NEW ZEALAND'S PREMIER SOARING MAGAZINE

Soaring NZ

WHALE WATCHING

SOARING MARLBOROUGH

WORLD GLIDING CHAMPS

CLUB NEWS

TECH TALK • DUO DISCUS XL

issue 6 october/november 2008

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6-10am

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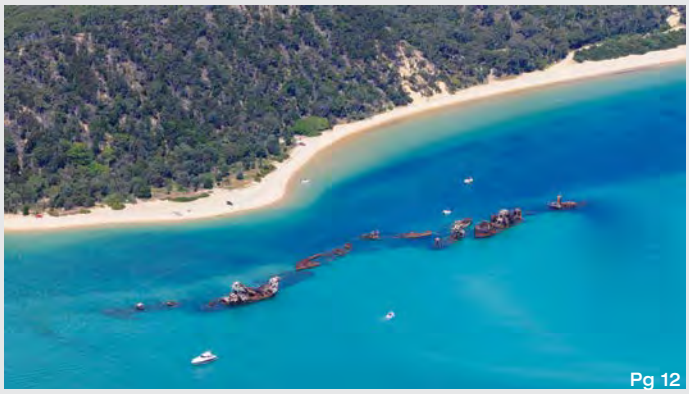
contents

october/november 2008


Pg 12


Pg 16


Pg 24


Pg 28


Pg 36


Pg 38

FEATURES

COCKPIT

REGULARS

SoaringNZ

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BE CAREFUL WHAT YOU WISH FOR, IT MIGHT COME TRUE.

A few days past Christmas two years ago a group of glider pilots were having one of those friendly conversations around the fireplace at Omarama, the sort of conversation where the wrongs of the world are dissected and many suggestions made on how to make everything right. We were talking about Pacific Wings magazine and the wonderful gliding issue they had done earlier that year using photos provided by my husband John. We could do something like that for a New Zealand soaring magazine we agreed. One very important participant in that conversation was Nick Reekie, a magazine publisher with contacts in all the right places.

Nick and I met several times during the beginning of the year, nutting out the possibilities. We then learnt that GNZ would be putting the contract for the official magazine out to tender. We lifted things a gear and I put together articles and pictures for a mock-up magazine. Nick spoke quietly in the right ears and got Spectrum Print to produce four copies of a mock up for no cost, just a promise that if we did get the contract we would be bringing it to them. We were VERY grateful.

With no experience in these matters I worked out a basic budget and business plan. We put together first our expression of interest and later our tender. I kissed the envelope before I posted it.

We heard nothing for months!

I kept searching for a real job.

Tom Davies rang me with some questions about my tender. I was a nervous wreck. The tender was supposed to be announced on October 1st. We had the printers and designer on standby for a December issue. We heard nothing. That had to be a bad sign. It was of course a decision arrived at by a committee and these things take time. On the 30th October Tom Davies rang me with the good news. Yes, we had won the contract, SoaringNZ was a go!

Tom said that under the circumstances of the late notice we didn't have to produce a December issue. We disagreed. People would be expecting one, we had to try. We worked backwards from the latest mailing date before Christmas, working out the time needed to print, collate, staple and package an issue, with the lead in time to lay out and format the material. It left me three weeks to find the material!

We were very fortunate to have the Fossett and Delore 1250 km triangle record to lead with, not to mention the Richie McCaw story already written for the mock up. I called in twenty-year-old favours and tracked down acquaintances old and new asking for pieces. In the middle I went to the South Island Regionals as part of the organising committee. The internet is wonderful, I could work from there. Producing issue one was an incredible adrenaline rush. We did it.

The first issue looked fantastic. It was even better than I'd dared to hope. The wonderful look of the magazine is due to designer Rosalie Brown. Rosalie came as part of the package with the printers. She and her assistant Lee-Ann are fantastic. The quality of the printing by Spectrum Print is superb.

The feedback from that first magazine was great.

With no time to draw breath we were into issue two and the Grand Prix. Again I worked from Omarama. Issue two was nearly finished and I was finally going to have a few days off, maybe even go flying myself, when I got a phone call. The job I'd applied for at HortResearch months earlier, could I start Monday?

I began my part time job as an entomology technician on January 15. It was fantastic. I got to use skills gained from my recently-acquired science degree in the field of entomology which had developed into a major interest of mine. It was interesting, innovative and exciting and I got to work with a great group of people.

From nothing a year earlier I now had two dream jobs, and it was completely exhausting. Thankfully the Hortresearch job is seasonal and wrapped up in July. I restart there in November to work through the summer. I have spent the down time consolidating my methods in producing the magazine. I've chased more advertising, the only real way the magazine earns money. I've worked out a plan of events and episodes to cover in the following year, and I've had a bit of a rest.

You now have issue six in your hands and I am as excited about that as I was about issue one. The pleasure of producing SoaringNZ has not diminished; in fact as I have learnt what to do and the learning curve has levelled out it has become even more pleasurable. It has been one heck of a year.

SoaringNZ is your magazine as much as it is mine. I would like to acknowledge the fantastic effort of all contributors to the magazine. You people are what makes it happen. Thank you to the

A Dimona motor glider thermalling above the Queensland Coast.

Photo John McCaw

next issue

We are coming into contest season again. Next issue we will cover the Central Plateau and South Island Regional Contests. We will have back our regular columns of Meteorology, Towing and Instructing and look at some women glider pilots in New Zealand. Are women really different from men?

Deadline for Club News, articles and pictures is 10 November and 22 November for advertising.

clubs that include me in their mailing lists so that I know what is happening around the country and can follow up on news. Special thanks to Kate Stevens who proof reads every article and to Max Stevens, Colin Bryan, John Goddard, Roger Harris, and others at various times who check over the final proofs before we go to press. The quality of the magazine has improved immensely since you people became involved.

Yes, I got what I wished for and it has been a wonderful year. Please join with me in drinking to the next.

We are always looking for contributors and reader's stories. Items for the regular columns are particularly sought after. In fact this issue we have come up short with nothing on instructing, meteorology or towing. Could you write about new gadgets, or new gliders? Should your club be feature club, do you have a story idea? If you can write on any of this, please get in touch.

Regards
Jill McCaw

This photo of the Morning Glory over the Gulf of Carpentaria in Queensland was taken on Monday 23rd September. Described by photographer Jim Herd as a typical Glory its top was around 4000 feet and there was a wedge of cloud at the bottom. The lift was right above the leading edge at about 2m/s. Several motorgliders launching from Burketown flew the wave 127 nm out over the Gulf before it petered out. They flew nearly all the way home along it before it died leaving them just ten miles short of home. There were a number of islands within reach at all times.

The expedition to photograph and study the Glory will be reporting back to SoaringNZ next issue. This is just a teaser.

We have had two very interesting letters to the editor this issue. Arthur Gatland has more to say on Nelson Pomeroy's issue four article on what makes aircraft fly. Ross Macintyre, a name familiar to many New Zealand pilots, writes from the UK to share memories stirred by our issue five cover picture of Tony Passmore soaring the Paekakariki hill. We welcome comments on any issues raised by SoaringNZ.

What really makes aircraft fly?

I read Nelson Pomeroy's article – "What really makes aircraft fly" in Issue 4 – with interest. If I read it correctly, his message is that aircraft wings only generate lift by having an angle of attack which generates downwash, and that the purpose of a fatter aerofoil shape is solely to allow higher angles of attack at slow speed.

However, a study of aerodynamic characteristics, and practical experience, do not support this approach to teaching why aircraft fly. For interest, I do not hold any degrees in aerodynamics, but I do have a reasonable amount of flying experience on various types (16,000 hours including light aircraft, supersonic fighters, airliners, helicopters, and of course gliders in which I am an A Cat instructor).

Wings generate lift as a result of two distinct characteristics, aerofoil shape and angle of attack. The percentage that each factor contributes to the total lift varies considerably, depending on the type of wing (swept or straight, long or short), the aerofoil shape, and the speed of flight.

Most wings have an aerofoil shape in which the bottom is generally flatter and the upper surface has more shape. This aerofoil shape generates a low pressure area above the wing which creates lift, and this lift is greatest at the thickest part of the wing – approximately one-third back from the leading edge. The acceleration of air over the upper surface of the wing is caused by the aerofoil shape, and is not as Nelson's article states 'related to the angle of attack'. Note that this lift is generated even with zero angle of attack, or even at -1° or -2° angle of attack. The greater the thickness of the wing, the more lift generated at a given speed – but also more drag. Thus thinner aerofoils are used on higher speed aircraft to improve the Lift/Drag ratio for the intended cruise speed. Slats/flaps are used to change the aerofoil shape to create more lift on approach.

When the angle of attack is increased (usually as aircraft are flown slower) this also generates downwash which generates more lift. This characteristic is sometimes referred to as the 'barn-door principle' – and it is certainly true that you could fly with a flat-plate shaped wing if you go fast enough. The portion of lift generated by angle of attack is reasonably evenly distributed along the aerofoil, and so is closer to halfway back from the leading edge.

As I said, the percentage of lift generated by the aerofoil shape, and/or by the angle of attack, varies.

At zero angle of attack, almost all lift is generated by the aerofoil shape, and none by angle of attack.

At 15° (close to the stall for a straight wing) a lot of lift is generated by the angle of attack, but a fair amount is still generated by the aerofoil shape, but mostly by the forward third of the wing (centre of pressure is well forward). Note that a straight wing stalls if the angle of attack is increased further, because of the loss of the aerofoil-generated lift. The loss of this portion of lift (around one-third of the chord) results in the centre of pressure moving back, which results in nose-down pitch which we are all familiar with at the stall.

For a military aircraft with a swept wing, lift continues to be generated up to 30° or even 40° angle of attack, and it does not experience a classic straight-wing stall. In this case, almost all lift results from the angle of attack (with huge thrust required to overcome the high drag created).

SoaringNZ welcomes letters from readers. You can send letters by email to soaringnz@mccawmedia.co.nz or post them to: The Editor, SoaringNZ ,430 Halswell Road, Christchurch. SoaringNZ reserves the right to edit, abridge or decline letters. Writers name and address is required and a phone number is helpful.

When an aircraft slows down for landing, angle of attack is increased to generate more lift. However lowering slats/flaps increases the aerofoil shape, increasing the low pressure area above the wing, and increases the percentage of aerofoil lift compared with angle of attack lift. (There is still some downwash from trailing edge flaps of course.)

In summary, the best way of teaching "why aircraft fly" is to explain that lift is generated partly by angle of attack, and partly by low pressure above an aerofoil. The relationship between the two depends on aerofoil shape, speed and angle of attack.

Arthur Gatland, Auckland Gliding Club

Nostalgic Memories

I couldn't help recalling some of the early flying from Para-paraumu with the Wellington club. I started flying with them in 1959, and although now resident in UK I am still flying when it's not raining.

The great picture on the cover of the August/September issue immediately sent me off on a nostalgia trip dating back to the period in 1961/62 when the Wellington and Wairarapa Gliding Club moved its home airfield from Hood aerodrome in Masterton to Paraparaumu. A name change to Wellington Gliding Club indicated that it was a permanent change of venue, although the introduction of competitions meant many an aerotowed trip back to Masterton took place.

Back to the picture, I recognised the land or rather seascape easily, as being taken near the summit of the Paekakariki Hill Road. A steep cliff straight down to the water, at about 600 ft elevation. I had seen it many times but usually not including the glass glider.

Not long after the club shifted to Paraparaumu (after the new Wellington airport was opened), the members began exploring the ridge down towards Paekakariki. K6s, K7s, and the newly acquired Olympia 463 ZK-GDJ were foremost among those exploring the hills. The cliff at Paekak was a magnet for many, and we occasionally found there were two or three gliders using the lift. A couple of runs along the cliff face and you were well above the road so it was open the airbrakes again and come down to do another run. A most exciting trip considering that the low point would often be only 400 ft or so. But the real excitement came when a few of the foolhardy (including me) decided to open the airbrakes fully just above the top of the ridge, and descend, facing straight out to sea, but getting right down to ground level where we would touch down on a rough top dressing strip which ran vertically up the hill above the road. A couple of turns of the wheel when the touch occurred, ease in the airbrakes and shoot out just above the road, into the lift. Most exciting!

It was guaranteed to have a largish crowd stopping their cars at the top of the hill to view the spectacle. An occasional wave from the pilot usually brought a few waves back. But on one occasion, I saw a motorcyclist run into the back of a car instead of looking where he was going. I don't know if that was connected with a later visit from the traffic police to the airfield to politely ask us to stop the practice. It was causing far too much congestion on the narrow road!

Being law abiding citizens, of course we stopped, but I feel sure that the occasional pilot would sneak down and soar the ridge lift in the years since. Vaughan Ruddick's picture shows this to be the case.

I hope that the law's memory doesn't go back as far as mine!

Ross Macintyre, Cambridge United Kingdom

MANDL AIR EXTRACTOR REACTIONS

Following the publication of information on the Mandl Air extractor there has been considerable comment both on forums and the following from the DG website.

Friedel Weber of DG summarises the comments.

Effectiveness of the Mandl Air Extractor

There was lots of praise for this invention. Interestingly nobody doubted the measured values. It seems to be an accepted fact that the Mandl air extractor works.

Explanation of the principle behind it

There are several theories.

A letter writer suggests: when the air is let in and the airmass is accelerated to the airspeed the so-called impulse drag is generated. This can also have an effect if you don't accelerate the airmass to the full airspeed. Incidentally, for this reason BMW has developed a sealable grill for the cooling air inlet of its fast cars.

DG's reply: this may indeed also be part of the overall effect: When the air flows in at the nose and can exit almost immediately at the back without a lot of resistance and reduction in speed, then this is the equivalent of a hole in the nose at the place of the highest dynamic pressure. Of course this reduces the overall drag balance.

Another email quoted a study from 1972 which described how the laminar airflow can normally flow past the front canopy gap, but will then at some point become turbulent after all. This is caused not least by the string on the canopy, which creates a wedge of turbulent air approximately 15° wide.

The interesting question, DG says, will be whether due to some kind of 'boundary layer suction' the turbulent airflow becomes laminar again at the rear canopy gap. More will be known when they have carried out oil flow tests etc.

There are quite a few things they say they need to investigate yet!

"That's nothing new!" "Old hat!"

Numerous pilots simply can't believe that it is possible to achieve such a difference with such a simple measure. Surely this must have been invented before! And then there are all the alleged predecessors of the Mandl air extractor.

All such claims were investigated and proved to be either different cooling vents, holes in various places and rumours of similar devices. They all proved to be false.

In brief, say DG, the Mandl air extractor truly deserves to be called a new invention and be granted patent rights.

Will it impede jettisoning the canopy?

One interesting question was asked several times, i.e. whether an extraction device would have a massive impact on the ability to jettison the canopy in an emergency. The argument was that a pressure reduction of 5 millibar (mb) in the cockpit causes a pressure on the canopy of approx. 250 N (=25 kg weight), which would make it very difficult to open the canopy.

DG assure us that this worry is unfounded. Cockpits are not sealed and the air extractor sucks this air out of the fuselage. They say it may create a slightly lower pressure of possibly 1 mb, but nothing as great as 5 mb. Strong gas struts on DG-808 and LS gliders do the work when their canopies are jettisoned. Side hinged canopies may be slightly different. They are doing more testing to ensure there will be no problems but as far as they know, the Mandl air extractor cannot impede jettisoning the canopy.

Will there be pressure surges in the cockpit because of the extraction?

In short – no. The air pressure in the cockpit is more constant than without it. Instruments which use barometric pressure should be connected to the static pressure anyway. The static pressure ports don't respond to varying cockpit pressure.

Retrofit on DG and LS gliders

Possibly available by the end of the year.

... and the World Championships?

The three LS10 pilots came 13th, 18th and 27th. So unfortunately no top places, but at least above the average. Again, as said before – it's the pilot skill that counts the most.

CONTINENTAL RECORDS

At the IGC meeting this year a proposal was put forward by Germany for "the implementation of continental records into the sporting code regulation frame."

On request Bob Henderson forwarded the publicly available proposal from Germany.

Introduction of continental records into the FAI sporting code

The multiple benefit of establishing continental records (e.g. European records) in the framework seems evident:

- Continental records open record categories to a broader range of pilots (also to the younger and more 'unknown' ones) in our sport. A growing number of pilots on different continents might be encouraged to start record flying and to attempt giving best performance.
- It would be possible to fly records not only in wave but also under pure thermal or mixed conditions.
- Motivation will also be created to investigate unexplored areas (with respect to gliding) for their gliding potential and soaring possibilities (Eastern Europe, North Africa, etc....)
- Most important: Flying records, e.g. a European record, will surely help us to attract media attention, thus moving our sport into the spotlight of public awareness! We all know that we need headlines and that we need heroes!
- Please keep also in mind that the extraordinary and successful Barron Hilton Cup is based on a continental scoring!

Henderson says it was accepted as a 'Year One' proposal, which means that the fine details of how it might work have to be provided to the meeting in 2009 to decide if it is acceptable or not.

Todd O'Hara

On 9 August Todd O'Hara, the young helicopter scholarship recipient featured in issue 4, soloed in helicopters. Todd is loving his helicopter flying.

He has completed four of the six PPL H written exams with a 93% pass in one. According to his Dad some of the fun parts have been riding around in a turbine Squirrel the company owns (pax only but he's dreaming) while they do confined landings on islands within rivers and low level flying. He hopes to have his PPL H by the end of summer.

Todd O'Hara on right, flies in a simulator with Roger Read

SCHEMPP-HIRTH PHOTOGRAPHIC COMPETITION

Your photo could be on the back page of SoaringNZ.

Sailplane Services want photos of New Zealand Schempp-Hirth gliders and pilots to use in their SoaringNZ ad.

Photos need to be high quality digital images, 6 megapixels or higher and can be taken anywhere by anyone. Summer is here. Get your cameras out and get snapping.

The winning photograph will be used on the back page of the February issue of SoaringNZ

Email your images to sailplaneservices@xtra.co.nz before 15 January.

new zealand EVENTS CALENDAR

01-9	November 2008	Central Plateau Contest	Taupo
15-22	November 2008	South Island Regionals	Omarama
29 Nov-06	December 2008	Northern Regionals	Matamata
04-16	January 2009	National Championships excluding Sports Class	Omarama
31 Jan-07	February 2009	Central Districts	Waipukurau
15-27	February 2009	Sports Class Nationals	Matamata
21-28	February 2009	Matamata Soaring Contest	Matamata
31 Oct-08	November 2009	Central Plateau Contest	Taupo
14-21	November 2009	South Island Regionals	Omarama
21-28	November 2009	Northern Regionals	Matamata
02-09	January 2010	Omarama Cup	Omarama
TBA		National Championships all classes	Matamata or Taupo
27 Feb-06	March 2010	Central Districts	Masterton

While most of us have been freezing, drowning in mud and not enjoying winter some people were overseas and flying high. Terry Delore sent this photo.

Here is a pic I took flying with Philippe Athuil from Ely Nevada. We are over Zyon National Park, cloud bases this day were 20,000ft. We fell short of 1250k by 110k.

SPOTs

Following on from last issue's story on SPOT messengers Roy Edwards tells us that there are now 3 SPOTs in Omarama. Some testing on the ground has been done with a unit working well from the bottom of the Lindis Pass. Thanks to one of our readers, John Scott, it is now possible to use the Txt messages from SPOT. That means if you land out your crew can get a txt with the Lat & Long. We are continuing our quest to get SPOTs for the 2009 Nationals. It would be helpful to know who already has or plans to have a SPOT. After the Nationals we may have some units available 'at a good price' complete with the satellite service. Let Roy know at royedw@wave.co.nz

STOP PRESS - CLOSURE

Twelve months after adventurer and well known gliding record setter, Steve Fossett went missing while on a local flight from the Hilton Ranch in Nevada, the wreckage of his aircraft has been found. The impact would not have been survivable.

The finding brings closure for family and friends.

Fossett was well known to the New Zealand gliding fraternity through his partnership with Canterbury pilot, Terry Delore.

The soaring season has arrived, along with your opportunity to once again compete in a fun filled week dedicated to soaring. If not interested in competing you are urged to enter one or two days to advance your cross country skills. Once again the Canterbury Club will be your host and the organisers are aiming to keep costs down.

We want to encourage Clubs to bring their two-seater training gliders. NZ club pilots who have not previously flown in contests are therefore urged to find an instructor or a cross-country rated pilot, get a group together and enter for the week or just a day. The entry fee will be waived for club two-seaters (having a handicap less than 90). The intent is to get the clubs back into Regionals mode and have as many Grob Twin Astirs (and the like) entering the contest as we can.

The emphasis is on safety and fun – the entertainment factor after flying is also a high priority and entrants are encouraged to be prepared for a 'club challenge evening' and a 'silly hat' day – any other ideas you want to see for the week please contact the organisers or Contest Director Geoff Soper. reg2008@42.net.nz

ENTER ONLINE at http://glidingcomps.42.net.nz/sireg2008/

THE MATAMATA SOARING CENTRE NORTHERN REGION GLIDING CHAMPIONSHIPS

30 November to 6 December. Practice day 29 November.

This offers a great opportunity for newer pilots to try cross country flying while challenging the experienced pilot. The Matamata area is a safe flying area with lots of suitable paddocks!! Come and enjoy the friendly atmosphere and camaraderie of the Regionals.

We are keen to encourage two-seaters to enter the contest to assist in introducing pilots who may not yet be ready for solo cross county flights to the fun that can be experienced through cross country competitions.

The entry form can also be downloaded from the GNZ website.

