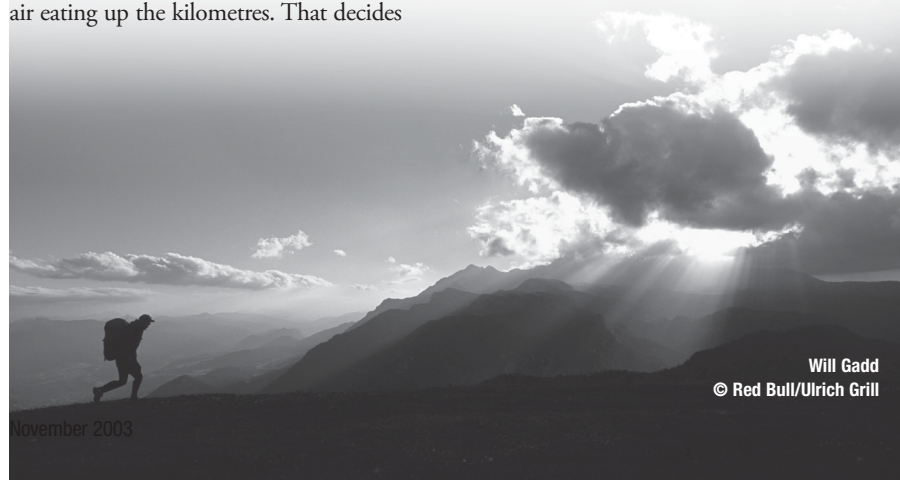
Thirteenth day: Across the finish line

At 11:30am on 27 July, after only four hours of sleep and one final tough climb, a visibly exhausted but equally visibly happy Kaspar Henny arrives at the final turning point on Mont Gros. Asked how he feels just before the last two kilometres to the finish, he says: *"It's an incredible feeling, but not really an explosive one. The emotions come more regularly, like during that last climb. I really got goose-pimples."*

At 12:15pm the 35-year-old Swiss lands on the roof of Monaco's famous Jimmyz nightclub, thus winning the toughest paragliding race of all times. After making up an incredible amount of distance in a final spurt, David Degault is the second to reach the finish, at 5:40pm. The Frenchman has obvious-



© Red Bull/Christoph Hoerner



Will Gadd
© Red Bull/Ulrich Grill



A Victory for Stubbornness

(An interview with Kaspar Henny)

Kaspar Henny, 35, from Obersaxen, Switzerland. Trained forester, paragliding instructor, athlete. Henny has competed in the Paragliding World Championships since 1993, finishing fifth overall in 1999 and 2000. He placed third in the 1998 European Championships and won three World Cup titles with the Swiss national team. His greatest accomplishment: winning Red Bull X-Alps.

How are your legs doing?

Pretty good. I had knee problems before the start, but amazingly enough it got better during the race. But then by the second day of the race I had an inflamed ankle-flexor tendon from all that hiking over flat ground and downhill. Probably like most of the other pilots, I wasn't really prepared for this. I mean, who's stupid enough to strap a 20kg rucksack on his back to hike 50km on a flat road? The inflammation was really hurting on the fourth day, when I hiked 40km in the rain to Scoul. But towards the end the pain let up.

The decisive moment in the race?

Maybe right during the first flight, from Dachstein to just outside Zell am See. The conditions were difficult – weak thermals, a low cloudbase and unpredictable valley winds – and a lot of the guys were bombing out. During one launch I noticed a spot that was wind-sheltered and getting very intense rays of sunshine. And I thought, maybe there are some thermals there. There were, and I got a good flight and a good lead out of them.

Your best decision?

To not rest on my laurels after landing by Zell am See. I decided not to walk to the nearest launch point on the Schmittenhöhe, where the others would have caught up to me the next morning. Instead, I hiked through the night and the next morning to the Wildkogel, which extended my lead.

Your worst decision?

On the eleventh day, near Cuneo, I walked a long way to reach a launch point, even though the weather forecasts and cloud pictures were promising bad weather. It cost me a 20km detour and



Kaspar Henny

© Red Bull/Ulrich Grill

nearly a half a day, and then I had to wait up there for a hole in the fog so I could fly down to the valley.

Your strategy for victory?

I planned my daily stages so that I was always at a launch point at noon, when the thermals are rising. And I always set an optimistic goal for the day as well as a minimum goal. If I reached the optimistic goal – great. But if I had to land short of the minimum goal, then I did all I could to get there anyway. I was very stubborn about keeping to this strategy, which wasn't always good – like in Cuneo.

Your nicest experience in the race?

The flight over Obersaxen, my home. I've rarely had such good flight conditions there.

Your present plans?

First of all I'm going to take at least a four-month break and fly to northern India with my girlfriend to do some bicycle trekking tours. Then we'll see what comes next.

Last year you called it quits with World Cup competition. Was Red Bull X-Alps your last race?

Hmmm. Could be. But the final decision has yet to be made.



ly given his all. *"Today I just wanted to walk, walk, walk. My body was like a machine,"* says David in the finish area. That evening, Stefan Bocks crosses the finish line as well.

The other athletes now have 48 hours to reach the finish in Monaco – but no one else will make it: a cold front passing through hinders long flights. In the final hours, marathon man Thomas Friedrich is able to edge into fourth place past Urs Loetscher, whose feet are so swollen that he can't even get into his sandals. Uros Rozic, who has been suffering from horrible foot pain ever since the second day, rescues sixth place from Will Gadd and Holger Herfurth.

Epilogue

Kaspar Henny took only 11 days, 22 hours, 55 minutes and 30 seconds to cover the distance from the Dachstein Glacier to Monaco. The field was extremely scattered by the end of the race: Jon Shaw, who brought up the rear, was still 509km away from the finish while Henny was already sipping a beer. Although he covered only a third of the distance, Jon is still very satisfied with his performance: *"Unlike most of the other pilots, I'm not a pro. It's like an ordinary driver competing against Michael Schumacher in a Formula 1 race. For me the race was between me and the mountains. And I had my hands full with that opponent."*

Was Red Bull X-Alps the ultimate paragliding challenge? That was something everyone could agree on. Even winner Kaspar Henny called it *"the toughest thing I've ever done."*



Above: Kaspar Henny and Maja
© Red Bull/Ulrich Grill

Kaspar Reloaded

Never say never: Kaspar Henny, winner of Red Bull X-Alps, had already called it quits with his career.

In truth, Kaspar Henny had grown tired of pitting himself against other pilots in paragliding competition. After over 10 years in the sport he could look back on two fifth-place finishes overall in the World Cup (1999 and 2000), a third place in the 1998 European Championships and three World Cup titles with the Swiss National team ('95, '97 and '01). And for the 35-year-old Swiss, that seemed enough: 2002 was to be his final season. After all, he had to start a new future in his home in Obersaxen. But Kaspar wasn't very firm about his retirement from paragliding competition. His final World Cup season was barely over when he heard about Red Bull X-Alps and knew: "This is my event."

It wasn't only his thirst for adventure that drove the trained forester to enter the toughest paragliding event of all times. A fair amount of ambition was also behind his decision: "I'm here to win," he said before the race, not one for feigned modesty.

His training for the race was correspondingly intense: extended ski tours throughout the winter, jogging two to three times a week, mountain biking in the spring – the former triathlon competitor and cyclist knows how to get his batteries charged up. For Red Bull X-Alps he chose the same flight equipment he used in World Cup competition. It was important for him to fly in his accustomed harness, even though it was somewhat heavier than the lightweights used by some competitors. "When you're in the air for up to eight hours at a time, it's important that you're comfortable in your harness," he reasoned. Kaspar tried to reduce weight in other ways, like eliminating maps from his rucksack. Why would he need them anyway? There are few people who know their way around the Alps like competition paraglider pilots do.

Kaspar's choice as his supporter was Maja Walther, a physiotherapist and the girlfriend of a fellow paraglider pilot. Maja already had experience supporting the Swiss National Team in World Cup and European Championship competition. She and Kaspar met in 1996, when Maja – who had only been paragliding for six months – would have wrapped herself around a tree during a landing if Kaspar hadn't grabbed hold of her at the last minute.

Kaspar was able to make good use of Maja's physiotherapy skills during the race. By the second day he was already suffering from an inflamed right ankle-flexor tendon, a typical sign of overstress. Kaspar's criticism of his training methods: "Probably like most of the other pilots, I wasn't really prepared for this. I mean, who's stupid enough to strap a 20kg rucksack on his back to hike 50km on a flat road?"

But despite the inflammation, which didn't ease up until the final days of the race, his training was obviously good enough. Right on the very first day, Kaspar

found the most favourable thermals. He jumped into the decisive lead on the second day and stuck to his shrewd strategy to maintain his edge all the way to the finish – a well-earned victory.

And now? Was his greatest triumph also his last race? A stoic Kaspar: "Hmmm. Could be. But the final decision has yet to be made." One thing is certain: he won't be climbing into any harness for the next four months. Until December he'll be travelling with his girlfriend in northern India, where they will do some trekking. Not with gliders but by bicycle.



Kaspar Henny in the air

© Red Bull/Ulrich Grill

GRAND PRIX DE FRANCE

St Auban – 22-28 June 2003

Bob Henderson Referee, Roland Stuck Competition Director

THE GRAND PRIX STAGED IN FRANCE FROM 22-28 JUNE THIS YEAR WAS THE FIRST TIME THAT SUCH AN EVENT HAS BEEN FLOWN IN EUROPE. THIS EVENT, WHICH IS DESIGNED TO MAKE GLIDING MORE SUITABLE FOR PUBLIC VIEWING AND MEDIA INTEREST, AS WELL AS BEING GOOD FUN FOR COMPETITORS, WAS DEVELOPED BY TERRY CUBLEY IN AUSTRALIA AND WAS FLOWN AS A DEMONSTRATION EVENT WITH THE PRE- WORLDS AND WORLD COMPETITIONS AT GAWLER IN 2000 AND 2001.

The French have made some interesting modifications in terms of the scoring system used. Some interest has been expressed in arranging further events in Australia in the near future.

The objective of this event was to test a new concept of competition designed to be easier to understand and to be more attractive for the media and the public. Primarily the organisers wanted to see if the modifications made to the rules, in order to make the contest more media friendly, still provided a safe and valid sporting competition. Of secondary importance was the desire to test whether such an event was really more attractive for the public and the media.

It is to be noticed that such a Grand Prix had already been organised successfully in 2001 in Gawler Australia but with slightly different rules and with another scoring system.

THE CONCEPT

The key features were:

Rules

Detailed rules, following the Annex A format, were written and posted on the competition website. Since the competition was experimental the competitors were asked to accept that changes might be made to the rules during the competition.

Classes

The competition was open to two classes: Standard and 15 Metre.

Regatta starts

The starts were to be simultaneous so that the first pilot coming home was really the winner of the day. To avoid collisions and high speed manoeuvring in the start area the pilots were required to be "behind" the start line and below a maximum altitude for the final two minutes before the start. This requirement was also designed to make the starting gliders clearly visible from the ground.

Tracking

The position of the glider was to be tracked during the flight with a system provided by LX Navigation. The required data were provided to the system using GSM, VHF transmissions and the Inmarsat satellite. The results were to be displayed on a large screen in the briefing hangar with the LX software Track Nav. The tracking was also to be displayed on the web.

Turnpoints over the airfield

In order to make the race easier to understand for the public, turnpoints were to be set over the airfield and the pilots were to be required to round these below a maximum altitude. The organisers also planned to set turnpoints on significant topographical features, which have easy public access, and to inform the public that the glider races could be seen from these points.

Time scoring system

A so-called Accumulated Time Scoring system was to be used in order to make the ranking easier to understand for the public and the media. This system is quite simple:

- *The winner is allocated his elapsed time (the time he needed to achieve the task),*
- *All pilots finishing less than 60 minutes after the winner are allocated their elapsed time,*
- *All pilots finishing more than 60 minutes after the winner are allocated the winner's elapsed time plus 60 minutes, and*
- *All pilots landing out are allocated the winner's time plus 60 minutes plus a penalty equal to the time they would have needed to cover the distance from their out-landing point to the goal at 60km/h (ie: one minute per missing kilometre). This penalty is limited to a maximum of one hour.*

Scoring was performed with See You using a special program written for these rules.

Referee

A referee acting as both jury and steward replaced the usual IGC jury and steward system. This was intended to reduce costs for the organisers and to personalise the function of the adjudicator.

Video

A video of the event was to be made by Leading Edge. Unfortunately they did not attend the event because they could not get any sponsors due to the difficult economical situation. The organisers asked a local producer to replace them but their offer significantly exceeded the budget available for the event.

HOW DID THIS WORK?

Participation and classes

During the days leading up to the contest a number of intending competitors were forced to withdraw because of a variety of personal and business reasons. Participation was therefore reduced to seven pilots. This number of entries was still sufficient to test the validity of the concept but obliged the organisers to mix the 15 Metre and Standard gliders into a single class. This was probably a good decision because having two separate classes competing may have been confusing for the public.

Weather

The weather was co-operative with temperatures exceeding 30°C all the week resulting in cloudbases regularly above 4,000m in the higher mountains and good soaring conditions on all but the last competition day. The met forecast was average with a rather complex "meteotech" presentation with the data-show pictures tending to be different each day. For the future it is suggested that the pilots need detailed information and, if we have public watching this sort of event, we need the met brief itself to be pitched at a level the general public can also understand.

Tasks

The good weather conditions allowed racing tasks ranging from 197km to 472km to be set on every competition day. It is noted that, for this style competition, it is recommended to give relatively short tasks in order to maintain the attention of the public. Furthermore this kind of racing task probably requires a higher degree of concentration from the pilots.

Regatta start

The two minute procedure worked well and did not lead to any hairy situations or incidents despite the fact that gliders were sometimes quite close at the start. The pilots believed that this start procedure could be used safely with up to 15-20 gliders. Several attempts were made to limit the ground speed behind the start line but, according to feedback from the pilots, this increases their workload without providing any clear improvement in safety. Since it is not always easy to find lift at low altitude around the airfield at Saint Auban (except in Mistral situation), the maximum altitude was set at 1,500m msl (1,000m agl). It is suggested that this is about the upper limit for the public to be able to easily observe the gliders starting.

Turnpoints over the airfield

Maximum altitudes of between 1,300m and 1,500m msl were set for the turnpoints over and adjacent to the airfield. This worked well except that some pilots were concerned because they were sometimes too close to the red line when they had to turn below the maximum altitude. From the organisers point of view the pilots must view the approach to such altitude limited turnpoints as being a final glide and plan their flight path accordingly. A requirement for the pilot to report his position two kilometres from the turnpoint was added so that the public could be warned of their approach.

The possibility to set turnpoints on significant topographical features, which have easy public access, could not be tested. This was mainly because of the delay needed to inform the public via the local newspaper and radios. Nevertheless the use of such turnpoints would certainly allow a higher maximum altitude at the turnpoint thereby reducing the risk of a land out.

Tracking

This was a trial and it worked, but the system needs a great deal of refinement. The tracking units based on pure GSM (sending SMS with position and altitude) and on mixed VHF and GSM (using a VHF relay temporarily installed on the adjacent Montagne de Lure in 1,800m altitude) worked well except on one day when a thunderstorm disrupted the VHF signals. The

seemingly promising Inmarsat system reported the position of the glider with unacceptably large delays.

The local display of glider information on a screen using Track Nav also needs some improvements to make the display more user friendly. These include:

- *Allowing an auto-focus facility on the maps so that only the area immediately around the glider path is shown instead of having to select a display area on the screen.*
- *Providing altitude information against the aircraft position information.*
- *Using the real aircraft registration on the display data block and use the data block to mark the aircraft position.*
- *Providing a more frequent refresh rate.*
- *Improving the data transmissions to provide up to the minute information for display.*
- *Providing multiple aircraft displays overlaid on a single map background on the internet.*

It may be easier to display the results directly in See You using a dedicated add on.

It is suggested that the further development of this system needs to have input from an experienced Championship Director to ensure the system is tuned to provide the maximum usability of for public displays.

Time scoring

The time scoring worked well until the last day where everybody landed out. It became apparent that, to be able to provide meaningful results in this case, a reference time must be given to the winner. The organisers therefore modified the scoring system to allocate the winner the time he needed to fly from the start to the virtual outlanding position giving him the best marking distance plus the outlanding penalty (one minute per kilometre from the goal). The other pilots were then allocated the winner's reference time plus the outlanding penalty corresponding to their virtual outlanding position. This gave results consistent with those published for days when there were finishers.

The scores obtained with this system were compared with the results from the official scoring systems used in Annex A (see attachment). The results are quite similar for the 1,000-points and Kilometre Scoring system. The Place Scoring system generated different final positions because the system does not reward outstanding performance.

It is intended, however, to further modify the Time Scoring formula to modulate the maximum marking time as a function of the number of pilots coming home. This would, for example, prevent a pilot getting a huge



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60-minute advantage when he was the only finisher. It is also planned to increase the nominal speed at which non-finishers are assumed to fly home in order to reduce the time differences between pilots having landed out. A more drastic alternative would be to delete the additional time “penalty” given to the outlanders. This would even make the scoring simpler and more easy to understand but would also invalid days without finishers, leading probably to some frustration among the pilots.

The See You software and the dedicated kit written for the Grand Prix worked well except that the organisers were unable to insert plain language text or comments on the task sheet.

The air show

The secondary objective of testing whether such an event could be more public friendly than our usual competitions was achieved on the last day when the competition was integrated into a small airshow organised by the CNVV. It was very interesting to see how attentively the public (about 300 people), informed by a competent speaker and by the broadcast of the radio calls controlling the start, watched the take off and the regatta start.

During the time the gliders were away the speaker drew the attention of the public to the tracking screen. Several presentations of glider aerobatics, model gliders, and of three open class gliders flying in formation with music were provided to maintain the attention of the public.

The task was a relatively short triangle, with a turnpoint over the airfield, which had to be flown three times. Unfortunately high altitude cloud reduced the usable lift resulting in all gliders landing out on a close airfield. The pilots were asked to simulate a fast finish after their retrieval by aerotow and it was very encouraging to see the crowd applauding the low passes and giving the pilots an ovation when they rolled their gliders to a stop in front of the briefing hangar.

A short Prize Giving Ceremony followed immediately after the airshow so that the major part of the public was still present.

Pilot feedback

The pilots were very positive and said that this kind of competition was really fun for them. It was interesting to observe Eric Napoleon's enthusiasm when he was describing his race after landing. They also felt that the time scoring system was fair to the pilot although they asked for some adjustments to take better account of the outlandings.

ADDITIONAL LESSONS LEARNT

Dates

As it happened, the dates of the Grand Prix were not well chosen because the competition began just after the National Championships in Romorantin and at the same time as a regional Championship in Sisteron. It would be much more convenient to hold this event in Saint Auban at the beginning of September when there are still good soaring conditions in the Southern French Alps but it is no longer possible to fly competitions elsewhere in Europe.

Location of activities

The enthusiastic response from the public on the last flying day showed that there are a number of activities that need to be based as close as possible to the public to maintain their interest. These include:

- *Briefing and public displays all in one central location*
- *Preparation of the gliders to be close to the briefing area*
- *The launch area being as close as possible to the public viewing area*
- *The rate of towing for the launch should be even so that there are no huge time gaps with no activity*
- *The finish line needs to be centrally placed on the airfield*
- *The pilots should be encouraged to taxi up to the edge of the public area after landing. The crowd greeted the pilots who did this on the last day at Saint Auban with enthusiastic applause. This can be achieved by having the gliders hangared adjacent to the briefing area.*
- *The media need to have immediate access to the pilots after landing so a suitable interview area needs to be available with power and lights*
- *A “film” based on one or more of the FR tracks run either early (before briefing, based on the previous day's flying), or after first finishes (based on today's flying) could be an additional highlight.*

Ideally this requires a hangar approximately located in the vicinity of the centre of the runway with all activities (briefing, scoring, bar, sound system, public area, etc) located in, or adjacent to, this hangar.

Knowledge of the public

The public did not seem to care what the “make” or “class” of the glider(s) was. The mere sight of the gliders lined up along the start line in the sky and then subsequently flying through the finish line and landing in front of them seemed to be enough for the public. There seems little point, therefore, in discriminating between gliders – except to

ensure that all gliders competing have a similar performance – or to have more than a single class.

On line information

It appeared clearly necessary to have a computer on line in the briefing hangar and a dedicated webmaster reporting more often on the website. As mentioned above the position of all gliders should be clearly displayed by the tracking system.

HOW TO CONTINUE

Wolfgang Weinreich, President of the FAI, Tor Johannessen President of the IGC and others officials who visited the Grand Prix, were all positively impressed and seemed to consider that this Grand Prix was a big step forward for gliding.

We believe that the rules tested only need some minor adjustments and could be used at the World Air Games 2005. A decision should be taken at the next IGC meeting. We should also decide there which class will fly.

The event is sufficiently small that it does not require a huge logistical effort by a host club. It would be possible for the event to be staged using two or three experienced personnel, supported by laptop computers, and six or eight club members plus tow pilots. The provision of catering and refreshments would provide a source of revenue for the club hosting the event.

A Grand Prix de France will probably be organised again next year in St Auban with a bigger effort to attract public, media and sponsors. It is also possible that from next year a similar Grand Prix could be organised in other countries in parallel with our classical championships. Axel Reich is considering organising a Grand Prix of Germany in Musbach and Leonardo Brigliadori may organise a Grand Prix of Italy in Rieti. Future developments could perhaps include a Grand Prix of Champions with the top placed pilots from individual Grand Prix events gathering to test their skills and entertain the public.

Without being too optimistic we have the feeling that this may be the beginning of an interesting evolution in our sport. While the name used this time was the Grand Prix de France, and immediate future events may use a similar name, it is suggested that a more international brand name should be developed. Accordingly, it is strongly recommended that the IGC maintain control over this development by depositing the names “Grand Prix of Soaring” and “Soaring Grand Prix” and by requiring IGC permission to organise such an event.



Honorary Life Membership Awarded to Fred Foord

Rob Moore

IT WAS MY PLEASURE TO PRESENT FRED FOORD WITH HONORARY LIFE MEMBERSHIP OF THE GFA AT THE ANNUAL GFA PRESENTATION DINNER HELD IN SYDNEY MID-SEPTEMBER.

