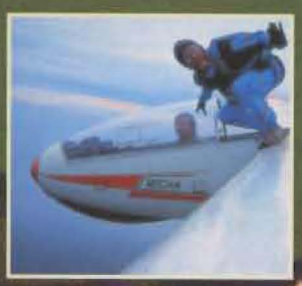
Sailplane & Gliding

The 18-Metre world-beater

Don't try this at home...

FLIGHT TEST: DG-1000

Soaring Australia



Aug – Sep 2001
£3.25 Vol. 52 No. 4
ISSN 0036-7230

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August ~ September 2001
Volume 52 No 4

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Your contributions are very welcome: please feel free to discuss your ideas with us

Deadline Dates

October ~ November 2001

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Letters	August 14
Club News	August 14
Advertisements	August 24
Classifieds	September 7

December 2001 ~ January 2002

Articles	October 16
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*New world champion Steve Jones, of Lasham Gliding Society, team-flew with Dave Watt in the 18-Metre worlds, held alongside the World Class worlds at Lillo, Spain, this June. From 14 contest days in two classes, Brits took seven day wins (Steve in Chris Garton's Ventus: the **White Planes** picture co.)*

Sailplane & Gliding

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From the BGA Chairman

FOLLOWING his success as the European 15-Metre champion last summer, I am delighted to see on the web this evening (June 30) that Steve Jones has won the World Air Games 18-metre title at Lillo in Spain in a convincing performance over seven days. Dave Watt came 7th and had it not been for missing one TP would have been up there with Steve.

Sarah Steinberg (nee Harland) came 5th in the World Class (PW-5) after leading at one stage. This was a superb achievement as the only British entry against experienced PW-5 pilots and team flying, and particularly as she was self-funded.

At home, the foot-and-mouth crisis has been a serious disruption to normal activities this season, but I am glad the Executive was able to relax the cross-country ban fully at the beginning of June for a large part of England, following the same for Scotland north of the Clyde-Forth valley in May. Two competitions went ahead in June with no reports of problems, and pilots are flying cross-country – albeit with due caution, I believe, to avoid landouts where possible. I should like to thank the movement for its forbearance and compliance with the ban. There is no doubt our voluntary actions have been very well received at national level by the NFU, the CLA and government.

Of course it was Sod's law that the weather was quite good for gliding in April and May. But the balloonists haven't flown at all in the UK since February, and hang-gliders have been severely restricted. Except those clubs caught in the infected areas, we have got off quite lightly.

Your editor's rationing of space keeps this piece short. So, briefly, the five-year BGA Strategic Plan was delivered to the Sports Council in June; the technical exposition for the BGA's delegated maintenance of motor-gliders and certain tugs, negotiated with the CAA, is in its final consultation phase; and we plan a fourth Chairmen's Conference on October 27 at Husbands Bosworth. The main topic for consultation will be a complete overhaul of BGA Laws and Rules, but we also hope to revisit important marketing issues for clubs.



Which of these world-beaters is congratulating the other? Club Class World Champion Pete Masson, left, shakes hands at the BGA AGM last February with Steve Jones, then the European 15-Metre Champion, now also the World 18-Metre Champion

After a successful meeting with Kate Hoey MP last August, following the election we have to start again as we have a new Minister of Sport, Richard Caborn.

Have a good summer – what remains of it!

David Roberts, Chairman
d.g.roberts@lineone.net

Low-interest loans for UK gliding clubs

THE PHILIP Wills Memorial Fund, formed in 1978, exists to make secured loans to BGA clubs to help fund their capital projects and is administered by Joan Cloke, Dick Dixon, Keith Mansell, Barry Rolfe and Chris Simpson as Trustees.

At a recent meeting of the Trustees Chris Simpson resigned as their chairman (a position he had held since the Fund's formation) but continues as a Trustee.

Hitherto, loans made to clubs have been only for the purchase of land or buildings but the Trustees will now also consider applications for loans towards the purchase of equipment such as gliders and winches.

Currently the Fund has some £151,000 – of which £29,000 is loaned to clubs leaving around £122,000 available for further loans.

The Trustees are keen for more of the Fund's resources to be employed for the good of the gliding movement.

Loans typically are repayable over five or ten years.

The interest rate on new loans has been reduced from 5 per cent to 3 per cent. If your club needs a loan towards proposed capital expenditure please consider the Fund as a possible source of finance. Enquiries should be made to Barry Rolfe at the BGA.

Keith Mansell, Chairman of Trustees

Double blow for Dutch

FROM 2003, gliders may not be allowed above 1,500ft in The Netherlands, due to a lack of suitable transponders as required by the Dutch Aviation Authority. Dutch pilots hope to negotiate a transitional arrangement. They are also being asked not to stray into Belgium, where usable airspace for gliding is very limited. Errors could threaten even the limited airspace available. Comp pilots face disqualification if they go wrong (*Thermiek*)

OSTIV call for papers

OSTIV will hold its XXVII Congress from December 13-20, 2001 in Mafikeng, South Africa, at the site of the 27th World Gliding Championships. All members are invited to send in papers or nominations for the OSTIV Plaque. For details and the call for papers, email *l.m.m.boermans@lr.tudelft.nl*

Top French pilot dies

FRANCE'S Gilbert Gerbaud, 1993 World Champion at Borlange, Sweden, died on May 24 in a Nimbus 3DM. The 48-year-old was on a gliding holiday in the USA with Swiss pilot Eddy Naef, who was also killed. An investigation is under way. (*Vol a Voile*)

New bookmark for records

The records section of the FAI website has been improved. New options include viewing performances per pilot or glider. Bookmark the new page: *http://records.fai.org/gliding*

Soaring in Florida

LEADING American pilots Tom Knauff and Karl Striedieck are to join Chris Rollings to run gliding courses in Florida this winter. See *www.milehighgliding.com* for more details.