For more information please contact
Bill Mace, President MSC
07 8891980 or email wajvmace@ihug.co.nz

BSPORT TO SPONSOR NEW ZEALAND GLIDING EVENT

Want to see your club grow, and our national gliding membership turn around and increase? Then circle the weekends of February 28th and March 7th. Those two weekends are going to be nationally promoted as 'Gliders over New Zealand' inviting aviation enthusiasts and the public to visit a gliding club near them and find out what gliding has to offer.

'Gliders Over New Zealand' is being sponsored by BSport through their National radio network. Beginning February 23rd BSport will be promoting the open days with on-air advertising, spot prizes, DJ endorsements and interviews with gliding celebrities, our top international pilots as well as club representatives.

Gliding New Zealand will also be promoting the event through its PR efforts in national and regional media and providing your club with additional support where requested.

This is a great opportunity for a local promotion of your club by exhibiting aircraft including vintage, having displays and information, demonstrating aerobatics, selling trial flights and encouraging flight training and club membership.

This is a co-operative event between Gliding New Zealand and local clubs and it takes both sides of the gliding movement in New Zealand to really make this work. Full information on the event and planning for it has been sent out to your clubs. Get involved, and put up your hand to volunteer.

Remember how you felt when you first tried gliding? Let's give others that opportunity by extending an invitation to New Zealand.

WEBLINKS

GLIDING NEW ZEALAND'S NEW WEBSITE

Don't forget to check out the new updated Gliding New Zealand's website.

www.gliding.co.nz

YOUTH GLIDE CANTERBURY

Member Toby Read has used clever filming and editing skills to create a great video of himself and friend Alex McCaw flying from Omarama. This scenic and interesting video shows that Toby has a great future in film making even though he says he is going to be a pilot.

www.youtube.com/watch?v=9VpDBEU0YBs

If that is too hard to type in, go to You tube and search for Toby Read.

MORNING GLORY

Next issue we hope to bring you a story from the Morning Glory, the enormous rolling cloud that moves across the Gulf of Carpentaria at the top of Australia. In the meantime check out some of the meterological information about how it forms.

www.morningglooryaustralia.com/

CAA

With the discussions raised in this issue, perhaps you should check the regulations out for yourself. There is lots of other interesting stuff on there too.

www.caa.govt.nz

WHALE WATCHING FROM A GLIDER

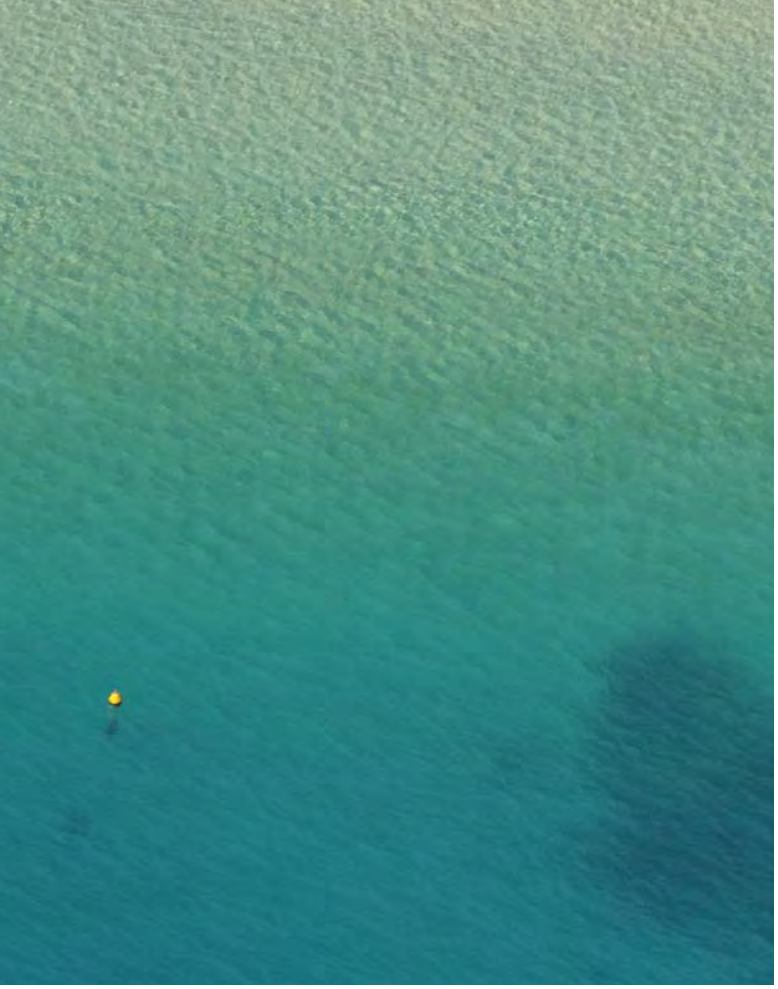
by Jill McCaw

We were circling under a good size Cu, climbing badly because I was in control and I wasn't used to the aircraft. Cloud base was around 8,000 feet. I was in the right hand seat of a Dimona HK 36 motor glider registration JLL (and isn't that the right registration for me) with Al Sim in the left. John was in a second aircraft with Mike Truitt and with John on the controls they were easily out-climbing us. I was slightly distracted by the view. I think it was one of the most spectacular thermals I've ever been in. We were over Moreton Island off the Queensland coast and the engines were off. They had been off since about two-thirds of the way across the channel from the mainland when it was obvious that there were thermals over the island.

I was just starting to get the hang of the feel of the thing and managing to centre my turns when "Whales," Al suddenly said. "I have control." Within moments he'd simply flipped a couple of toggles and turned a key and the rotax engine purred into life. He called Mike and John and we headed out to sea. About a kilometre off the coast a spout of water rose in the air. The Dimonas dropped down to 1000 feet, the legal height allowed above the mammals and we started scanning the water. I spotted a pod of dolphins, five or six of them, and then the whales off to our port side. Al circled with Mike in formation. A whale broached, leaping high in the air and flopping backwards, its belly a pale lemon colour.

There were three whales swimming north along the coast of the island. They were playing on the surface of the water, jumping and slapping their tails. The dolphins swam in their bow wave leading the way. It was a truly magical sight.

Whale watching would probably top my list of things I never thought you could do in a glider. A Sunshine Coast beach holiday with an All Black game in Brisbane on the Saturday night did not seem the sort of trip where I would even see a glider. But of course we are McCaws, if there are gliders around, we'll find them. (We have to go to rugby games too.) We had thought of a trip out to Kingaroy or Darling Downs but when we arrived on the coast it just seemed like too much effort. Then we found the brochure from 'Come Gliding'. They advertised, "Gliding Adventure Flights in motor gliders with the chance to see spectacular scenery, at least a third of the flight to be



Photos John McCaw

in 'glider' mode and a chance to take the controls." Oh and you could see whales on their southern migration during the winter months.

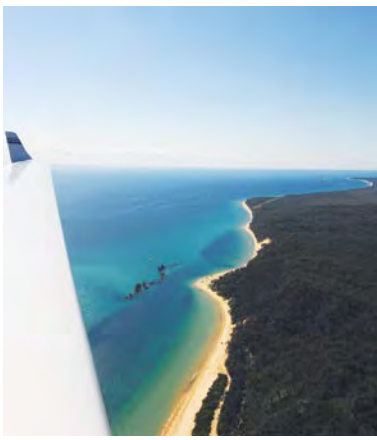
Of course John and I had to go and check it out. Come Gliding operate out of Caboolture airfield just north of Brisbane and only around forty-five minutes drive from where we were staying in Maloolabah. On Monday morning we took the rental car and headed down to the airfield. With no way of getting in touch we just hoped there would be someone around. When we got to the airfield we had the good fortune to ask Barry McCarthy for directions– Barry turned out to be the CFI of the Caboolture Gliding Club.

Barry took us for a tour through the club's hangar, introduced us to local gliding personality Bert Persons and got us to promise to come back on Friday when the club would be flying. The hospitality was typical glider pilot welcome. Bert showed us his beautifully restored Moth Minor and pristine Ka 7, we met a bloke called Speedy and were promised a good time on Friday. We finally got away to track down the Dimonas.

We found one parked in front of a hangar at the very far end of the airfield. With it was Mike Truitt. Mike is a hugely experienced glider and power pilot. He is the equivalent of an aircrash investigator for gliders and had been busy on the weekend attending a fatal motorglider accident a little way inland. He also has a business as a driving instructor and instructs for Come Gliding as and when needed. He was just back from a flight up the coast.

He rang Al Sim, Come Gliding's owner and Al was delighted to come out and meet with us. Al also had a gliding merchandising business, is a professional photographer and is involved in the Gliding Federation of Australia at a policy level. When Al arrived he took one look at John and said, 'We've met.' They had, back in Omarama during the first Gliding Grand Prix. They'd compared cameras and Al had spent time in our caravan looking at our photos on the laptop.

Al was delighted to see us. The thought of another photographer taking pictures of his gliders got him really excited. We cooked



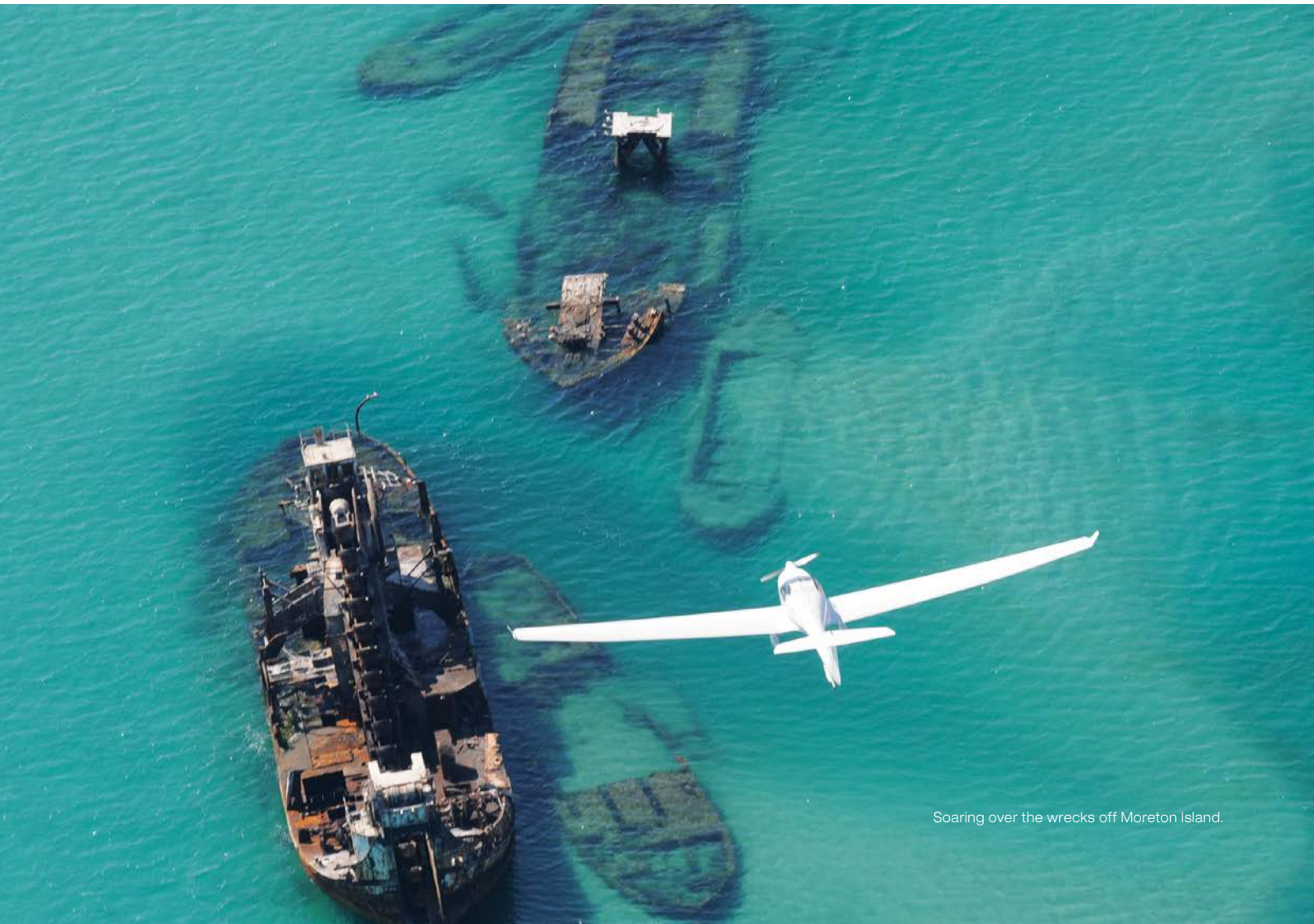
A great gliding sky. IS28 preparing for flight at Caboolture.

up a plan. John would be in one glider with his camera and Al in another with his; Mike and I would be along for the ride. We would formate on each other in the most scenic place Al and Mike could find, Moreton Island. Everything went to plan. The whales were an absolute bonus.

Come Gliding is run as a club. There are the two Dimonas and around twelve members who fly whenever it suits them. The advertised adventure flights are run in accordance with GFA rules as trial instructional flights. Al says their aim is to introduce people to gliding and if they join a club somewhere or tell someone else about it then that is to the benefit of the sport. The motor gliders give them the scope to operate in a wider range of weather conditions than conventional gliders.

Also operating from the same airfield is the Caboolture Gliding club. Most of their members live in Brisbane which is only around forty minutes away. They come up on the weekends and many also fly Friday. We came back on Friday and made ourselves known. The club flies an IS 28, two blaniks, a twin Astir and a couple of single seaters. Their towplane is a Pawnee. Directly under the let down for Brisbane, their ceiling over the strip is only 3,500 feet but not far away they can go to 4,500 and much higher just a little inland.

John went for a flight in the IS 28 with Tony Sorenson. John



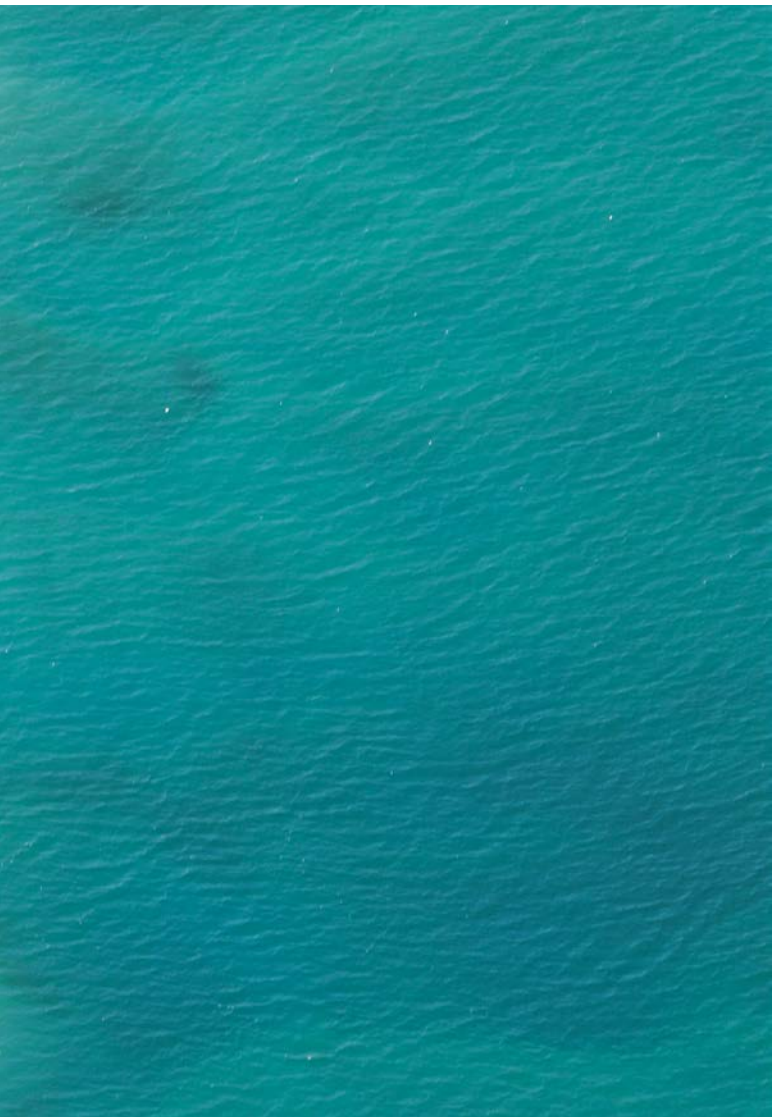
Soaring over the wrecks off Moreton Island.

Mike Truitt and student prepare to fly.

said the thermals were really good. They certainly looked that way from the ground. I caught up with Al Sim and gave him copies of John's photos and learnt some tricks for mounting a camera on a wing. There is a Warbird museum on the airfield and a Mustang was doing touch and goes in the circuit. It is an exciting place to fly from. We left Caboolture with new friends to keep in touch with and the pleasure of having mixed with a great group of gliding people.

I highly recommend a visit if you are holidaying near Brisbane. The club flies Friday and weekends and Come Gliding operates on request. See the accompanying ad for details. Whale watching and thermalling in the same flight, unbeatable.

Top: Instrument panel of Dimona. L: Typical gliding club scene, Caboolture Gliding Club. R: Al Sim, operator of Come Gliding.



THE TALE OF THE

OR CYBER MEN FLY 1000KM

Passing Mt Hutt

In Greek mythology Athena was the goddess of wisdom, practical skills and prudent warfare – an apt alias, says Geoff Soper, for Steve Fossett's ASH25. With Athena returning to New Zealand he felt it would be timely to relate one of her previous NZ flights that he had the privilege to be a part of. Soper joined Terry Delore to prove that 1000 km flights can happen at any time of the year.

Invited by Terry Delore on a winter cross country, we rigged at Hororata early in the cold dawn light on the 19th Aug 2006. The hoped-for early launch was delayed as we waited for better conditions. I asked Terry where we were headed. "We'll try to go north a bit then south a bit more." No point pressing for details. Nick Reekie tried and only got; "It's the journey not the destination, Grasshopper."

Soon, in typical Terry fashion, it was, "Hurry up get your kit on and get in." I was still securing gear in and around me as he fired up Athena's motor and we were rolling. Terry's mystery tour was about to unfold. Curiously, Terry had loosely placed his bright red plastic lunchbox on the frame between the front and rear cockpit. Having stowed everything else securely, I had this nagging doubt, how would it stay put during turbulence? He assured me with a mischievous chuckle, "Don't worry it always stays in place."

Terry set the task up to go 'north a bit,' and at 10:15 we were finally on our way to the first disclosed turn point not far from Otira. There was a mass of cu packed in to the west, the cloud below us broken and ragged. I noticed how far over the main divide we were when the Otira viaduct came into view. Around the turnpoint at 15,000 feet we turned west pushing hard descending into wind – no lenticulars but the western tops of the cu were showing the smooth signs of waveforms. Terry eased around the corner of a cloud gap and Athena surged upwards, the view to the east reappeared rapidly and it was time to go 'south a bit'. Actually I was thinking 'south a bit' looked difficult, let alone 'south a bit more'.

The weather was post frontal with another front due; the snow down to low levels and the mountain tops obscured by the mass of cloud spilling over from the coast. I was now noticing how much colder it was getting and Terry took that moment to ask if my feet were cold... yeah right. Like I needed reminding that he had electric socks on? It pays not to know the temperature but the ice on the canopy was pretty hard to ignore. It was slow going south but good progress was made by a series of steps to the west. We ran the lines then stepped west again past the Erewhon basin which was devoid of any signs of lift. It was like a giant sinkhole but Terry has a less than eloquent word for the Erewhon basin and 'sink' only shares two of those letters. A good climb was found in a small cloud gap in front of Mt D'Archaic, the icy lakes at the foot of the Godley, Maud and Classen glaciers were spectacular with frozen waterfalls and great chunks of fractured ice.

The Mckenzie basin was devoid of cloud and after climbing to 16,500 feet Athena was eased into full noise and we pushed past the Murchison glacier and around Mt Chudleigh via the Tasman glacier, onto the wave in the Lee of Cook. Then we raced down the Pukaki wave – a lone roll cloud spectacular against the blue of the lake. Our groundspeed increased to 290 kph as we steadily climbed to 20,000 feet.

It's now 12:20 and as Omarama slid past I noticed the canopy was growing ice crystals at a rate you could actually observe. Refocusing on the secondary GPS unit to monitor our progress I cycled the unit – the next turnpoint displayed; 'Manapouri, distance 220.1 km.' This was certainly 'South a bit more'. We were soon over the Lindis at 13,000 feet and Terry let me fly down the wave line while he concentrated on converting internal ballast to orange juice. A large mass of cloud loomed to the southwest; I could just make out Lake Dunstan amongst the ground shadows and worked out we were on the Pisa wave. I was now thinking this was as far 'a bit more south' as we would get. I couldn't see beyond Cromwell, the Nevis looked impenetrable.

Terry once again asked whether my feet were cold as he reminded me that his electric socks were just the "gooderest things to wear." It was minus 25 and I didn't need reminding! I would have thrown the lunchbox but figured I really needed him to fly Athena,

RED LUNCHBOX

Lake Classon, a frozen lake with icebergs, you don't see that everyday.