My association with Fred and his family began in 1967 when he rejoined the ASC and became a committee man, and a crew person for me at National gliding championships, for many years.

Fred was born in England in 1926. His first memories of aviation were when, at the age of nine, Hanley Page HP-42 airliners were flying at 1,500ft over his house on their way to Paris. Another memory was that of Alan Cobham's flying Circus, which was barnstorming a short distance from his home. He was drawn to gliding after watching seagulls soaring along the cliffs near his home and his life changed forever after that.

Joining the Air Cadets in 1943 he heard that gliding courses were available for those cadets who volunteered for pilot/navigator/bomb-aimer. Shortly after he was accepted he started a gliding course, training as they did in those days using primary trainers. He was flying solo by the Thursday of the course, and was in an enclosed primary called a Cadet. After some months he was deemed "proficient in low hops". So ended his ATC gliding until he became involved with the Australian Air Cadets as a civilian instructor in the 1980s.

In 1947 Fred became a post-war founding member of the South Down Gliding Club, and thus began Fred's 56 years in gliding administration of some sort or another.

Fred got to fly the club's high performance Grunau Baby 2b before marrying Pat, and then became more involved in the administration of the club and only flew rarely.

In 1955 the Foord family moved to Adelaide, Australia and Fred joined the Adelaide Soaring Club where he helped in the building of two ES 49s and a Grunau. In those days one had to do four hours work on building projects to be entitled to fly the next weekend.

In 1958, as Fred and Pat's family grew (they have eight children), he once again had to stop gliding. He restarted again in 1965 when his wife and daughters bought him a surprise birthday present of membership to the club.

Fred is a Life Member of The Adelaide Soaring Club, has a Gold C and owned a Kingfisher sailplane for some years. He was an instructor and tug pilot until 2001 when he stopped solo flying for medical reasons. Fred still remains actively involved in the gliding movement as the GFA Trophies' Officer and as the Gliding Officer for the local Royal Aeronautical Society.

Fred was secretary of The South Down Gliding Club for two years, the Adelaide Soaring Club for 11 years, the SAGA for 10 years and the GFA for seven months when the GFA secretary of the time left at short notice. He has also been Chairman of the GFA International Teams' Selection Committee for four years, Chairman of the GFA Technical Committee and on the GFA executive for two years, been a GFA councillor for South Australia for 10 years and GFA Trophies' Officer 17 years.

Fred attended all the World gliding championships held in Australia in an official capacity and was the Protocol, Ceremonies and Trophies' officer during the Benalla and Gawler World Gliding Championships.



Fred in his Kingfisher

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Recipients:

Jack Iggulden 1981, Bob Mullar 1982, Col Churches 1986, Geoff Strickland 1989, Mal Williams 1989, Richard Gething 1993, Alan Patching 1993, Merv Waghorn 1994, Alan Ash 1995, Roger Woods 1998, Harry Schneider 2001, Maurie Bradney 2002, Kevin Sedgeman 2002, Fred Foord 2003.



Relating to the Wildlife

Allan Ash

THERE HAVE BEEN RECURRING REPORTS, MOSTLY FROM EUROPE, OF CONSERVATIONISTS AND ANIMAL LOVERS SEEKING TO LIMIT OR BAN THE OPERATIONS OF GLIDING CLUBS ON THE GROUNDS THAT THEY DISTURB OR THREATEN LOCAL WILDLIFE.

In my 60-odd years of association with air sports, my impression has been that the contrary is more likely to be the case. It is the wildlife that has impacted the sport.

Though the little critters are sometimes startled when gliding operations begin in their territory, they apparently and quietly adapt to the intruders and soon continue about their daily routines while ignoring the human weirdos who do such silly things as flying through the air.

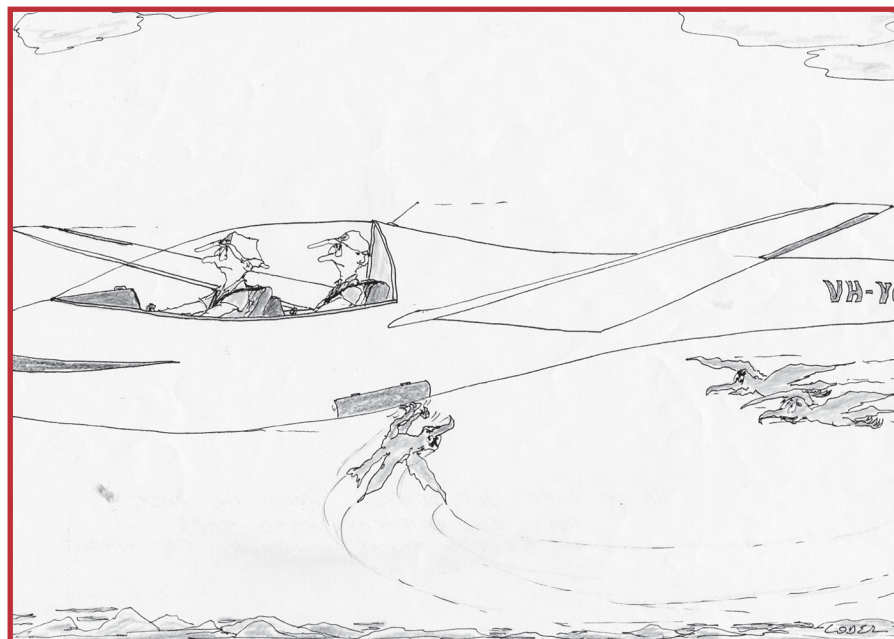
One only has to look around an airfield to see that the wildlife, as well as domestic animals, continue their lives without fear or loss of habitat.

Of course there are occasional exceptions. Spring is usually the season when birds and animals are caring for newborn offspring and some can be very protective. I recall an incident from the mid-1940s when gliding clubs in the Sydney area operated from a disused wartime airstrip at Doonside, near Blacktown.

Off one end of the runway were several large dead trees and a pair of magpies had their nest in the upper branches of one of them. Gliders on their final approach passed close overhead of these trees and on each approach, the magpies rose in screeching wrath at what they considered was an attack by a huge predator.

On several occasions glider pilots were forced to divert from their course to avoid the frenzied attacks of these vicious little black-and-white terrors.

Not all birds are so ferocious. Like many other pilots I have flown with soaring birds



Cartoon: Codez

to our mutual enjoyment. I recall flying with a pair of pelicans in a thermal at Waikerie. These sedate flyers ignored me, circling around me in haughty contempt at my poor efforts to gain height while they rocketed skywards.

I've enjoyed the company of hawks on several occasions. They seemed to welcome my company, playfully formatting on my wingtip or sometimes a short distance in front of me, but my relatively poor soaring ability usually bored them after a while and they peeled away into the faster moving core of the thermal.

As a general rule hawks seem to be lone

flyers but there was one occasion, at Mount Isa in western Queensland, when I was suddenly overwhelmed by them. Sedately climbing near the gliding field I was startled to find a dozen or more hawks had joined my thermal at my height.

At first I was concerned that I might collide with them but I soon realised they were much better flyers than I was and had no trouble keeping out of my way. It wasn't long before they had out-climbed me and left me to my lonely circling.

Eagles, on the other hand, are not always friendly. Being very territorial they resent any apparent intruder into their hunting patch. Though I've flown with them occasionally without any problems, other pilots in different parts of Australia have found themselves under savage attack by these large birds.

Some, like the majestic wedge-tailed eagle, have a span of two metres or more and, weighing many kilograms, represent a potent guided missile capable of inflicting severe damage to a sailplane if encountered at a closing speed of 80mph or more.

The only option open to the glider pilot is to clear out of that patch of sky as quickly as possible. Some pilots who have been slow

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to make this move have found themselves with a damaged wing, fuselage or canopy. One can imagine the result of one of these aerial attackers hitting a sailplane's tail unit!

While attacks by hawks are almost unknown, a pilot in South Australia, flying an open cockpit Grunau Baby, saw a hawk making a frontal approach, then crash unexpectedly into his chest before flopping onto his lap. With commendable presence of mind the pilot grabbed the bird and flung it overboard before it could put its beak and claws to work. Once clear of the sailplane, the hawk recovered its composure and set off at high speed into safer skies.

Then there was a pilot in Queensland who was de-rigging his sailplane after a cross-country flight when a small snake slid out from the rear section of the fuselage. It had been in the aircraft throughout the flight, fortunately without making its presence known.

Another pilot I heard about was climbing nicely in a thermal when a large spider walked across the inside of the canopy in front of his eyes. Despite some initial alarm, he was able to deal it a quick fatal slap.

There was another pilot who flew from Narromine to Bathurst with a pesky fly zooming around inside the cockpit. All efforts to deal with it were in vain. It seems that part of a normal cockpit check should include making sure all flies are excluded.

Of course, it's not only birds and crawly things that bother pilots. Animals have often been a bother. Early in the sport's history pilots found that one of the hazards of outlanding was the damage to their aircraft by cows licking the fabric on the wings. In their anxiety to get at the tasty dope in the fabric, the cows would sometimes put their feet through the fabric, damaging structure in the process. Horses, on the other hand, seem more inclined to rub their bodies on the aircraft, which also results in damage.

One of the dangers of landing close to domestic animals is their unpredictability on being startled. My observations, though they may not be really accurate, suggest that, when startled, horses will run away from you, cows will just stand and stare at you while sheep are just as likely to run towards you.

A fellow I know, making a landing in a paddock populated by a flock of sheep, was relieved that they stood without movement until the sailplane touched down. Then, at almost the last moment of the landing roll, one large sheep suddenly darted across in front of the aircraft. The resulting collision left the sailplane with a badly damaged wing. I'm not sure what damage was done to the sheep either before or after the pilot got out of the cockpit.

Even pet dogs can be a hazard to gliding operations. Dogs should really be banned from airfields. One incident I recall was caused by a dog that was brought to the field by a spectator. Allowed to roam unleashed, the dog took to running after each aircraft as it was taking off or landing. Being chased away by the club members, the dog moved several hundred metres down the runway. It was soon attracted by the drogue parachute on the winch wire and whenever a launch began the dog darted out and began chasing the drogue until it left the ground.

The inevitable finally happened and the dog caught the drogue. Snapping at the 'chute just as it left the ground, the dog's teeth became hooked in the fabric. As the chute went skywards it took the dog with it. The pilot, of course, could not see the drogue or the dog so kept climbing. At a height of several hundred feet the dog came loose from the chute and fell to the ground, with fatal results.


Despite the claims of conservationists, I have found that native animals pay little heed to the operations of gliding clubs. At various sites I have seen kangaroos, wallabies, echidnas, rabbits and a variety of birds continuing their normal activities undisturbed by the movements of aircraft, winches, motor vehicles and people. It seems they quickly realise that these strange objects present no danger to them.

I can't recall hearing of any hazardous incident between a sailplane or its crew and any wild creature, except for the aforementioned eagles. But on the other hand, I once found myself facing an unexpected hazard as a result of some rabbits.

One of my early cross-country flights, having departed from Narromine, led me to make an outlanding at Alectown, near Parkes. From the air, my selected paddock looked ideal. It was large, flat and unobstructed and was not far from a homestead.

It was as the Olympia touched down that I realised I had made a serious mistake. To my alarm I saw that the entire surface of the paddock was littered with rabbit burrows. They were everywhere, and my landing roll involved constant ruddering, left, right, left, right as I sought to keep the landing wheel from dropping into one of the holes.

When I finally came to rest, undamaged, I realised that the presence of these burrows made it impossible to attempt an aerotow retrieve. All I could do was snarl at the dozens of little brown rabbits peeping from the holes.

Perhaps what we need is not so much a law that protects the wildlife from glider pilots as one that protects the glider pilots from the wildlife! 



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FLIGHT TO FREEDOM

Harry Buckle

IT'S ABOUT 1:30PM AND AS I LOOK UP INTO THE SKY FROM THE PRISON EXERCISE YARD I SEE THAT THE CLOUDS ARE BEING BLOWN ALONG BY A SOUTHERLY WIND OF AROUND 20KT, SO IT'S PROBABLY ON AT SPION ON THE WEST COAST.

The wind is just about straight on, white caps have formed and the tide has receded to mid point... all the ingredients for an excellent session along one of my favourite stretches of the Victorian coastline.

My companion and I rush to set up as we don't want to risk losing the wind that may change at any time, as it is prone to do at this time of year. We yearn to waste no more time earth bound and few words are exchanged as we busy ourselves with battens, instruments and harness. I'm set up first, as my Fun is a snap compared to Chook's Litespeed.

A car pulls up and a guy in his mid-thirties walks up to me and asks, "*What's it like to hang glide, mate?*" Always keen to encourage a potential pilot into our ranks I go into my stock spiel. He listens intently then says, "*It's something I've always wanted to do, and pretty soon I'll have a go at it.*" I wish him well and refer him to Rohan and Paul at Dynamic as I zip up my harness and slip on the helmet.

Radio check, hang check and up to launch. It's absolutely perfect with the wind at a steady 18kt. I feel Grace urging me to go by the pressure she imparts to me via the downtubes.

Wings level, eyes to the horizon, first step with my chest forward past the A-frame, second step, third step and then the air rises to me like a lover and Grace transports me upwards.

Quick turn to the right to build up height from the lift that surges up from above where the Great Ocean Road turns to the right before it snakes back to the left to cross the bridge over Moggs Creek. I silently count "*One elephant, two elephants, three elephants*" and then slip into prone and zip up as I pass through 230ft, then turn back to the left and slowly work my way along the ridge, climbing steadily as I approach the bowl.

I love the bowl, with the excellent lift that funnels up and surges me up to 600ft. Another traverse back along the ridge to above launch where I look down from 700ft as the Litespeed lifts into the air and turns to

the right like I had done a few minutes earlier.

Back to the bowl at 700ft and suddenly the Litespeed carves a sweeping turn towards the sea that takes him above and in front of me. I never see him actually weightshift from side to side, or move his arms in and out as he turns, climbs and dives, it's all so smooth – just like he's part of that gorgeous machine as he pirouettes through the sky... Someday I'll be that smooth, I'm working on it, and more and more often it all comes together for me. "*Practice makes perfect,*" they say, and when the practice is so much fun then it's no chore at all.

I move to the left and pass over the landmark "stilt house" and I'm now tracking along the Great Ocean Road to the Fairhaven Surf Life Saving Club. I'm slowly losing height as the ridge falls away and I arrive at the departure point to fly to the Airey's Inlet lighthouse.

Bar in to penetrate forward and I cross the road just to the left of the club house. The smell and sound of the surf rises up to me and I'm buoyed along in a salty mist. I'm down to 400ft now, but this is sufficient to cross over the first gap in the sand dunes in front of "Mad Max's House" (this is the beach house used in the first Mad Max film).

I arrive at the east end of the dunes at about 100ft and I want more height to cross over the creek so I turn to the right to do a few passes and regain altitude.

My wings cast a shadow over a couple walking their dog along the beach and they look up and wave. I take one hand off the bar to wave back. The man's voice rises up to me on the wind, "*What's it like up there, mate?*" I form a circle with my thumb and index finger and a broad smile shows on his face. I turn back to the lighthouse and his steps quicken as he tries to keep pace with me... I hear him say, "*Someday I'm going to do that.*" I look back to see his wife with her hands on her hips, head to one side and a look of disbelief on her face at what she'd just heard. "*Yeah, sure thing mate...*" One day you just might," I think to myself.

Dale showed me the way to cross over the creek to the cliffs at the base of the lighthouse: you want to have about 150ft as you pull the bar in and head towards a gap in the cliff that's about in line with the end of the dunes. It's the last point I would have thought to cross at if I had been on my own that first time – thanks again for the help, Dale.

The gap looms up to me and it looks like I'm just going to scrape through as the distance closes up. Not much lift, just speed to get me there, and then that glorious feeling as Grace rises in the new lift and I'm floating up to 180ft and looking down onto the cliffs and lookout below. It's a magnificent view with the brown of the cliff tops giving way to the blue and white of the surf as it crashes over the rocks. I wonder what must be on TV today to keep 99.94% of the population inside on such a day... Probably a doco on the Royal family, or something else equally as thrilling, I muse.

I sense rather than see the Litespeed off to my right and slightly above me (he's always "slightly" above me). A handful of Asian tourists on the lookout wave to us and hold their cameras aloft. In no time we have about 20 cameras snapping away at us as we hover at 200ft.

I hit the transmit button and radio to Chook, "*Smile for da birdies,*" as they zoom in on us – they should get some excellent shots to take back home with them... "*Abhhh, those Aussies are truly amazing,*" will be the start of many conversations when they show the folks back home their holiday pics.

A few passes along the cliff with the lighthouse behind us as a back drop for our happy snappers, and then the Litespeed just isn't there any more – there it goes, across the gap and off along the dunes like a startled bird. I pull the bar in and wheel to the right in an attempt to keep up.

The wind has shifted a few points to the east, so it's now slightly tailwind and I'm mindful of a tailwind stall as I race along with the Litespeed leaving me behind and below as he climbs away. Yes, the Fun is easy to carry and set up and soars with the best



of them... but I've just gotta' get one of those rocket ships one of these days!

I arrive at the gap in the dunes at 80ft, but I want a few more feet before I cross, so I point Grace windward and do a few passes to get to 90ft. I unzip "just in case" and head off again.

You can cross the Great Ocean Road just after you cross the gap with lift that will take you onto the start of the ridge, or you can go further along to the back of the clubhouse and cross there. But I love flying the dunes with the challenges they give, so I decide to "do the dunes". (Plus I'm unlike all my fellow pilots in that I have just a teensy, weensy little bit of the exhibitionist in me, and I just luuuuvvvv the way the cars wave and toot to me as I race them along the road.)

I pass above the Surf Club, using their aerial that passes just feet away from my right wing tip as a turning point to now change direction and commence my run home. I'm at 40ft, but it feels like four foot as I race along. I crave more height, but as that means turning back into the wind with the result that I'll probably sink out as I move forward of the lift band, I decide flying is better than walking so I press on. The lift along this section isn't as smooth because the air is torn apart by the salt bush and tea tree it passes over, so it's usually a more demanding section to fly. The dunes increase in height as they track along the same level as the road rising up from the surf club to the point where it snakes right and left just below launch. This height increase and the resulting extra lift acts to offset the turbulence, so I'm now cruising comfortably. The vario shows I'm at 30ft and increases to 45ft when I reach the end of this section. The speed limit is posted at 60km/h and I'm keeping up with the cars. I'm sure I could pop a wingtip into an open passenger window if I wanted to.

I'm coming up to my turning point where I know the lift will increase, so I slow down and zip up prior to crossing over the road. A red Porsche soft top crests the rise and my eyes are caught by those of the passenger – a stunning dark haired beauty with classic Croatian features. Our eyes lock as I soar up over the road. The driver is your typical garden variety Porsche owner: male, mid 40's, blond tips, open shirt and chunky gold chain and pendent. He looks across to his passenger with her eyes turned skyward, and to regain her attention announces, "Hang gliding really isn't all that hard. I did it once and was good at it straight away." Sensing his insecurity, she pats his thigh with her hand and nestles her head onto his shoulder, but this is just a ploy so she can look into the

rear view mirror to where I'm now climbing up past launch.

Back at 300ft I look over to the right through the rising mist down to Eastern View with the Great Ocean Road sneaking along to Lorne and beyond. The Litespeed is skimming along and setting up for a landing, so I pull the bar in and roll slowly to the right and cross over the creek.

I follow the road to the second power pole, then wheel back to the left, unzip and power down to above the creek, keeping the power lines well behind me. Smooth S's to loose height, 100ft on the vario, then 50ft, then 30ft and the air smoothes as I punch through the gradient.

The tide's all the way out and the golden beach stretches out before me. Both hands up to shoulder height, arch the back, legs well back and the beach rises up to me. Bar out to trim, eyes straight ahead and then flare and pop down onto the beach with three steps only. I'm down.

I stand there drinking in the vista of the sea and the sand and the smell of the salt air washing over my senses. Grace pulls eagerly against my hands and whispers to me, "Go again, go again."

I walk slowly backwards to the dry sand and start to pack up. Helmet off, out of the harness, I transform Grace from an elegant flying machine back to a bag of "promises and delights".

Then it's up the hill to launch, into the ute and then down to the car park beside the bridge where I load harness and accessories into the back seat, and Grace onto the racks. Down to the "Mylar only" pack up area my "Guardian Angel" has also packed up and is waiting for me with a broad smile on his face. "Good flight, Rob?" to which he replies, "Oh, you know... just another day in paradise, mate".

Down the road to Skinny Legs Café for cake and coffee and I wonder to myself, "Is there possibly something else in the world as good as flying?" Apart from flying with friends, "Naaaah, can't be".

The sirens sound to announce 3:30pm muster, to be followed by tea and then lockdown at 4:30pm. Looking back to the sky I hope that the wind will be on tomorrow, so I can take another flight to freedom.



(Author's note: This story is dedicated to my fellow pilots and friends in the Dynasoarers Hang Gliding Club. Thanks for your support guys and gals, and to Glen Craven who will be joining us in the air after 16 December 2004 – thanks for your guidance and inspiration Glen. By the way, if you're wondering why I call my glider Grace: have you ever heard of a good man having a fall from Grace?)

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JAKE THE HUMAN CANNONBALL (or, High Adventure on Shaw Butte...)

Ole Olsen

SUB-ED NOTE: THE INDOMITABLE OLE, THAT MACHIAVELLIAN OF MEXICAN MAYHEM, IS BACK WITH US AGAIN THIS MONTH! I'M ASSURED THAT ALL THESE STORIES ARE TRUE!

"Hey guys, check it out!" said Andy. *"Jake's doing loops again!"*

I was bent down zipping up my glider bag. I looked up above Shaw Butte, and sure enough, Jake was letting her rip. As the rest of the 'Butties' watched, Jake stuffed the bar, bringing the nose straight down. When the glider reached maximum speed, he let off the bar and ripped into a loop. They were long, graceful loops, and you could hear the wing shred the sky, even from this distance; a delayed flutter, travelling for several seconds before it reached the observers in the landing area.