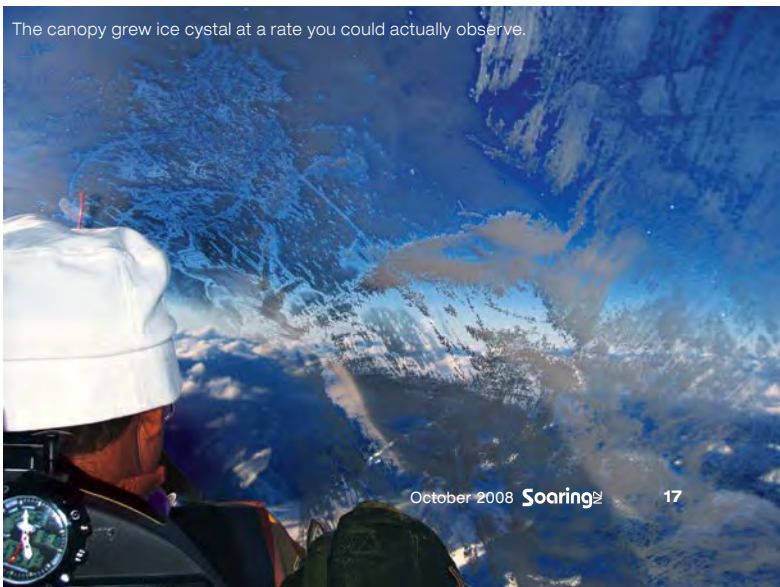
besides, I was curious as to the game plan.

Taking control and climbing to 18,000 ft Terry guided Athena west from Cromwell to the south end of the Remarkables and completely avoided the Nevis cloud mass. It still looked ugly to the west but the blue sky in the Mossburn area was beckoning and we turned south again. Having lost 5,000 ft in the push we were held up by Queenstown control who were clearing a Boeing 737 out to the west. Cleared south, we made the run without any loss or gain of height and arrived overhead Five Rivers at 13,300 ft at 13.30hrs and ran into turbulence. Terry's lunchbox was about to get hurtled into the canopy and I discovered I could reach it and hold it in place. Terry laughed his head off and said, "See told you it stays in place. Everyone does that – even Steve (Fossett)." We were heading for a turnpoint near Manapouri out over the lake approx 70 km away, cool! The only glitch as far as I could see with this plan was the pre-frontal cloud obscuring any view of the lakes.

Terry built up Athena's speed and slipped into negative flap for the run, and what a run it was – as we descended past the northern end of the Takitimus, the cold air mass became less than friendly and we bounced our way around, over and under shredded frontal cloud and dived under the dark edge where the rain turned to ice and then snow. I looked out at our wings to see snow sticking to the leading edge, the wings were getting a thorough work out from the turbulence and so was the lunchbox! Only 2 km from the turnpoint Terry made the decision to pull the pin and abandon the task, hugely disappointing but necessary as the only chance to get away was 16 km behind us on the lower slopes of the Takitimus. There is always the motor in Athena but if it failed to fire up we were looking at an outlanding.

The glide back to the Takitumus was uneventful and Terry eased Athena into the ridge lift. It dawned on me that this was the starting point for Dick Georgeson, Dave Speight and Bruce Drake's 1978 world distance record from Tower Peak to Te Araroa some 1254 km distant! For us, Tower Peak remained hidden by dense cloud. Looking at this magnificent southern scenery, the lakes glinting in the distance, the front chasing us and Terry working his backside off to climb us from this low level scenic detour, I thought, 'Yep, this is indeed a bit more south.'

The canopy grew ice cystal at a rate you could actually observe.



Umbrella Mountains north of Waikaia

Fortunately, a reasonable climb was had on the northern face to 5,500 ft and Terry turned Athena downwind towards West Dome. Athena was about to prove she had the legs to make it all the way to Five Rivers, the good part about being low and back in the sunshine was that it was nice and warm in the cockpit, my feet had thawed out.

The glide to Five Rivers was looking quite shallow but we made it with 2,500 indicated. It was now 14.30hrs on a cold winters day and we were 366 km from home low down on a ridge that wasn't playing the game. The wind was flowing down the valley at this height and the front was catching up to us, and so we headed towards Mid Dome searching for a way back into the wave. Time and time again we pushed west towards the virga and pulled into scraps of lift desperately hoping – to no avail. We took turns at trying this for over 40 minutes climbing to 5,500 then immediately losing the gains. North the route up the valley to the Hectors and Remarkables was not an option, the front had closed that route off. Terry had had enough and headed east arriving 10 km north of Waikaia at 15:30 – maybe we could get far enough North before sunset in a couple of hours and land at Alexandra, or maybe even as far as Omarama?

The Waikaia valley had seen heavy snow and the Umbrella mountains were covered. I had to photograph it of course but Terry wanted me to have a fly while he manufactured some more orange juice. Athena behaved herself for me, and wanting a top photograph I carefully eased her downwind under some scrappy cloud and just as I took the photo the left wing started to lift of its own accord. I stowed the camera into the side pocket and simultaneously banked into a steeper turn, mindful that the Maestro hates being disturbed when he has important business to attend to. The lift got better, bugger Terry, this has all the hallmarks of real lift! A few more turns and I was rewarded with that unmistakable pre-wave surge. Climbing through the mildest rotor we met with the sweet sound of wave, the air went smooth and Athena soared skyward. With Terry urging me to keep moving north, we passed the end of the valley at 9,000 ft, 90 kts and still climbing!

Five Rivers Airfield

We soon passed to the east of Alexandra with signs of good wave ahead. Our groundspeed was improving and a look at the GPS data shows we were averaging 250 kph as we neared Falls Dam. The sun was so low in the sky the cloud to the west obscured it and at 11,000 ft the ice began forming on the canopy again. The ground was murky black in total shadow but we were going home.

A quick deviation around a stack of lenticulars, and we were at 12,000 ft, 322 kph some 15 km east of Omarama which was invisible through the gloom. We raced across the Waitaki valley into the lee of the Benmores and burst out into a clearer area in sunshine just south of Simons Pass – what a great feeling to be back into the Mckenzie basin now confident of getting home before dark and ahead of the front.

17.00hrs; overhead Tekapo at 15,000 ft – the 250 km run behind us, having slowly gained height along the way without slowing down, we reflected that only an hour and a half ago we were at 4,000 ft not confident of getting home! Terry allowed me to continue on to the Two Thumb Range where he assumed control and at 16,000 was ready for the final glide to Hororata.

Terry's magical mystery tour was soon to be over. Christchurch control gave us clearance and Athena eased into full noise with her wing tips arching gracefully up. The final glide as the sun was setting was a great reward for 8 hours in the air – less than 20 minutes later (which included having to pull the airbrakes out in the lee of Mt Hutt to lose height) the red lunchbox was back in the circuit at Hororata after some 1,000 km and of course the obligatory practice competition finish requested and approved by the Club's CFI.

Athena was promptly derigged just before nightfall. In the compulsory debrief at the 'local' afterwards, Terry told everyone about my cold feet and then said to me that he knew my feet were cold as one electric sock had failed to work for the entire flight!

What a flight. However, as the realisation of missing out by only 2 kms sunk in I felt like we had unfinished business. Athena's back. Watch this space.

Geoff Soper is the current CFI for the Canterbury Gliding Club having completed two terms totalling some ten years. With a Gold C and over a 1000 hrs gliding behind him he says he is still learning!

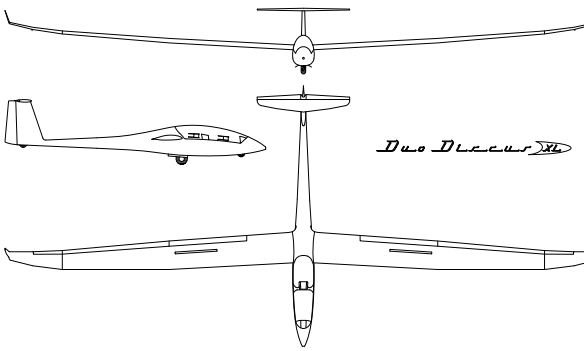
The development of the Discus by Schempp-Hirth has stepped up a gear for 2008. The new Duo Discus XL is a glider you shouldn't miss out on flying, according to Schempp-Hirth's New Zealand agents Sailplane Soaring.

DUO DISCUS XL – BACK TO THE FUTURE

by Shane Brown

The Discus has established a legendary place in gliding and continues to punch well above its weight in the new century. The key to its success is a design ethos focused on simplicity and precision.

At the heart of its design is the triple-trapezoidal wing planform introduced by Schempp-Hirth in the mid '80s and since imitated by other manufacturers on their higher performance machines. The Discus has been an absolute success story with over 1750 units built. Its wing behaves like the optimal elliptical planform but can be produced and maintained easily. The planform combined with light weight carbon fibre construction and the Duo Discus's large 16.4 m2 can be flown with a wide range of wing loadings from 28.9– 45.7 kg/m2 by pilots of all shapes and sizes. Schempp-Hirth's dedicated efforts have resulted in a sailplane that is more comfortable for bigger, taller pilots and seat loads of 110 kgs per seat are permissible. Add in up to 200 litres of water ballast on top of 410 kg empty weight and a massive 750 kg all up weight is usually achievable.



The Duo Discus XL has a fuselage that is 100 mm longer in the cockpit area than previous models. This has been achieved by extending the fuselage between the front and rear seats. A vast amount of time and effort has been invested in optimising seat comfort, security, cockpit space and ergonomics. The room in the cockpit was additionally increased by moving the rear seat 80 mm further back in the aircraft. With nearly 200 mm of additional space small details like oversize side pockets have been added on both sides; additionally, a large bag in front of the rear stick permits further stowage and a place for the main pin. The baggage compartment behind the rear seat also offers a lot of space. It is now possible for pilots taller than 2 m to fly in comfort. Adjustable backrests and pedals provide for smaller pilots, the front seat pan backrest with integrated headrest is adjustable at the top in flight and ground adjustable at the bottom. Gone are the 'steps' in the seat pan (for old parachutes), now just smooth curves that follow the shape of your spine. Up front a tilt-up instrument panel makes getting in and out a breeze as well as providing for a safer emergency exit. When in the down position the panel nestles on an extra high centre stand; this facilitates plenty of room for the knees.

Control levers have been placed according to ergonomic criteria and in response to customer's requests. Now in a more user-friendly position, they include a newly designed water dump valve. Additional features include rudder pedals that extend further forward yielding room for long legs and full-length cockpit armrests.

The clean interior of the Duo Discus XL features integrated armrests, oversize side pockets, integrated mike booms, eyeball vents, rail mounted canopy release and a new seat-pan that completely isolates the front and rear cockpits. Plus nearly 8" more space. Tilt-up front panel for nine instruments.

The cockpit was comfort tested by many people of different sizes.

It is now possible to fly from the back seat without any operating handicaps. This extends significantly the spectrum of operation and the changes also apply to the Turbo sustainer variant. A new longer canopy extends further backwards and greatly improves the view for the pilot in the rear seat – a win for safety and great for instructional flying. It is now possible to see the tailplane from the back seat. The canopy is attached to the glider with a re-engineered hinge and release mechanism which is now integral to the canopy frame, enhancing security and simplifying jettison procedure.

A new ventilation system has greatly reduced the level of cockpit noise at all settings. The forward cockpit vent quietly and more evenly distributes demist air over the canopy and complements eyeball type vents front and rear. The crew can keep comfortable with air delivered in a focused manner. The total air requirement for comfort is greatly reduced along with drag emanating from air spilling around the canopy. A soft frame seal that is able to compensate for expansion and contraction in all weather now completely seals and further silences the cockpit.

A new boom mike mount helps keep the cockpit wall clean and reduces the chance of entanglement on the traditional cockpit rim L mount bracket. The Duo XL now matches feature for feature (okay there's no flaps lever) the New Nimbus 4DM in the cockpit area. It is noteworthy that at the time of writing there were three 4DM's under construction for European owners who demand more room in their new open class twins.

A newly designed undercarriage introduced on the Duo X incorporates a 100 mm suspension travel, which significantly increases the energy absorption. The roll comfort is greatly increased and a new shock absorber cushions touchdown shock remarkably. Due to the compression dampening arrangement the total construction height is still low at rest so that an easy entry into the cockpit is possible. Further advantages of the new undercarriage are:

- Lower lift-off airspeed due to increased angle of attack during take-off roll.
- Light operational force during extension/retraction due to gas strut assistance.
- Undercarriage can be operated and locked from the rear seat.
- Further ease of ground handling due to lighter tail weights (longer nose).
- Improved off-field landings due to higher undercarriage and wider opening doors.
- Robust and maintenance-friendly construction.
- Improved ergonomics and positioning of undercarriage lever (XL).
- New "Beringer" Tubeless main wheel tyre.

Glide slope control is greatly enhanced because with the extension of airbrakes, a trailing edge flap moves downwards simultaneously. This provides multiple advantages in practical flight:

The loss of aerodynamic lift when the airbrakes are extended is regained with the trailing edge flap (so that the lift coefficient practically remains unchanged). At the same time the total drag of the aircraft is increased, which allows a steeper approach angle and more importantly a slower landing speed.

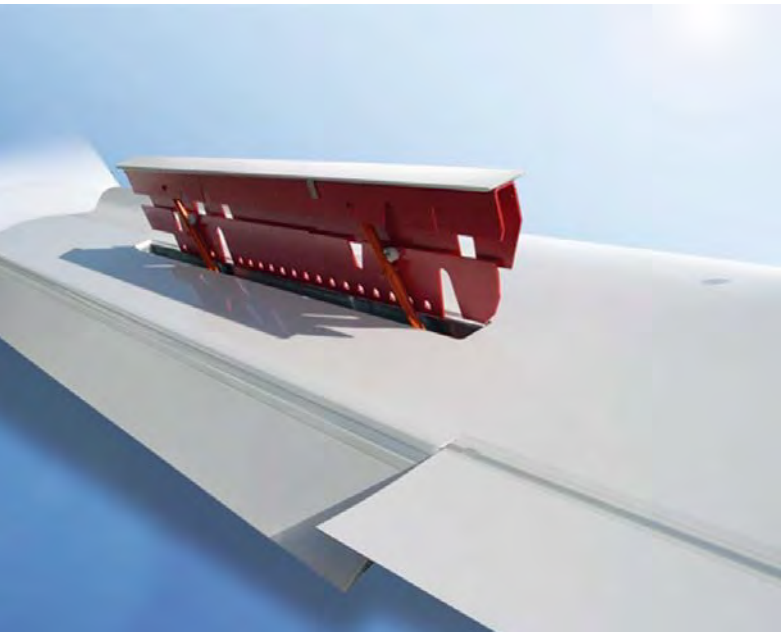
The large airbrakes, combined with the extended trailing edge flaps, increase the longitudinal pitch which results in even better visibility to the landing point and permits steep finals whilst ensuring excellent visibility for the rear seat pilot.

As the trailing edge flaps and airbrakes are mechanically coupled (compressible gas linkage), the trailing edge flaps react in opposition to the airbrakes upon extension. A non-locked airbrake can therefore not extend itself, which prevents the situation at take-off of extending the airbrakes unintentionally. There is no additional workload for the pilot as there is no extra lever needed to operate the trailing edge flaps which work in unison with the air brakes.

The linkage design cannot deploy the flap at high speed so that the system is never dynamically overloaded.

Improved effectiveness of the airbrake system. The airbrakes have been moved 40 mm toward the leading edge and are now 18 mm higher. These changes make possible the approval of the Duo XL for aerobatic certification.

The result of this technology is a standard class machine with unparalleled glide slope control on approach from a clean L/D>46:1 to 6:1 with full brakes, that's 10–15% steeper than the Duo X. The essence of all these developments is unprecedented power and control. For the less experienced, a wider margin of error on approach, and for the hot shots it just may make the



Landing flap and brake panel arrangement.

difference when circumstances hold their full attention.

Significant safety improvements arise from stall speed of the aircraft remaining constant regardless of airbrake setting and by default this provides an increased safety margin when rounding out for a short field. Schempp-Hirth suggests an approach speed as low as 48 knots plus ½ wind speed if required for landing short. Landing the Duo Discus XL is as easy as you would expect of a good basic trainer.

Further, once you have it on the ground there is still more stopping power in the form of the all-new Beringer wheel brake system. The new wheel features billet alloy construction with tubeless tyre and hydraulic disk brake. The slave cylinder features a twin pot caliper which provides maximum braking effort to the small diameter and very narrow disk arrangement.

The improved airbrakes have allowed the Duo Discus XL to be certified for limited aerobatics including spins. This, together with the fact that the Duo XL can now be flown as PIC from the back seat, has further extended its usability spectrum in club and private operations.

Ilecs new TB06 is included as standard on the Duo XLT. The new controller represents a complete rethink of the Turbo sustainers system and features complete operation with one switch and prompts the pilot via a digital readout. All engine management is available from both seats.

One switch turns on the ignition and fuel pump and simultaneously raises the engine mast to the start up position. Glance at the Ilec LCD which will warn if “FUEL” shut off is not completely open or prompts “DECO” for the pilot to operate the decompression handle.

Nose down and pull the decompression handle until the “DECO” prompt disappears at approx 63 knots.

Now release the decompression handle and the engine is running

When you have finished with the engine run, turn the switch to off and the power plant retracts automatically in a short time.

A 16 litre fuel tank is placed below in the fuselage and refuelled by an integrated fuel pump with a ‘snap in’ hose connection. This provides for oxygen cylinders which mount above the main spar.

Intensive study by Prof. Dr. Karl-Heinz Horstmann and Prof. Dr. M. Maughmer has culminated in a state-of-the-art winglet design. The X/XL wingtip performance improvements stretch across the entire usable cross country speed range, though the greatest improvement is reduction of the minimum sink rate. The result is increased cruise speeds at all thermal strengths, with the harmonic shape of the winglets adding to the already optimal wing platform and enhancing the elegant silhouette of the Duo Discus highly banked in narrow thermals. Carbon wing construction means that the new wings are about 5 kg lighter, with the greatest reduction at the outer end. This significantly reduces the inertia (resistance to change of roll rate) of the wing assembly, meaning that change of bank angle is quicker, or requires less control input, so reducing the drag generated manoeuvring the glider. The tip aileron sections move upwards with the inner ailerons and remain in neutral position when the inner ailerons move downwards, limiting the angle of attack at the tip. New sealing of the aileron and flap gaps on the XL has also been adopted. It is now completely sealed with Teflon tape. Schempp-Hirth have made recent advances in this area and some of the new sealing arrangements can be retro-fitted to older SH products.

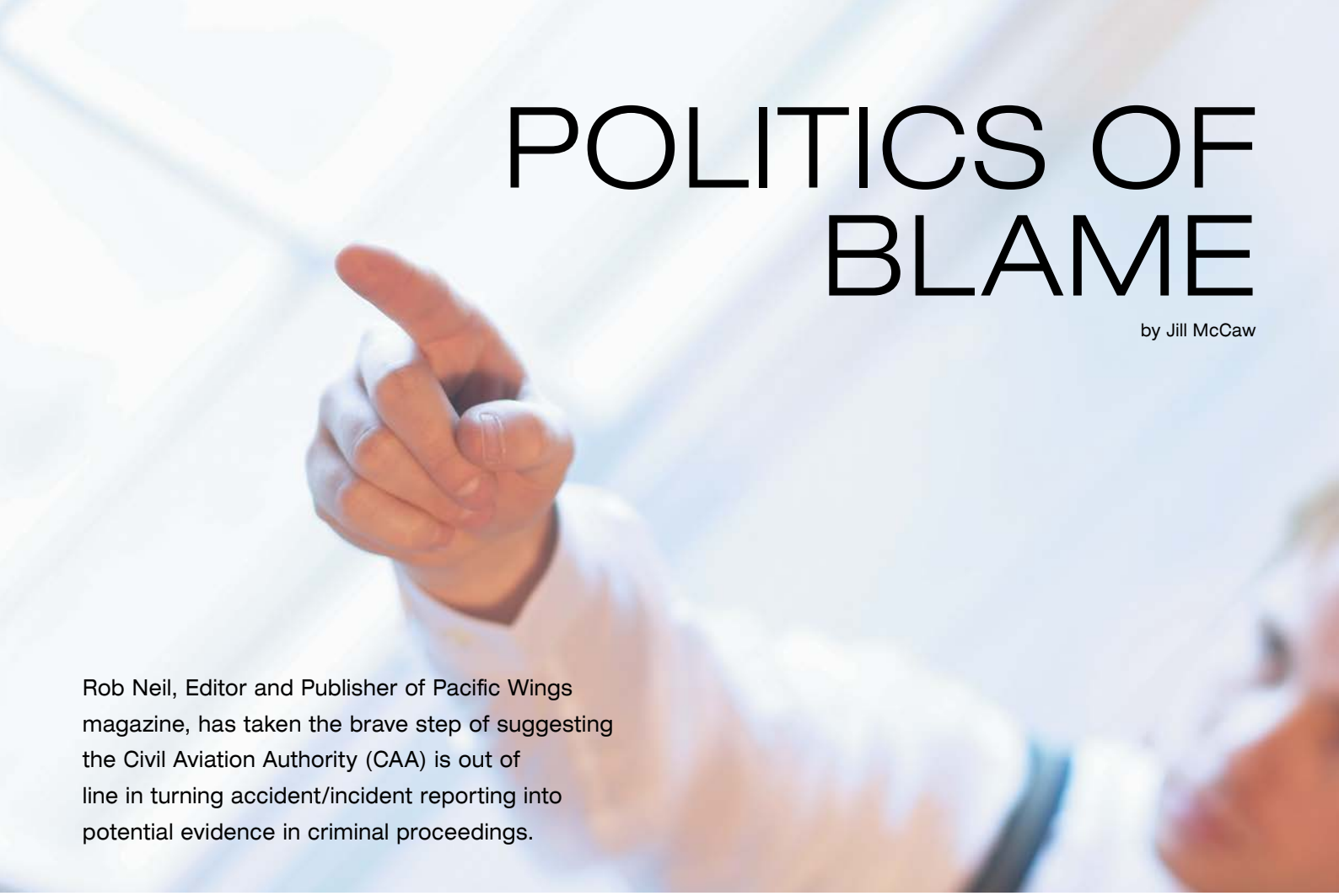
Pilot safety is further enhanced and all new Schempp-Hirth gliders are fitted as standard with shock absorbing upholstered cushions which were selected based on research by Tony Segal of the military research facilities at Farnborough England. This research proved the safety advantage of the foam filling type in heavy landings. In addition the cockpits have carbon-aramid fibre seat pan and under that the fuselage skin includes aramid fibre in this area. Aramid or Kevlar is an interesting material and it is hard to appreciate the level of protection that it provides in an accident, holding the broken structure together and protecting you against puncture injures.