"Sh#%t..." said Leslie. Maybe he didn't approve, but Jake didn't care. From his lofty place in the sky, he couldn't hear anyway. As the glider ripped over the top of the loop and dove straight down, he stuffed the bar again and started another loop.

I had seen this display before. Jake was known as one of the more radical pilots who flew the Butte. He was the type who was not happy just to thermal or soar the ridge lift. I bent to my task again, zipping up my bag.

Suddenly Andy cried out again – "LOOK!" he hollered.

I looked.

The glider was right side up now. But something was weird. As I took a double

take, my eyes nearly bugged out of my head. The glider was upright, all right. But it was also empty! Jake was nowhere in sight! I blinked, thinking my eyes were playing tricks on me. But, no! The glider floated along and was buffeted by some mild turbulence, BUT IT WAS EMPTY!

"Did you see that?" asked Andy. I could only shake my head, 'no'. I was still speechless.

"Holy Sh#%t!" said Andy. He was the only one who still had his tongue. *"He disappeared behind the mountain!"* he exclaimed.

"Sh#%t!" I said, finally coming to my senses.

"Sh#%t!" said Stony.

"Sh#%t!" said Leslie.

"Sh#%t!" said Andy. *"Let's GO!"* Without another word, the Butties jumped into Andy's truck and we sped off around the Butte.

Andy cursed a red traffic light. *"You think there's any hurry?"* I asked. No one could survive a fall like that. It must have been a thousand feet. *"Let's not crash in our hurry!"*

Andy popped the clutch, squealing rubber. He only glanced at me. *"Sh#%t!"* he said. The road wound around Shaw Butte and through a residential area. Andy lead-footed the throttle recklessly. I wished I'd brought my helmet.

"SLOW DOWN, ANDY!" I begged. But it was no good. Andy raced for the back of Shaw Butte like it was HIS life that depended on it. Glancing up, I caught a glimpse of Jake's glider. It still floated around the sky and... yup! It was still empty... The glider was now pointed downwind and travelling at a good clip with a tailwind.

"Slow down, Andy, fer chrissake!" said Leslie. *"You'll kill us too!"* But it was no use. Fortunately, we soon reached the end of the paved road. Andy slammed on the brakes, flung open the door and jumped out with his key to the gate, all in one motion. *"He could be DEAD!"* he observed. A foregone conclusion.

"COULD BE?" I said. *"I don't think I want to go any further."*

Andy threw open the gate. He jumped back in the truck and spun gravel in his hurry up the road behind the Butte.

We rounded a couple of turns and were shocked to see Jake walking down towards us. He wore his harness and a stupid grin and had a great bundle of laundry in his arms. At least, that was my first impression. Then I realised that Jake was carrying his recovery parachute in his arms. He didn't even have a limp. We roared to a stop next to him.

"What the..." we asked, in unison.

"What the..." Jake grinned some more and dropped the canopy in the back of the truck.

"Thanks for the ride!" he said, and jumped in back. He looked very calm, as though he had maybe been stuck at the laundromat. *"Let's get outta' here!"* he suggested.

Andy looked at me as if he'd just seen a ghost. Then he manoeuvred the truck around on the narrow road. *"What the heck?"*

We drove back down the road as Leslie asked, from the back of the truck, *"What happened?"*

"I broke the connection," Jake explained matter-of-factly.

"You broke it?" we asked in unison. This



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AUSSIE PILOTS CONNECTION



was a pretty difficult thing to do – that was the idea of a connection. In fact, none of us Butties had ever heard of such a thing.

"Yep!" said Jake.

"Then what happened?"

"I threw my 'chute."

"But you were so low!"

"Tell me about it," said Jake. "That was as low as I've ever deployed. Them years of sky-diving came in handy." This was met with incredulous laughter.

"I guess!" said Andy. "What was it like?"

"I suppose it was scary," said Jake. "But I was too busy to be scared."

"What did you do, exactly?" I asked.

"Well..." said Jake, "When I came off the bar I felt right at home"

"God!" said Leslie.

"I skydive too, remember? So I stabilised and looked down... the ground was coming up FAST!"

"Then?"

"I realised this harness is not built for a terminal deployment. I knew it would likely fail," continued Jake.

"Sh#%t!" we said in unison.

"So I threw the 'chute and gripped the bridle," said Jake, "to take some of the shock."

"And...?"

"And... the canopy opened and then my feet touched!"

"Just like THAT?"

"Here I am, ain't I?" said Jake, the Human Cannonball. "Burned the hell outta' my hands," he added, holding them up for all to see where the recovery system bridle had singed his flesh – his only injury.

Harvey and Maude Clashan settled into the chaise lounges poolside at their new home. They tipped a toast with a couple of extra dry martinis, shaken, not stirred. Harvey was reading the newspaper.

"Hon..." he said. "They say there will be a meteor shower tonight. Maybe we should take a trip out in the desert where we can see better?"

"Good idea, Harvey. We'll bring along a thermos with these martinis!"

"Should be a good night for star gazing. Not a cloud in the sky." Harvey glanced up from the paper and something in his peri-

pheral vision caught his eye. He couldn't believe it.

"Hon..." he said. But no more words came. Harvey was looking at an empty hang glider, drifting along, heading for his backyard. "Holy Sh#%t!" he said.

The wing sliced into Harvey and Maude's palm tree and spun sideways. It hesitated for a moment, and then crashed backwards into the pool.

"Holy Sh#%t, ma!" said Harvey. Maude just stood there with a hand over her mouth. They looked back and forth at each other, and at the empty glider.

"What do you suppose...?" said Maude.

"I suppose we'd ought to call the Sheriff," said Harvey. "Don't look like there's any particular hurry," he continued, "I guess this fella' finally got tired of holdin' on."

"Oh, Harvey!" said Maude. She couldn't look at the wreckage anymore. Turning her head she said, "This is just AWFUL!"

"Call the Sheriff, ma... I'll get the camera. They ain't gonna' believe this back in Kokomo!"



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An Analysis of Australian National Gliding Championships from 1979 to 1994

THIS ARTICLE WAS PREPARED BY TIM SHIRLEY SEVERAL YEARS AGO AS A FACTUAL ANALYSIS OF AUSTRALIAN GLIDING NATIONALS FOR THE YEARS 1979 TO 1994 .

Tim was in the unique situation of having access to detailed data for all of the nine championships from 1985 as he had been present as an official at all but one of the events. He was able to obtain some information about the previous six.

During the full period under review, the event had been held three times at Benalla in Victoria, twice in several locations (Dalby/Jondaryan in Queensland, Narromine in NSW, Cunderdin in WA and Waikerie and Gawler in SA). Other sites used in this period were Leeton, Forbes, Tocumwal and Lake Keepit in NSW.

Clearly, with such small samples it is impossible to draw conclusions about the suitability of the sites from a weather point of view. The analysis will show that several sites where the event had been held twice have had widely different weather conditions in each event, however the effect of the poor conditions on the competition does vary between sites and there are some conclusions that can be drawn from this.

This article does NOT in any way suggest that any of the sites used for Australian Gliding Nationals are particularly suited to the holding of a major championship nor that any are particularly unsuited. What it does clearly indicate is that successful major events are possible at all the sites in the review, and also that poor weather will impact the success of a gliding contest wherever it is held.

THE EARLY EVENTS AND SITES

Detailed data for analysis purposes is not available for events prior to 1986. Some incomplete information has been obtained, and the following is a general description of the contest particularly as it relates to the analysis of later events.

Cunderdin, Western Australia – 1979

This was the first such event held in Western Australia. There were over 50 competitors, which was considered a large turnout considering the distance from the eastern States. The weather was moderate, being affected by unseasonably cool conditions. There were a considerable number of outlandings during the contest and at least one day on which all but one competitor outlanded.

Benalla, Victoria – 1980

Conditions were moderate. Four days were lost to poor weather but the remaining days were good. The number of outlandings was relatively small.

Waikerie, South Australia – 1981

The weather was only moderate. There were a significant number of outlandings and three days were lost. There were 81 competitors, which I believe is a record for Australian Nationals.

Narromine, New South Wales – 1982

This was an excellent contest with very good weather. Two days were lost, and there were only a few outlandings. The event attracted 79 competitors.

Jondaryan, Queensland and Cunderdin, Western Australia – 1983

At Jondaryan this event was poorly attended and the weather was particularly unkind. It should be noted that this site is only 35km from Dalby where the 1994 Nationals were held in weather conditions that could only be described as superb. At Cunderdin the weather was better with one day lost and relatively few outlandings.

Benalla, Victoria – 1984

No days were lost to weather but the number of outlandings was very high, suggesting weak weather or poor tasksetting. There were 79 competitors.

Leeton, New South Wales – 1985

There were a couple of very good days, but others were very difficult with many outlandings. Two days were lost to weather. There were 60 competitors – a relatively poor turnout for the period.

ANALYSIS

Number of entrants

The trend line for this is generally downward, from a high of 79 at Gawler 1986 to a low of 43 at Lake Keepit 1993. The trend seems to be levelling particularly at the more regularly used sites (Narromine, Benalla and Gawler) and numbers in the high 50s can be expected at the major sites.

Number of contest days achieved and lost

The number of contest days achieved varies from 11 at Gawler 1986 and Forbes 1988 to a low of six at Benalla 1990. Benalla was

a year of particularly poor weather at the site. There is no discernable trend here. One point to note is that Gawler 1992, despite historically cool weather, achieved 10 contest days out of 11 in a weather system that virtually shut down cross-country gliding at all sites in Victoria and NSW.

Total and average set task distance

This figure is an indication of the overall strength of the weather at the various contests. The range is from 439km at Forbes 1988 to 315km at Gawler 1992. No trend is apparent from the figures. The contests with particularly strong conditions (Forbes 1988, Waikerie 1989 and Dalby 1994) are well ahead in this statistic. Only Tocumwal 1991 and Gawler 1992 have unusually low figures.

The figure can also be affected by the attitude of task setters. Waikerie 1989 included the setting of the first and only 1,000km task set at an Australian Nationals (and I believe this remains a unique task anywhere in the world) while other contests may have taken a more conservative approach. Reliability of weather and confidence in the predictions can play a part in these decisions.

Average winning speed

This figure is another measure of the strength of the weather, and the appropriateness of the tasksetting. Conservative tasksetting can lead to higher speeds and it is possible that this effect can be seen at Narromine 1993 and perhaps Dalby 1994. The lowest figure is 99 kph at Benalla 1990, reflecting perhaps the fairly long tasks set (average 387 km) coupled with weak weather conditions.

The trend is upwards, which reflects increasing glider performance and more effective use of the conditions by skilful pilots.

Number of flying days

The total number of flying days combines the number of competitors with the number of contest days flown. Gawler 1986 was by far the highest figure because of the large number of entrants and the fact that no days were lost. The lowest figures were Benalla 1990 and Tocumwal 1991 because of the low number of contest days flown. It is worth noting that Gawler 1992 was third in this statistic after Gawler 1986 and Narromine 1993.

Number and percentage of outlandings

Gliders outland on competition tasks for several reasons. The most common reason is that less skilled pilots are unable to complete the task during the period of the day when convection is working. The second most common is when the day does not live up to the expectations of the forecast and all or most of the fleet land out. Then there is simple bad luck or misjudgement, which tends not surprisingly to occur more often to less experienced competitors.

One point that should be made is that as the number of competitors increases the average skill level drops. There are a group of 20-30 pilots in Australia who are in the top rank and who can be expected to complete any task where it is actually feasible. A further group of 20 or so will complete most set tasks. After that the situation

becomes less certain, so that it must be expected that the total number and percentage of outlandings will be higher in contests where the number of competitors is higher. This may well have had an effect at Gawler 1986, Waikerie 1989 and Benalla 1990.

Apart from this effect, the figures show quite clearly that the weather conditions are the main determinant of the number of outlandings. Benalla 1990 and Gawler 1992 had the highest number and Dalby 1994 the least by far. On percentage the highest were Benalla 1990, Gawler 1992 and Lake Keepit 1993.

In these three contests however each had days which were effectively not completable or where the vast majority outlanded. Benalla 1990 had one such day, Gawler 1992 had two and Lake Keepit 1993 had one. It is not necessarily true that this results

from poor forecasting or tasksetting. Five days are the minimum necessary for a contest to be a championship, and in the case of Benalla 1990 only six were achieved.

Naturally in such circumstances organisers will need to be less conservative when it comes to setting tasks in poor weather.

Top pilot outlandings

The scoring system heavily favours pilots who complete tasks, so it is not surprising that pilots at the top will rarely outland unless everyone else does as well. The three contests where significant numbers of top pilots outlanded were those which had uncompletable days (Benalla 1990, Gawler 1992 and Lake Keepit 1993). Apart from that there were very few outlandings among top ranked pilots. ➤

Australian National Gliding Champions

15 METRE CLASS CHAMPIONS

1977/78	Ingo Renner
1978/79	Maurie Bradney
1979/80	Maurie Bradney
1980/81	Mike Borgelt
1981/82	Bruce Brockhoff
1982/83	Malcolm Jinks
1983/84	John Rowe
1984/85	Andy Pybus
1985/86	Simon O'Donnell
1986/87	Not awarded
	– World Comps in Australia
1987/88	Brad Edwards
1988/89	Bruce Brockhoff
1989/90	Bruce Brockhoff
1990/91	David Jansen
1991/92	Brad Edwards
1992/93	Brad Edwards
1993/94	David Jansen
1994/95	David Jansen
1995/96	David Jansen
1996/97	Norm. Bloch
1997/98	Bruce Taylor
1998/99	David Jansen
1999/2000	Graham Parker
2000/01	Graham Parker
2001/02	Peter Trotter
2002/03	Tom Claffey

STANDARD CLASS CHAMPIONS

1968/69	Max Howland
1969/70	David Jones
1970/71	Sue Martin
1971/72	Malcolm Jinks
1972/73	Maurie Bradney
1973/74	No contest
	– World Comps in Australia
1974/75	Ingo Renner
1975/76	Ingo Renner
1976/77	Tim Knappstein
1977/78	Geoff Cleland
1978/79	Gabby Hayes
1979/80	Ed Pascoe
1980/81	Shane McCaffrey
1981/82	John Buchanan
1982/83	Mike Giles
1983/84	Andy Pybus
1984/85	Ingo Renner
1985/86	Ingo Renner

STANDARD CLASS CHAMPIONS

1986/87	No contest
	– World Comps in Australia
1987/88	Andy Pybus
1988/89	Andy Pybus
1989/90	Maurie Bradney
1990/91	Ingo Renner
1991/92	Andy Pybus
1992/93	Ingo Renner
1993/94	Ingo Renner
1994/95	Bruce Taylor
1995/96	Bruce Taylor
1996/97	John Buchanan
1997/98	John Buchanan
1998/99	Ingo Renner
1999/2000	Ingo Renner
2000/01	Ingo Renner
2001/02	Andrew Georgeson
2002/03	Tom Claffey

OPEN CLASS CHAMPIONS

1956/57	Doug Reid
1958/59	Jack Iggulden
1960/61	Bob Rowe
1962/63	Mervyn Waghorn
1964/65	Malcolm Jinks
1965/66	Malcolm Jinks
1966/67	Malcolm Jinks
1967/68	John Rowe
1968/69	John Rowe
1969/70	Malcolm Jinks
1970/71	Malcolm Jinks
1971/72	Ingo Renner
1972/73	Ingo Renner
1973/74	No contest
	– World Comps in Australia
1974/75	Malcolm Jinks
1975/76	Malcolm Jinks
1976/77	Malcolm Jinks
1977/78	Malcolm Jinks
1978/79	Malcolm Jinks
1979/80	Ingo Renner
1980/81	Malcolm Jinks and Tony Tabart
1981/82	Ingo Renner
1982/83	Ingo Renner
1983/84	Ingo Renner
1984/85	Tony Tabart
1985/86	John Holland
1986/87	No contest
	– World Comps in Australia

OPEN CLASS CHAMPIONS

1987/88	John Holland
1988/89	John Buchanan
1989/90	John Buchanan
1990/91	John Buchanan
1991/92	Ingo Renner
1992/93	Michael Giles
1993/94	Paul Mander
1994/95	Paul Mander
1995/96	Ian Shadbolt
1996/97	Paul Mander
1997/98	Brad Edwards
1998/99	Brad Edwards
1999/2000	Peter Griffiths and Lars Zehnder
2000/01	John Buchanan
2001/02	John Buchanan
2002/03	Not Contested

18 METRE CHAMPIONS

2000/01	Graham Parker
2001/02	Tracey Tabart
2002/03	Bob Ward

NATIONAL CLUB CLASS CHAMPIONS

1981/82	Miles Gore-Brown
1982/83	John Mills
1983/84	N Fisher
1984/85	A Campbell
1985/86	H Kruger
1986/87	Paul Mathews
1987/88	Tom Gilbert
1988/89	Peter Buskens
1989/90	Tom Gilbert
1990/91	N Fisher
1991/92	Geoff Raymond
1992/93	Haidyn Dunn
1993/94	Tom Gilbert
1994/95	Haidyn Dunn
1995/96	Graham Parker
1996/97	Haidyn Dunn
1997/98	Lars Zehnder
In 1998 the name was changed to Club and Sports Class, but the numbering was retained	
1998/99	Bruce Taylor
1999/2000	Tom Gilbert
2000/01	Peter Temple
2001/02	Bruce Taylor
2002/03	Terry Cubley



Ian Aspland flying Kingaroy Soaring Club's new Discus CS, XKD. The photo was taken by Greg Kolb in May this year

The trend in this figure is downward when this effect is removed. In the earlier years of the analysis Gawler 1986 had 11, Forbes 1988 had 12 and Waikerie 1989 had nine. By contrast Narromine 1993 and Dalby 1994 had three and none respectively.

SUMMARY AND CONCLUSIONS

All Australian Gliding Championships held between 1979 and 1994 have proved successful. There have been wide variations in weather conditions and in the fortunes of competitors, but from this analysis there is no evidence that any site is particularly well favoured. The only site which appears to be having a poor run of weather is Benalla, but in periods where NSW comes under the influence of tropical air masses Benalla can provide excellent soaring conditions.

It would appear that sites in South Australia in general lose less contest days, which may point to more reliable gliding weather in the contest period. Certainly South Australia suffers less from intrusions of tropical air. However, the sample size is very small and I do not make this observation with a high level of confidence. Forbes, Narromine and most recently Dalby have held contests with many superb gliding days.

There is no evidence that sea breeze effects at Gawler have had any unusual influence on the success of Nationals held there. The 1992 Nationals were held in poor conditions (which were the worst since records began over 120 years ago) with a strong south-west flow enhanced by a sea-breeze on most days. However, 10 contest days were flown out of 11 possible with only two being uncompletable. By contrast the 1986 Nationals at Gawler were highly successful with excellent weather, long tasks and

a low outlanding rate. Several other sites have also suffered from unseasonally poor conditions (Jondaryan 1982, Leeton 1984 and Benalla 1990) and have also run successful contests although with more lost days.

There is a trend to a lesser number of competitors in our National Championships but some evidence that this has levelled particularly at regularly used sites.

Winning speeds are tending to increase, being a function of improving glider performance and pilot skills.

There is a trend to a smaller number of outlandings. This is more likely to be connected with a more conservative approach to tasksetting and to more accurate forecasting than to a change in weather. There is no suggestion in these figures that outlanding numbers are higher at some sites than others, although it is clear that poor weather increases the percentage wherever it occurs.



GFA News

IGC Pilot Ranking List Updated

The results of the very successful World Gliding Championships at Lezno have now been included in the IGC Pilot Ranking system.

There are three new pilots in the top positions. The number one ranked pilot in the world is now John Coutts from New Zealand followed by Andy Davis from Great Britain and in third position Holger Karow from Germany.

The ranking list also includes the results from the Junior World Championships, the World Class and the Women's World Championships as well as many other International and National competitions.

There are now over 1,000 pilots included in the IGC Ranking list.

GFA AIRWORTHINESS DIRECTIVES

GFA AD 591 – Issue 2

Type affected: All powered sailplanes fitted with Rotax engines as listed below:
912A to serial number 4,410.606 (correction

of previous number 4,416.606 Issue 1);
912F to serial number 4,412.858; 912S to serial number 4,922.971; 914F to serial number 4,420.394.

Subject: Replacement of the oil dipstick.

GFA AD 595 – Issue 1

Type affected: HK-36 TT Serial numbers 36.511 up to and including 36.734. DV-22 serial numbers 22.001 and 22.002. DA-40 Serial number 40.001V1.

Subject: Inspection of exhaust muffler part number 979402 fitted to Rotax 914 series engine.

GFA AD 598 – Issue 1

Type affected: HK-36 R-T series all serial numbers. DV-20 all serial numbers. DV-22 all serial numbers. DA-40V1 serial number 40.001 V1.

Subject: Service bulletin publication index for Rotax aircraft engines types: 2ST, 912, 914 series.

GFA AD 599 – Issue 1

Type affected: Discus A.
Discus B – serial numbers 551 up to and including 554, 568, 569, 571 up

to an including 573, 575 and 577.

Discus CS – serial numbers ICS up to and including 308CS.

Subject: In flight failure of wing structure. A manufacturing defect cannot be ruled out at present.

GFA AD 600 – Issue 1

Type affected: Discus BT – serial numbers 77, 106, 146, 151 up to and including 154, 156, 158, 161 and 162.

Subject: In flight failure of wing structure. A manufacturing defect cannot be ruled out at present.

AIRWORTHINESS ADVICE NOTICE

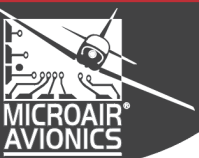

GFA AN 166 – Issue 1

Type affected: HK-36TT serial numbers 36.393, 36.511 up to and including 36.734 fitted with Rotax 914F series engines.

Subject: Miscellaneous airworthiness information.