At Sailplane Services we have seen first hand how effective this type of construction is and can confirm that this technology could save your limbs or your life. Straight E-glass or carbon structure is simply no match when it comes to protecting your most valuable asset.

Simplicity of design, benign handling and great performance: a ship that is truly suited to pilots of all levels and our New Zealand conditions.

POLITICS OF BLAME

by Jill McCaw



Rob Neil, Editor and Publisher of Pacific Wings magazine, has taken the brave step of suggesting the Civil Aviation Authority (CAA) is out of line in turning accident/incident reporting into potential evidence in criminal proceedings.

Glider pilots are every bit as much at risk as general aviation pilots of being bitten by this rather disturbing trend and as such need to be aware of the potential for problems when questioned about accidents by CAA investigators. In his August issue editorial Neil says that his intention in publishing a story, 'The Right to Remain Silent,' by Leigh Neil on the prosecution brought against the pilot of a Devon that crashed at Ohakea in 2006 was not intended to be seen as "CAA-bashing" (sic) but an attempt to "highlight issues that have the potential to destroy the safety culture..." of New Zealand aviation.

The crux of Rob Neil's argument is that in New Zealand, for the sake of safety we expect pilots (and engineers, and all those involved in an aircraft mishap) to explain to investigators what they did or didn't do in an attempt to stop similar events occurring again. With the benefit of armchair hindsight, he says, it can always be seen that most aviation accidents **could** have been avoided. And the problem comes when people start looking for someone to blame.

Safety is the number one priority for all good pilots, says Leigh Neil in the introduction to his article. What happens, he asks, when the supposed quest for safety impinges on a pilot's normally accepted rights and privileges?

If you were formally cautioned and knew that what you said might send you to court, would you be prepared to admit to errors? You wouldn't and this of course would mean that the truth behind accidents might not come out. This is the point Neil is trying to make. The pilot in Leigh Neil's article was charged and eventually acquitted in a jury trial following the use of statements he had made during the CAA accident investigation.

In his editorial Rob Neil says: "In our civilised society, as soon as an investigating (and potential prosecuting) authority forms an intent to prosecute, then the individual or individuals being investigated **must** be cautioned and given the opportunity for legal representation. There is any amount of case law and precedent to rule any incriminating statement obtained by police in the absence of a caution as inadmissible in evidence, so why should it be any different for the CAA when investigating aviation professionals?"

He is not advocating exemption of prosecution for aviation incidents, but for a clear process and policy on the handling of potentially incriminating information resulting from accident investigation.

Rob Neil, a former police officer, describes court processes as heart-breaking and soul-destroying and says that once legal procedures have been instigated the 'full facts' become irrelevant to the 'whole truth'. Anything not immediately relevant to the prosecution or outside the rules of evidence is ignored.

The question he says is: in an industry where – almost without exception – its participants are utterly committed to safety and professional conduct, where does the organisation charged with its oversight draw the line in deciding which matters are worthy of blame-free investigation, and which deserve to be prosecuted?

He also says we need to realise just how lucky we are in New Zealand that we are so well served, generally, by our CAA.

THE CAA WILL SOON PUBLISH ITS POLICY ON HOW SAFETY INFORMATION IS USED

In the interest of presenting a balanced argument SoaringNZ approached CAA for comment. The following report is from the Director Steve Douglas' weekly intranet newsletter to his staff, the text of an upcoming article in Vector and from a speech he gave to the 58th Annual Aviation Industry Association Conference. We have attempted to convey all the information given us but it would have been easier if CAA had simply sent us a statement for publication.

For further information please see Vector magazine or read Douglas' speech on the CAA website. http://www.caa.govt.nz/publicinfo/DCA_speech_AIA_08.htm

The simplest explanation of CAA's position is set out by Douglas in the intranet newsletter.

The CAA has a wide range of regulatory tools or intervention actions available to it for monitoring and enforcing safety in the civil aviation system. The tools range from raising findings during routine audits of participants, where a period of time is allowed for voluntary compliance to correct a Rule breach or deficiency, to more serious interventions such as suspensions of certificates or licences or imposition of conditions. Such actions are taken when the Director has reasonable grounds to believe that an unsafe condition exists, and a suspension or other 'administrative action' is necessary to mitigate or remove an unacceptable risk in the civil aviation system. The basis for such action on the evidence available is on the balance of probabilities, a relatively low standard or threshold that is consistent with the need to intervene quickly to protect safety. On occasions it may be necessary to suspend a certificate first, and investigate later, depending on the urgency and severity of the risk present, and the legislation provides for this.

Law enforcement actions, which include summary prosecutions, infringement fines, and warning letters, may be considered following an investigation which discloses an offence and where it is determined to be in the public interest to take enforcement action. Enforcement actions are taken to deter further or repeated non compliance with the requirements and to maintain respect for the legislation and Rules that provide for an acceptable level of safety in our system. The laws of evidence apply to the gathering of evidence for an enforcement investigation. The standard of proof required for a conviction is 'beyond a reasonable doubt'. This is a high threshold, consistent with the more serious consequences for a person convicted for an offence.

In his speech Douglas refers to the trial covered by Leigh Neil's article. **The CAA, he says, took a prosecution case against the pilot because it believed that the pilot's actions or judgements, or lack of these, led directly to the accident and that as a result of these actions unnecessary endangerment was caused to the persons on board the aircraft and to people and property on the ground. The CAA accepts the jury's decision. The CAA believes there was a case to answer and the jury's verdict does not change that.**

The case was an example of the limited circumstances under which safety information can be passed to Law Enforcement for consideration of action under that process. That required application of the 'Non prosecution' test in Civil Aviation Rules 12.63, which requires that safety information submitted by a person under Part 12 not be used for prosecution action unless the information reveals an act or omission that caused unnecessary danger to any other person or to any property. This threshold or guidance on the use of Part 12 information is the same threshold that has always applied.

Douglas emphasizes that decisions on enforcement actions are always carefully considered and CAA policy requires that the circumstances in each case are weighed against the public interest obligation in the Act. Operating group staff are involved in assessing the evidence and preparing recommendations – both for action to be taken and for action not to be taken.

The following is stated in all the information. **The two Units (Safety Investigation, and Law Enforcement) have not been merged, as industry seem to believe, but since mid 2007 have been brought within one Group reporting to the same General Manager. They have co-existed in the same Group in previous structures of the CAA, so there is nothing new in this arrangement. The function and focus of the two Units are distinctly different and so are the processes under which they operate.**

The completed CAA policy on the Collection and Use of Safety Information will be published on the CAA website.

Elisabeth Rietveld

2008 Lucy Wills
scholarship recipient

SOARING, FLYING LIKE A BIRD – A HIGH LIKE NO OTHER

Ahhhh, warm sunshine, a gentle breeze, birds chirping, a glider overhead, tranquility flowing through the air. Lanky trees and bushes lead to the terminal entrance and to 'Kahu Cafe' the social centre of the airfield.

Beyond lies the runway surrounded by fields and paddocks, overlooked by spectacular mountains. This is Omarama, forty minutes south of Mount Cook, the gliding capital of New Zealand.

As I walk over to the terminal a glider floats down, landing with charm and elegance. In the terminal I see a detailed weather briefing taking place. I quietly acknowledge familiar faces and go to stand with Gavin Wills, Youthglide Omarama organiser and owner of Glide Omarama. For anyone wanting to know about flying or the airfield all you have to do is ask. Over the summer months Omarama is home to many expert instructors, men and women, from all walks of life, all here to help people like me experience the world of flight. After all the hellos and organising I am keen to get straight into it and fly.

Thankfully there are cool rivers nearby as Omarama summers can be scorching hot. The dry stalky grass crunches and breaks underfoot as we head down the airfield. On the side of the runway wait a number of gliders side by side and the tow plane. Third glider down I see is 'November Echo' one of Youth Glide Omarama's basic trainers, a good old two seated Grob 103. We move its long albatross like wings and elegant glossy white body onto the runway and prep it for flight.

The tow plane roars to life and taxis out to join us. The power suddenly hits me, can I really do this? The rope is attached and the tow plane begins to take up slack. The energy builds up within and under the watchful and steady hand of my pilot I take control of the glider.

"Delta November Sierra, all out, all out." With one radio call we are off. The trees pass by me and the grass turns to a blur of green and brown. We pass the terminal, over the motorway and disappear over the trees. Flying in formation with the tow plane we climb and gain height.

In no time at all the altimeter reaches three and a half thousand feet, over two thousand feet above the airfield. Gulp. It's time. I reach out to the yellow handle and we release from the tug. As I gently pull up to the right I watch as the tow plane descends to the left – a small toy dropping away in the distance.

"Thanks Ash, we're clear."

Then there is silence but for a murmur of wind outside the glider. It doesn't matter how many times I've flown before, all I can whisper is, 'Wow!' Silently floating free in the sunshine we fly with no strings attached, away from the dramas of life. Free from the chains of gravity. Relief flows through me and a smile breaks out along my face as I turn towards the mountains. This is definitely getting away from it all.

We gain height by catching rising air sweeping up the hillsides. With only thousands of feet of thin air between us and the ground we fly detached and silent. The scenery is great – reminds me of postcards you see in shops, but here it is real. This beauty, this power, this freedom to dance and soar in all directions of the blue skies is paradise. Omarama skies are made from the Southern Alps of New Zealand, creating extraordinary wave systems and lively thermals. Sitting afloat in the peaceful sky I feel relaxed away from all the worries of life. Adventuring the endless blue skies, I enjoy and cherish every moment. It is almost like a doorway into another realm, wandering on the hidden currents of the sky. I'm free.

In this aircraft, no wider than an armchair, I look around me. My hands gently relaxed over the controls guide the glider closely around the curves of the hillsides. Behind me to either side are the long wings. With the knowledge and skill of flight we keep afloat with the currents of air. In the distance a glider catches my eye. I watch it circling, riding a thermal, gaining height little by little. Soon he will discover wave, the 'ultimate gliding experience'. Gaining height, flying at high speeds in silence and peace, floating in mid air, it's breath-taking and spiritual like nothing I have felt before. It's like surfing on silk. If you've ever been privileged to soar through the Omarama skies you have flown in one of the world's best soaring conditions, without a doubt over the most spectacular and impressive mountains. Savouring the moment I breathe in deeply, storing this feeling within. It's feelings like this that get you through the tough times.

Leisurely gliding back I catch sight of the airfield and the tow plane, parked as it was before we left. I set up my landing and begin to descend. Nerves ripple through me. In a plane with no engine you have one chance and one chance only, there is no turning back. "Omarama traffic, November Echo, downwind right hand, for runway two seven, Omarama." I conclude my checks and turn onto finals. Descending rapidly, washing off height we fly towards the ground. Adrenalin pumps through me. Heading straight for the ground, watching it rapidly get closer and closer, I feel the power and speed behind me. I hold my breath. Touchdown! The solidness of reality. I hear the landing more than I feel it – the rustle of grass beneath the undercarriage and the long wings rattling as we roll down the airfield. Gradually we slow down, stopping balanced until the left wing drops to the ground.

Lying back relaxed in the glider with the canopy up, a fresh breeze brushes over my face and I think of the first pioneers who once dreamed of flight. With determination and understanding they created reality out of these dreams, now people from all over the world take to the skies to share this passion and love for gliding.

A hawk glides over the airfield catching my attention. It flies peacefully with its wings stretched out, carving delicate circles. Rediscovering the sky, it climbs the individual staircase of air, thermals, the secret of flight. I see in this hawk an expression of my own spirit, wild and free we take to the heavens, soaring the limitless Omarama skies.

*Thank You to Glide Omarama and all the instructors and tow pilots, for the help and time you have put into Youth Glide – the young pilots of tomorrow.

Soaring NZ

Ray Lynskey in his Nimbus XL shows his stuff at an airshow at Omaka

Photo **Gavin Conroy** http://capphotography.fotopic.net/

SOARING OVER MARL

Marlborough picks up the baton in our flight through the country. Mike Dekker tells us about flying out of Omaka.

Mike Dekker started gliding with the Wigram Aviation Sports Club in 1974. He gave up gliding for 10 years to raise a family but took it up again at Blenheim in 1998. Mike is the club CFI and vice president and is a new member of the GNZ executive.

As well as the famous and beautiful Marlborough Sounds, Marlborough also possesses large areas of inland mountains and valleys that provide some of the best gliding in New Zealand, much to the delight of those of us in the Marlborough Gliding Club. We operate out of Omaka airfield which is nestled in the south-western corner of Blenheim. Some very convenient ridges that catch the nor'westers and hot sun are only a short aerotow away.

Our local flying area includes the nearby Blairich and Black Birch peaks at 5,500 ft and the mountain ranges that extend south-west to a peak called Fernie Gair thirty-five km away. These provide plenty of safe challenges for beginners or for those who just like flying locally. They provide all the thrills and views of mountain flying but without most of the associated risks.

The more adventurous of us explore the unlandable Spray and Waihopai River systems further west out to about 60 km. On good days, the Bounds Range on the western skyline tops out at 6955 ft providing access to the Nelson Lakes 100 km from Omaka.

We occasionally fly north or north-west over the Marlborough Sounds and Richmond Ranges, but cloud bases there seldom exceed 5000 ft and we quickly reach the limit of safe landout areas

Photo Gavin Conroy

BOROUGH

by Mike Dekker

Typical summer conditions at Omaka.

Looking southwest at Blairich (centre right), Black Birch (centre left), with Tapuenuku on the skyline at left, and the Bounds Range on the skyline at far right, as captured by Ross Menzies at 4500 ft and 10 km south of Blenheim.

(too much seawater). Airspace restrictions in that direction also cramp our style. Because conditions almost always look better elsewhere, we seldom venture over our scenic water wonderland.

Just 15 km south over the mountains is the Awatere Valley which provides tremendous norwest wave. Unfortunately, these mountains are usually shrouded in cloud on good wave days so it is awkward to get over the top and into the Awatere. If we do get there direct from Omaka, it will usually be at low level and so if we don't contact the wave very quickly, it can get awfully stressful – the downwind ridges seem a long way away at that altitude. The last time I tried this, I contacted the wave just as I lowered the gear for an outlanding. Coming into the Awatere at high altitude from the south or west, on the other hand, makes getting into this wave real easy.

On the south side of the Awatere Valley and further upriver, the Inland Kaikoura Ranges rise to Mt Tapuae-o-Uenuku at 9465 ft and 55 km away. From on top of 'Tappy' it is an easy glide home; and even down to about 7000ft, it is usually easy to glide home around or through the mountain ranges that block the way. Climbing Tappy is one of our local 'Been there, done that' challenges, and a truly magnificent experience – but I admit that Mt Cook is better.

Eighty km further south and over the Clarence River, the Seaward Kaikoura Ranges rise to 8562 ft. The combination of deep blue Pacific Ocean, Kaikoura Peninsula, lush green pastures and clear blue skies makes an amazing view. It is usually easy to get home from here by following weak wave or thermal lines but if that does not look promising, the Inland Kaikoura Ranges provide a halfway point at which to catch a last climb.

To the west, between the Bounds Range and out towards the Spenser Mountains that run south of the Nelson Lakes to about 120 km from Omaka, is a labyrinth of unlandable high mountain valleys with ridges at 6000 ft, peaks up to 7500 ft and nowhere to land. It is a brave, stupid, or very confident person who flies here below the ridge tops, although some of us sometimes get ourselves into (and out of) this predicament. Fortunately, summer thermals and weak wave do enable us to explore this area safely. I have thermalled up to 13000 ft here, although 9000 ft would be more typical. The rugged mountain tops provide great views, especially in spring when blue skies, snowy peaks, colourful wild flowers, tortured rock and mountain tarns combine to make the sort of beautiful setting that only a glider pilot gets to enjoy.

Typical airfield scene at Omaka.

Most of our longer flights are to the area we call the Molesworth, which starts about 80 km southwest, just over the head of the Waihopai Valley, and extends to Hanmer Springs at 140 km. It is characterised by wide-open spaces with moderately high mountain ranges up to 6000 ft. The valley floor can be over 3000 ft AMSL, which means that 6000 ft is about as low as you want to get. We usually fly in here when the westerly winds blow or when thermal cloud bases are above 7000 ft; fortunately, in summer this happens quite often. Unfortunately, the area is closed to the public for most of the year and cellphones don't work there so a landout is not a welcome prospect.

On all except wave days, getting home again from the Molesworth requires a good knowledge of the local valleys as we make our way north above the ridges, before dropping over the saddles that take us back into the Waihopai and Spray River Valleys. On wave days, there is often a large wave system at the head of the Waihopai Valley, this allows us to fly north to the edge of the Nelson and Wellington airspace at high altitude (usually just close enough to make ATC ask us our intentions), then do a hard right turn downwind, and spiral down with full airbrake 40 km further east to sneak home under controlled airspace; a fun way to finish a good day.

South of Hanmer Springs the Waiau River provides one of those 'what next?' waypoints. There is a lot of satisfaction in having made it this far and there is a strong temptation to turn around and get home before the lift dies. For those who want to do a 300 km out and return, the bridge over the Waiau just south of Hanmer is a possible turnpoint, although the need to glide out and back over the Hanmer Plains tends to be a disincentive. Alternatively, the area further west around the Lewis Pass enables us to stay in the mountains, but it generates an uncomfortable feeling of being too far from home with too many mountains to cross.

Frank Saxton of the Nelson Gliding Club did his 300 km from Omaka to just south of the Lewis Pass. Carl Jackson did his by flying to Hanmer, with a last turnpoint just north of Omaka and relied on cooperation from ATC to get across the Blenheim Airport approach routes.

And yes, we can go much further. Our 500 km turnpoint is near Lake Coleridge, inland from the Canterbury Gliding Club's base at Hororata. The area just to the north of Coleridge has great mountain ranges for thermals – the Torlesse and Puketeraki. However, the terrain south of Hanmer Springs that we have to fly over to get there (and back) looks uninviting unless we are in the wave at a great height. I have had to get back from Lake Coleridge at low to medium level on a number of failed 1000 km attempts and not landed out yet; but the experience has usually been unpleasant.

1000 km? I am the only one pursuing this at the moment. I have decided not to try the Wanaka and return route just yet – it all sounds too "big" – perhaps later. Chris Richards has flown from the Awatere to Omarama and back. I have got close to completing a 1000 km yo-yo between Lake Coleridge and Marlborough. Unfortunately, some dumb decisions and failing light made it necessary to land at Culverden, south of Hanmer Springs after 840 km. However, the experience did teach me that on the right day it will be a "milk run". (Oh why can I never pick the right day?)

A few NZ glider pilots, including Ray Lynskey, have crossed Cook Strait. Ray thinks it is probably impractical under the current airspace arrangements. On some days it does look real easy but "oh the cost of that retrieve".

Yes – Marlborough is a great place to soar, with endless opportunities to explore new countryside. I love it.

AWARDS OFFICER

Edouard Devenoges is now the GNZ Awards Officer.
Ed's contact address is gnzawards@xtra.co.nz
40 Eversham Road, Mt Maunganui 3116.

GNZ AWARDS AUGUST — SEPTEMBER 2008

QGP

2215	Vivienne Bryner	Central Otago
3029	Sefton Crandall	Piako
3030	Warwick Walbran	Wellington
3031	Adrian Blum	Tauranga
3032	Mats Henrikson	Canterbury

SILVER C DURATION

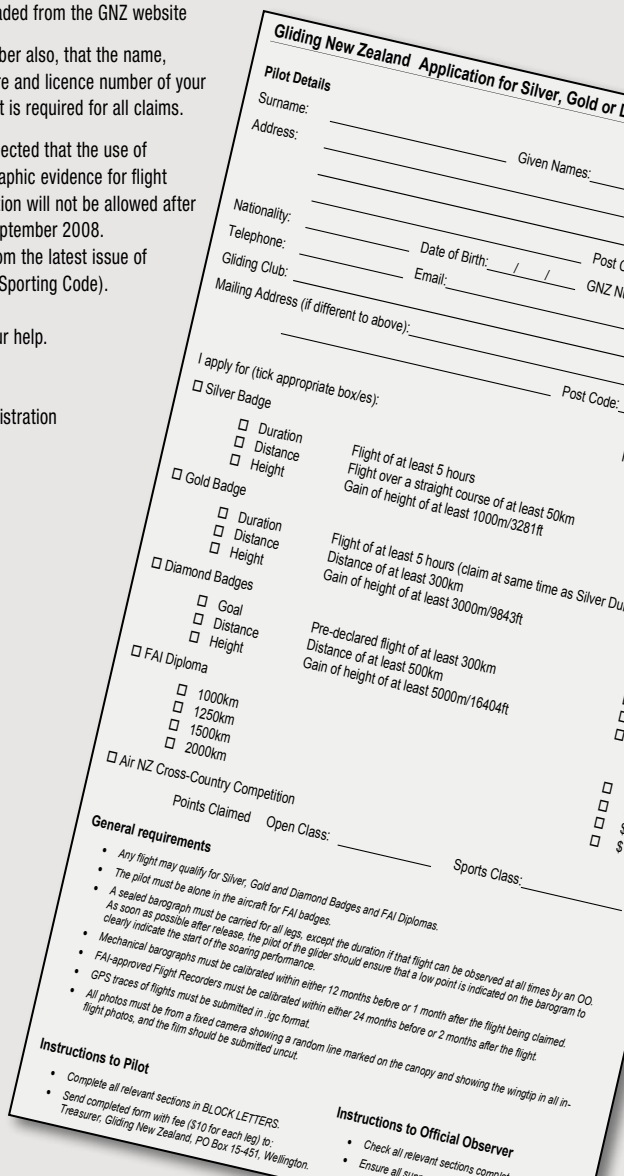
Clinton Steele	Norfolk	21/08/2008 Blanik

A FEW POINTS TO MAKE LIFE EASIER:

- Please send all the paperwork, together with the appropriate fee, to Bruce Cunningham, GNZ Treasurer, Gliding New Zealand, PO Box 15-451, Wellington 6243
- Please do not send "SeeYou" documents of your flight, but send the electronic flight log (.igc file) to me. E-mail attachment would be fine. gnzawards@xtra.co.nz
- Please write your e-mail address clearly on the application form, as e-mail is my preferred way of communication.
- Please do include your GNZ number on your application form.
- Application forms can be downloaded from the GNZ website
- Remember also, that the name, signature and licence number of your tow pilot is required for all claims.
- It is expected that the use of photographic evidence for flight verification will not be allowed after 30th September 2008. (This from the latest issue of the FAI Sporting Code).