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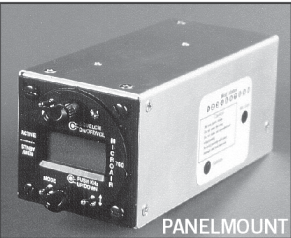
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2003 World Paramotor Championships



Ramon Morillas – Paramotor World Champion 2001 & 2003

Ramon Morillas (Spain) flying his Advance Epsilon 4 with a PAP motor has won his 2nd World Paramotor Championship in a row. The Spanish Paramotor Champion also won the Paramotor Worlds in 2001 flying a Sigma 4 with the same engine. In February this year in Kenya he broke the World Record for altitude, flying a Sigma 5 and PAP motor to a height of 5,333m.

All Advance gliders are suitable for paramotoring and have been DHV strength tested to 8G. Their high quality of manufacture using premium materials has been shown to equal and sometimes exceed the standards of wings designed especially for paramotoring.

Information: Godfrey Wenness, Manilla Paragliding, phone 02 6785 6545, email <skygodfrey@aol.com>, www.advance.ch>.

CLUB NEWS

Blue Mountains Hang Gliding Club

The real news this month is the incredible run of bad luck for us weekend fliers. All the good weather appears to have been during the middle of the week, with gales lashing the mountains over most weekends. Of the marginal conditions only David Seib has managed to get in the air and recently getting an XC from Mt Ovens to Wallerawang.

Last Sunday for the September round of the club competition was a good example of how to get sucked right in. All turned up at Blackheath to be met by what appeared to be reasonably good conditions for a change.

Went out to the hill, set up and the weather gods turned the dial up a bit to give us unlaunchable turbulent air. To be fair, there has been a couple of other days but it's not been great. I'm sure the weather is going to get better over the next month.

While talking about strong conditions, it is a good moment to remind people to take care when launching at Blackheath when the wind has any northerly component to it. This was highlighted in a most unfortunate accident the other week when one of our very experienced pilots got

a flight in a powered aircraft to Nepean hospital. Luckily he is still with us. On the bright side, he had already ordered a new Litespeed S before trashing his current glider. Seriously though, some experiments with long streamers conducted by Paul Hunt and Peter Burkitt has shown that conditions can give rise to descending air onto the middle of the ramp when the air at the top of the ramp can be okay. It has been noticeable that most incidents have occurred with our most experienced pilots.

I'll look forward to seeing you all out there getting high. All news and reports can be sent to me at <dtoulalan@hotmail.com> or <derek.toulalan@ozemail.com.au>

Derek Toulalan

Southern Microlight Club

This is early advice to all trike pilots that the National Trike Gathering 2004 will be at Wangaratta on 3-4 April.

The Southern Microlight Club is holding this HGFA sanctioned event a little earlier than previous years, so mark it on your "Must Not Miss" calendar, then set to and make the appropriate bookings.

Last year was our most successful event to date with more than 50 trikes attending, including a large group flying in from South Australia.

We are negotiating with our previous caterers to provide breakfast and lunch on the Saturday and Sunday, and we intend holding a dinner at a local hotel on the Saturday evening.

A great camping ground is located at the airport or alternatively Wangaratta has numerous motels/hotels a short drive from the airport.

We intend distributing registration information closer to the date. To enable us to have your correct contact details, could you register your interest with our Secretary Jeanette Walker on 03 59412721, 0438 418 808 or email <jesta@wingdriver.com.au>. And of course, you are most welcome to spread the word far and wide.

NEW PRODUCTS

Icaro's New Helmet – The 4Fight Integral

Introducing the new 4Fight Integral of Icaro 2000. More and more pilots appreciate helmets with visors, therefore we conceived a very attractive helmet design; the 4Fight



integral with visor. Particularities of the 4Fight Integral:

- After laboratory tests we managed to reduce the helmet width and make the tightest helmet on the market maintaining the maximum comfort.
- The internal padding is completely interchangeable; advantages are that it can be washed, it can be changed often, and at the back of the helmet there is a compartment for a small altimeter.
- New visor conception: very strong, good face protection and UV protection.

The advantages of a visor are evident:

- protection from the cold
- extra face protection
- no sunglasses needed

The 4fight has the European certification E.N. 966 and is suitable for both hang and paraglider pilots.

Sizes available: S, M, L and XL.

Australian dealer: John Reynoldson <aerial@ozemail.com.au>.

New Icom – The IC-400Pro



Icom releases its first Mobile UHF CB – the IC-400PRO.

Market leader in airports radio equipment with its robust handheld UHF CB, the IC-40s, ICOM of Japan have just released their first ever Mobile UHF CB in the Australian market. Based on their highly regarded commercial units, the IC400PRO has class leading performance and features.

It boasts 128 channels (40 UHF CB plus 88 receive or private licensed channels), multiple scan functions (including repeater scan), auto squelch, selcall, CTCSS (silent standby subtone), Smart Ring and an Automatic Transponder in range indicator. The powerful commercial spec transmitter outputs five Watts on CB and 25 Watts private channels and uses a front mount four Watt speaker for clear audio. The unit is built to tough US Military Specs and comes with a Icom two year warranty.

Recommended retail price is \$473.

Manilla Paragliding has a special introductory price of \$419 until 31 December.

Call Godfrey on 02 67856545, email <skygodfrey@aol.com>, or see [www.icom.net.au].

Godfrey Wenness, Manilla Paragliding



The Awesome
ADVENTURES OF DICK SPEED
Hang Gliding Legend in His Own Mind
THIS WEEK'S ADVENTURE: **DICK'S UNEXPECTED TRIP**



HIGH ON GLIDE, DICK'S LOOKING FOR THE NEXT THERMAL TO GET TO GOAL...

YEAH CHIEF WE FOUND THE CROP. WE'RE BURNING IT NOW.

UNBEKNOWNST TO DICK, THIS IS NO ORDINARY SMOKE!

CRACKLE!
SNAP!



HOUSTON, WE HAVE A PROBLEM...



THIS SMOKE SMELLS FUNNY...

DICK REACHES THE SMOKE AND CORES THE LIFT, BUT AS HE GETS HIGHER, HE GETS, WELL... YOU KNOW WHAT!



HE FINDS HIMSELF CLIMBING INTO A MYSTERIOUS, MULTI-HUED NIMBUS OF LIGHT.

DID YOU GUYS NOTICE ANYTHING STRANGE ABOUT THE AIR TODAY?

WHAT DO YOU MEAN EXACTLY DICK?



LATER, IN THE BAR AFTER THE FLIGHT...

Chapman

Any resemblance to persons living or dead is purely coincidental. All events depicted are fictitious. Don't try this at home.

TRIKE FLYING AROUND CORAL BAY AND EXMOUTH

Peter Lucas

WE PULLED INTO CORAL BAY MID-AFTERNOON. CORAL BAY IS SITUATED SOME 250KM NORTH OF CARNARVON ON THE WEST AUSTRALIAN COAST.

There were wall to wall holidaymakers as it was still school holidays in WA. In addition to all the people there was an added bonus – flies by the hundreds. It happened to be the right weather for them and boy where they bad. We checked to see if we could get into one of the two caravan parks, but the first one was completely full while the second had some sites but they were crammed in like sardines. Coral Bay is a lovely place, but not built for so many tourists. We went for a walk along the beach to gather ourselves and get away from the flies. Chris (my wife) suggested we go to the airstrip and have a chat to the local pilots.

We called in and were made welcome by the local pilots, who suggested we could set up and tie the trike down at the small airfield built on a salt pan a short distance from the town. We decided to leave the trailer (and pod) locked to a tie-down stake and have a look along the coast either side of the small town. We first drove to the south and walked along the cliffs overlooking the beautiful coral reef with its turquoise waters. We must have look pretty silly as we had a

mosquito net over our heads to keep the flies off our faces. After this we headed out past the airfield to another beautiful beach (without flies) where we sat and enjoyed the rest of the afternoon. We watched the sun slowly set as many fishermen came down to try their luck. In this ideal fly-less environment we decided we would stay and fly in the morning if the weather permitted. That night we stayed out at the airfield and it was beautiful; not a soul in sight, a star filled sky, a nice warm evening and a good meal.

We set the alarm for 6am, but I was up at quarter to six getting the pod off the trailer and covers off in the dark. It was not full light by the time I had it together ready to fly, and I checked everything time and time again to be sure I had not overlooked something in the half light. Both Chris and I put on our flying suits as I thought it a good idea to climb high to see as much as we could in one go. In fact we did not need them, as it was warmer in the air than on the ground. We made the necessary radio calls on multicom, back tracked on runway 20, turned and took off. As we climbed, the extent of the coral reef became apparent.

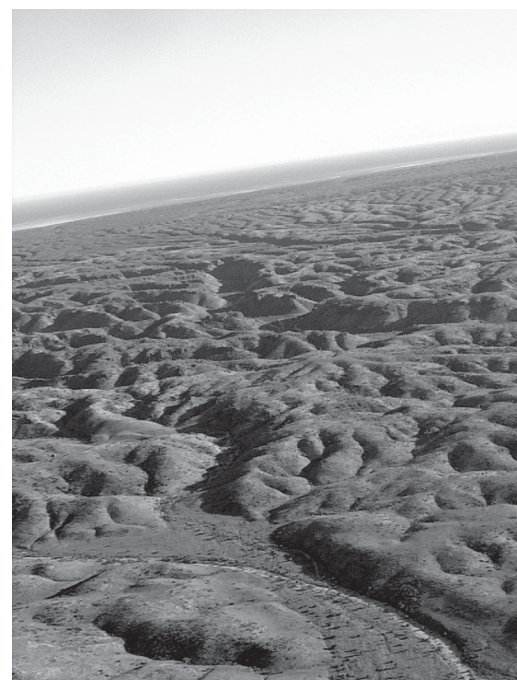
It went both to the north and south as far as we could see from 3,500ft. The colour was amazing from the air; the sea out past the reef was dark blue, inside the reef was turquoise, the sandy beach was white and inland it was red. We dropped down to below 1,000ft and flew along the beaches to the north. Chris spotted a shark that was also out for a cruise. After our fill of cruising along the coast we turned for a fly over the small village of Coral Bay at 500ft to take some photos. We climbed again for the last time before heading back to the strip where we landed.

After a short rest and some breakfast I started packing up before the flies found us. It took less then an hour. We had seen Coral Bay, the reef and it's beaches from the air – a fantastic way to see the place. After packing up we were on the road again with the trike in tow, heading for Exmouth, our next destination.

At Exmouth we checked into a great caravan park and chained the trailer to a tree at our campsite so we could have a look around town. It was bigger and better than I expected with a good variety of shops and



Coral Bay and the Ningaloo Reef



Flying over Cape Range National Park

businesses. We drove out to the airstrip some 10km south of town. I went to the office attached to the hanger for a chat with the local operator who told me all I needed to know to go for a local flight. We headed over to another hanger near where he said we could set up, and a bloke with a big grin arrived in an old Jeep and pulled up next to the hanger. Inside the hanger to my amazement sat two trikes. The bloke with the grin was Peter Lake, a local triker, who was extremely happy to see us. He had been flying since August last year. After a long chat about flying trikes, Peter decided he would come and fly with us in the morning and show us around Cape Range, the Ningaloo Reef and Exmouth. That evening we went out to one of the western beaches for a fish. I had decided it was time to get the rod off the roof and try my luck. Naturally I caught a feed of fish, which we brought back to the caravan park to cook. It had been a big day, starting with a fly around Coral Bay and finishing with a fish.


The next day we set the alarm for 6am. We were soon out at the airfield putting the trike together and Peter joined us. Exmouth is next to Learmonth RAAF and within the Learmonth MBZ. After making the appropriate radio calls we took off and climbed to 3,000 plus feet as we crossed from the east of the cape to the western shores. We overflew the fabulous gorges of the Cape Range National Park; they were beautiful in the morning sun as each gorge was highlighted with a mixture of colours and shadows. When we got to the west coast and the Ningaloo Reef we turned north. The coral reef and beach lay stretched below us. The colours were brighter than at Coral Bay, as

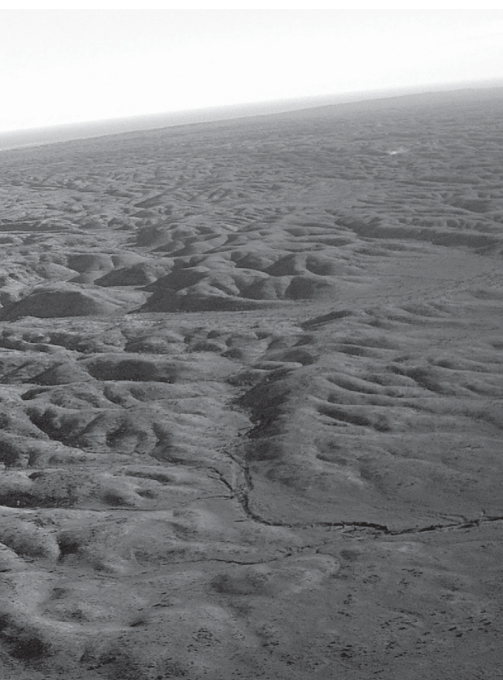


Shark Spotting

the sky was cloudless. Again the colour mix was spectacular. Peter flew outside the reef looking for Whale Sharks. His was a “swim with the Whale Sharks” skipper/operator and was trying to find some whales. We flew along the coastline taking in the sights and waving to the campers in the National Park below. We overflew the many tourists being ferried out to the larger whale spotting boats. They were heading outside the reef to try to find whale sharks to swim with. Peter pointed out the boat he skippered. Flying along the coast we saw many schools of fish, sharks and eagle rays in the shallow waters inside the reef. We flew north (toward the tip of the cape) until we came to the end of the range where the Vlaming Head Lighthouse stood. Here we turned east. It was necessary to turn short of the cape tip, as the Harold E Holt Communication Station (a

US Command Centre) with its high towers has a two nautical miles, 3,000ft boundary.

When we came to the Exmouth Gulf beaches we turned south, following the coast back to the town of Exmouth. We flew coastal next to the town and over the cyclone proof harbour area. We made an inbound call and landed on runway 20. Peter followed, but aborted and went around and landed on 02, as the wind direction had changed. After a chat Peter helped me pack up before saying farewell. We headed back to the caravan park for brunch and a rest. We were supposed to be on holidays and had the alarm set two days in a row, and had set up and packed up the trike two days in a row. It had been more than worth it, as we had seen some of the best scenery this country has to offer, and had experienced something very different, something both of us will remember the remainder of our lives. 



Flying over the Ningaloo Reef

Photos: Peter Lucas

THE COMMITTEE

R Suppards – Reprinted from Australian Gliding 1971

Chairman: Gentlemen, if we start promptly we should finish in time to have a little refreshment. I declare the meeting open. Are there any apologies?

Secretary: Er... Well, Arnold's not here. I can't say he sent his apologies, but I'm sure he'd like to apologise if he could.

Chairman: Ah yes. How is Arnold, James?

Secretary: All considered he's pretty well, Mr Chairman. I'm sure he still recognises me when I call in visiting hours. I told him he'd been re-elected to the committee and I think he understood. I'm sure he tried to nod his head, but of course he doesn't move much these days. His bones are getting very brittle. But he wasn't any worse this month than he was last time I went to see him to tell him we'd nominated him again for the committee.

Chairman: I suppose we can't expect any real improvement in his condition?

Secretary: No, I don't think so. But he's had a very good innings.

Chairman: I'm told he was a founder member of the club?

Secretary: Yes, that's right, Mr Chairman. In fact he was the club when I joined it. That was when we had the old primary. It was Arnold who started us off building the two-seater. Very far-sighted. You know, we were one of the first clubs to start thinking of two-seaters for training. We used to fly all day and work on the two-seater project in the evenings.

Chairman: Yes, so I understand. What a great spirit there must have been in those days! The club wouldn't be the same without Arnold. Poor old chap. I'm afraid next year we might have to think of filling a vacancy on this committee, gentlemen, as we had to do this year following old Tom's sad departure. Well, we'll minute Arnold's apology. Is there anyone else?

Secretary: Young Grant's not here!

Chairman: Why not? I must say I think that's irresponsible. After all, this is the first committee meeting after his election. He's young and healthy. There's no excuse.

Secretary: I expected nothing else. I've though him unreliable ever since he arrived in town last summer, with his talk of great flights he'd had interstate. A real bull artist. I can't make out how he found enough support to get himself elected onto the committee.

Treasurer: He has a small following among the younger members. In fact he's brought quite a little gang of young layabouts into the club. But I don't think we

need to take him too seriously. As soon as he and his mates realise how much solid hard work has to be put into the club to keep it going, they'll lose interest.

Chairman: Well it is very irritating. The next item on the agenda is 'Welcoming New Members'. We can't do that till he gets here. Where is the young beggar?

Vice-president: He's flying, Mr Chairman.

Secretary: What?

Chairman: Flying?

Vice-president: Flying.

Chairman: How can he be? The glider is un-serviceable isn't it? It was last month, didn't you tell me so, Jack?

Jack: Oh, I believe he spent a bit of time patching it up. At least, I hope he did. It certainly wasn't safe to fly last time I looked at it. All the fabric had come off the rudder, and the ailerons weren't even connected. The cables had been taken out of the wing. That was in January.

Secretary: There you are. I told you he was untrustworthy. I don't care if he breaks his own neck, but he's no right to endanger the club's property. If he'd had to work on the building of that machine as I and Arnold and Jack did, he wouldn't treat it so lightly. Ten year's work, that was!

Ground Engineer: Apart from that, how did he get himself launched. He couldn't have used the winch.

Chairman: Is that un-serviceable too, George? I didn't know.

Ground Engineer: No, it isn't un-serviceable. But I've got the cable drum off. It's down in town, in my workshop. I've been working on it a bit since the new year. I meant to bring it back this afternoon, but I forgot. But the winch is in top condition now.

Chairman: Thank you George. That's splendid. We all realise how much effort you've put into that winch over the years. It really is a beautiful piece of machinery, and maintained in perfect shape. It looks hardly used, even after seven years. But how the devil did that young larrikin get into the air?

Jack: Here he comes now, Mr Chairman.

Chairman: At last! Now we can get on.

Grant: Hello Mr Chairman. I'm sorry I'm late, but we had a terrific flight. We got up to eight thousand and...

CFI: We? Who was with you?

Grant: I took Mike with me. He did most of the flying. He's coming on well now, he'll be ready for solo in a few more hours.

CFI: Do you mean to say you've been giving instruction?

Grant: Yes. Why not?

CFI: It is a club rule that only qualified instructors give instruction. We have a first rate safety record, no-one's had any kind of accident or incident here for 10 years. And we enforce that rule.

Grant: But I am qualified.

CFI: You can't be. I haven't checked you out. In fact we've only your word for it that you're fit to fly solo.

Grant: Well, I'm sorry if I have broken a club rule, but no-one told me that one. And as for checking me out, you never seem to be at the aerodrome when I am. I suppose you do all your flying on Saturday mornings and I have to work then so I can't get here till afternoon. But I assure you I am a qualified Senior Instructor under GFA rules.

Chairman: Aren't you rather young to be a Senior Instructor? In any case, whatever your old club called you doesn't apply here. We have our own high standards, as the CFI says.

Grant: Age has nothing to do with it, Mr Chairman. It's a matter of flying ability and... You know, teaching skills and so one.

Secretary: (audibly muttering) See what I mean? A real bull artist!

Grant: And the GFA isn't exactly another club, Mr Chairman. It's...

CFI: Well, I don't care what it is. You'll have to be checked out before you fly again.

Grant: What about tomorrow morning?

CFI: Sorry, I have to be somewhere else tomorrow.

Grant: Next weekend then?

CFI: No, that won't do either. I have to be in town.

Grant: When, then? If you like I'll get a Saturday morning off and we can fit it in then. Just name the day.

CFI: Er...

Chairman: Order, order. Gentlemen, we have an agenda, and if we are to finish by a reasonable time we must push on. Item 3. Oh... Consider yourself welcomed to the committee, Grant.

Secretary: Huh!

Chairman: Item 4. Oh, before we go on, Grant, how the devil did you manage to get yourself launched? I'm told the winch is un-serviceable.

Ground Engineer: I protest, Mr Chairman. The winch is not un-serviceable, as I just told you. It is in top condition. Like new!

Chairman: I'm terribly sorry George. It was a slip of the tongue. I meant, Grant, you didn't actually use the winch, did you.

Grant: No, it IS un-serviceable. Some beggar's stolen the cable drum. It's been missing ever since I joined the club. But we found some good cable in the hangar and we've been towing with my utility.



Ground Engineer: But dammit, that's my new cable for the winch! Do you mean to say you've pinched it for your damned towing. Don't you realise how it'll wear?

Grant: Well, what's all the fuss, then? We used the club's cable for launching the club glider. So the club can buy some new cable, can't it? We'll need some more soon anyway. But actually, for car towing piano wire will do just as well, and it doesn't wear so much.

Chairman: The agenda, gentlemen, the agenda. After all, this is a gliding club, not a car and piano club.

Secretary: Mr Chairman. I don't think we can let this be passed over. I move a vote of censure on Grant. He has behaved very badly indeed. He's been flying and giving instruction without a clearance, he's used George's good electrical cable for his own car, and he's been flying the club glider in a dangerous manner without fabric on the rudder and with the ailerons disconnected. I'm astonished that he can sit there and face this committee as an elected member when really we should expel him from the club along with his larrikin friends. Conduct like his is going to undo all the good work we older members have done over the years.

Chairman: Absolutely irresponsible!

Grant: I couldn't ever find you to ask about it George. No-one could remember where the cable from. It still had the factory wrapping round the spool, but the whole thing was covered with cobwebs. That was months ago. Didn't you realise we'd been using it.

Ground Engineer: Of course I didn't, you young devil. I've been toiling on that winch down in my workshop, trying to get the club's gear into top line, I haven't had time to come round here checking up on you lot. I thought I could rely on gliding people having a bit of common decency. Not to say honesty. You had no right to steal that cable and I'll see you damn well replace it.

Grant: I'm extremely sorry, George. I certainly had no idea it was your cable. I thought it must belong to the club. But those of us who have been using it will certainly have a whip round and pay for it. What did it cost?

Treasurer: It is actually club property, George. You remember, we bought it for you some time ago. But the price of cable has gone up a lot since those days, Grant. Paying the club for it won't do. You'll have to replace the cable.