Thanks for your help.

Edouard
Awards Administration



Gliding New Zealand Application for Silver, Gold or

Pilot Details
Surname:
Address:
Given Names:
Nationality:
Telephone:
Date of Birth: / /
Gliding Club:
Email:
Mailing Address (if different to above):
Post Code:

I apply for (tick appropriate box/es):

☐ Silver Badge
☐ Duration ☐ Distance ☐ Height
Flight of at least 5 hours
Flight over a straight course of at least 50km
Gain of height of at least 1000m/3281ft

☐ Gold Badge
☐ Duration ☐ Distance ☐ Height
Flight of at least 5 hours (claim at same time as Silver Du
Distance of at least 300km
Gain of height of at least 3000m/9843ft

☐ Diamond Badges
☐ Goal ☐ Distance ☐ Height
Pre-declared flight of at least 300km
Distance of at least 500km
Gain of height of at least 5000m/16404ft

☐ FAI Diploma
☐ 1000km ☐ 1250km ☐ 1500km ☐ 2000km

☐ Air NZ Cross-Country Competition
Points Claimed Open Class: Sports Class:

General requirements
- Any flight may qualify for Silver, Gold and Diamond Badges and FAI Diplomas.
- The pilot must be alone in the aircraft for FAI badges.
- A sealed barograph must be carried for all legs, except the duration if that flight can be observed at all times by an OO. As soon as possible after release, the pilot of the glider should ensure that a low point is indicated on the barogram to clearly indicate the start of the soaring performance.
- Mechanical barographs must be calibrated within either 12 months before or 1 month after the flight being claimed.
- FAI-approved Flight Recorders must be calibrated within either 24 months before or 2 months after the flight.
- GPS traces of flights must be submitted in .igc format.
- All photos must be from a fixed camera showing a random line marked on the canopy and showing the wingtip in all in-flight photos, and the film should be submitted uncut.

Instructions to Pilot
- Complete all relevant sections in BLOCK LETTERS.
- Send completed form with fee ($10 for each leg) to: Treasurer, Gliding New Zealand, PO Box 15-451, Wellington.

Instructions to Official Observer
- Check all relevant sections comp
- Ensure all

TECH-TALK
ROGER HARRIS

Roger Harris has been involved in the maintenance and repair of gliders for more than forty six years. He is a current Gliding New Zealand Approved glider maintenance engineer, holds GNZ Class four Approval and a GNZ IA-G Certificate (Inspection Authorisation-Glider). He currently conducts the Annual Inspection and Annual Review of Airworthiness on twenty-three gliders of all construction types although he is working on reducing this number now that he has joined the ranks of Superannuitants.

GLIDER BATTERIES

Up until now in these columns we have been looking at paper work. Now let's look at something a little heavier. Is there anything heavier than paperwork? Yup, Glider batteries.

First a general comment. Under Part 91, operators are required to ensure that their aircraft is maintained in an airworthy condition. Part 43 contains requirements for maintenance that must be complied with to assure this airworthiness.

Part 43 includes the requirements that approved parts be used and that an aircraft remains in its original or properly modified condition. This, believe it or not, includes the batteries.

CAA Advisory Circular 43-12, allows Non Aeronautical lead acid batteries to be used in gliders, under certain limitations.

Only new batteries should be used. Rebuilt, re-plated, or reconditioned batteries will not be considered acceptable. Batteries should comply with the standards noted in AC 43-12. All batteries now used in gliders are of the lead acid paste or gel cell type. Batteries in the YUASA NP series are acceptable.

I had been asked to write something on glider batteries, but before I did, I found this recent article from Jim Hammerton, of the BGA. Thanks Jim, saves me doing it.

There are now several new types of battery on the market, Nickel Metal Hydride (NiMH), Lithium polymer (Li-Po), or Lithium Ion (Li-ion).

It may be suggested that these are alternatives to lead acid (gel) batteries used in gliders. It should be noted that these types of battery are not approved for general use in gliders.

There are several issues to consider.

Unless they are approved in the original type design, and mentioned in the Type Certificate, or as an Approved Modification, fitting them will invalidate your Airworthiness Certificate.

Some types can become unstable when over charged or over discharged and catch fire.

Special charging equipment is needed.

They cannot be mixed in the same charging area as lead acid, as this could lead to violent chemical reactions and fire or explosion.

Small self contained cells contained within equipment such as PDA's, are perfectly satisfactory provided they are not charged with lead acid batteries, and any special disposal requirements are observed.

This equipment requires special chargers and internal protection.

So, in New Zealand, use only new lead acid Gel cell batteries. Always buy and use the very best quality you can get. YUASA type is acceptable. (AC 43-12.) Always mark leads with polarity. Always fit inline fuses close to the battery terminals. Never use second hand batteries. (ie. Expired alarm batteries.)

And still on batteries, there has been considerable discussion recently on Electronic Delivery Systems (EDS), and their battery life.

The following is from Matthew Dimock of Canterbury.

I just want to make a clarification in regards to what happens to Oxygen EDS units when the battery voltage gets too low. It has been believed locally that the unit would supply a constant low pressure oxygen flow when the battery's voltage dropped too low to operate the unit. (ie. That it would fail safe.)

I wanted to check this as I wasn't convinced it was correct. So, with the unit operating, I pulled a battery out of the unit, and it stopped flowing oxygen.

I have now looked up the specs for the dual unit from the Mountain High web site, and this is its correct operation. ie. Low or no voltage equals NO oxygen.

Also please note, the specs for the voltage cut offs for the dual units low battery warning signal times are for a battery at a temperature of 25° C, hence when flying high in the cold the times will be much less than the 12 and 5 hours specified.

I presume the same principle will apply for the single outlet units. The voltages (9 volt battery) and possibly warning times will be different.

An Advisory Circular is planned on oxygen use, and EDS units, for flying in New Zealand is on the way. However, until this is released, the following is strongly recommended.

Never use a standard (non economiser) cannula on a constant flow system. Never fly above Flight Level (F/L) 180 using only a cannula. Never fly above F/L 250 when using EDS alone. (Even with a proper mask.)

Clear plastic masks (as supplied with EDS units) should not be used above F/L 200.

Fit a new battery on the ground before every flight, you cannot hold your breath long enough to change batteries at altitude.

GLIDING NEW ZEALAND NEWS

MAX STEVENS GNZ EXECUTIVE OFFICER

This column is intended to give readers an ongoing insight into the activities of the GNZ Executive and its Committees. Rather than a detailed report on matters currently under consideration, here are some recent items of significance.

NEW WEB SITE George Wills of Media Suite has done a magnificent job on our new web site, now live for all to share. There are some great new features, such as the ability for you to securely update your membership details yourself and post classified ads directly. Clubs can add their own news and update their contacts etc.

Much of the available information has been imported from our old site and over the coming months we will be updating it as necessary. Meanwhile, George would love to have more photographs from clubs – you can send these to him at gnz@mediasuite.co.nz

MOAP AMENDMENT The GNZ Manual of Approved Procedures has been amended with effect 23 August 2008. In addition to the routine updates to personnel, CAA rule references etc., the airworthiness section has been extensively revised; there are changes to the selection process for international representatives; C cat instructor privileges are clarified; provision is made to accept microlight and commercial driver medicals; and medical validity periods for instructor and passenger ratings have been extended to align with CAR 67 (now 5 years if you're under 40 and 2 years if older).

Members will also be pleased to learn that the previous user-unfriendly page numbering system has gone and you can now navigate your way around the MOAP by ordinary page numbers.

This new version of the MOAP can be downloaded from the GNZ website, along with a detailed list of the changes. A hard copy has been mailed to every club president and CFI, plus GNZ committee members and officers. Further hard copies can be ordered from John Roake.

MAINTENANCE OF 0800 GLIDING If you need to change your club's terminating contact number(s) for the 0800 GLIDING freephone, please contact me.

AIRSPACE POLICY At a meeting with CAA senior managers in late August, the GNZ Executive told CAA that we had great difficulty in understanding why CAA had acceded to the Airways request for much greater airspace in the Bay Sector. No rational case for it had been advanced by Airways, and GNZ's strong objections had fallen on deaf ears. Airspace is a national resource and it appears that a lack of high level policy regarding its designation is part of the problem. Other national resources are well covered by government policy, but airspace is not.

The Director acknowledged that there is a lack of strategic direction regarding airspace and the CAA has taken steps to address this, with the acquisition of specific new government funding for the establishment of an airspace and environmental unit, with one of its objectives being to develop an Air Traffic Management Plan for New Zealand. Development of the plan will involve extensive consultation with stakeholders – so watch this space.

PETITIONS FOR CAA RULE CHANGES At the aforementioned meeting with CAA, we stirred a few other issues that have been bubbling away behind the scenes mostly unbeknown to members. One of these is the Commercial Glider Pilot Licence [CPL(G)], where we are pushing CAA to honour a long standing formal agreement to accept the FAI Gold C as crediting the CPL(G) flight test in addition to the written exam credits already allowed. But a recent change to the International Civil Aviation Organisation [ICAO] standard has given us hope that we might see the abolition of both the CPL(G) and Private Glider Pilot Licence [PPL(G)] in favour of just a Glider Pilot Licence [GPL]. The ICAO GPL flying experience requirements are quite basic, and the licence requires only a Class 2 medical yet allows pilots to fly gliders commercially. In the light of this we have formally petitioned CAA to abolish the CPL(G) and to re-designate the PPL(G) as simply GPL with privileges extended to allow the holder to act as pilot-in-command of a glider for hire and reward.

In addition to all that, we are ever hopeful of a rule change to allow our gliding instructors to be remunerated – CAA is still promising this, as it has for about seven years now, so we are upping the pressure for action.

Another formal petition we have made to CAA relates to glider towing with the new Recreational Pilot Licence [RPL]. We originally supported the RPL proposals except for the bit about RPL holders not being allowed to tow gliders. We said it was not appropriate to limit the RPL privileges to exclude glider towing because the consequences of medical incapacitation would be less significant than in situations where an RPL holder is carrying a passenger, which is allowed. There is also an anomaly in that a microlight pilot certificate holder can qualify for glider towing with a suitable microlight. CAA acknowledged the validity of our position and invited us to formally petition for a rule change, which we have since done. Again, watch this space!

DOC CONSERVATION PARKS While on matters bureaucratic, I should mention that recent proposals by the Department of Conservation to establish conservation parks have given the Executive cause for concern about access for glider retrieves from park outlandings, both by vehicle and aerotow. The two conservation park proposals that sparked our concern are 'Hawea', which includes part of the Hunter River flats; and 'Oteake', which includes some landable terrain near Falls Dam at the foot of the Hawkdun Range. There are other proposals and some parks already exist. Fortunately, park terrain by its very nature is generally unsuitable for out-landing so we don't envisage a huge problem. Nevertheless, we have written to DOC in general terms, seeking to ensure that retrieve access is not inhibited.

LAUNCH ACTIVITY DOWN A BIT With only 11,687 launches from January to June this year, we are down 18% on the same period last year. However, the first half last year was the best we've had for a long time, so this may not be a fair comparison. This year's first half is actually only 3% down on the average for the previous five years. Roll on spring and a better second half year!

Last minute adjustments by Ross

WORLD GLIDING CHAMPIONSHIPS
LÜSSE 2008

By Rae Drake

After great expectations and some bad luck Ross Drake and his support crew led by his parents Rae and Bruce Drake made it to the 15m World Championships at Lüsse, near Berlin in Germany. It wasn't to be Ross's contest. Rae Drake tells the story.

What a difficult competition. Ask most of the competitors and they will say that the weather was awful – most of the time. The winners of the 15m, 18m, and Open classes were worthy of the title 'World Champion' as each of them won by a good margin after managing to conquer the challenging conditions. The rest of the pilots struggled to some degree on a daily basis.

After the drama of having no glider to fly two weeks out from the champs, Ross eventually arrived in Lüsse with a Ventus 2b. He managed one good flight and ascertained that all instruments and systems were working. Then the game was on. In typical fashion the weather decided to pack a sad, hurling winds of 25 knots, gusting 35 knots, with broken Cu of 1-3 m/s being 'disturbed by strong wind and cloud fields'. This was pretty testing flying for the teams of two or three pilots, let alone one lone Kiwi. The first three days followed the same pattern. Our hopes and expectations plummeted.

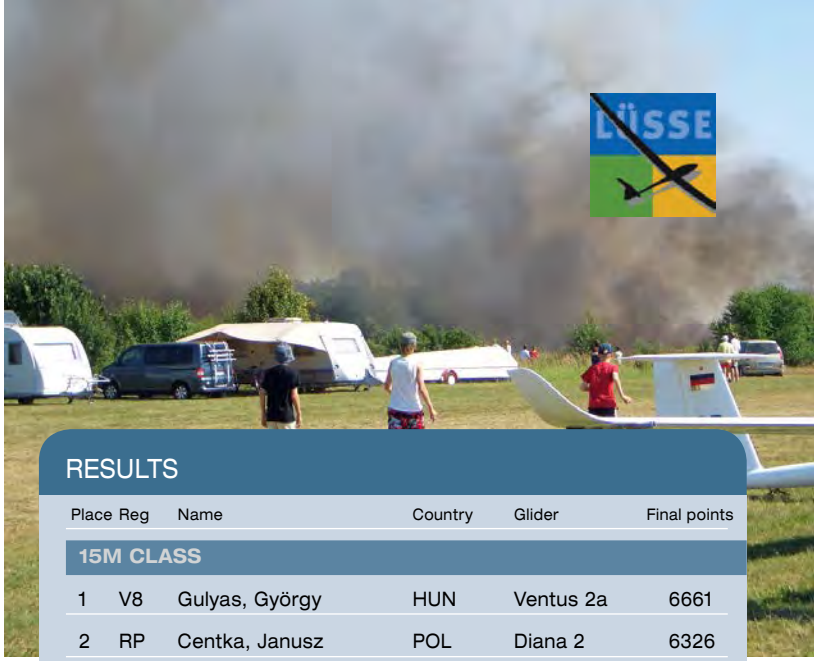
In one respect we were lucky to fly at all. Running next to the airfield was a large paddock of wheat which was due to be harvested. It took three attempts and two fires for the harvest to be completed. The first fire was of major concern as it jumped the access road, making evacuation of gliders and people a real possibility. But the second time the wind was blowing away from the aerodrome and the call went out, "Where are the spuds?"

At Lüsse there was a group of team containers for pilots and captains to use as a base for briefings and meetings. They cost money to rent and only the affluent larger teams had one. Ross was asked if the New Zealand team had a container. His answer was, "No, just a rubbish bin!" We didn't need a container anyway as we had a superb holiday apartment on the outskirts of Belzig, 6 km away. It came complete with dishwasher, the use of a workshop and the ability to raise the radio antenna in the garden. First class crew facilities!

On Day 4 blue thermals were forecast to begin at 12.30 with a temperature of 28°. Expected first launch was 12.00 – "Into what?" one would have to ask. With launch taking 1 hour 45 minutes, and the pack mentality ruling to minimize mistakes, it was a dangerous time to be in the air with huge gaggles. The day did not live up to the 120 kph expectation and at 16.45 Ross called to say he still had 230 km to go from a 405 km day. The whole of the 15m class landed out, with 108 gliders landing out in total. There were some very good pilots having spectacularly poor flights in the difficult weather. The team captain received an SMS warning of thunderstorms, hail and wind gusts of 35 kts approaching. The following day was a rest day.

At the halfway mark we were really looking for some decent weather. The racing task on Day 5 was completed by Gulyas,

Bruce and Ross Drake march in the opening ceremony



RESULTS

Place	Reg	Name	Country	Glider	Final points
15M CLASS					
1	V8	Gulyas, György	HUN	Ventus 2a	6661
2	RP	Centka, Janusz	POL	Diana 2	6326
3	K1	Leeuwenburgh, Mark	NLD	Ventus 2a	6227
39	Z1	Drake, Ross	NZL	Ventus 2ct	4422
18M CLASS					
1	EW	Darroze, Olivier	FRA	ASG 29	6853
2	XTC	Termaat, Ronald	NLD	Ventus 2cxa	6755
3	PL	Staryszak, Karol	POL	ASG 29	6606
OPEN CLASS					
1	HM	Sommer, Michael	GER	ASW 22 BLE	7437
2	VB	Bode, Tassilo	GER	ASW 22 BLE	7345
3	ZX	Goudriaan, Laurens	RSA	ASW 22 BLE	7265

the Hungarian who eventually won the class, with 117 kph over 372 km. This was not the 130+ kph that people had been expecting of Lüsse. That evening there was the halfway party. Last year it was called the 'Hump Day' party. Somebody must have explained the baser connotations of this word to the organisers!

Launching the 134 gliders was still an issue. There were a number of Wilgas and two Robins endeavouring to launch the field in acceptable time, but 1 hour 30-45 minutes was too long. Under pressure from team captains and the stewards, it was decided to bring the release areas closer to the airfield. Wilgas may climb OK but they don't go forward very fast. Launch time was reduced to 1 hour 10 minutes on Day 6. Ross came home in ninth place after a three hour AAT which heartened both pilot and crew. There is potential lurking there somewhere!

> "The pilot was happy enough being fed beers by a very attractive Polish lady but the crew were getting testy."

With more on-again, off-again conditions we headed into the last day. The Open and 18m classes had tasks set to fly around Berlin. The 15m class was sent east with a turnpoint in Poland. As they set off our German friend, Holgi, said, "If Ross lands out in Poland, I'll kill him!" How to jinx a pilot. At 3.00 pm the phone went announcing that Ross had done just that. He was gutted. He hadn't got quite high enough to fly into the turnpoint and push back out to get safely re-established in the lift. The Ventus was not happy at lower levels and would not climb in scrappy thermals. So to Poland, 250 km away we went, only to discover that the road to the little village was not well signposted from Gubbin and it took four hours to find him. The pilot was happy enough being fed beers by a very attractive Polish lady but the crew were getting testy. They arrived home for late dinner at 10.45 pm. Ross discovered that he was the only one to land out that day and was last for the day. He shared that distinction in the contest with Steven Raimond (a European champion), Paul Crabb (a top Irish pilot), and Karl Striedieck from USA who was last on two days and second last on another. He was in good company! It was a memorable day for all the wrong reasons.

The final day was cancelled due 'no usable thermals' and prize-giving the next morning was accompanied by the sound of rain on the roof of the hangar.

LIFE AT THE WORLD GLIDING CHAMPIONSHIPS

Sue Wild

Soaring contests aren't all hard work

Deadline constraints last issue meant we could not get Sue Wild's story of the World Championships in Italy in time to publish. It shows another side of international contests, the romance of foreign places and the hard work of being on the team. Enjoy

If you had the opportunity to have three weeks in Europe, to see the great sights – the Eiffel Tower, the Colosseum and more – would you choose instead to stay in an old farmhouse in a small town and spend your days on an airfield? We did.

Why? Answer: to be at the World Gliding Championships. So what's the appeal?

In short, to join an exciting and friendly international crowd, to absorb Italy below the skin, to eat drink and laugh with great companions and to support our pilots.

The first rays of morning light up the ivy-covered walls of the ancient farmhouse and you can creep down the stone stairs taking care not to wake the sleeping pilots and wander out into the cool freshness. Stroll down country lanes among the sunflower and maize crops in the lush rolling foothills of the Appenine mountains. Use the international language of arm-waves and smiles to chat with lively locals as they tend their veggie patch or plod to the local shop. The energetic can hire a bike and ride out for a coffee in one of the picturesque villages that tumble down the mountain-sides – half a dozen of them in view of Rieti airfield.

Back for breakfast with the team in the big shady porch. You need to be at the airfield on polishing and wing-watering duties by 9.30, but it's still cool and the banter between teams and pilots is friendly and entertaining. Tow out via the weigh scales and all is ready before the day heats up. At briefing in the big hangar the contest management is tense with safety issues (6 gliders damaged by day 3, though only minor injuries) and queries over rules and policies. But as the comp goes along routines are set, there's room for humour and on the final day the contest directors, stewards and jury receive a huge standing ovation for their excellent work.