Ground Engineer: I'll second that!

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Grant: On a point of order, Mr Chairman...

Chairman: All those in favour? Passed nem con.

Grant: Mr Chairman, nem con means no-one opposed the motion. I do oppose it, in fact it's utterly ridiculous. But I suppose the idea is to make me so angry I'll resign from the committee. Well, I am not going to. And if you force me out, I'll call an extraordinary general meeting of the club. I'm allowed to do that if I can get 10 signatures, which I can, gentlemen, from the younger members. But for the record, the club glider, horrible ugly and ancient as it is, is now fully airworthy. I am a fully qualified instructor and airframe repairer, and the steel cable we found in the club hangar has been used for club flying and nothing else. And, Mr Secretary, you can write that all down in the b...y minutes and stick them where you know best.

Secretary: You young puppy! Insolence... words fail me...

Grant: Just as well. Also, for the record, I'm nearly 30-years-old.

Chairman: Item 4. Minutes of the last meeting. Take as read, gentlemen?

Grant: No, I haven't read them, Mr Chairman. The Secretary didn't send me a copy. May I see them, please.

Chairman: See the minutes? Well, I suppose so, if you must. Let him look at them, James.

Secretary: He wants to read the minutes?

Grant: Yes.

Chairman: Only for the last meeting, you know, James. He doesn't have to go back further than that.

Secretary: I'm sorry, Mr Chairman, I didn't actually bring them with me.

Treasurer: You see, Grant, we don't usually bother. They are always taken as read. It's only a formality, after all, isn't it!

Grant: I don't think so. How can you remember all the decisions you've taken.

Treasurer: Ah, well, when you've been in the club as long as we have you'll understand

how we work, and then you won't need the minutes.

Chairman: Order, gentlemen, please. We must get on. Item 5. Matters arising from the... Well, we don't need to linger over that... Item 6. Now, here gentlemen, we have something of very great importance to the future development of the club. I'm sure you'll all agree the club spirit will benefit very greatly from this extension to the...

Grant: I'm sorry to interrupt, Mr Chairman, but I would be most grateful if we could take Item 10 on the agenda before Item 6.

Chairman: Item 10? What's that? Where is it?... But that's 'Any Other Business'! It's taken after everything else.

Grant: I know that's usual, Mr Chairman, but I've noticed on other committees I've been on that 'Other Business' often doesn't get full discussion because people are anxious to get away after a long meeting. I have an item to raise which is far more important for the club than any of these others, and if you agree to all these other things there won't be any hope of money being available for my item.

Chairman: But all these things are intended to make more money, Grant. The bar extension, the new wine cellar, the poker machines, the opening hours at weekends – you can see how much profit the club can make, quite apart from the improved atmosphere. We've been losing members to the RSL and the Institute. These new measures will attract a lot of new members. I'm convinced they're in the club's interests.

Grant: I don't doubt you are. But I think the club should buy another glider. A modern two-seater. And we ought really to have a solo machine too. A Ka6 or something like that. You can buy them for around \$4,000, secondhand.

Chairman, Secretary, Treasurer, Ground Engineer, Jack: Buy a glider? You must be joking! \$4,000! Etc, etc.

Grant: I'm dead serious. I suggest we buy an L13 and a Ka6.

Chairman: I don't understand all these figures.

Jack: \$4,000 for a glider? It's absolutely ridiculous. If you want a glider why can't you get down to it and build one, as we had to do? The club two-seater only cost us £20.

Grant: Yes, it looks like that, too. And a few of us have spent 10 times that amount on it these last few months, just to make it fit to fly. The club needs a new one – two or three, in fact. As the chairman said, this is a gliding club, after all. At least, that's what it is supposed to be.

Treasurer: It's almost five o'clock, Mr Chairman.

Chairman: Good Lord, so it is. Item 6.

Grant: But Mr Chairman.

Secretary: You're out of order.

Chairman: Item 6. Green's estimate for the new bar extension was \$4,400 gentlemen. Very reasonable I think you'll agree? All those in favour of accepting? Passed nem con.

Grant: I'm con, Mr Chairman. The club could buy a good Ka6 for that sum.

Chairman: Item 7. Extension of the licensing hours to match the RSL. This has been granted, gentlemen. All those in favour say aye!

Secretary: That's very definitely not out of order!

Chairman: The wine cellar. This is going to cost us \$2,000, gentlemen, to build and then the stock will of course have to be considered as a long term investment. Jack will select the wines. All in favour?

Grant: There goes the deposit on the L13.

Chairman: Item 9. The new poker machines will cost us a great deal, gentlemen, we haven't discovered how much, but I'm sure they'll pay for themselves in no time, and then next year we can think about a new billiard table. Item 10. Any other business, meeting closed... thank you very much gentlemen. Open the bar James. All that work has made me thirsty.



RAAF WILLIAMS BASE, POINT COOK

Graeme Barton

THE COMMONWEALTH GOVERNMENT ANNOUNCED ON 29 AUGUST 2003, THAT IT HAD APPROVED A FREEHOLD SALE OF THE RAAF WILLIAMS BASE, POINT COOK WITHIN THE 2003/04 FINANCIAL YEAR, WHILST RETAINING OWNERSHIP OF THE RAAF MUSEUM AND A RAAF HERITAGE PRECINCT.

In addition to the RAAF Museum and associated buildings, the 'RAAF Precinct' includes the Sergeants' Mess, World War 1 Airmen's Quarters, World War 1 Memorial, Parade Ground and Base Head Quarters' Building, which is currently used by the Air Training Corps. Land and buildings associated with the RAAF College and Academy and the Officers' Mess are being put up for sale with the intention of leasing them back until the college is relocated to East Sale and Wagga. An airstrip will be retained for use by the Museum.

Whilst this is an improvement on the earlier proposal that the entire base was to be put up for sale, and the basis on which the Steering Committee formed to prepare recommendations on the future use of the base deliberated, the proposal as announced has serious shortcomings from aviation and heritage points of view. Of particular concern is the exclusion from the 'RAAF Precinct' of the area known as the 'Southern Tarmac Area', the area which is considered to be the most important area on the site from a heritage point of view.

At the time of preparing this article for Soaring Australia (mid-September), an active program is being prepared to lobby the Government to achieve a greater recognition of the heritage importance of the base and the establishment of an aviation museum which recognizes all branches of aviation and the significant contribution which aviation has made to the development of Australia as recommended by the Pigott report tabled in our Federal Parliament in 1975.

A petition is currently being prepared for presentation to the Federal Government stressing the importance of the Point Cook RAAF Williams Base to the development of aviation in Australia. It is intended that the petition will recommend to the Government that the Point Cook base be leased to a community-based not-for-profit organisation and that the site be developed for aviation heritage, aviation preservation, education and tourism.

It is expected that the petition will be distributed widely in the near future. The support of all aviation-minded people and others in the community who believe that the very significant aviation heritage of the RAAF Base at Point Cook should be preserved is essential. If a copy of the petition is not available through your club, please contact me and I will arrange for a copy to be forwarded to you. My address is: Graeme Barton, 2 Bicton Street, Mount Waverley, Vic, 3149, or phone 03 9802 1098.



Letters to the Editors

Thanks extended to GFA

I would like to say a big thanks to GFA for its help in assisting gliding at Camden, NSW. At present, Camden Airport is in the process of being sold. Hoxton Park, Camden and Bankstown Airports are being sold in a group to private industry. Camden Airport will still remain an airport, but the definition of an airport is not clear. The gliding community at Camden has great concerns that it may lose its grass runways.

This affects Southern Cross Gliding Club, Sydney Gliding, the Scouts Gliding, Air League and independent operators of motor gliders located at Camden.

Bob Hall and Henk Meertens have been very helpful in working with us on lobbying the Federal Government. The local Liberal

member, Pat Farmer, has also been very supportive. We had a meeting with the Minister for Finance and Administration, Nick Minchin at Parliament House.

It is obvious that Henk and Bob have worked these corridors before, many times. It is a frustrating and thankless task with extremely long decision and process times.

On behalf of the gliding community at Camden, I want to thank these guys for their help.

I know there are times when GFA comes under criticism but getting help like this is very valuable and I am thankful to have Bob and Hank's experience on our side.

Dave Boulter, President Southern Cross GC

CLIO'S WINGS

Clio, the Muse of History

CLIO, THE ANCIENT GREEK MUSE OF HISTORY, HAS HAD A GREAT INTEREST IN THE HISTORY OF GLIDING AND SOARING EVER SINCE ICARUS AND DÆDALUS FIRST SPREAD THEIR WINGS. IN AN EFFORT TO FOSTER AN APPRECIATION OF THAT HISTORY, SHE HAS INSPIRED THE FOLLOWING QUIZ.

A LITTLE OF THIS, A LITTLE OF THAT

Clio's quiz:

1. Who was the first Diamond glider pilot in the world?

- A. Coren D Ternal
- B. Richard Johnson
- C. Ralph S. Barnaby
- D. Hawley Bowlus
- E. John Robinson

2. The Moazagotl is what the German glider pilots call their standing wave and it was named after a farmer.

TRUE or FALSE

3. Who self-launched his glider off a cliff using a greased slide?

- A. Orville Wright
- B. Cloyd Artman
- C. Peter Riedel
- D. Elmer Zook
- E. Espin Hardwicke

4. The Canadians have never built gliders commercially.

TRUE or FALSE

5. The PW-5 was designed with the "one class" idea in mind, that is, that all competitors in a contest would fly basically the same glider. What was the first sailplane designed with the "one class" idea in mind?

- A. Grunau Baby
- B. Blanik L-13
- C. DFS Meise
- D. Franklin PS-2
- E. Schweizer SGS 1-26

6. Elliotts of Newbury (EoN), the English glider manufacturer famous for building the Olympia series of gliders after World War II, had been a home construction company before the war.

TRUE or FALSE

7. What famous German ex-patriot glider pilot was a secret General in the OSS (Office of Strategic Services, the forerunner of the CIA) during World War II and may have actually performed secret missions for the Allies within Germany during the war?

- A. Wally Setz
- B. Gus Haller
- C. Dr Wolfgang Klemperer
- D. Martin Schempp
- F. Robert Kronfeld

8. Erno Rubik, inventor of the "Rubik's Cube" also designed gliders.

TRUE or FALSE

9. Who founded the first organisation dedicated to the preserving and flying of vintage gliders and sailplanes?

- A. Chris Wills, the Vintage Glider Club in England
- B. Jan Scott, the Vintage Sailplane Association in the US
- C. Willi Schwarzenbach, the Oldtimer Segelflug Vereinigung in Switzerland
- D. Klaus Heyn, the Oldtimer Segelflug Club in West Germany
- E. Martin Simons, the Vintage Glider Association in Australia

10. The Aeronca C-2 Flying Bathtub was a modified glider.

TRUE or FALSE

The answers can be found on page 45

GFA Badges & Certificates

FAI List – October 2003

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Moore, Michael Ryan	10887	Southern Cross

C CERTIFICATE

Tromp, Sara Angeline	10741	Darling Downs SC
O'Sullivan, Gregory James	10801	Geelong GC

A B AND C CERTIFICATE

Keir, Michael John	10885	Gympie GC
Bogaard, Ian Roy	10886	Hunter Valley
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PARAGLIDER LINES: How safe are yours?

Compiled by Jean-Luc, CFI Rainbow Paragliding

WHEN I STARTED FLYING OVER 10 YEARS AGO, PARAGLIDERS HAD MORE LINES (ON AVERAGE 100M MORE) THAN THEY DO TODAY. THEY WERE ALSO MUCH THICKER. GRABBING YOUR A'S COULD MEAN 16 LINES BY 1.8MM – A BIG HANDFUL!

Over the years the length of lines (distance between pilot and glider) has increased. This means greater speed on turns, and an increased load on each line. At the same time, the number of lines has halved, with a 70% reduction in diameter. Of course the line quality has improved to handle this.

However, a few accidents in France have attracted the attention of the line manufacturers. British pilot Hamish Philip was doing a cross-country course with Jocky S in a year-old borrowed Genesis with microlines (unsheathed). As he entered a thermal, 23 lines on

one side snapped. He had a reserve and landed safely on the back of a Lada!

Last year, another incident involved a French instructor flying a borrowed glider with competition lines that had 100 hours airtime. After the second turn on a spiral, all the lines on the inside riser snapped. He didn't have a reserve and did not survive. More recently, Eric Beauvelet, wanting to reline one of his school gliders, decided to fly down the valley to the workshop with it. Forgetting what was above his head, he started a spiral. Again, on the second turn, many lines snapped in a row; lots of 1.1mm middle lines and also lower lines at the level of the heat-shrink. He didn't have a reserve but survived with multiple injuries after executing an awesome PLF.

In Australia, a pilot bought a second-hand wing and flew it in thermal turbulence.

On recovery after a big asymmetric tuck, all the lines on one side broke. Jason pulled his reserve and landed safely on a tall tree.

Another pilot had six "A" lines snap while thermalling. He managed to keep the glider flying and landed safely. The probable cause was a salt water landing six months earlier.

Although one of the gliders mentioned above was equipped with Kevlar lines seldom used today, and others had comp lines, the latest accident involved Supararam, currently used by 60% of paraglider manufacturers. The other 40% are using Dyneema (and some use both).

I have noticed reluctance with Australian pilots to replace lines. Considering the important role lines play in our safety, they do merit our close attention. A paraglider line is a sophisticated product:

A plating machine takes around one hour to produce 20m of lines. The textile fibres, derived from petrol, are heated and cut into hair like fibres. The factory "Cousin" in France produces 70% of paraglider lines globally (15,000km worth in length in the year 2000). It's a family enterprise founded in 1848. Today it employs 500 people to work around 1,000 machines. It buys the raw product from big chemical companies. After giving up on polyamide (nylon) and polyester (due to shrinkage), it settled on dyneema (high module polyethylene) or superaram (polyamide aromatic, aramide). Dyneema has all the qualities needed for a paraglider, but it does stretch under big loads (flying incident, acro, etc) and does not tolerate heat well. The heavier Superaram doesn't stretch as much, but has less resistance to fatigue and UV.

Didier Pascal from Cousin states: "When I see competition pilots on 0.9mm unsheathed, it doesn't give me confidence. The thicker the line, the stronger it is: by increasing the diameter of a line, we gain much more on strength than we lose on drag. An Aramid line of 1.2mm has a breaking strength of 120kg. If we double the diameter (2.4mm), the strength is 410kg! At Cousin, we insist that a line has a limited life span. They are subject to wear and tear through shocks, bending, UV, salt, heat and humidity. So the annual check of the strength of the lines recommended by all manufacturers is indispensable."

Andre Rose, chief test pilot for ACPUL: "One must know that a line can lose 50% of its strength when fitted to the glider, because of a bad thread for example. Even a simple knot can cause 50% loss of strength. Therefore we must be certain that the coefficient of margin of safety on a new glider is huge. We should organise a study on the aging of the lines, but unfortunately such a project would cost a lot of money."

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Pierre Bouilloux from Supair: "Unconsciously we end up taking the act of flying for granted. Eric B did 360's under a wing that he could not trust. It's not about pointing the finger; it's the type of mistakes that we all do now and again. It's stronger than we are. Maybe we should rethink the way we approach the sport. Flying is an important act."

I hope the above comments from professionals will convince you to be meticulous with your lines, although there is no need to panic, paraglider line failure is rare. The majority of paraglider manufacturers only use the best quality lines available. All the line accidents mentioned above involved used gliders. On the other hand, we are all flying used gliders, as they don't stay new for long.

Here is some line safety advice to prevent line failure:

- Don't leave your glider in a hot car (even the boot gets too hot in the sun).
- Never pack and store a humid or wet glider (dry it first, in the shade is better).
- Don't drag your wing on the ground.
- When packing up, place the lines (without hard bending) towards the leading edge, where they will be less compressed and have better ventilation.
- Big ears, B's, spirals or acro manoeuvres heavily load the lines, therefore accelerating the aging process. Safe acro requires a change of lines every 50 hours (at least the lower lines).
- After a shock (violent reopening after a big collapse, tree landing, etc) you should check the lines involved.
- If buying secondhand, have the lines checked right away before you fly.
- If your lines are equipped with heat-shrink, then you have another reason to have the lines checked, as it could have weakened the lines if the heat-shrinks were improperly fitted (overheating the lines).
- Spontaneous aging does exist: even properly stored and unused, a wing and its materials are aging and weakening with time.
- There are no miracles: the quality of lines fitted to a paraglider is reflected in its price. Be wary of cheap products.
- Be realistic with the way you use your wing: if you often do acro, like over 12m/s sink spiral (that can put 5G on some lines), or drag your glider on the ground with every take-off, be more vigilant with the state and the frequent checks of your lines.
- If the glider feels lazy to inflate and shows tendencies to drop back when it comes over your head, the lines could be stretched, or worse still, the fabric porous.
- If a turn on one side seems faster and easier to induce than the other, it probably means you have an asymmetric line problem. One side could be stretched. This happens if you do acro on one side only.
- After three years of careful use of a paraglider, expect to lose 50% of the original breaking strength of your lines.
- A professional inspection is the best way to be sure. For example, at Rainbow Paragliding, we check length of lines, resistance of lines, resistance and porosity of the fabric, visual inspection of line threading, line attachments, cells, diagonals and ribs, leading and trailing edge. Finally, ground handling and execution of manoeuvres in flight. A written report is provided.

CONCLUSION

A paraglider is an aircraft, so we should have a serious approach to its maintenance. One would not expect a GA pilot to fly his plane without maintenance checks. Most paraglider manufacturers recommend a yearly check or every 100 hours. As the glider gets older, it should be every 50 hours, unless an incident gives you reason to doubt some lines and hence cause you to check earlier.

I hope this article has brought to your attention the importance of the lines and regular maintenance checks. Your safety depends on it!



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The Slippery Art of Flying Safely

Rob Julian

I SHOULD BE SO LUCKY, (LUCKY-LUCKY-
LUCKY) I SHOULD BE SO LUCKY ABOVE
(REPEAT)



Setting up, we found the Moyes Boys, Mark Newland and legendary aerobatic pilot Danny Scott testing the new XS high performance weapon. Despite our keenness to get into the air, we couldn't resist wandering over to chat to the sky gods and see what the latest and greatest comp machine was all about.

"Pick it up," said Mark.

"Feel how light it is." I managed to heave it about one centimetre off the ground. "Yeah, it's great," I said, grimacing.

Being super keen and quite happy with our single surface machines (I was flying a Gyro trainer with a Rainbow Stripe) we were soon off on the heels of the test pilots, who seemed to have disappeared into the ether.

We launched, but alas, the wind soon dropped off and Andrew was already heading off down to the beach, defeated. But I wasn't just going to roll over like him. I had convinced myself I was the next Danny Scott. I was going to salvage something. I was going to do it with style.

Nothing for me would do but the most perfectly executed 'fly on the wall' landing in the history of audacious landings, or in the history of flies for that matter.

Turning resolutely towards the hill, I pulled on speed and aimed at the face. Of course, pulling on speed in a Gyro is really just pulling on sink, even if your glider has a Rainbow Stripe. Consequently, by the time I approached the hill I was a considerable way down the face. Out of my peripheral vision I could see the rusty wrecks of stolen cars that had found themselves in a similar predicament. Eventually however, the wavering blades of grass rose up to meet me and at the appropriate time, I jammed out the bar and mushed into the hill. I had done it! I had top landed at Stanwell! Well, I hadn't quite landed on top, but it was close enough.

In hindsight, I think this flight represented the absolute peak of my flying career, at least as far as ridiculous overconfidence was concerned. I still hadn't experienced

anything that put lie to the popular bumper sticker of the time – "*Remember when sex was safe and hang gliding was dangerous?*"

A few weeks later, I was flying at Bells Southside for the first time. Southside was a coastal site with a convenient top landing, and for those who preferred it, an inconvenient beach landing. For some reason, maybe only because someone said so in jest, I had convinced myself that the bottom landing was for emergencies only. After soaring for a while, the wind began to drop off. By then I had convinced myself that if I didn't top land I was going to fly into the surf and be lost forever. I just had to top land! No worries, I'd done the same at Stanwell a few weeks before.

Coming in too high, I floated over the end of the landing field and in a panic I mushed down into the scrub before the cliff edge. Except that by some fluke I had picked a tiny area roughly in the shape of a Gyro 160 that was completely devoid of vegetation.

When my rescuers arrived on the scene they were perplexed. "*Why didn't you land on the beach?*" and "*Hey, how the hell did you manage to put it down in this bare patch?*"

Of course, I couldn't say why to either. I just couldn't believe I had screwed up like that.

But this was merely the first in a long and educational series of flying bloopers.

Looking back, this wasn't an Accident. But it was an Incident. So what's an Incident?

Here are two broad definitions.

Definition 1:

An Incident is putting yourself in a situation that leaves too much to chance or taxes your skills in a way that is not fun.

Definition 2:

Incidents are the hilarious 'no shit there I was' stories that you tell in pubs at the end of the day.

Conversely, an accident is an incident that results in glider damage or pilot damage. But I'm not going to get into the semantics of what constitutes an accident. I say don't just look at accidents, look at incidents, because incidents show you how an accident occurs.

Not only that, your logbook, if you keep one, is littered with them.

I don't think of myself as a superstitious person, but I must be, because I have been reluctant to write anything to do with the issue of safety. Why? Well, I'm not exactly comfortable being moralistic about these things. More specifically, I have a deep seated fear that no sooner than it appears in print, I'll plough into some mountain somewhere, thereby revealing my complete lack of credibility.

But then again, I've so far managed to chalk up near 400 hours with nothing so much as a grazed knee and a sore thumb. So why do I feel so vulnerable?

The answer, Dear Reader, requires a journey into the mists of time and the murky depths of my logbook.

The year was 1989. I was nineteen. Mulletts were still an option, the Berlin Wall had just come down, and Kylie Minogue, also 19, was launching her international pop career, not that I was paying much attention.

Simultaneously, I was embarking on my career in the infinitely less glamorous world of hang gliding. Not that Kylie was paying much attention.