Lunch for Team NZ is a mouth-watering spread of crostini, bruschette, pommodore, salami and cheeses, selected by our team caterer, Teri Dickinson. Bill Walker listens and coaches as the boys pore over maps and plan their strategies.

Then comes the glamorous part of the day — the launch. A lineup of 105 sparkling birds, wings stretched in anticipation, each with pilot and care-givers clustered under a colourful brolly. The serious focus is on instruments, but there's still time for a goggle at a passing slender bikini-clad crew. The temperature rises towards 40 degrees. Tug engines rev and the launch commences. Once they're all airborne it's time for the March of the Penguins — crew straggling onto the airfield to locate and wind their tow-rope, dropped by the returning tow plane. We sit, squinting at the distant gaggles, waiting for the start calls. This is worry time. The International Committee decided that from 2008 on, the Standard Class World Competition will be held with the Club and World

classes. At this Rieti comp the launch sequence was PW5s, Club, Standard. The performance difference between a fully-watered Standard Class glider and the others made for extreme danger in prestart gaggles, especially when the sky offered only one or two useable thermals. A pilot must not climb through the core or cut inside others. Without exception the entrants agreed that while no single pilot was to blame, there were frequent near misses and the danger level was the worst they had ever encountered. The IGC will need to address this. Meanwhile the task-setter endeavored to separate classes by placing start points on opposite sides of the valley.

For the next three or four hours you should really read, shop and relax, but your thoughts are in the air with the pilots and you're glad but nervous when it's time to return to the airfield for the finishes. The air is cooling, the thermals dying as the gliders appear over the ridge, streaming water. All your fingers are crossed as you watch and listen for YOUR radio call. A mass landing can be a nerve-wracking spectacle, but the finishes radio operator was superb. You try to hold off on the "How was it?" until the glider is back at the tie-down. Then, as you wash off the bugs, you can absorb the day's action story, the highs and lows, the fast ridge-runs and the doldrum-downers. (Landout retrieves, by the way, are another story!) The results are popping up as you leave the airfield but there's no need to linger - now you can get them via a mobile phone while you sup a cool drink.

Needless to say, evenings are spent relaxing under the vines in a hillside restaurant. Italian food is, of course, great: at our favourite place just the antipasto is a feast. Many evenings are international – sharing French pasties, Finnish vodka, German beer, Austrian sausage, Swiss chocolate - and Kiwi fruit salad with great company – all speaking English – luckily!

No-flying days give you the chance for a drive into the Grand Sasso mountains to see the rock faces where our boys weave their way to the tops.

Some think it's tough work bending, lifting and polishing in 40 degrees, fretting over misbehaving equipment, unfair rules, shady airmanship; tough giving up that bus tour of great sights and hotel beds. But our advice is – if the opportunity comes your way to crew at a world comp – grab it!

And if it was in Rieti, Italy? Well, you can be sure of a café right on the airfield, smart competition offices, a sealed approach road, because all of those were constructed as we watched in the week prior to the opening ceremony! Reminded you of a film on fast-forward! The ready-lawn was rolled out round the office block just one hour prior to registration. You can count on the friendly lively Italians to organise with panache rather than military precision. The contest dinner was served by gold and white waiters, while a concert pianist played on candle-lit terraces, with 360 degree views over the lights of the Rieti valley, but until the last minute we understood that only pilots could attend. You can expect your pilots to be challenged by the unlandable tracts of the contest flying area – the contest director gave a special presentation on avoidance and solutions! You won't need to worry about towing a trailer into distant rural Italy on an after-dark retrieve because the magic car GPS will talk you to the precise landout spot. You will spend your holiday in a beautiful valley, with wonderful people, great food and wine and an exciting mission.

Team New Zealand

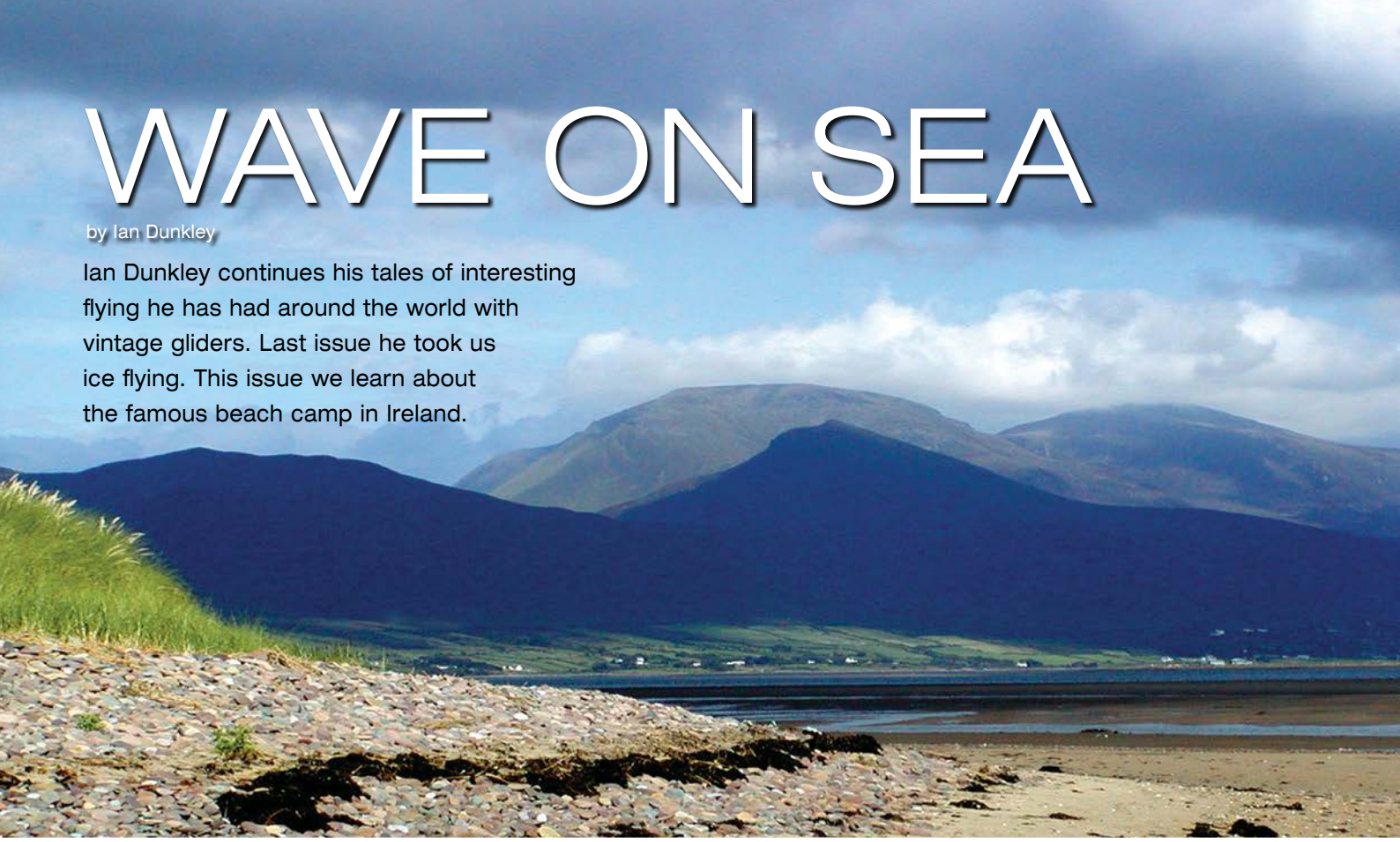
Discussing strategies with Bill Walker

The pilots at briefing

WAVE ON SEA

by Ian Dunkley

Ian Dunkley continues his tales of interesting flying he has had around the world with vintage gliders. Last issue he took us ice flying. This issue we learn about the famous beach camp in Ireland.



The Dingle Peninsula, in County Kerry on the West Coast of Ireland, is home of the 'Rose of Tralee', and ex-home of 'The Wild Colonial Boy'. It is one of the scenic highlights of this beautiful country. For many years now the 'Dingle' has been visited in the autumn by members of the Dublin and Ulster Gliding Clubs for a 'vintage-type' flying event that provides exactly the same fun as it did when the first glider had its cockpit filled with sand. (This being the origin of the 'Kerry Clap', not an unfortunate disease but the practice of knocking sand off shoes when entering the cockpit.)

Beach flying has one major thing in common with frozen lakes, and it's not water. The airfield is apt to vanish. In the case of beaches this occurs twice per day so one's sense of timing has to be a little more acute, tide tables being more appropriate than calendars or an awareness of approaching spring. A further similarity is that the airfield is also likely to be invaded by fishermen regrettably more mobile than those poor souls who sit all day over long drop holes drilled in the ice.

Fishermen are not, however, the only problem. Just as there are rules for airfields there are rules for beaches, the first one being that although they may be shown on air maps as airfields, as in Kerry, tourists and others do not usually check on a 'half million' chart before going to paddle, or empty their dog. The second is that the afore-mentioned tourists seem oblivious to the dangers of one and a half ton of car hurtling towards them with 2,000 feet of parafill, which could descend round their ears, followed shortly by 15 m of glider, either on the way up or down. To misquote the Duke of Wellington, "I don't know what it does to the enemy but it scares the hell out of me". It is therefore essential to follow a third rule: keep good relations with the public, i.e. don't kill them.

> "*Release now* means the car is about to either hit the rocks, a tourist or you are about to enter US airspace"

As 80% of the public obey the first law of tourism "Never walk more than half a kilometre from your means of transport", setting up the launch point more than half a kilometre from the car park eliminates, a poor choice of word perhaps, 80% of the problem. Thus leaving 20% to be dealt with by club members at the launch point to be asked politely, either to wait until after the launch, or if proceeding, to do so well to one side or the other. This generally still leaves 19%, because members are chatting, making coffee or eating the food, hiding in a trailer out of the wind, hiding behind one to take a leak, or any of the things pilots do when it's not their turn to fly. The end result can be a lot of people on a runway that is changing width, if not length, all the time. That reminds me of the most essential rule: don't try to fly at the height of the tourist season, it won't work!

This problem provides one of the most interesting tasks of the event, accosting walkers, politely of course. On my first year in Kerry, club members were, for some historic reasons, not very keen on an Englishman going down the beach and asking Irish citizens to get out of the way. They need not have bothered, for I am well practiced in the 'blarney', and the Irish are most understanding. The problem is with American or English tourists, particularly those of loosely the feminine kind; they often do not co-operate and start getting very shirty about 'rights'. They are therefore fair game for any pilot or tow car driver with homicidal tendencies and a good lawyer. Here it must be said that over the years of the event due to excellent

management and flying discipline there have been no accidents, and good relations are maintained with all concerned.

Having dealt with the admin we can now get down to the flying, unless of course it is blowing a gale, no wind at all, raining, no runway, we have lost the battle for territory, or have decided to join the tourists somewhere else. We have a choice of two very long beaches, you can look them up on Google Earth: one, Fermoyle on the north side of the Dingle Peninsula generally running east-west, and on the south Inch, a long sand spit projecting effectively north-south. So whatever the wind we can fly, subject to the frustrations already listed. Kerry has mountains and on the Dingle they conveniently fill the gap between the two beaches. If they didn't the whole exercise would be pretty pointless.

On the beach launching is by car, and is quite different from anything else you may have experienced, as you soon find out. It is slow, prolonged, highly controlled and voice training is essential. You need the ability to call out over the radio a string of numbers, "30, 49, 60, 15, 30" etc. in a constant rapid stream, rising an octave when the speed falls outside the envelope and, with difficulty introducing at the same time a note of panic if you are really worried. Pilots who try a calm relaxed tone throughout spoil the fun and for that reason seem to get poor launches. You also have to respond to calls like "Out to sea", meaning you are about to start ridge flying whilst still on the cable, "Release now" means the car is about to either hit the rocks, a tourist or you are about to enter US airspace, "Stay on", indicating a release now could result in a law suit or an inquest, and "In to land", that you are getting out of gliding distance back to the beach.

Time and tide waits for no man and it is important not to land on the beach when there is not one. This leads to other messages "land immediately", or "do not land for the next three hours". The first, often given to greedy pilots at low tide as well, is easy to comply with, if your radio is switched on, the latter, more challenging. It is sometimes given to pre-Bronze pilots on the Pimple, a small and poor working local hill, when everyone can enjoy the fun. However I do remember Millennium New Year when we all went touring, leaving the pilots on the mountains to locate the emergency fields should 'Time and Tide' cause embarrassment.

At this stage you may well be asking "Is it worth all the hassle?" Well to start with the Irish National Record of 22,000 feet or so was set here, for wave is frequent, but not always obliging as it is often mixed up with cloud, and presumably mountains. Space prevents me recounting the saga, honoured by its own song, of the pilot who vanished into cloud and "pulled the stick back when the cloud turned green".

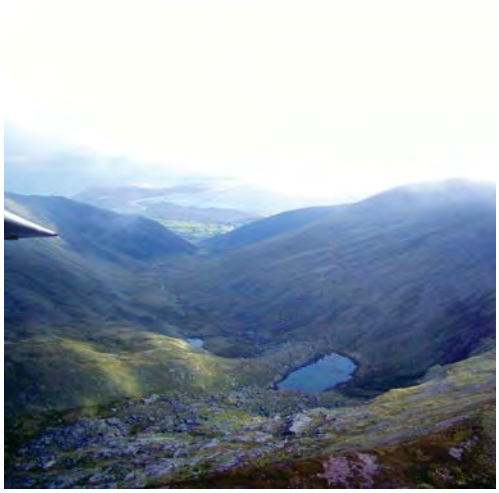
Wave flying is all well and good but the real fun is working the hills and mountains where you generally join the lower slopes at less than a 1000 feet. From there it is a question of working close in to slopes and gullies, making transitions to larger lumps of rock, passing over small lakes, and a few sheep on the way. With height opportunities increase, sea cliffs, bigger mountains, new ranges, always keeping an eye on the beach, this is real fun. Sometimes orographic cloud obscures the higher slopes so you explore the

lower slopes and ranges that are usually just stepping stones on your way up or seen from above.

At the end of the day if you are unlucky enough to be on the beach when high tide approaches you will notice that de-rigging takes priority over talking, eating and going behind the trailers, when you will be expected to do this job with the speed of a Grand Prix racing team. This sometimes involves 'calling down in order', if space and manpower is limited, a lesson learnt when one untended glider floated out to sea. The pilot concerned omitting to tell his syndicate partners until the sand was found in the fuselage, during C of A, six months later.

The next day will almost certainly be different, if you fly at all that is, the fun starting with the wrong decision on "Which beach we should go to", as half the pilots knew already but lost the argument. This is all part of a holiday, with optional, no that's not the word, possible flying, for sometimes little flying is possible over the two week period. It is this fun, and the friends I have made, that makes 'Kerry' determine the earliest date I can return to New Zealand.

How about re introducing flying from the beach in NZ? Suggestions for suitable sites with dunes or ridges to GNZ website.



The International Gliding Commission held its annual meeting in Rome at the end of February 2008.

IGC president report
to the FAI General Conference 2008

Awards

The Plenum was pleased to confer the following awards:

- The Lilienthal Medal to Mr Derek Piggott, United Kingdom
- The Pelagia Majewski Medal to Ms Maksymiliana Czmiel-Paszyc, Poland

Decisions

Significant decisions taken by the IGC Plenum included:

- Bureau members to be elected for 2-year terms starting 2009.
- A recommendation to the FAI Navigation and Airspace Commission that common open standards for critical electronic systems be adopted to allow for the development of traffic awareness equipment for light aviation.
- The continuation of the major overhaul of the Sporting Code Section 3, started in 2007, to allow for further editing and review with a target date for approval now of March 2009.
- A long-term agreement with an appropriate party be sought to cover internet publishing rights for Sailplane Grand Prix events.

Working Groups

The Plenum agreed to form the following Working Groups (WG) to continue our drive to make the sport of gliding more attractive and available:

- Grand Prix (GP) Business WG – to continue the next phase of development of the GP racing product.
- Country Development WG – to foster and organize improved support to new counties developing the gliding sport.
- Continental Record WG – to consider how to make access to record flying more available in regional areas.

1st South American Continental Gliding Championships

The 1st South American Continental Gliding Championships was held in Club de Planeadores Otto Ballod, Argentina from the 20th of January to the 2nd of February 2008.

The 84 competitors represented a total of eight countries: Argentina (66), Brazil (8), Chile (4), Colombia (1), Italy (2), Sweden (2), and USA (1).

The Championship was held in two handicapped classes (Standard and Open) to accommodate the variety of aircraft in South America. Six flying days were achieved.

The Plenary charged the IGC Bureau with ensuring that every assistance should be provided to countries wishing to establish new gliding championships.

The IGC-On Line Contest World League 2008 A very successful 3rd season for the IGC-OLC World League for 2008 has recorded entries from 1050 Clubs and gliding organisations — a staggering increase from the 374 clubs that entered the 2007 league.

IGC Grand Prix Racing

In December 2007 the 2nd FAI World Sailplane GP Final, 2007, was contested in Omarama, New Zealand. Good weather and excellent camaraderie was overshadowed by a fatal accident involving one of the German pilots. At the time of writing this report the accident investigation by the New Zealand Civil Aviation Authority is not complete.

The pilots and their gliders then competed in the inaugural New Zealand Air Games at Wanaka on the 27th and 28th of December.

Future Championships

Bids were received from several countries for the calendar of FAI World Gliding Championships in 2011. The bids awarded were:

- 6th Women's FAI World Gliding Championships, 2011 to Arboga, Sweden
- 7th Junior's FAI World Gliding Championships, 2011 to Musbach, Germany

In addition, the 15th FAI European Gliding Championships, 2009, Open, 18M and 15M was awarded to Nitra, Slovak Republic.

Future Initiatives and Opportunities

In July 2009 we will all gather in Turin for the 2009 World Air Games. In 2007 the IGC published its first set of Strategic Actions. Review shows improved membership and improved quality and management of International Championships. We have a growth target of five nations a year participating at IGC-level that we are working hard to achieve.

Recruiting new volunteers to take on necessary work in the organisation also remains a challenge. Most work to date has been done by a relatively small number of unselfish volunteers. The gliding movement is indebted to these people and we need to find more to spread the workload.

Access to airspace and protection from increasingly sophisticated and expensive technology solutions to airspace management are major threats to our sport and all air sports.

Finally, safety continues to be at the forefront of our challenges. We will be having a major focus on safety and training at our next Plenary meeting in March 2009 and it is my desire that we move rapidly to create change in this area.

2008 Gliding Championships

The IGC congratulates the winners of the 2008 Championships and the IGC-OLC World League. We are also grateful to the hosts of these Championships for their tremendous efforts in presenting very successful events.

FAI World Gliding Championships 2008

The first FAI World Gliding Championships, in the new format, were held this year.

Lüsse Germany hosted 130 competitors from 34 countries in August 2008 for the 30th FAI World Gliding Championships in Open, 18 metre and 15 metre classes. Rieti, Italy hosted 104 competitors from 25 countries in July 2008 for the Championships in Standard, Club and World Classes.

Bob Henderson President
International Gliding Commission

other IGC information

Cockpit Damage Report

The Sailplane Development Panel (SDP) the technical body of OSTIV has been working on improvements to sailplane cockpit design to help reduce injuries to the occupants during survivable crashes.

Part of the process of continuous improvement relies on feedback from actual accidents. The SDP requires data about the damage to the cockpit area arising from an accident. This data is not necessarily provided by official accident reports.

The OSTIV SDP has, therefore, in close cooperation with the manufacturers, prepared a special report form for describing damage to the cockpit, including the use of photographs to illustrate the damage.

This form — the Cockpit Damage Report (CDR) — is available in English on the OSTIV website at www.ostiv.fai.org.

Although this report is not mandatory, future improvements in safety and crashworthiness, for both existing and new sailplanes, will benefit from this data being available.

The OSTIV SDP and the manufacturers urge safety officers send reports to OSTIV for all survivable crashes.

The CDR can also be downloaded from the GNZ website.

A QUESTION OF SAFETY

DOUG HAMILTON NATIONAL OPERATIONS OFFICER, GNZ

Operations Report September 08

Well I am sure that you are all sick of the less than perfect flying weather we have all experienced over the last 3 months! Needless to say there has not been much chance for anything Ops wise to take place. But we all stay optimistic that the summer will be a good one.

Currency requirements

As many of you have not flown much for some time I'd like to remind you to get some currency flights in now while there is no pressure and before you throw yourself into the summer instructing or cross country flights. As you will note from the accident reports posted in this issue, many of the problems happen during cross country flights.

Also make sure you check your logbook and confirm that your BFR, or any other renewable rating has not expired.

Instructor courses

By the time you read this there will have been another instructors course at Taupo. The word is that there will be another good turnout of new and current instructors wanting to hone their skills and upgrade themselves.

If you or your club have need for instructor training then be sure to let us know so we can arrange future courses.

Ops team

We are still on the lookout for qualified instructors to join the OPS team as replacement Regional Operations Officers and National Ops Officer as some of our current team are looking to step aside next year.

406 ELTs

Don't forget that as of 1 July it became compulsory to have a new 406 type ELT in your glider to replace the old 121.5 ELTs. This particularly applies to cross country flying. Cross country flying is anything more than 10 NM from your airfield.

Manual Of Approved Procedures (MOAP) changes

I would recommend to all instructors (and everyone else for that matter) that they have a read through the latest revision of the MOAP that has just been issued. Section 2 has some changes from an Ops perspective and some may just affect you.

Magazine articles

There has been a continuing stream of good articles relating to all things techno and general flying wise, appearing in this magazine. It is great to see the depth of knowledge out there, so please keep them coming, we all learn something with every read!