Me and my mate from uni, Andrew, were on our first visit to Stanwell Park. As a low hour novice pilot, Stanwell was a kind of holy grail for me. We had driven up from Melbourne together. This took quite a long time. Andrew was a mild mannered but stubborn country boy. As he was driving his mum's Camira, he wouldn't let me drive and being a mild mannered country boy, he never went faster than 80km/h the whole way. To my surprise, we eventually arrived at our destination, and even more surprisingly, when we got there it was on!

Looking at my logbook and using Definition 1 above, (assuming that X is a Hang Glider, and Y is what you say when Moyes send you the spare parts bill) I get the discouraging result that I can expect a 'situation' every ten or so flying hours. An incident can be something as trifling as dropping a wing on launch to having a full blown prang.

All of these are my own fault because:

- a) *I fly hang gliders*
- b) *I want hang gliding to be fun at least some of the time*
- c) *I keep repeating the same mistakes*

So I encourage you, if you have the patience and a reliable log book, to sit down, be honest and write down every time you stuffed up, even in a minor way, as a one line 'incident report'. I managed to almost fill a whole A4 page. It was the usual stuff: poor approaches, top landing woes, turbulence on approach, dodgy launches. But better than reading somebody else's accident reports, it shows me the types of errors I tend to make. It makes for sobering reading, unless you think of them in their not-so-proper context as hilarious flying anecdotes. Here are a few of the 'funnier' ones for your reading pleasure.

- *Attempted first wingovers and landed perfectly to find one downtube bent (what the?)*
- *Wireman failed to clear sidewire on launch and had to run off yawed to one side (sidesplittingly funny)*
- *Crashing into slope after trying to 'ridge soar' embankment in dodgy old glider (doh!)*
- *Slack pre-flight resulting in folded mylar going unnoticed resulting in dodgy pitch pressure (hilarious)*
- *Forgetting to release VG and doing two downtubes (very funny indeed)*
- *Diving underneath a paraglider to avoid a mid-air (those crazy jellies!)*
- *After landing in very rough air, noticing the nose catch was about to fall off (pure comedy)*
- *Car running out of fuel while launching on tow (should've been on Funniest Home Videos)*
- *Overshooting tiny beach LZ after coastal XC flight and needing high flare to avoid water (off the scale on the laugh-o-meter)*

And so the list goes on. But don't think I've got a monopoly on the fun. My friend Steve, usually a prudent fellow, once stowed his radio in the side pocket of his harness and secured it with a mini carabiner. One day, about a thousand over Bright Hill, he weightshifted to one side and the mini carabiner decided to clip itself, and Steve, to the left hand rear wire. Ever resourceful, Steve managed to reach back with both hands and release himself and the glider from the ensuing spiral dive and lived to tell the tale at the Alpine that evening.

As I mentioned, most incidents aren't this exotic, but they happen all too frequently. There is a saying, "*Hang gliding is as safe as you want to make it*", from which I can only conclude that nobody wants hang gliding to be safe, unless you consider safety as getting away with it all the time.

But I suppose the inevitable moral to this rambling exercise is that by recognising incidents and trying to avoid repeating them, you can minimise their frequency, and with a bit of luck, they won't become accidents, just good flying yarns at the end of the day.

As an interesting postscript on the subject of superstition, I was about halfway through writing this article when I decided to go for a fly down at the coast. I began my launch run and managed to stop it again about three feet from the edge when one wing went down into the dirt. (*You just had to be there!*)

(Sub-ed note: Thanks to Rob for writing this article. I hope by printing it I don't condemn him to immediately plough into a mountain somewhere as he suggests might happen. But I guess the good of the many outweigh the sacrifice of a few... so please take heed of Rob's words lest they be spoken in vain – go through your logbooks and write down all the Incidents you've had over the years.)

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Adding Technology to keep your eyes OUTSIDE the cockpit

Kevin J Wilson

TECHNOLOGY HAS COME ALONG WAY... ADMIT IT! FROM COMPUTERS TAKING UP WHOLE BUILDINGS TO SOMETHING NO BIGGER THAN A PEA AND WITH PROBABLY MORE COMPUTATIONAL POWER AND A MILLIONTH OF THE ELECTRICAL EFFORT REQUIRED.

In the olden days of gliding there were no instruments and we (ok... not me personally) relied upon good ole' feel to get us around. We used our senses to ensure we had enough airspeed and height above ground. As time went on we started adding instruments to aid us determine how fast we were going, how high we were, whether we were climbing or sinking. With focus on competition and cross-country now possible due to advancement in glider design, we add maps and GPS's to our cockpit. Little wonder we spend increasingly more time focused on instruments, maps, GPS, LNAV, compasses, etc, rather than a good lookout and really enjoying the actual flying of the aircraft and the beautiful scenery that presents itself outside the cockpit.

In comes WinPilot from Sierra Skyware, Inc. – another piece of technology that's actually supposed to reverse the trend and allows you to spend more time looking outside the cockpit... or does it? In a snapshot, WinPilot (WP) is a gliding computer that shows you on one screen your location, height, speed, nearest landing points, your direction, wind speed, distance to next turnpoint, final glide, push/pull based on McCready settings, map, airspace limits... and more!

HOW IT WORKS

Basically, WP is a piece of software (computer program) that runs on a small handheld computer (Pocket PC) about the size of your passport, but about one centimetre thicker. The computer is largely a touch screen colour panel taking up about 80% of the front face. The Pocket PC is connected to a GPS via a cable or a dedicated GPS sleeve. The sleeve wraps neatly around the Pocket PC and adds about one centimetre to the thickness of the combined unit. The WP

program uses the input of the GPS to calculate a bunch of useful things that glider pilots would like to know (eg show me all the airfields or landing points I can reach from my current position, etc). Together with geographic data, airport data and other information, it provides an immense amount of information that can be shown on the screen of the Pocket PC in flight.

THE TEST

It's all very well to add another piece of technology to the glider, but doing so would make you think that there are more things to keep your head IN the cockpit. In my frame of mind, as another glider pilot put it of himself, *"I have an acute sense of self preservation, risk and risk management."* Hence, adding technology for the sake of adding technology which distracts from the self preservation model is certainly not high on my agenda. So in evaluating WP, my primary goal is to test the product to see if it fundamentally improves safety. Other factors also include ease of use in flight, easy to read/see, accuracy of computed data and others. For the initial test, my aim was to test the product under local soaring conditions. Cross-country is the next test, but that will have to wait for another report.

To prepare for the test, the following hardware and software items were obtained:

- A near-new Compaq IPAQ 3870 (a Pocket PC)
- A Garmin e-Trex GPS
- A GPS to IPAQ connectivity cable
- A GPS Sleeve (as an alternate to the Garmin)
- WinPilot Adv and Pro software

To become familiar with the functions of the software, Sierra Skyware supplies a free downloadable simulator version from their website [www.winpilot.com] that allows you



to 'play' with all the functions prior to flight. I strongly recommend spending a few hours with the simulator before using the flight computer in flight.

The simulator is actually the full code with the GPS connectivity disabled. To simulate movement, the simulator program feeds in data to simulate movement, in place of the real GPS data. The simulated data simulates that you are in a glider at a predefined height and speed. Luckily, the developers included a function that allows you to change direction and speed of the 'glider' in case things get boring flying in a straight line. Once WP is up and running on the IPAQ in simulator mode, the first (and main operating screen) is a colour terrain map showing your location (depicted by a glider) over the map. In the colour terrain mode, the simulated glider has a position update every few seconds. By turning the terrain off, the position update occurs with sub-second response (as I found out later, this is in fact the same response times when operating in actual flight).

I configured the simulated glider to be 3,500ft asl near the Camden glider air strip travelling south-west. Surprisingly, the NSW Airport and Airspace data that was downloaded from the website actually showed the Camden airstrip (and runway direction) on the map as well as Bankstown, Hoxton Park, Sydney International and most known strips in the area. In addition, Airspace data was shown depicting arc lines showing the boundaries of Class C airspace, restricted airspace etc. This is especially useful around Camden as 10km to the west the height restriction goes up from 4,500ft to 7,500ft. About 10km to the east, the height restriction drops to 2,500ft. If you're approaching one of these airspaces, WP gives both an audible and textual warning. It was also observed that a green label appeared around the name of the airport with a height label next to it. Basically, this meant that your aircraft (with configurable polar curves) with its current height, speed, and wind direction, will be able to glide to that airport (or waypoint) without the need for further thermals. The height label shows how many spare feet you will

have when you get there. With the home/goal/destination point assigned, there is a small graphic on the left side of the map showing your height required for final glide. There are chevrons on the glide bar which depicts pictorially, if you are close, or way short of the required height for final glide.

By double-clicking on an airport in the map view, a view screen pops up showing details about your current situation in relation to the airport as well as showing relevant airport information. These details include your current distance from the airport, arrival height above airport at your present course and direction (at MacCready settings 0, 2, 4), ATIS, tower and ground frequencies, runway directions (visual map) and others (courtesy of the US Government).

On the main screen, a configurable status bar at the bottom of the map allows you to show information that you feel is relevant to your gliding situation. The status bar allows five to six separate pieces of information and it's up to you to decide what information you want to see. You can add more information, but the map real estate gets smaller to accommodate. The information available includes: ground speed, turnpoint distance, current bearing, L/D, time, time left, ground level, leg speed, task speed, track, wind, altitude QNH, altitude AGL and a lot more. With all this information, the map can get cluttered. It is advisable to configure the font sizes to suit your needs. I find using smaller fonts de-clutters the screen.

The configuration options of WP are vast. With three menu screen and loads of sub-menus, it is relatively straight forward to customise your copy of WP to meet your needs.

FLIGHT TEST

With fresh batteries in the GPS and fully charged IPAQ, Bill Kirkham (fellow Southern Cross Gliding Club glider pilot) and I took the equipment out to the glider to test the features of the software in flight. For safety during our first test, I did the flying and Bill went through the features in flight. The fundamental aim of this first field test is to test how easy it is to use (installation and visibility), the accuracy of the information presented and how reliable the figures are in flight. For this test we used the IPAQ in conjunction with the Garmin e-Trex.

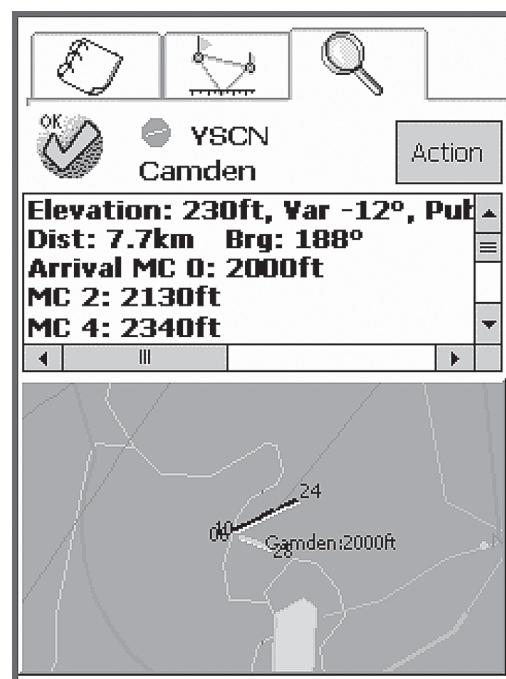
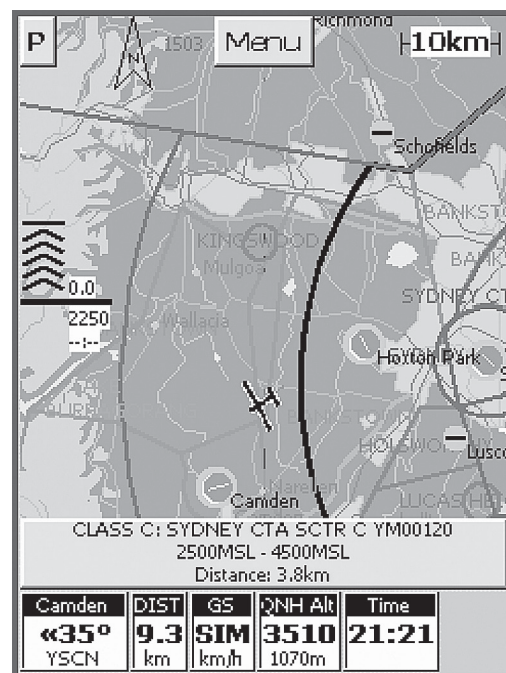
The first thing we noted is where to put everything. We have two devices and had no thought to securing the components. So, with a bit of Velcro, we were able to stick the GPS to the top of the instrument cluster in the rear seat and just hold on to the IPAQ for the flight. Hooking in the GPS to the

IPAQ was a cinch as all it took was plugging in a cable to the GPS and the other side to the IPAQ. As soon as the cable was connected and the WP software started, the main view screen on the IPAQ showed a map view of Camden with the little glider icon sitting just where we expected it to be... right on the end of the runway at Camden. With QNH altitude set in WP, and a wave to our wingman, we were off!

On climb, WP didn't register height above ground till around 400ft, but once started, it seemed to produce reasonably accurate height QNH plus or minus 100ft (as compared to the gliders altimeter). The colour screen map and information appeared very clear, especially with the sun directly on the screen. What was a little troublesome is when the sun was dead in front of the glider. All you see in the screen is your face! The recommendation here is to use a quality screen glare guard to fix this problem. On climb, you could easily see the glider on the map (top down view) and the heading. By a quick glance at the screen, it would be very easy to do a radio call stating your position based on your position relative to the airfield. "...Zulu Alpha Yankee two kilometres south-west of Camden at 2,000ft circling." The refresh rate, which updates your current position, appears to take its time (a few seconds). However, when the terrain is switched off (via a button on the front of the IPAQ), the refresh rates are much faster (sub-second updates).

For navigation purposes, we wanted to see how easy the map translates to the view outside the cockpit window. As a test, we headed towards the runway with the zoom setting on around five kilometres. As we got close to the end of runway 06 main centre-line, WP accurately showed Camden Runway 06 ahead and to the right. The map also showed main roads, rivers and via colour contours, the ballpark heights of nearby hills. One of the things we did notice is that without any external power to the IPAQ, a 20-minute flight really drains the IPAQ battery. The best thing to do is to also rig a power coupling to the glider's battery or use another external battery source.

On circuit entry, we started mid-downwind at 800ft and WP indicated at 100 to 200ft below height requirement. This is correct as we planned circuit entry to arrive at 1,000ft. However, it's best not to get too comfortable as you may be 1,000ft above the runway threshold but still not be in the right position to enter circuit, which may take you 300 to 400ft height loss to reach correct circuit entry point.



As feedback from one of our junior pilot (<20-hours solo), he found WP quite good, although his head was glued to the WP screen during flight! Herein lies the importance of familiarising yourself well with the software before you fly. Our recommendation is to use the simulator and then spend the first couple of flights as dual (without being Pilot-in-Command) to get familiar with viewing the information quickly. It is essential that the IPAQ is mounted properly to allow quick visibility of the screen.

For the second test, the primary aim is to see if having this extra piece of technology actually helps to minimise risk. Risk minimisation from this tests perspective, is basically the ability to better avoid a collision. The

initial premise was that the software would enable the pilot-in-command to quickly look at the WP screen, absorb the information and bring their eyes back outside the cockpit. The idea is that the information presented allows us to make decisions without reference to multiple dials or page through many GPS screens to indicate heading, location, GS, etc and hence reducing the risk of not keeping a good lookout. As you will see in the next paragraph, we were actually surprised at how WP actually helped us avoid a potentially dangerous flight!

This time we turned the flight logger on. Bill did the flying and I managed the flight computer. After releasing from the tug and performing a few consistent turns, WP instantly shows an arrow pointing at the glider. This arrow is a wind direction arrow. On the tail of the arrow there is a number indicating the wind strength at that altitude (in WP Pro version, it is not necessary to fly circles to pick up the wind direction). When thermalling at different altitudes, WP again updates the wind information. By touching the wind indicator, a pictorial wind-slice is shown, indicating the direction and strength of the wind at different altitudes! Pretty cool, eh? Another useful feature is the trace. As you fly along, WP shows a trace of where you have been and what you have been doing. We noted that when we left a thermal, our trace showed the circles we left behind. What was even more interesting is that when we travelled away, and then came back to the circles, we could actually pick up the thermal again! In the Pro Version, it's even easier with the display of thermal dots – the larger the dot, the bigger the thermal. Now, more importantly and without realising it, as we were thermalling along we were approaching the 4,500ft limit. Without WP we felt we may have been in the right area to step to the 7,500ft zone. By quickly looking at the WP screen, we noted that we were just inside the 4,500ft zone. Had we continued our climb we could have breached the 4,500ft limit in the zone we were in! WP saved the day!

With the logger enabled, we were able to review the flight trace in the simulator after the flight. We were even able to replay the whole flight second by second! Being a standard .igc file, the log can be imported into your favourite logger display program.

CONCLUSION

So fundamentally, the question is: Does adding technology such as WinPilot actually reduce risk? The more familiar we (Bill and I) became with the software and explored its features, the more we understood the real benefits. It's obvious to note, this is not your

standard Sunday afternoon flying software. This is serious gliding software geared around competition and cross-country flight – we know, because the developers are actually competition glider pilots!

What I have described here is really only a small portion of the benefits of the program. There are many more functions available around setting tasks, start gate type, rounding of turnpoints, finishing rules, etc. To ensure there is no danger using the software, we recommend a Silver C prior to usage to ensure safe flying skills first. So, back to the question... does WinPilot actually reduce risk? Funnily enough, the answer is – maybe! Depending on how you fly today will govern whether WP will actually reduce risk. For Sunday flyers, you really don't need this software to tool around the sky. You know what you are looking for and adding this technology may potentially distract from your flying fun. However, if you have any inclination to stretch yourself (as with any sport), you need to be well prepared. Pilots who want the thrill of moving away from home base and performing any form of cross-country will already have an armoury of equipment, maps, GPS, etc, to provide information they need for their flight. They will have spent the time on the ground with thorough preparation prior to flight. With WP this is no different. Planning is the key to a successful flight. All WP does is collects the information and display that information in a format that is easy to see, retrieve and handle. In this case, I would be confident to say that WinPilot does indeed reduce risk as there is less fumbling around to access information in the traditional way. So I give WinPilot the big thumbs up for data presentation, configuration and ease of use and I would recommend any glider pilot give this software serious consideration.

HARDWARE REQUIREMENTS

Minimum requirements are:

- *COMPAQ IPAQ (WinPilot works with models 22xx, 38xx, 39xx, 51xx, 54xx, 55xx)*
- *Any GPS (with NMEA output). Eg: Garmin, Magellan, NAVMAN or TRANSPLANT (both are GPS Sleeves), etc.*
- *GPS to IPAQ connectivity cable (not required if you have a GPS sleeve)*

For this test, the IPAQ and e-Trex was obtained from e-bay (internet auction site – [www.ebay.com.au]). The Navman GPS sleeve was obtained directly from Navman Australia. The WinPilot software and GPS connectivity cable were purchased electronically from [www.craggyaero.com]. Payment for WinPilot can be done via credit card

from their website. Once approved, a password is sent to you to enable the GPS interface of the software. The program itself is downloadable freely from the Craggyaero website. Without the password, the software will still be operational but in simulator mode only, ie, it does not allow you to get real-time information from the GPS.

Prices as tested:

Compaq IPAQ 3870 – A\$430

Garmin e-Trex GPS – A\$370

WinPilot Adv – US\$375

Connectivity Cable – US\$40

Navman GPS Sleeve (optional and replaces E-TREX GPS) – A\$899

Transplant GPS Sleeve (Optional) – US\$200

WinPilot Pro (optional) – US\$475

For those that keep paper diaries, now is the time to upgrade to a Compaq IPAQ! If you keep your business contacts and calendar information in your paper diary, you can put it all in a Compaq IPAQ meaning you can purchase the IPAQ as a legitimate business expense. In addition, if you travel by road for business, why not get a Navman GPS Sleeve as well! With turn-by-turn voice navigation, it will get you to your next customer meeting quickly. With Australia-wide street navigation, you can throw that old street directory out the window. The Navman GPS sleeve comes with both a window mount and car charger (powering both the GPS and IPAQ).

For those who want WinPilot just for gliding, then you probably only require a external GPS (like an e-Trex). If you want a GPS sleeve, then I recommend the Transplant GPS which is much cheaper than the Navman. You can purchase the Transplant GPS directly from the Craggy Aero website for US\$200. For the sleeve, you will most likely want to buy the canopy mount as well. Again, see the Craggy Aero site for different mounting options. One word of warning... if you get the GPS sleeve, you won't be able to use the WinPilot Pro version, unless you have another GPS. The Pro version requires that the GPS goes into the Borgelt first to get the air data and then into the IPAQ. Of course, if you have the Cambridge 302, you don't need an external GPS as the 302 already comes equipped with one. You may want to see the Craggy Aero website for all the configuration options.

As with any software that you download onto the PocketPC, you will also require access to a PC that can connect to the internet. You will require some level of computer literacy in order to download and configure the software on the IPAQ. For a small fee, fellow glider pilot Bill Kirkham (contact: 0413 186186) will purchase all the equip-

ment, configure the software onto the IPAQ and deliver you the complete operational package. All you have to do is mount it in the glider and install the power connection kit to allow you to power the GPS and IPAQ from your glider battery (and he can do that for you too!).

For the do-it-yourselfers, the folks from Craggy Aero have good email and phone support.

The WinPilot site [www.winpilot.com] has all the WinPilot programs as well as all the terrain maps, airspace data and main air-

ports. WP does however, miss out on some of the smaller local aerodromes. Luckily, you can download them off other websites, but only as user waypoints (you don't get the fancy stuff like runway direction etc). Prior to flying a task, you might like to add in user waypoints for your area – see [http://acro.harvard.edu/SOARING/JL/TP].

The site has files for downloading and importing into flying programs. I found one for Camden and Lake Keepit which is WinPilot formatted.



David Pietsch in his ASW20 at 8,000ft in weak wave during the Canberra Gliding Club's wave camp at Bunyan in August
Photo: Bruce Campbell from the back seat of Bernard Eckey's ASH.