Be careful out there!

SUMMARY OF INCIDENTS — 2007

Date 6 January 2007 Location Omarama Glider type Duo Discus
Nature of Flight X/C training
Pilot hours 1182 Last 90 days 99
Injuries Nil Damage Serious POB 2 Details available on CAA web site: Yes
Notes During a cross-country flight from Omarama an outlanding became necessary. During the round out phase the pilot reported that an unexpected strong crosswind gust caused the left wing to touch the ground. This initiated a powerful ground loop, resulting in serious damage to the glider.

Date 19 January 2007 Location Lake Ohau Glider type Hornet
Nature of Flight Private x/c Pilot hours 2000+ Last 90 days 30
Injuries Nil Damage Substantial POB 1 Details available on CAA web site: No
Notes During a cross-country flight the pilot decided he could not complete a final glide back to Omarama and elected to outland on a farm airstrip. During the over flight and inspection of the strip the pilot did not identify that sheep were present due to the brown and dusty colour of everything. On finals when the stock were identified, not enough height remained to divert to a different landing site. Approach was modified to land in the middle of the strip to avoid stock at the ends. During the landing roll the pilot used full braking to avoid running into the stock. The severe braking combined with the prevailing crosswind initiated a ground loop causing substantial damage to the glider.

Date 30 January 2007 Location Te Poi Glider type PW5
Nature of Flight Competition Pilot hours 3500 Last 90 days 70
Injuries Nil Damage Minor POB 1 Details available on CAA web site:No
Notes During a competition task the pilot was forced to outland in a paddock on the crest of a ridge. To prevent the glider overshooting the strip and going down a steep slope the pilot initiated a ground loop. Minor cracking damage was caused around the tail skid area.

Date 1 February 2007 Location Kaikohe Glider type Ka –6CR
Nature of Flight Local Flight Pilot hours 62 Last 90 days 5
Injuries Minor Damage Substantial POB 1 Details available on CAA web site: Yes
Notes The pilot got too low on the downwind and base legs of the circuit. He increased the speed but the touchdown was too fast and the pilot neglected to open the airbrakes. The glider bounced about 10 feet in the air, the right wing was lifted by a crosswind gust. The glider veered to the left entering an incipient spin rotating 180 deg and crashing nose down.

Date 21 February 2007 Location Drury Glider type Krosno Puchatek
Nature of Flight Solo Circuit Training Pilot hours 5.5 Last 90 days 5.5
Injuries Minor Damage Minor POB 2 Details available on CAA web site: No
Notes During the second solo training circuit the student pilot failed to flare the glider, landing on the nose skid resulting in damage to the skid area.

Date 17 February 2007 Location Matamata Glider type Unknown
Nature of Flight Circuit area Pilot hours N/A Last 90 days N/A
Injuries N/A Damage N/A POB Details available on CAA web site: N/A
Notes Parachutists reported coming very close to a circling glider over Matamata airfield during freefall! A reminder notice has been issued to glider pilots regarding traffic and operations within the MBZ.

Date 25 February 2007 Location St Arnaud Glider type Grob Twin II
Nature of Flight Winch Launch Pilot hours N/A Last 90 days N/A
Injuries Moderate Damage Nil POB Details available on CAA web site: No
Notes During a winch launch the novice wing runner was pulled off his feet. He had been holding both the leading edge & trailing edges of the wing when full power was applied.

Date 6 March 2007 Location Omarama Glider type Grob Twin G103
Nature of Flight Local Soaring Pilot hours 3600 Last 90 days 35
Injuries Nil Damage Minor POB 1 Details available on CAA web site: No
Notes The pilot reported that a stone had grazed the wheel fairing during landing and had cracked the (non structural) faring.

Date 21/22 April 2007 Location Otaki Glider type not reported
Nature of Flight Landing Pilot hours unknown Damage Minor
POB 1 Details available on CAA web site: No
Notes Persons on the ground reported that the pilot performed a "beatup" of the airfield before landing. During the maneuver the glider contacted a tree causing some damage to one wing.

Date 19 August 2007 Location Lake Station Glider type Rhonlerche
Nature of Flight Dual Training Pilot hours 3400 Last 90 days 8.5
Injuries Nil Damage N/A POB 1 Details available on CAA web site:No
Notes The pilot being trained for C Cat rating asked if an orbit could be done on high final

AIRSPACE

GNZ National Airspace Officer Trevor Mollard makes the following report.

On the 18th September NZCAA released the following statement:

"CAA targets aviation efficiency and environmental improvements

The Civil Aviation Authority is to establish a new Airspace and Environment Policy Unit to coordinate its regulatory work directed at harnessing the potential of current and emerging aviation technology.

The unit will develop a national Airspace and Air Navigation Plan in consultation with aviation stakeholders to guide the development and implementation in New Zealand of advancements in new air navigation systems. Development of a Plan will enable the CAA and industry to measure and mitigate the environmental impacts of aviation to help ensure the sector's sustainability.

Known as Performance Based Navigation (PBN), the concept essentially signals a shift from ground-based navigation to satellite-based navigation. It means aircraft can be flown with greater precision along more simple routes to maximise fuel efficiency and minimise environmental impacts from aviation-related carbon emissions.

Although still in the early stages of deployment worldwide, the International Civil Aviation Organisation has signalled that PBN is the way of the future.

On Friday last week, Air New Zealand flew the first international flight using these concepts and technologies to maximise efficiency throughout all phases of the flight. The ASPIRE I flight from San Francisco to Auckland showed what fuel savings and emission reductions could be achieved.

CAA General Manager Government Relations, Planning and Strategy, Simon Clegg said the new CAA unit would begin work on the national Airspace and Air Navigation Plan later this year.

"New Zealand has been a pioneer in the use of performance based navigation systems over oceanic airspace. The ASPIRE 1 Flight demonstrated the full potential of modern air traffic control technology and techniques. The new national plan will aim to yield similar benefits for commercial flights in New Zealand.

"In establishing this unit now, the CAA can ensure that the regulatory environment is prepared to integrate these new technologies and that New Zealand can harness the efficiency and environmental benefits that will arise from them," Mr Clegg said.

So what does all this mean for gliding? GNZ have been pressing NZCAA to establish and publish policy on the creation of controlled airspace for some time now. The current ad-hoc basis of creating controlled airspace has placed GNZ at a severe disadvantage when lobbying against the commercial interests of the airlines and the Airways Corporation. The creation of a sound, rational, visible and transparent policy on controlled airspace would be a big plus for gliding but it will not happen on its own. It will require considerable effort and a significant amount of lobbying on the part of the Executive and Airspace committees.

Performance Based Navigation (PBN) basically means that the airliners and other IFR traffic will use the satellite based Global Positioning System (GPS) to navigate pretty much wherever they like without reliance on ground bases navigation aids such as VOR's and NDB's. This will please the Airways Corporation as they will no longer have to fund the provision, maintenance and calibration of a ground based navigation system.

There is however a very real risk that PBN routes will expand like a cobweb. We already have an example of this at Queenstown. Applied correctly PBN can also be used to tighten up the route structure at lower levels. This will simplify ATC's separation task as it allows greater use of vertical separation and makes easier the separation of overtaking aircraft.

In particular it will make possible the greater application of Constant Descent Approaches (CDAs) by commercial aircraft. Allowing a jet to descend automatically on the optimum descent path with no level portions has a far greater capacity to reduce fuel burn (and carbon emissions) than does shortening the route by a mile or two. The gliding interest in all this is that it is a compact form of approach that requires significantly less airspace than is used at present.

Boeings and Airbus aircraft already have the equipment to do this but current ATC methodology means it can seldom be utilized. CDA's significantly reduce airline pilot workload but its widespread application will require an entirely new mindset from ATC in how they separate and sequence traffic.

The new Airspace and Environment Policy Unit is likely to be the forum where these decisions are made and it is here that GNZ and other General Aviation operators must make their voice heard if we are to avoid being rolled over by the commercial interests of the airlines and Airways Corp.

approach. The training instructor approved the maneuver noting there was a 15–20 kt wind. On completion of the orbit it became obvious that the glider would not reach the airfield. The training instructor took over control and dived the glider to increase airspeed. During the dive to near ground level in the field before the airstrip the Port wing hit a cow. The glider rotated to Port and floated over the fence and landed in loose gravel.

Date 5 October 2007 Location Hororata Glider type LS4
Nature of Flight Local Soaring Pilot hours 130 Last 90 days 22
Injuries Minor Damage Minor POB 1 Details available on CAA web site: No
Notes The pilot was unable to find lift after release from launch. He elected to land in a paddock. Wind conditions were gusty and the pilot had to work quite hard to maintain correct speed on approach. The pilot reported that just before touchdown the glider seemed to just fall to the ground. He is not sure if he was dumped by a squall or stalled due to wind shear. The glider bounced once and skidded to a halt when the wheel retracted.

Date 5 October 2007 Location Hororata Glider type Grob 103 Twin Astir
Nature of Flight Local Soaring Pilot hours 56 Last 90 days 17
Injuries Nil Damage Minor POB1 Details available on CAA web site: No
Notes On advice from other pilots the pilot of the Twin Astir aborted his 5-hour duration flight as weather conditions were deteriorating. The glider encountered heavy sink on the downwind leg. The pilot had to modify the circuit to ensure reaching the field. The approach was at an angle to the runway and as the glider was turned into wind and lined up with the runway the glider gently ground looped causing both wing tip wheels to be broken off.

Date 10 November 2007 Location Puhi Puhi Glider type Janus
Nature of Flight Local Pilot hours 589 Last 90 days 6.5
Injuries Nil Damage Nil POB 2 Details available on CAA web site: No
Notes The glider had been re-rigged after an outlanding. During the duplicate inspection it was not noticed that the tail plane locking lever had been pinned in the unlocked position. On the next flight, during the landing the glider bumped over some wheel ruts and tail plane slid forward and came off the gilder.

Roger Read

STRAPPING IN AND COMFORT

We are all used to hopping into a car and putting our seatbelt on before we get moving ... well ... here I will look at how to correctly and comfortably strap into a glider and get ready to go flying.

We all come in different shapes and sizes and our familiarity with gliders differs so there are a few considerations to make before we even start getting in to the glider. First up, we need to check that the glider is ready to be flown. For now, we shall assume your instructor has checked this but ultimately, you will learn how to check this. Our next check is that we have everything we need: glasses, hat, suitable clothing etc. Check that we have no loose articles in our pockets that might fall out and drop into any gaps or controls, as this could jam or restrict controls – a potentially dangerous situation. Check there is nothing in any of our pockets that will cause discomfort if seated and strapped in for long periods. Sitting on a wallet can really be a pain in the butt so consider stowing it safely in your car.

We need to know how to correctly get the canopy open. Canopies are potentially fragile and if mishandled are expensive to repair or replace. There are cautions to be aware of when opening them and considerations to be aware of when the canopy is open. Make sure it is securely open and know how to avoid knocking it shut when getting in. Position the glider with one wing down on the side you are getting in on as this will make it easier than having the other wing down. Note that if the canopy is a side opening one, it means that it is easier for it to fall shut towards the lower wing, especially if there is a breeze from the upper wing side. Your instructor will point these things out and show you what precautions to take in these situations to avoid damage to the canopy.

Do we need to wear a parachute? It's not compulsory ... but it is a good idea to. If you chose to wear one, get instruction on the specific parachute you will be wearing; how to get it on and how to use it if required.

There is a minimum and a maximum pilot weight for the front seat; we must check we are within the limits or fit ballast if too light. If it is required ... check how to fit and secure it properly. If ballast is not required, check it is not fitted. Some seats are adjustable; check how they can be adjusted so that the seat is adjusted for your size and that the seat cushions are suitable/adequate for your size and comfort.

There are a variety of strap/harness systems, buckles, levers, locking and release systems. Get familiar with what is fitted in your glider and know how to loosen, tighten, lock and release the harness you will be using. Before hopping in, check where the straps are lying and loosen them off so you can get to them once you are seated in the glider. Check where you can stand and areas to avoid, ensuring you don't damage the glider getting in and out. Again, your instructor will take you through these considerations then get you to climb into the cockpit.

Once seated, your instructor will check that you can comfortably reach all the controls without stretching and that any adjustments are made to ensure comfort. Then you can locate the straps and start strapping in. Your instructor will show you how each strap is fitted, starting with the lap straps, then the shoulder straps. Firmly tighten the lap straps first, checking the buckle is central and correctly located and not sitting too high or too low across the stomach/pelvis region. Check how the buckle assembly works/locks and unlocks. Then tighten the shoulder straps. Check you can still reach all controls and that full control deflections are possible. Check how the harness is released. Some have a facility for partial release of the shoulder straps; some are single action, some require two steps to release. Also look at how to tighten and loosen straps without releasing the harness.

This 'exercise' is what I call a 'free lesson'... that is, you do not have to pay for your time getting in and out of a glider and practising how to strap in etc. Practise strapping in and making adjustments to ensure comfort by getting access to your glider when it is not being used. The sooner you learn how to do this correctly the better, as you can then move on to other exercises. Remember, you need to know how to correctly fit and adjust the straps, ensuring you are seated comfortably and in easy reach of all controls. Now ... go fly and enjoy the summer soaring!

CLUB DIRECTORY

Link for club info www.gliding.co.nz/Clubs/Clubs.htm

Auckland Aviation Sports Club
Club Website www.ascgliding.org
Club Contact Peter Thorpe
pbthorpe@xtra.co.nz Ph 09 413-8384
Base RNZAF Base Auckland (Whenuapai) 021 146 4288
Flying Weekends, Public Holidays

Auckland Gliding Club
Club Website www.glidingauckland.co.nz
Club Ph (09) 294 8881, 0276 942 942
Club Contact Ed Gray airsailor@xtra.co.nz
Ph (09) 237 8151 (027) 608 4156
Base Appleby Rd, Drury
Flying Weekends, Wednesdays, Public Holidays

Canterbury Gliding Club
Club Website www.glidingcanterbury.co.nz
Club Contact Kevin Bethwaite kevin.bethwaite@airways.co.nz
Ph (03) 384 3196
Base Hororata Road, Hororata
Flying Weekends, Public Holidays

Central Otago Flying Club (Inc)
Club Website www.cofc.co.nz
Club Contact Phil Sumser phil.sumser@xtra.co.nz
Base Alexandra Airport
Flying Sundays, and by arrangement

Glide Omarama.com
Website www.GlideOmarama.com
Contact Gavin Wills gtmwills@xtra.co.nz
Base Omarama Airfield
Flying October through April 7 days per week

Gliding Hutt Valley (Upper Valley Gliding Club)
Club Contact Wayne Fisk wayne_fisk@xtra.co.nz
Ph (04) 567-3069
Base Kaitoke Airfield, (04) 526-7336
Flying Weekends, Public Hols., Mid week by arrangement

Gliding Manawatu
Club Website http://sites.ourregion.co.nz/glidingmanawatu/home.html
Club Contact Ron Sanders Resanders@xtra.co.nz
Base Feilding Aerodrome
Flying Weekends, Public holidays

Gliding South
Club Contact George Menlove ggmenlove@actrix.co.nz
Base Rouse Airstrip, Five Rivers, Southland
Flying Weekends and Public Holidays

Gliding Wairarapa
Club Website http://www.glidingwairarapa.co.nz/
Club Contact Diana Braithwaite Ph (06) 308-9101
Base Papawai Airfield, 5 km east of Greytown
Ph (06) 308-8452 or (025) 445 701
Flying Weekends, or by arrangement

Hauraki Aero Club
Club Website www.flyhac.co.nz
Club Contact Ron Bergersen d.rbergersen@xtra.co.nz
Ph (027) 277 4238
Base Thames Airfield
Flying Weekends and Public Holidays

Hawkes Bay Gliding Club
Club Website www.skyhigh-photography.com/Main/Aviation_and_Spaceflight/HB_Gliding_Club.php
Club Contact David Davidson Dhcd@clear.net.nz Ph (06) 876-9355
Base Bridge Pa Airfield, Hastings 0272887522
Flying Sundays. Other days by arrangement

Kaikohe Gliding Club
Club Contact Peter Fiske, (09) 407-8454
Base Kaikohe Airfield, Mangakahia Road, Kaikohe
Flying Sundays, Thursdays and Public Holidays

Marlborough Gliding Club
Club Website http://glide_marl.tripod.com
Club Contact bmog@paradise.net.nz
Base Omaka Airfield, Blenheim
Flying Sundays and other days by arrangement

Nelson Lakes Gliding Club
Club Website www.glidingnelson.co.nz
Club Contact Frank Saxton franksaxton@gmail.com
Ph (03) 546-6098
Base Lake Station Airfield, St.Arnaud Ph (03) 521-1870
Flying Weekends and Public Holidays

Norfolk Aviation Sports Club
Club Website http://www.geocities.com/norfolkgliding/
Club Contact Kevin Wisnewski wizzbang@xtra.co.nz
Ph (06) 756-8289
Base Norfolk Rd
Flying Weekends and by appointment

Omarama Gliding Club
Club Website http://www.omarama.com
Club Contact Yvonne Loader loaders@clear.net.nz
Ph (03) 358-3251
Base Omarama
Flying 7 days a week by arrangement

Otago/Youth Glide Omarama
Club Website www.youthglideomarama.org.nz
Club Contact Tom Shields tom.shields@century21.co.nz
Ph (03) 473 1721
Base Omarama and Dunedin
Flying By arrangement

Piako Gliding Club
Club Website www.glidingmatamata.co.nz
Club Contact Phil Smith phil.r.smith@xtra.co.nz
Ph (027) 486-4761
Base Matamata Airfield, Ph (07) 888-5972
Flying Weekends, Wednesdays and Public Holidays

Rotorua Gliding Club
Club Website http://www.geocities.com/rotoruagc/RotoruaGlidingClub.html
Club Contact Mike Foley
roseandmikefoley@clear.net.nz
Ph (07) 347-2927
Base Rotorua Airport
Flying Sundays

South Canterbury Gliding Club
Club Website www.glidingsouthcanterbury.co.nz
Club Contact John Eggers johneggers@xtra.co.nz
33 Barnes St Timaru
Base Levels Timaru & Omarama Wardell Field
Flying Weekends, Public Holidays & by arrangement

Southern Soaring
Club Website www.soaring.co.nz
Club Contact Chris Rudge chris.rudge@soaring.co.nz
Ph (03) 438 9600 M 027 248 8800
Base The Soaring Centre, Omarama Airfield
Ph (03) 438-9600
Flying September-April: 7 days a week (except Xmas Day)

Taranaki Gliding Club
Club Website www.glidingtaranaki.com
Club Contact Peter Williams peter.williams@xtra.co.nz
Ph (06) 278 4292
Base Stratford
Flying Weekends and Public Holidays

Taupo Gliding Club
Club Website www.taupoglidingclub.co.nz
Club Contact Tom Anderson Tomolo@xtra.co.nz
PO Box 296, Taupo 2730 Ph (07) 378-5506
M 0274 939 272
Base Centennial Park, Taupo
Flying 7 days a week

Tauranga Gliding Club
Club Website www.glidingtauranga.co.nz
Club Contact Roy Edwards royedw@wave.co.nz
Ph (07) 578-0324
Base Tauranga Airport
Flying Weekends and Public Holidays, Wednesday afternoons and other times on request

Waipukurau Gliding Club
Club Contact R.D. Orr pat.rob@xtra.co.nz
Base Waipukurau Airfield Ph (06) 858-8226
Flying Weekends and Public Holidays

Wellington Gliding Club
Club Website http://www.soar.co.nz
President Mike Tucker mike@hvpc.co.nz
M (021) 439 193
Base Paraparaumu Airport
Flying Weekends and Public Holidays 7 days a week December through to March

Whangarei District Gliding Club
Club Website www.igrin.co.nz/~peter/gliding.htm
Club Contact Paul Rockell rockelkaym@xtra.co.nz
Base Rockelkaym Ridge, Gibbs Road, Puhi Puhi
Flying Weekends and Public Holidays

GLIDING NEW ZEALAND CLUB NEWS

The predominant information passed on by clubs this issue has been that there is not much news. The whole country has had a dreadful winter and not much flying has happened anywhere.
Now spring is upon us and the gliders are starting to come out, don't forget to include writing club news in your calendar.
Deadline for club news for the next issue 10 November.

AUCKLAND CLUB

Up here, where we have almost emerged from the rain, the first signs of spring showed last weekend when some pilots ventured south of the Bombay Hills to find, somewhat temporarily, that some cross country flying could be anticipated. Although both had to push the retrieve button (turbo/trailer), it was great to see some southern exploration at last.

Our Pawnee is minus the power plant at present while new engine baffles are made, but on another tack, we are pleased to announce that our club is to be the owner of a new ASK 21 for delivery in October 09, courtesy of the Snow Douglas bequest. The club members examined all options including high performance two seaters and the few second-hand ASK 21 alternatives from Europe but in the end, the decision was to purchase new.

Our 2008 AGM has been and gone and we welcome a new Vice President in Vincent Vingerhoeds, Grant Nelson to Committee and recognize the efforts of John Plunkett, Paul Schofield for whose long service the club is grateful and also our Club Captain Peter Heiplik, who is to be married shortly, our best wishes go with him. Although our books look good, we are very aware that the income has not been notable from local club flying operations and plans are being made to ensure longer term sustainability and more effort is required.

We anticipate some cleaning up and maintenance, shrub planting on the airfield surrounds and especially some work on our entrance road which resembles a pothole chicane after the winter rain, which has been unprecedented in recent memory. The lack of flying however has meant fewer ruts to fill in on the airfield in the spring.

We look forward to improving weather for the forthcoming instructor course in late September at Taupo, followed by the ATC Cadets visit in October. Our recent student pilots, including Leighton Duke and Doug Henry, continue to make progress between the showers and look towards longer training durations.

Roll on summer!

RT

CANTERBURY

With the long wet winter drawn to a close the better weather is allowing members to exploit the soaring conditions that arise. A westerly airflow on the last day of August brought a westerly wave and several members made good flights on it. Mike Oakley and Warwick Bethwaite flew Ash 25 TF down to Mt Cook and return after a bit of a struggle getting established west of Lake Coleridge. During their flight they got a good climb in the lee of Mt. Tasman and then flew on to soar the face of Mt Cook They got some fantastic pictures of the snowclad Alps. Terry Delore in his recently acquired Libelle

Canterbury: A recent visitor to our club

GK was reminded how steep the attitude of this little glider is when flying at speed but with his usual skills he had a nice flight among the mountains. Canterbury Youth Glide member Toby Read had a nice local flight lasting a little over an hour in the Single Astir MQ.

The next day was Monday but several members found excuses to go flying and once again Mike Oakley and Warwick Bethwaite flew TF in the wave this time going further west and again flying south to the Mt Cook Hermitage whilst Matt Dimock and President Kevin Bethwaite flew our Janus almost to Blenheim and return covering about 500 km. Nick Reekie accompanied them in his single seat pursuit ship.

Rangi deAbaffy flew his LS4 to Lake Sumner and return whilst Jerry O'Neill instructed Rob Sherlock and Robin Cullen in the art of wave flying in Twin Astir PR.

Our recent AGM was extremely well attended and is a confirmation of the good skills and hard work by the committee, most of whom returned to office. We have been blessed with good governance for several years which has put the club in a very strong position. Members are again looking forward to the annual Labour weekend visit to Flock Hill right in the middle of our spectacular mountains.

Stewart.

CENTRAL OTAGO FLYING CLUB

The weather washed out flying over several consecutive weekends this winter. Low pressure systems and moist air masses have dished up cloudy, still, and often wet weather for days on end. We've had few frosts and even fewer wave days. It's been an odd winter for Central Otago! On top of all that we've few active students at present so there's been little incentive to fly at all.

A number of the private owners had their gliders out of action for annuals and general winter fettling in preparation for the season ahead.

And as I write this report it does look like spring has arrived. We finally had a good soaring Sunday, with thermals to 6000 ft and westerly wave to 11,000 ft. These conditions were much enjoyed by recent member Patrik and instructor Doug White in our Twin JW. The mountains are still thick with snow but it's melting fast.

JR

GLIDEOMARAMA

As the 08/09 season opens we welcome back to GlideOmarama a similar staff line up to last year. Congratulations are extended to G Dale who was twice a day-winner at the World Club Class championships in Rieti and finished 10th overall. Also to Luke Dale for his win in the British Junior Nationals in some awful weather conditions that seem to have marred most of the UK soaring summer. Meantime Lemmy was spending time in the sunshine at Minden, Nevada, with the new SoaringNV operation and reports good things happening from that part of the world.

The Fatman is smiling with a new identity – freshened up into GlideOmarama livery this powerful towplane now sports the appropriate OMA registration. The GlideOmarama workshop and Hangar is complete and ready for dedicated action.

Philip Plane has been working hard in establishing protocols for utilising the SPOT tracking system reported in the last SoaringNZ for our gliders and several will be trialled this summer. We anticipate a reduced need for radio position reporting, better accuracy and easier location of (occasional!) remote landouts. Phil has also created a new set of easy-to-read glider flying maps covering the South Island that are conveniently marked with competition turnpoints and landout areas. The GlideOmarama Land Out book has been updated and is available as the Second Edition.

Gavin attended the Gliding Federation of Australia AGM and conference in Adelaide in September where he presented his popular Mountain Soaring seminar as the after dinner guest speaker. Later in the summer we look forward to welcoming a number of desert flat-landers from across the ditch as they expose themselves to the joys and challenges of a more diverse and vertical landscape.

There are always events to look forward to at Omarama each summer; the November Regional and January National contests will undoubtedly attract some old and new friends. The Omarama Airfield and camping grounds have wintered well and visitors this summer will notice a few more changes around the place that will help them enjoy and manage their gliding holiday. As SoaringNZ goes to print the first of the migrating summer residence birds return and the place is open to business. Will you come join us?

Piilate

MARLBOROUGH

We missed the last few issues, so this report covers highlights since February. Depressingly, there haven't been many.

In March Mike Dekker had a rare wave flight over the Marlborough Sounds. The wave here can be very turbulent and the entry into the wave from the ridges south east of Picton usually makes a spectacular ride. First there is the downwind dash just above ridge tops, followed by the 'vario on the stops' descent towards the Cook Strait ferries at Picton, followed by shin-bruising turbulence as you hit the rotor and realize that that outlanding is not going to happen, then a hard turn to remain in the lift, and then a frantic radio call to get clearance to climb as you hit a smooth 6 to 8 knot climb and race towards the 5500 ft height limit over the Sounds. Due to problems such as sea, unfriendly land, and too many air traffic control zones, it is not practicable to go far when flying over the Sounds; but the scenery is spectacular and it is fun hearing trans Tasman jets being vectored around you.

There were a few good wave flights in March and April, but that marked the end of summer. Compared with last year, winter came early and has been a real drag, although a few 'sunny face soaring' flights have been managed.

In the meantime, Daniel Wooding has returned to the gliding fold after giving powered flying a go. Daniel was the first of our recent batch of young pilots to go solo and has decided that gliding presents more challenge and variety than those other flying machines.

On what was almost the shortest day of the year, Brian Mogford, Ross Menzies, Jamie Halstead and Terry Delore all had great flights, with the latter two getting to Mt Hutt and back.

Three weeks later, with a ground level air temperature of 10 degrees, we did get some gliders thermalling up to 6000 ft over the snow on a cloudless windless day, but we still don't know why the air was going up.

The July floods did not stop us operating, but three days after the floods a strong self-preservation instinct made us do a partial power takeoff in the towplane without a glider, to confirm that the airfield hadn't gone all mushy. Surprisingly it was OK.

Unusually for Marlborough, there have been lots of wet weekends recently and none of the weekend nor'westers that usually keep our spirits up.

I hope summer comes early.

Mike

Nelson Lakes: Clubhouse and trailer

NELSON LAKES

It would appear the spring weather has finally arrived after a seemingly eternal run of wet weekends and the strip's second heavy dousing of snow this winter. The last few weekends have been flyable, if not readily soarable. Sparse thermals have been adequate for some pilots to get up and away, but one club member found getting

Regular Club News *continued on page 49*

FLYING FROM TARANAKI

Taranaki doesn't have the history of long cross country flights that other clubs can boast about but we do have a lot of fun in our unique and interesting conditions. We are on the west coast with prevailing damp westerlies which gives us fairly low cloud bases and typically small and not very strong thermals. Where the current air mass has come from can make all the difference. From the south is best, but if it has passed across the South Island first or has come up the east coast of the North Island and then across as an easterly it is dryer and we can get some really good thermal days.

Sea breezes are the norm in one form or another and can come in from the north and/or the south. The Taranaki Gliding Club is based at Stratford, which is as far from the coasts as possible. If we are lucky the sea breezes stay away and converge overhead to give good soaring conditions late into the day.

At Stratford we have a very good house thermal in the form of the Stratford Power Station. This is only 1 nm from the airfield and will often work even in stable conditions when there is nothing else around. It works well at milking time.

The big player in our conditions is 'The Mountain', 8259 ft high Mount Egmont or Taranaki or whatever you like to call it. While not the highest mountain around, it rises from sea level and it stands alone. A very typical scenario in a prevailing westerly wind is that there will be a convergence running downwind of the mountain which will give good soaring, sometimes even up the side of it if the air coming around one side is drier. In this case the wind on the ground at Stratford will be a light easterly and it is often possible to glide into the lee of the mountain and ridge soar on this 'suck back' effect – just don't go too far around the side. The sea breezes will then come in from the north and south and they will also converge at a much lower cloud base. Last spring this convergence formed up in a north-westerly and combined with a sea breeze front down the south coast all the way past Wanganui. A couple of 'gliderers' from Wanganui did 300 km on this, flying up to the base of the mountain as a turnpoint – poachers!

There are the remnants of two old volcanoes to the north, the Pouakais and the Kaitakis which give good wave lift in pre and post frontal conditions. Our old site at German Hill was situated close to the primary rotor from the south-westerly Pouakai wave which could cause gliders in the circuit to land out. Flights as high as 28,000 ft have been achieved in this wave. Since we have been at Stratford we have soared in waves off the south side of the mountain and also in a prefrontal north-westerly Pouakai wave when North Taranaki was covered in low cloud and rain. The NOAA satellite photos will often show diagonal wave clouds coming out from the main mountain convergence like the wake of a boat.

Just occasionally it is possible to ridge soar the mountain to the summit but usually the wind is lazy and goes around rather than over the top.

You don't have to go very far east to get into some very good soaring conditions but it does mean flying over some scary tiger country. Since this hill country is mostly sheep and beef farming there are a lot of airstrips – in fact when you get your eye in they are everywhere. Cloud bases start heading up to 5 or 6000 ft so it makes it safe to venture over the unlandable bush country which can produce some monster thermals. It also makes it possible to final glide back to Stratford through the sea breeze.

We have had two camps on my farm airstrip in Mangamingi, 20 km east of Eltham to get used to flying over these hills and also operating off a farm strip. This summer we will have a camp on an airstrip near Te Wera about 40 kms east of Stratford which is on a farm leased by one of our members.

No one has done a 300 km flight from Taranaki yet. This would mean flying out of Taranaki, a challenge in itself. The southern route is safest and there is a more inland southern route that goes across the head of the Waitotara valley and then Jerusalem on the Wanganui River. This is a route well used by light aircraft. Another route is along the 'Forgotten Highway', north-east of Stratford through to Taumaranui which has been done once in a motor glider. Brett Emeny did this in his Stemme and because the cloud base was over 6500 ft the transponder was used. That flattened the battery so it was a true glider on the way home all the way back to New Plymouth – so the story

Soaring a bushline thermal

Cloud street coming off the mountain

goes. The best effort so far was the late Bob Struthers who managed to fly down to Fielding but his return flight was cut short by the sea breeze.

I have been exploring the northern coastal ridge soaring possibilities with a microlight. The main problem here is the lack of suitable airstrips to operate from. The beach can be used but limits flying to low tide. I have also been surprised just how much wind it needs to make the ridge work safely but there is an easy 50 km of straight coastline in the right conditions. A very long flight should be possible for the keen, all the way up past Auckland with a south-westerly to help you past the jagged bits of Albatross point and Raglan.

As you can see there are a lot of possibilities to try and explore which haven't been done before which is quite exciting. We haven't got a lot of cross country experience in Taranaki so if anyone wants to come and show us how to do it they will be very welcome.

Tim Hardwick-Smith
CFI Taranaki Gliding Club
Also Microlight pilot with tow rating.

The author

Regular Club News *continued from page 49*

home again was an entirely different matter, having to execute an unplanned but 'technically perfect' outlanding.

We recently held a blind instrument competition which once again proved a fun way to hone flying skills. Combined with a simulated paddock landing, points were awarded for flying accuracy, speed and altitude judgement, and landing finesse. Some interesting results from winter's rusty pilots under heavy scrutiny from their peers.

We now have four of our five club aircraft in service and ready for a full season of flying. The fifth is our club's original plane, the much loved Rhonlerche K4, Mike Zulu, which will soon be fully repaired after an unfortunate encounter with a large Hereford cow last summer. It will be great to go into the season with a full complement. Hopefully non-owners will spend less time on the ground feeling frustrated and more time soaring our magnificent unrestricted airspace. There is no other remedy for ground sickness.

Ken Montgomery

Nelson Lakes seems to have fantastic soaring in any season and they can't seem to stop skiting about it. Frank Saxton shares the following with us.

Last Sunday (14th Sept) I had another new experience in my glider – flying the Mt Owen wave. Easy climbing wave developed over the strip later in the day and I gained a climb to some 8000 feet in TH. Four club gliders plus a number of private ships were up, some climbing to over 9000 feet. I headed off towards Mt Owen, the photo shows you why (also Ivan Evans was already over there in IE).

It was a clean run over there, Glen Hope landout airstrip below if needed, with no appreciable sinking air and I arrived at some 6000 feet to get straight into a climb that strengthened to some 10 knots up the face of this magnificent cloud. The second photo was taken alongside the top of it at some 9000 feet.

The last photo is looking back towards the strip from the top. Very much a downhill ride home!

PIAKO GLIDING CLUB

The weather for the past few months has limited much of our soaring. At the time of writing we're currently running a 'B' certificate course, and hot on its heels an 'A' certificate course. During mid September with much enthusiasm we'll embrace the 'start of season brunch and briefing'. This will include various topics, amongst others: intro talks by our CFI, Chief tow pilot and Ralph Gore on alterations to local air space.

Our public image has a fresh look with a new website that is now up and running. It should hopefully impress members and 'Joe public' alike (it's amazing just how many visits our site takes!), and

Mt Owen

"Up close to the beast"

Looking back towards strip

Nelson Lakes: Hangar

includes the new online club glider booking system.

The rapid changes to fuel prices made us review the amount that we currently use our winch, which is seldom. Whether or not we place more emphasise on its functionality only time, pilot interest and fuel prices will tell!

Costs are not just confined to fuel, we have recently bulk purchased the new monitored frequency 406 MHZ PLBs with GPS for our fleet of five gliders to remain within new CAA regulations, and expedite rescue should it be required.

Although the recent climate has not really been that favourable, the quality of our 'all weather' runways has attracted a few glider pilots who are based just north of us to stopover and fly from our venue.

Mid November will see a number visiting pilots to our club as the cross country course gets underway, followed immediately by the North Island Regional competition. Lots of events to look forward to at the start of the new season and that will keep us all very busy.

Dom.

SOUTH CANTERBURY

South Canterbury is finally emerging from one of the more miserable winters in my memory. The strip is drying out although it still tears up with vigorous use of the wheel brake (don't tell Kerry!) We have broken our usual cycle of miserable Sunday weather and have managed good training days for the last 3 weeks. More importantly we actually have some trainees to use them.

The AGM saw the committee return unchanged from last year. We have been fortunate to get funding for the PLBs for the Gliders and ELT for the Cub. The Jack Hutt Trust Scholarship is being held again this year which is raising our profile. Our annual dinner is being held on the 27th with some awards keenly contested.

Sunday saw the annual competition between the Aeroclub and Gliding Club for the 'Borer bomb' trophy donated by Steve Lyttle in the early '80s. The competition is based on flying each others aircraft with a spot landing component. The Gliding Club has held the trophy as long as anyone can remember. We also make the rules so it's tougher than the America's Cup for anyone else to win!! We had a scare this year with the Aeroclub slipping in a new CPL into their crew. Fortunately our President led the way in the Tomahawk with a 94 out of 100 and a spot landing at 2 metres plus the CPL damn near killed me with his landing which did nothing for his score!! Yet another year of triumph for the gliding club!

Our summer camp at Omarama is being impacted by irrigation and visitors need to update maps and computer programs with regards to the extremely limited landing options that will exist this year at Wardells airstrip. Spring has arrived with a few 20 degree days so hopefully another long soaring season.

Taranaki still flying in the winter

FMSG

SOUTHERN SOARING

Our 2008/2009 season kicked off recently with Rod Dew, Darren Smith and myself heading to Omarama on 15 September. Wave conditions greeted us on arrival and, as is typical during early spring, it was easy to find strong climbs. Every day since, we have had soarable conditions with some great flights.

In July, Gavin Wills and I were advised that we were unsuccessful in getting the 5% charge on towing dropped so that we could compete more fairly with tow planes operated by gliding clubs (which are not charged the 5%). It had been proposed that, if the 5% was dropped, the loss of income from Glide Omarama and Southern Soaring tows would be made up by charging all users an increased landing fee. Rather than take this approach, OAL has decided to keep the 5% on commercial towing and increase the landing fee anyway. To make the system slightly fairer, however, we were advised that clubs will be asked to return 5% on all tows that are not for their club members.

Despite this setback, we still wish to be competitive with club tows and have therefore introduced the 'Southern Soaring Tow Card'. This initiative will see a card issued to you after your first tow this season and, after you have completed ten tows, you will get the next launch (to a maximum height of 2000 feet) free. To qualify, you need to do ten tows over one or two seasons and hold an individual account with us (most pilots flying at Omarama do). Tow credits cannot be transferred to another pilot or carried forward after the end of the second season. By our reckoning, over 20 pilots who currently tow with us will benefit from the new scheme.


Southern Soaring: Rod Dew is already back into instruction mode

We look forward to seeing everyone back again this season – it's shaping up to be a cracker!

Chris

TARANAKI GLIDING CLUB

At long last the weather has improved and we have got back into the air. Our Blanik has had aileron bearings replaced and then repairs done to the base of its tail fin after an argument with a farm shed doorway that was a tad too low.

Our tow plane is in for its annuals at the moment but we have had to wrestle with its batteries not being sufficiently charged during the winter lay-off. Some thought is being given to a solar charging system to be plugged in at the end of a flying day. Our glider batteries are being charged in this manner.

We have been privileged to host Miss Anna Klauser from Freiburg, Germany, who has been on exchange at a New Plymouth High School. She flies well and was delighted to have a wave flight with Peter Cook late one afternoon, close to the mountain. Her ambition is to be a commercial jet pilot.

Two members, one with a Discus and one with a PW5 are planning a foray into the Central Plateau contest and there may be a Libelle owner there as well, once he completes its annuals. Good value all round, I think.

Andrew Skene who has joined our club and is well on the way to going solo. There are a couple of others pretty keen too, so the ab Initio ranks are looking a lot more healthy once again. The AGM saw the same team elected again though James Walker retired from being Treasurer. Well done and many thanks, James. Peter Miller has that role now.

Annual awards presented were: –

Normona Cup

Peter Miller 316 km at Benalla

Most Improved Pilot

Steve Barham

A get-well note for our Club President, Richard Arden, hospitalised at the moment for fuselage repair. The PW5 looks forward to your return!

Roll on summer, La Niña and Le Thermals.

PJM.

GNZ members are eligible for one free non-commercial classified advertisement per issue. Deadline for receipt of advertising for our October issue is 22 November 2008

HANGARS

FOR SALE: 20M GLIDER HANGAR SPACE, OMARAMA NZ. • Located at the south end of the hangar, closest to the Terminal building on the western side. Contact Wes McIver, wesmciver@yahoo.com.au Ph +64 7 55733478

FOR SALE: 15 METER HANGAR SPACE EAST HANGAR AT OMARAMA • $2000/m negotiable. Call 03 348 7009 or email vindaloulou@gmail.com

OMARAMA HANGAR SPACE TO RENT: • We have an 18m space in the Third Hangar (west side) available for rent. This is as close to the camping ground as you can get. Summer rate = $79.00 pw. Winter rate $39.00 pw. Please contact Chris Rudge, Southern Soaring, on 027 248 8800 or (03) 438 9600 for details.

FOR SALE

LS4: SUPERB ORIGINAL CONDITION, NO ACCIDENTS. • Excellent aluminium top Cobra trailer. Full panel including Volkslogger. Oxygen system with EDS. All tow-out and rigging gear plus cover set. Also Strong parachute available. Asking price reduced to $59,000. Currently based Omarama. Contact David Laing 027 4340074 / 03 4667173 email : laing.braeview@xtra.co.nz

ASW20FL: WITH WING EXTENSIONS AND WINGLETS •, Cambridge 302, EDS Oxygen with large Keylar Bottle. New tinted canopy. Fresh out of its annual with Avionics and Oxybottle checks complete. Hangared in Tauranga. For more details contact David Jensen email: puke-tiro.farm@xtra.co.nz Phone 0274 517757 Free delivery to the South Island.

LIBELLE 201B #579: • Approx 1600 launches and 2300 hours. Basic instruments, Trailer, Chute, O2. Located South Canterbury. Contact Paul Marshall for photos and any other details.
P_Marshall@xtra.co.nz

PW5 FOR SALE: ONE PRIVATE OWNER, NEVER DAMAGED • purchased new in 2003. Total time 130 hours. Becker AR4201 transceiver, Tasman V1000 audio vario $19,000. Owner up graded the reason for selling. Phone 092336370 evenings.
Email heinanddot@farmside.co.nz

COBRA 15 GLIDER (ZK-GJE) FOR SALE • Best condition Cobra in the country, complete with tow out gear and trailer in good condition. It is fitted with an Icom radio and a Borgelt B40 vario. This glider is fully aerobatic, easy to fly and has a 38:1 glide ratio – comparable with a Libelle or Standard Cirrus. More details are available on http://users.actrix.co.nz/russell.jones//CobraAdvert.htm. Asking price: $15,000; but I'm open to offers, so don't be shy in contacting me. Contact Russell Jones, (09)527-3430 or email: PrismConsult@gmail.com

VINTAGE DONOR PARTS REQUIRED

EVERY NOW AND AGAIN SOMEONE BREAKS A GLIDER and if it is an old one the cost of repairs can result in a scrap job. Just like organ donations one write-off can help to prevent another one (if you are not a potential donor you should be). The following parts are required to get Vintage Gliders in the Air. Tailplane and Elevator for a Ka6cr, Wing Strut for a Ka4 "Lark" If you can help please email vintagekiwi@xtra.co.nz.

Sailplane Services Ltd

SCHEMPP-HIRTH

email sailplaneservices@xtra.co.nz
phone 09 294 7324