Aviation Medicine Reports and Notes on Gliding

Graeme Barton

EARLIER THIS YEAR, THE AUSTRALIAN GLIDING MUSEUM RECEIVED FROM DR ANTONY SEGAL, A RETIRED MEDICAL PRACTITIONER IN THE UNITED KINGDOM, A COMPLETE SET OF THE ARTICLES HE HAS HAD PUBLISHED ABOUT PILOT SAFETY. THE SUBJECTS COVERED IN THESE ARTICLES SHOULD BE OF CONSIDERABLE INTEREST TO THE GLIDING COMMUNITY.

Tony has had widespread experience in the field of aviation medicine. After retiring from his medical practice, he undertook and completed a six months course for the Diploma in Aviation Medicine and he has been carrying out experimental work on pilot-safety at the Centre for Human Sciences, DERA, Farnborough. Tony has been a glider pilot since 1956, he is a Fellow of the Royal Aeronautical Society, and has received a number of awards for his work in the field of crash injury prevention from OSTIV, the Royal Aero Club and the British Gliding Association.

A listing of the articles received follows. This listing also includes the publications in which they were published or, if not published, the meetings at which they were presented.

Copies are available by request to Graeme Barton, Secretary of the Australian Gliding Museum, 2 Bicton Street, Mount Waverley, VIC 3149, or phone 03 9802 1098. It will be necessary for recipients to cover the cost of duplication (at Officeworks rates) and postage.

"Aviation Medicine Reports and Notes on Gliding" – Dr Antony M. Segal, MB BS, FRAeS, Dip Av Med.

"Pilot Safety and Spinal Injury" – Technical Soaring, Vol 12, No 4, 1988.

"Aircraft (Full-size Glider) Crashworthiness Impact Test" – Technical Soaring, Vol 14, No 2, 1990.

"Aviation Medicine Notes" – Not published. Presented to the OSTIV Sailplane Development Panel, Oerlinghausen, Germany, September 1992.

"Proposed Emergency Unassisted Escape System" "The Risk of Deep Vein Thrombosis in Glider Pilots, Especially as Related to a Steeply Raked Seat pan Angle"

"Resonance Frequency of the Glider Undercarriage, and the Pilot's Body"

"Anthropometry and Glider Cockpit Design" – Technical Soaring, Vol 18, No 1, 1994.

"Dynamic Testing of Highly Damped Seating Foam" – Technical Soaring, Vol 19, No 4, 1995.

"Jump or Bump – Parts 1/2/3" – Sailplane and Gliding Dec 1991/Jan 1992, Feb/Mar 1992, and April/ May 1992.



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Insurance for National Gliding Competitions

Paul Matthews

It would appear that many pilots intending to fly in Australian national gliding competitions are not aware of, or do not understand, the new insurance requirements for these events. Quite simply, the situation is:

- When registering at a national gliding competition, a pilot must provide proof of third party and public liability insurance cover in a sum of not less than \$1,000,000 in the joint names of the owner, the organization which is running the event, the GFA and the State Association.
- If you have an insurance policy with public risk at \$1,000,000, the extra insurance cost to fly in a national competition is nil.

- Anyone taking out a policy has to pay a minimum premium of \$500 plus state charges, which would more than cover the premium but other cover can be added at no cost, eg: ground cover, higher public risk, etc to get the value out of having to pay this minimum amount
- The GFA Broad Based Liability policy now only provides minimal cover and is commercially very low, but the cost to the gliding community to increase it is prohibitive and hence the need to add this requirement.

The New Improved Multi-Class Nationals

Tim Shirley

I'd like to encourage all interested pilots to consider attending the Multi-Class Nationals at Gulgong, which start in late December. The NCC (National Competition Committee) has substantially changed the format of the event, and as a result it should be attractive to a much wider range of gliders and pilots than ever before. The format is now a two-class handicap competition, with the classes divided by performance rather than wingspan. The Open Class

is open to all, though it is aimed at the modern Open and 18 Metre Class gliders – the 15 Metre Performance Class is for those gliders with lower performance including Standard Class, 15 Metre Class, and older gliders with similar performance regardless of wingspan. Nimbus 2, Kestrel, and 16.6m Ventus, for example, would all compete in this class.

The competition allows water ballast and is handicapped so that those with slightly lower performance gliders will still have a good chance. You are able to take rest days and fly as pilot pairs, as well. Tasking will be a mix of fixed tasks (AST) and Assigned Area tasks (AAT). Task lengths will still be set on the basis that gliders and pilots are competent at Nationals level, though of

course the AAT task ensures that slower pilots have a chance to complete a shorter task on a day, without landing out.

If you always wanted to try the Multi-Class Nationals but thought that your glider was uncompetitive, or if you previously thought it was too hard because you had to fly every day, take a look at the handicap list and the rules on the GFA website or in last month's Soaring Australia – you may be pleasantly surprised.

And if you are a competitive pilot with a top class glider, the format will bring you more competition and closer racing without handicapping you out of contention.

If anyone wants more information about the event and the new format, please email me at <ts Shirley@bigpond.net.au> or give me a call on 0417 268073. See you at Gulgong.

The World Comps Scoring Formula

Tim Shirley

Since this formula has now been adopted for the Multi-Class and Club Class Nationals, I thought a brief explanation of how it works is needed.

Although on the surface this formula looks as complicated as the old Australian formula, it is actually much easier to understand and to calculate.

1. The formula gives 1,000 points to the

winner, by giving a number of points for distance and a number for speed. Finishers get all the distance points and some of the speed points (all of them, if they win). Non-finishers get only distance points.

2. For the purposes of the formula, a finisher is someone who gets around the task at more than two-thirds of the winner's speed. Those who get around but at a slower speed get full distance points only, and are not counted as finishers by the formula.
3. If everyone is classed as a finisher, there are 666.7 points for speed and 333.3 points for distance. If there are some non-finishers then the number of distance points increases

and the number of speed points decreases, but the sum is still 1,000. For example if 75% of pilots are finishers then distance points are 500 and speed points are also 500. If everyone lands out, then distance points are 1000 and speed points are 0.

4. The speed points are divided equally between the winner's speed (who gets 100% of the speed points) and two-thirds of the winner's speed (who gets 0 speed points). Finishers always get all the distance points.
5. Non-finishers get distance points only, based on the percentage of the task they complete. If they do 75% of task distance, they get 75% of the distance points.

Promoting the Sport – “Looking for the Goods”

Terry Cubley
– GFA Development Officer

We have been looking at ways to provide some great looking clothing which is practical, looks great and promotes the sport to members and non-members alike.

This is when we took another look at the great work that Al Sim from “Go Soaring” has been doing.

After discussing the issue with

Al we have come to the arrangement where Al will continue to provide his excellent merchandise which many pilots are already sourcing and GFA will promote this merchandise.

When people see the merchandise and look up the Go Soaring web page [www.gosoaring.com.au] they will immediately

find a connection to the GFA visitors' website through [www.soaring.com.au].

There will be a similar link to Go Soaring from the two GFA websites. Go Soaring will progressively take over all merchandising for GFA, including GFA Sales.

There will be a photo gallery where members can place some of their better photos, and where clubs can access photos for promotional purposes.

Now is the time to contact Go Soaring and order your gliding clothing for the new season.



Soaring Calendar

AUSTRALIA

NSW State Gliding Championships

15-22 November 2003

Lake Keepit Soaring Club will host the NSW State Gliding Championships. All classes catered for including Club and Sports. Enquires to Steve Hedley, ph: 02 96706733, <gliderdag@pacific.net.au>.

2003 Outback Shootout – Tocumwal

15-29 November 2003

International gliding competition for Open Class gliders at Sportavia Tocumwal Aerodrome NSW. The official practice days are Sat 15 & Sun 16 November. Both single and two-seater aircraft may enter. Datalogger will be used for scoring. Contact Contest Director Eddie Madden on 03 58742063, <info@sportavia.com.au>.

Gulgong Classic 2003

19-23 November 2003

Gulgong Gliding Strip, NSW. Comp to be held in the same format as 2002. Come and see if it can be epic two years in a row. Entries will be strictly limited to 50 aerotow qualified pilots. Entry fee is \$100 plus \$35 for strip fees (total \$135). Pay per tow. Late fee of \$50 for entries after 30 September. Enquiries to <billo@gulgongclassic.com> or ph: 02 49423131 or 0412 423133 or online info and rego at [www.gulgongclassic.com]. Comp factors are: B grade, 5km, 70km, 10%.

Narromine Cup Week

22-29 November 2003

Enquiries to Mrs Beryl Hartley, ph: 02 6889 2733; email <hartley@avionics.com.au>.

Gathering of the Moths

22-23 November 2003

Mt Beauty, NE VIC. Flyers of all denominations are invited to fly the sheltered Kiewa Valley at the foot of the picturesque Victorian Alps. Range of accommodation available. Contacts: Mark Ghirardello (03 5754 4572) or Don Pollock (03 5754 1301).

Gawler Week & SA State Championships

26-31 December 2003

A week of fun and competitive soaring for all pilots. New Year's Eve Party on 31st. For Gawler Week contact Andrew Wright on 08 83034648 or <andrew.wright@adelaide.edu.au>. For State Champs contact Steven Pegler on <stevenpegler@bigpond.com>.

Australian Open & Nationals

28 December 2003

– 4 January 2004

Deniliquin, Vic. This is an AAA, AA, A competition, multi-classed, groundtow or aerotow. Contact Tove if you are looking for an aerotow team. Entry fee: \$190. Website: [australianopen.dustydemons.com]. Contact Tove for more info: <chggpc@goulburn.net.au> or mobile 0419 681212.

42nd Australian National Gliding Championships

28 December 2003 – 9 January 2004

Cudgong Soaring Club will host the National Championships at Gulgong, NSW. Practise days 28, 29 December with competition days through to 9 January 2004. The Championship will be in the new format of a ballasted handicapped

competition. For more details and information contact Christine Meertens 02 94522777, fax: 02 94530777, <meertens@ozemail.com.au>.

WA State Gliding Championships

3-10 January 2004

The Gliding Club of Western Australia will host this year's event at Cunderdin. All classes catered for. Support provided for first-time entrants. Travel subsidy available for all Eastern States' entrants. Enquiries to the Competition Director, Rod Carter ph: 08 96417045, <rodcartr@avon.net.au>.

Australian FAI Club Class Gliding Nationals

11-23 January 2004

Waikerie, South Australia. Contact: John Hudson email <john.hudson@santos.com> or [www.waikerieglidingclub.com.au/clubclass/].

Corryong Cup 2004

18-24 January 2004

(The 20th Anniversary – Take Two!)

Corryong, Vic/(NSW border). This celebration rises from the ashes, bigger and better than ever. Not even acts of god will stop us this time (uh...

not that we're putting out a challenge or anything...) so turn up, come what may, for registration/practice day 17th, comp start 18th with registration in the morning. The best FUN comp of the year. Mt Elliot, Corryong is one of the most reliable and spectacular flying sights in the Eastern highlands, a hill launch set at the base of the Australian Alps. Tasks are generally 50-100km with up to four turnpoints set to make pick-ups easy in the flying-friendly valley. This year scoring will again be on a handicap basis according to your glider type and flying experience, so everyone has a chance of taking out the top prizes (first three positions, best placed veteran, most improved newcomer to competitions, first placed team receiving the Corryong mugs and numerous day prizes). You must have an Int rating (preferably with inland experience), UHF radio and parachute. Camera optional (databack not required), as this year scoring will be with GPS or camera, whichever you prefer (please let us know if you require a roll of film). Still the cheapest comp on the HG calendar at \$100 if you register before 30 Nov 2003 (\$120 thereafter), cheques made out to Blue Mountains HG Club. Incl. is entry, the great 20th Anniversary T-shirt, a film for turnpoints (ask), colour topo map of the area and Presentation Dinner. Places are limited so don't miss out. Register now with: The Blue Mountains Hang Gliding Club, C/O Steve Bell, PO Box 110, Woonona NSW 2517. Ph: 0412 686812 or <spbell@1earth.net>.

Bogong Cup

24-31 January 2004

Mt Beauty, Bright, Vic. AA (A) comp. If numbers permit/enough interest Bogong will be run in two categories. Serious and not so serious competition, with two launches being used. After 16 December, "first in best served" policy on entries. If only one launch used, strictly max 70 pilots. Entry fee: \$190 (incl. \$15 site/club fee). Website: [bogongcup.dustydemons.com]. Contact Tove for more info: <chggpc@goulburn.net.au> or mobile 0419 681212.

Flatter Than The Flatlands

9-12 April 2004

Birchip, VIC. HG pilots are invited to the 11th annual Flatter Than The Flatlands cross-country towing competition. The event will be conducted over the four day Easter long weekend. Entry fee is \$70 and incl. maps, daily prizes, presentation

dinner, scoring, goal beers and lots of fun. After the flying each day, social events including a Red Faces competition (mandatory event per team), movies and much more will be held with prizes awarded. Cameras not required, GPS recommended, parachute compulsory, lots of fun guaranteed. Entries will only be accepted from teams of five pilots. Entries open Wednesday 11 February 2004 at 8pm. Entries will be accepted on a first come basis. Places will be confirmed on the competition website after the full team payment is received. Following the success of previous years' events, get organised early. There will be approximately 12 tow strips, two of which will be held in reserve for South Australian teams until 10 March. To enter, phone Ian Rees on 03 9762 1364.

OVERSEAS

13th Open PG Championship of New Caledonia

1-8 November 2003

New Caledonia. Uses Ouazengou (Northern district) and Dzumac (Southern district). Required are a reserve parachute, insurance, GPS, FFVL rules apply. Registration: By 30 September 2003. Fee: US\$165, NZ\$350 or 183 Euros, not refundable payable by 20 October 2003, incl: registration, maps, transfers, dinners, B&B, lunch each task day, shuttles to take off/landing, welcome party, results party. For more info please ph/fax: +687 240629, email <avinc@netcourrier.com>. Tourism info at [www.sponline.com].

Pre-World Cup – Dominican Republic

January 2004

The Dominican Republic will hold the first 2004 Pre-World Cup event. A combination of thrilling landscapes, warm Caribbean people and outstanding January conditions makes this event a must; a great way to reveal an amazing flying destination... Check details at the official website of the Pre-World Cup Dominican Republic January 2004 at [www.paragliding.com.do], or contact Julian Molina [www.caribbeanFreeFlying.com].

Wanaka PG Festival 2004

4-8 January, 9-17 January 2004

Wanaka, New Zealand. "Brilliant, great, magic, excellent, unreal" ...that was what gushed from the mouth of one pilot describing a flight at the January 2003 Wanaka PG Festival, as he created his new personal best XC distance. Can the 2003 event be bettered? This year's hosts, Southern HGPC, think so, as they invite pilots back to Wanaka for the 2004 Wanaka PG Festival. The festivities will begin with a handicapped "Fun Comp" (4-8 January) designed to involve, educate and encourage pilots to develop their XC skills – last year's fun comp saw most pilots flying further, higher and longer than they had ever done before! This year's format will be similar, but we hope to encourage equal numbers of experienced and novice pilots alike. Then the NZ PG Nationals, designed for experienced pilots, runs 9-17 January. It will be an FAI Category 2 event, and will include the Trans-Tasman Trophy – a chance for the Aussies to the come over here and try to avenge last year's home-ground defeat. Using Treble Cone – this year with chairlifts – and other awesome sites of the Wanaka region, stunning scenery will be guaranteed, along with amazing tasks, and the occasional pub goal if last year's conditions are anything to go by. For all details and registration forms see the event website [www.wanakaparaglidingfestival.co.nz]. Come fly the friendly Wanaka skies – awesome sites, enthusiastic pilots, free spirits, free airspace and a load of fun.

HGFA General Manager's Report

More Good News

Yet again over the last month (September) I have seen no complaints regarding any of our activities. I am very happy to see this and it is a credit to you all given that we are entering the more active period of the year for flying. It also saves me a hell of a lot of time, which I can divert to more productive areas. Some of these include visiting and assisting clubs and attending their meetings, conducting Safety Officer workshops, Operations Manual work (which, incidentally, I am putting into a better digital format – it was in Word Perfect creating formatting problems – and will in the future be available on the HGFA website). Also, review and correlation of safety and accident stats, creation of pilot training databases to assist instructors with records and training administration, creating a real accident database that has a few userfriendly features to enable better analyses of trends, as well as continuing work on the NSW NPWS Policy on Hang Gliding and Paragliding Sites which I had thought I would need to offload... not just yet it seems. And there's continuing development of the new CASR's (Civil Aviation Safety Rules) regarding our operations. I manage to get airborne sometimes too.

Good, Bad and the Ugly

You may have seen this before, as I sent out a message similar to this to instructors, clubs, SSO's and SO's shortly after the below mentioned teleconference. I repeat myself here for everyone's info.

TBi (our insurer) has ceased underwriting any new policies as of 3 September and is in 'run off' mode for those existing policies. Our policy is one of the longest of the aviation policies remaining. There is **no change** in our policy and we can expect it to be serviced well, until renewal, though it will not be the same underwriting team servicing it. As at 3 October 2003, TBi will be redundant, however, from that time on (as I say our existing policy will be serviced until expiration) our policy will be of an uncontested nature, we would be free to pursue (if we so desire) another agency to take up our insurance if we wished to, or continue until the renewal date, situation unchanged.

The present TBi UK Team are therefore out of a job. It is possible, though not certain, that they will pursue new partners in an underwriting business which **may** take on and service our types of Aviation policy. Given our history with these parties they are a likely target, if this occurs, to pursue for our insurance. If this does not happen we have again a reduced capacity to 'shop around'. A teleconference was held between this underwriting team, myself and our broker

Kevin Chamberlain on 10 September. The teleconference was to be held with the view that our insurance would remain with TBi and the concerns of the underwriters regarding our policy and exposure to claims. Even though TBi are out, this was still discussed with a view to any future negotiations.

The issues of concern that were discussed were:

1. Instruction (as usual) and Aircraft Suitability. Concerns were raised about the exposure that instructor/student relationships hold, particularly to suitable training aircraft and their set up (examples given by them were regarding PG Ops and the tendency for catastrophic back injuries, back protection, etc). It appears they have suffered many claims regarding this elsewhere (our claims history is nil over the last two years, though there is still a trend leaning towards injury training accidents), and the concern is twofold:
 - a) the long tail nature of these accidents – claims can be made up to three years after the event, and,
 - b) aircraft suitability and set up. I spent a great deal of time explaining, as asked, our training system, glider use (DHV 1 and HG training gliders like the Fun) and the ongoing system of supervision once Pilots are signed off, ie: the instructor training system and hierarchy – clubs, SSO's and SO's, etc. It is obviously an area that is being closely watched and compared with elsewhere. We not only suffer and are judged by comparisons of standards internally, but also externally.

Pros:

They seemed to hold a favourable view towards our system that has a large element of a **peer supervisory nature**. That we, to a large extent, police ourselves and that the flying community is a close one and that 'word gets around' about unsuitable or dangerous practices. It is apparent they see some benefits in this and its ad hoc regulatory nature. It is worth noting in support of that, that our insurance is maintained through collective bargaining. That is, the strength of our access to insurance is through the **pool** of funding received from memberships and insurance levies. To this end it should be noted and recognised that we do not purchase our insurance as individuals but as a collective. This is how the insurance company sees it, and so should we. An analogy may be offered (as it was to me) that the insurance you pay is in respect of yourself **and** the person next to you. You pay

for theirs and they are paying for yours, because without the strength of the collective we lose our bargaining power.

Cons:

Some concern on the "coaching" aspects of the system were apparent (SSO's and SO's). The feeling is also that glider suitability **must** also be addressed and maintained **throughout** the system. They made comment on the idea that the 'majority' of new glider sales occur through dealers who are also instructors (not the case in Europe and England) that can advise and to some extent supervise the glider suitability to experience level. Concerns re dealers who are **not** also instructors was addressed because of this.

Dual (Tandems of any kind) was **of major** concern due to the increase in **perceived** exposure.

Powered PG Ops was **of major** concern due to the **actual** increase in exposure (from their claims history elsewhere). They have many issues regarding this in Europe and England! (TBi (UK) has the parent company in Europe, so we are judged by that market also.)

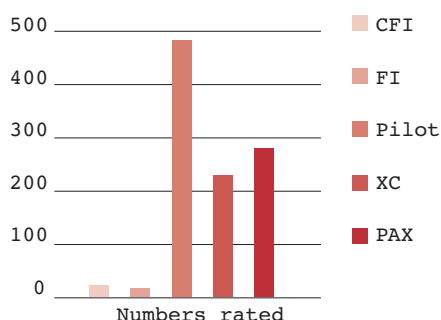
2. **Accessibility of Claims:** Discussion of the new laws and legislation in Australia took place. While it was expressed that this is a positive step in the right direction, no tests had yet been applied to the new laws and it may take a few years to take effect and see the impact. It was viewed positively, though we will not see any reduction in cost in premiums. It may help us maintain some level of predictability on cost, ie a stagnation of cost (hopefully, though not certainly).

In summary, I came away from the conference somewhat more relaxed than on entering it. Certainly there is a lot to take away, focus on and act upon. It is apparent that we need to maintain the focus on increased safety standards, instructor student relationships (Waivers), safety and training accidents and the peer supervisory nature of our Ops. We are certainly not dead in the water regarding insurance, but the next year or two will be crucial in cementing our accessibility to continued affordable insurance that meets **all** our needs. Now more than ever we need to inform and educate the HGFA Membership that while in the past we concentrated on maintaining **all** insurance as is (and this may yet be viable) we should now be concentrating on **improving** our systems and activities so that we have a stronger argument for some form of reduction by **progressing** acceptable standards. See: Risk Management.

The HGFA – What we do

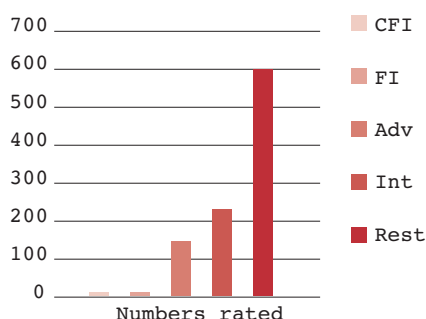
WM rating numbers
(including those with XC and PAX)

Total 512

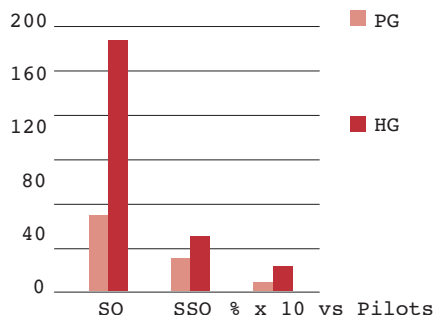


PG rating numbers

Total 1,014

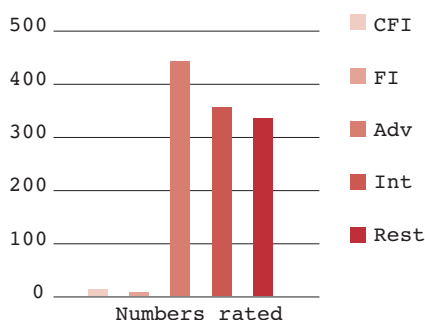


SSO and SO numbers



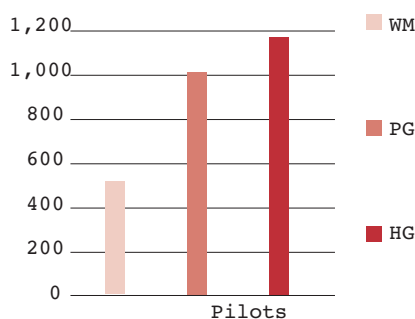
HG rating numbers

aircraft (pilot and four skdiving jumpers on
Total 1,166

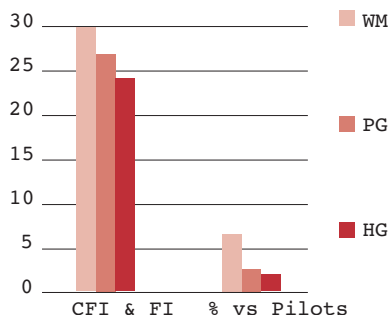


Discipline

Total flying members 2,662



CFI and FI numbers versus Pilots



*NOTE: Total Flying Members as at 1 September 2003. It only included those at that time with membership currency, it does not include outstanding overdue renewals.

We must maintain a no claims history to achieve a strong position from which to 'piggy back' the changes in law. In defending ourselves from claims I ask that a renewed focus and motivation be placed on Safe Training Practices, Safe Site and Weather Assessments, Glider Suitability, and any advice offered (by clubs, members, SSO's and instructors alike) should err according to an extremely conservative attitude and outlook. Not only because we need to help keep safe our fellow pilots for our collective benefit, but to be **positively proactive** in supporting our position to access a **broadform policy** covering all our operations, as we do now.

Mid-air in Germany

Six Germans were killed when a glider (sailplane, single occupant) and Cessna November 2003

board) had a mid air collision which occurred in clear skies at about 12:00 GMT. Both aircraft had taken off from separate airfields in the nearby vicinity.

NAS

Toward the end of November the new National Airspace System will be implemented. The system is modelled on the US Airspace configuration. By all accounts it appears it will open up the areas available to us to fly, for us it will encompass Class G and Class E airspace. Class E airspace may be shared with both VFR and IFR aircraft. It is unclear from the limited amount of information being made available exactly what the requirements will be and it is unlikely that we will know the exact airspace details in local areas until the

implementation and the new charts are available. I have also been informed, that while the information available at the moment appears very promising for us, that there are some hidden snags that have not yet been properly addressed to the satisfaction of sports aviation enthusiasts. Watch this space. For all the limited information that is available check out [www.dotars.gov.au/airspacereform/index.htm].

Accident Reports

No 1

Pilot: Restricted PG
Experience: 2.5 hrs TT and over last 90 days
Glider: PG DHV 1
Pilot injury: Back muscle spasm, shock
Glider damage: Nil
Location: Inland soaring site
Conditions: 2kt headwind, nil turbulence

Description:

Light winds and a forward inflation proceeding into launch run. At the point of lift-off the right wing tucked and developed into an asymmetric tuck. The pilot did not realise what had occurred and therefore did not make any corrections to rectify the problem. The glider turned to the left and the pilot flew/fell to the ground from about 20ft. The pilot had not yet entered the harness and was able to take the force of the landing though the feet and legs.

Primary cause:

No canopy awareness or feeling of the canopy overhead during launch. Secondary cause: no corrective action taken to dampen or correct asymmetric tuck.

Comments CFI:

Pilots need to develop a sense of canopy awareness and position when launching, with the need to keep the canopy balanced, overhead and accelerate with the canopy. Ground handling practice and knowledge of asymmetric tucks and correct recovery techniques are extremely important for the new and progressing pilot.

No 2

Pilot: CFI HG
Experience: 2,796 hrs TT, 22 hrs last 90 days, 600 hrs on type
Glider: Tandem HG
Pilot injury: Nil
Passenger injury: Nil
Glider damage: Upright damaged
Location: Coastal soaring site
Conditions: 10kt headwind, light turbulence

Description (From Chief Flight Instructor):

Attempting to launch with passenger and two wire assistants, one of which was inexperienced and was not given a sufficient

HGFA General Manager's Report

...

explanation of what was required.

Consequently, during launch the inexperienced wire assistant did not release quick enough or moved back holding the side wire. Glider rolled gently to the problem side and ground looped into bush and slope. Low speed impact, but sideways movement broke an upright.

Comments:

Poor communication and inexperience of assistant were the main cause of this incident. Clear and concise instruction of what is required by any assistant should be given, and 'dry run' (especially with inexperienced persons) should always be undertaken. Use of clear and concise language ("CLEAR") and what is required when those instructions are given should be covered in any practice and briefing. Thanks to the CFI for not being too proud to share this one; a cheap lesson for us all.

No 3

Pilot: Student PG
Experience: 0 hrs TT
Glider: DHV 1 PG
Pilot injury: Fractured ankle
Glider damage: Nil
Location: Training site
Conditions: 5kt headwind, light turbulence

Description:

The student was on a high glide and was responding well to radio instructions with good all round control. Coming in on final the pilot got into hang, rounded out and flared nicely, then appeared to trip over. Instructor was very happy with the landing in spite of the fall, but on approaching to congratulate pilot found him in pain. The pilot had rolled his ankle in a depression in the ground and fractured his ankle.

Comments:

The pilot in this instance is no spring chicken, and as I know myself all too well, sometimes the body is not what it used to be. Specific PG ankle support boots or other support device was not used. Use of normal running shoes is probably not appropriate, especially where the ground is uneven, ie almost every paddock we use.

No 4

Pilot 1: Restricted PG
Pilot 2: U/K
Experience: 20 hrs TT, 6 hrs last 90 days
Glider: DHV 1/2 PG
Pilot 1 injury: Nil
Pilot 2 injury: Nil
Glider damage: Some cut in canopy of glider 2
Location: Inland soaring site
Conditions: Good condition with inver-

sion 300m above launch

Description:

The reporting pilot (1) was taking part in a fly-in and the air was quite crowded with about 50 aircraft attending. There was a large gaggle which had not moved much due to inversion. Pilot 1 was flying in the gaggle and saw another PG approaching almost head on but tracking from slightly left to right. Pilot 1 was of the opinion that if they were to continue on they would collide but also if they diverted right, as per the rules of the air and crossed paths they may also collide. There was no option to turn left due to other pilots in the gaggle. In the end Pilot 1 went right and bodily hit glider 2 near the top of the lines on the left of glider 2. Pilot 1 managed to untangle from the lines and Pilot 2 dropped away and deployed the reserve. Pilot 1 went for the reserve and when checking for the position of the main canopy saw it reinflate over head and carried on flying. Pilot 2 landed safely under reserve in trees below and was recovered without injury.

Comments:

Rules of the air: Give way rules are only any good if everyone is fully aware of the gliders around them. When approaching head on both gliders shall divert to the right. In this case it appears it was not an option for glider 2 (as was going left for glider 1). The question must be asked if they were in a gaggle what way was the turn direction and why was everyone not following it. I hate traffic and because of this I always have a 'count' of gliders near my area where conflict may arise, thinking ahead of where I need to be and pre-empting others movements. Co-operation and situational awareness are the most important factors as is actually **following the rules**. Both pilots in this incident were very lucky.

No 5

Pilot: Intermediate HG
Experience: 70 hrs TT, 10 hrs last 90 days, 1 on type
Glider: Advanced HG
Pilot injury: Bruising and grazing to leg
Glider damage: 2 uprights
Location: Soaring site
Conditions: 10kt slightly crossed
Description:

Wire assisted launch, waited for a lull and commenced launch. Nose popped at end of ramp and launch run. Stall ensued with loss of control and turned back into the hill taking impact with legs.

Comments:

Popping the nose must be one of the most common causes of a failed launch in a HG. Care should be taken to maintain an

appropriate angle of attack throughout the launch run **and** on becoming airborne, especially where the launch sequence may encounter different air at the end of the launch run or ramp. Avoid letting the nose get high at any time, which may then be exacerbated by a pitch up moment when the glider 'sees' the air at the end of the run/ramp. I do not think you can fail a launch from trying too hard on these points. Always commit to a positive launch sequence and maintain a good angle of attack to avoid lifting off with insufficient airspeed to control the glider or be in danger of a stall. The most crucial part of any launch is the angle of attack.

No 6

Pilot: Intermediate HG
Experience: N/P hrs TT
Glider: Intermediate HG
Pilot injury: Cracked vertebrae and ribs
Glider damage: Nil
Location: Coastal soaring site
Conditions: 15kt nil turbulence
Description:

The pilot was soaring low at the site when the reserve parachute fell out of the side mounted diaper envelope container. Pilot noticed the chute fall away deploying and had no time to react or prepare for the impact with the slope. Pilot and aircraft were dragged a short distance uphill. Pilot was injured more seriously than at first thought though stayed still till help arrived.

Comments: Never move if there is a chance of back or neck injuries, these actions have saved this pilot from a possible far worse result! Only a few months ago the comments made in this section could be reproduced here; **pre flight!** This should include ALL equipment including harness and parachute containers with specific attention paid to safety pins in harness parachute handles and containers. Be aware that during ground handling and waiting to launch the rear wires of most gliders can catch and rub on the sides of the harness; keep a check on this right before launch to ensure that what you have already checked has not been affected since then. Get a hang check and ask the hang checker to look over ALL your equipment also for anomalies. Hang, Harness, Leg Loops, Glider.



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Apco Australia is proud to introduce the TETRA. A performance acro glider that is rated Standard and DHV 1.

The Tetra features a new profile and concept, offering a very long brake range, but super responsive (180 deg. in 2 seconds) without a hint of negative spin. Excellent for acro (safe SAT performer) and thermaling alike! The Tetra is setting new standard on passive safety: perfect passive dive damping, no tendency to 'dive in' or 'roll out' in thermal turns, immediate recovery "arms up" from situation. It's the first time a glider this class can satisfy beginners to advance pilots alike. Also it will bring a new level of safety for paramotorist. APCO uses the best materials available to make this glider but remains competitive and affordable. The Tetra features:

- Leading edge "Flexton" battens.
- New design diagonal cells with internal stitching.
- super aramid lines from Cousin 30% stronger, 1.8 mm for 220kg.
- Mylar reinforced hook points.

- Govenor top and bottom surface.
- Amazingly brilliant handling.
- Outstanding passive safety characteristics.
- 250 hrs/3 years transferable warranty for porosity.
- Promotional Price: \$3,880 (with 10% rebate)

TETRA DHV1/Afnor Standard

Finesse 8.1 – min sink 1.1m/s – max speed 46km – with paramotor trimmers 50km.

Weight range from 60kg to 130kg.

FIESTA2 DHV1/Afnor Standard

Finesse 7.8 – min sink 1.1m/s – max speed 46km – with paramotor trimmers 50km.

PRESTA DHV1/2/Afnor Standard

Best performance in its class

Finesse 8.6 – min sink 1m/s – max speed 52km

KEARA DHV2/Afnor Perf

Winner of Serial Class at Manilla and NZ Open, competition performance on a DHV2! Finesse 9.2 – min sink <0.9m/s – max speed 59km.

POWER HYBRID 500:

The reference in Powered Parachute.

MAYDAY RESERVE:



4 different sizes to suit all weights for HG and PG using the famous F111 fabric.

FINESSE PLUS HARNESS

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MANUFACTURER	MODEL	SIZE	COLOUR	ALL UP WEIGHT	CONDITION	PRICE	CERTIFICATION
APCO	SIMBA	L	PURPLE	100 TO 120kg	300 hrs	\$1,500	DHV 2
APCO	PRESTA	M	PURPLE	90 TO 115kg	40 hrs	\$2,500	DHV 1/2
APCO	BAGHEERA	XS	RED	60 TO 75kg	280 hrs	\$1,350	Performance
APCO	BAGHEERA	M	YELLOW	85 to 105kg	140 hrs	\$1,900	DHV 2
APCO	BAGHEERA	M	BLUE	85 to 105kg	400 hrs	\$950	DHV 2
APCO	FIESTALITE	M	WHITE	85 to 105kg	50 hrs	\$1,950	DHV 1
APCO	FIESTA	M	BLUE	85 to 105kg	15 hrs	\$2,900	DHV 1
APCO	FIESTA 2	L	YELLOW	100 to 120kg	130 hrs	\$1,900	DHV 1
APCO	FIESTA 2	L	YELLOW	100 to 120kg	50 hrs	\$2,400	DHV 1
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APCO	PRIMA	M	PURPLE	75 to 90kg	70 hrs	\$1,000	Standard
APCO	BIFUTURA	BI	PURPLE	140 to 210kg	160 hrs	\$2,400	Tandem
APCO	FUTURA	M	PURPLE	80 to 100kg	15 hrs	\$1,000	Performance
GIN	BOLERO	L	BLUE	100 to 120kg	35 hrs	\$1,950	DHV 1
FUNTOFLY	PROFEEL	L	BLUE	100 to 120kg	100 hrs	\$300	Standard
EDEL	APOLLO	L	MULTI	95 to 115kg	60 hrs	\$350	Standard
EDEL	SPACE	L	GREEN	100 to 120kg	80 hrs	\$600	Standard
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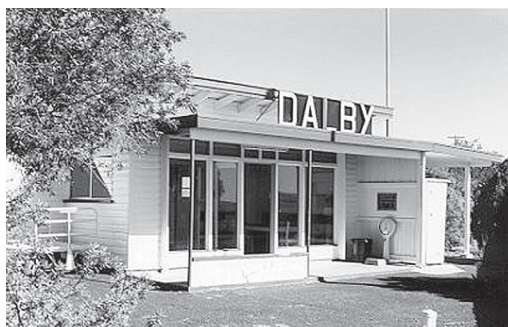
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Dalby Clubhouse



Dalby Hangar

WINTER REFUGE

Tim Osborne

IN WINTERY JULY FOUR OF VICTORIA'S FLIGHT-KEEN HANG GLIDER PILOTS HEADED NORTH FOR A FIX. DRIVE TIME FROM MELBOURNE – 19 HOURS. RESULT: FANTASTIC!

Dalby is a town situated on the Darling Downs, 200km inland from Brisbane. It's a moderate size for a country town these days. And it has everything the hang glider pilot needs. There are plenty of roads and farmhouses in the district, so even getting lost takes a bit of effort.

The club itself has all necessities. It's on the edge of town, so in the event something's forgotten it's only a short drive to town to retrieve it. Windsocks don't seem to be in short supply, there's a hanger to leave your gear in, and a fridge equipped with coldies.

There are also GFA pilots with abundant local knowledge and soaring enthusiasm.

Our goal for the week was to get some consistent airtime. We were pleased to discover this was surprisingly easy, despite the time of year. Peter Lussenburg did best hours for the week, with four in one day on one occasion.

Our maximum height for the week was 7000ft – a very cold 7000ft at that. The towing was of a high standard, and Smoky the tug pilot was a mine of information and a real asset to the club.

Most days we set up what became as the Brown Triangle (Whai Pub, Cecel Plains Pub, Dalby Pub). Unfortunately our lack of skills meant only 25-50% of the crew

made goal on any one day, but all had a good fly in the process.

In the Dalby Club we found a great assortment of hardcore Sport Fliers of many denominations. Thanks to all the club members for their hospitality.



Back on earth after a great flight



Dalby below, winter cu's above



The Brown Triangle – which pub will I be landing next to today?

Photos: Courtesy Tim Osborn



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**11th
Year of
Tours!**

Flatlands XC

This is our 11th year of flatland tours in this region. Book your holidays for 7th-13th December 2003. Our tour is normally based at Wycheproof, we tow from the Birchip competition paddocks. The area affords an extremely good road network and has proven to be the most consistent flying site this time of year. Motel accommodation, breakfast & evening meals, in depth morning briefings, all towns and retrieves supplied. This tour consistently provides quantity and quality airtime. Second tour 26th January to 1st February 2004.

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We're off to Euda again. This trip is designed for pilots who do not require instructor assistance. We will experience together the Australian coastal areas including the Coorong National Park dunes, the unique Nullabor cliffs, caves and fishing.

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This tour designed for limited holiday pilots and will be based at Mt Beauty. Tour dates 28th December 2003 with pick-up at Melbourne Airport, to 3rd January 2004 return to Melbourne Airport. This time has been chosen to suit the traditional Japanese holiday period. Aussie and other pilots most welcome.

Call or text Rohan Holtkamp (0409 678 734), Paul Rundell (0418 348 948) or email us at dynamic@netconnect.com.au for your free information package.

DYNAMIC FLIGHT PTY LTD

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Clio's Answers

1. **E.** Although Coren D Ternal would have you believe it was him, the first Diamond pilot was actually John Robinson, flying the Ross-Stephens RS-1 Zanonias, in July 1950.
2. **TRUE.** The Moazagotl was named for a Silesian farmer named Motz Gottlieb, above whose farm the phenomena was first noticed.
3. **B.** The Pacific Northwest's Cloyd Artman taught himself to fly in 1933 by launching himself and his primary glider off the cliffs lining the Snake River near Oroville, Washington, using a greased board.
4. **FALSE.** The Canadian Wooden Aircraft Co. and deHavilland Aircraft both built the designs of Polish WW II refugee Wacław Czerwinski. In addition, Boeing of Canada built primaries.
5. **C.** Although basically a smaller version of the earlier, 18m Weihe, at the Olympic design competition held in 1939, the Meise (Titmouse) was adopted as the first "one class" sailplane for the 1940 Olympics. The Meise subsequently has come to be known as the "Olympia" (or even "Olympia-Meise").
6. **FALSE.** Elliotts was a British furniture manufacturer that was converted to the war effort during World War II and was prohibited by the government from returning to building furniture after the war. They therefore completed the illegal Chilton Olympia (it was illegal to build a civilian glider during the war) and began building gliders commercially.
7. **C.** Although Wally Setz also made secret missions to Germany, and Robert Kronfeld flew not so secret missions over Germany, they did not hold the rank of General. It was only revealed after he died that Dr. Wolfgang Klemperer (employed by Douglas Aircraft, in Santa Monica, California) had actually held

the secret rank of General in the OSS. After this was revealed, his friends began to wonder about his frequent absences and unsubstantiated rumours were circulated that "Klemp," as he was known to his friends, had actually secretly gone undercover to Germany several times.

8. **FALSE.** It was his father, also named Erno, who designed gliders in their home country of Hungary.
9. **A.** Englishman Chris Wills, son of the famous glider pilot Philip Wills, founded the Vintage Glider Club in 1974. Beginning as an English glider club, it has since accumulated a worldwide membership.
10. **TRUE.** The GL-2 Air Corps Glider, designed by Jean Roché in 1922 and built by the US Army Air Corps at McCook Airfield. In 1929, Roché modified the design by adding an engine and it became the Aeronca C-2.

THANKS TO:

Hollenbaugh Bob and Housen, John. Aeronca, A Photo History, Aviation Heritage Books, Destin, FL, 1993.

Schweizer, Paul A. Wings Like Eagles, The Story of Soaring in the United States, Smithsonian Institution Press, Washington, DC, 1988.

Simons, Martin. Sailplanes, 1920-1945, EQIP Werbung & Verlag, Königswinter, Germany, 2001.

Clio's conduit for this quiz is Raul Blacksten, the Archivist for the Vintage Sailplane Association (VSA) as well as the Editor of the VSA's quarterly newsletter/magazine Bungee Cord. Raul encourages every glider pilot to do their oral history or memoir. He can be contacted at either PO Box 307, Maywood, CA 90270, or at <raulb@earthlink.net>. Visit the VSA website at [www.vintagesailplane.org].



Rubik Cimbara replica.

Photo: VSA Archives

GLIDING FEDERATION OF AUSTRALIA Airworthiness Inspection

FORM 2 AND C OF A NOTICE

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

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

Aircraft Type

Registration marks VH -

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Name

Address

State Postcode

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As of the 1st of September 2003 all display advertisements that advertisers would like to be placed on the GFA website as well as in the magazine have to be submitted to the advertising office in the correct HTML Code 4 format. If you have any queries regarding this please contact the Advertising Manager, Ms Fiona Rowe at Angel Administration (details below).

All advertisements and payments can be sent to
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GFA

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MOYES XT 145 int, GC, blue/red US, spare DTs, \$1,700. Ph: Kath or Lee 02 64561590 (h); 0427 220764; <gonegliden@ozemail.com.au>.

MOYES XTRALITE 137 adv, red/white, spare DT, Xtreme harness black/orange customised 5'10" graphite back plate plus original spare alloy, full-face helmet, flight suit, Flytec vario basic model, Moyes aerotow release. The lot \$2,000 ono, will separate. Ph: Walter (Sydney) 07 46360314; <walkraj@bigpond.com>.

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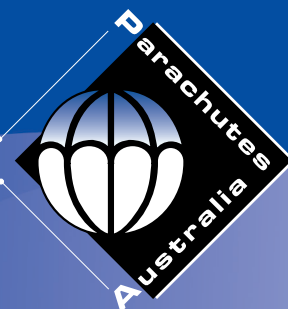
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