Bugwipers for wind turbines?

DUTCH researchers have solved a 15-year mystery: why wind turbines suffer a drop in performance when the wind is stronger. Dead insects accumulate on the blades, to little effect in light winds. But when the wind picks up, the bugs cause a drop in output. Sounds familiar. (Spotted on *www.bbc.co.uk* by Mike Miller-Smith)

Round the world in 90 days...

An amazing 45,000km flight in a Super Ximango (AMT-200S) began on June 25 when South American Gerard Moss took off from Sorocalba, Brazil. He hopes to achieve the flight, a first for a motorglider, in 90 days/ 300hrs (*www.glidingmagazine.com*)

... and flying after 90 years

Cotswold GC has discovered a new market for gliding: the over-90s. Residents of a Gloucester care home are following the lead of Grace Nunan (see p53). Irene Hale, 91, Brenig Owen, 93, and 96-year-old Peggy Barrett, born as the Wright Brothers made their first flights, planned to fly at Aston Down in July. (*Spotted by Peter Fuller*)



RICHARD Noble (far left) presents Graham Garner with a CAA General Aviation Safety Award Silver Medal and Certificate at the RAF Club in May.

Graham, from Wolston, near Coventry, was one of six finalists. At the age of 20, and with 2hrs 14min experience as P!, he dealt with a ballast weight's jamming of the control column and rudder pedals, and carried out a safe landing. For his account of the experience, see Bolt from the blue *on page 61.*

The CAA safety scheme, now in its seventh year, recognises people within UK GA whose outstanding airmanship, practical skills, quick thinking and common sense have averted serious or fatal accidents. The winner, Ian Middleton of Lincolnshire, shepherded a lost student pilot in another aircraft to safety

Memories of World War II

IT'S A June morning on an airfield somewhere in England, *writes Barry Furness.* The sun is up but there's a chill in the air. Gliders are picketed around the airfield – the early morning dew still glistening on their wings. Standing around quietly are groups of young men, a certain tension hanging over them. At the sound of engines warming up, pilots move instinctively towards waiting aircraft.

Sgt Douglas John ("Griff") Griffiths, 'A' Squadron Glider Pilot Regiment, checks his parachute without thinking – his mind is elsewhere, It's June 6. He tightens the straps, then climbs into his glider. His destination?

In 1944, it was Normandy; a year later, it was Arnhem; his glider was a Horsa.

And 57 years on Griff Griffiths went through the same preparations. This time, though, the 80-year-old was flying as a personal tribute to all wartime glider pilots, many of whom gave their life in the cause of freedom. A poignant moment, and even the suspicion of a tear in members' eyes, as Griff flew the two-seater Grob 104 low over the flag poles at Tibenham, with their Union flag and the Stars and Stripes fluttering alongside each other in recognition of the men of both nations who flew from here.

On landing, Griff was unusually quiet. After a reflective moment he just said: "Thanks – I'd like to be able to do this on the 60th anniversary".

At Saltby airfield, meanwhile, someone who didn't get airborne in the war has at last achieved his ambition, *Buckminster GC informs us.* In 1943, schoolboy Donald Steward was in a Horsa that would take British and Polish troops to Arnhem. His hopes of a flight were dashed when an exercise was declared. But after Don offered Buckminster GC a 1944 aerial photograph of the airfield, they learned of his frustrated ambition.



Chairman Neil Rathbone (above, with Don) said: "We just couldn't resist giving Don a flight, which he enjoyed, but more importantly members started talking to him about their stories, documents and memorabilia". Now the club is launching an airfield history group. Anyone who has stories, documents or memorabilia can email Don: *donvers@btinternet.com*

• *Volunteers, including ATC members are to build a full-size replica of a Horsa at RAF Shawbury, for static display at RAF Cosford*

WE'D LIKE to correct a potentially misleading impression given in the article *Learn from past tragedies* on p60 of the June-July edition. The accident referred to under the heading *Collision during comps* was primarily due to each pilot being in the other's blind spot. This raises several interesting points about safety while thermalling, which we hope to address in a future issue.

Helen Evans, Editor

Don't miss out

NOTE February 23, 2002 in your diaries, as this is the date of the next BGA Conference. Following on from the success of recent years, it will host many famous names in aviation, and in 2002 will include speakers such as Paul MacCready and Brian Lecomber. With more names in the pipeline, watch out for future issues of *S&G* when we will be announcing the full programme.

By popular demand we will be returning to the Eastwood Hall Conference Centre near Nottingham. To save disappointment you can book your accommodation now by calling the Centre on 01773 532532.

In brief

THE LATEST gliding victim of foot-and-mouth is the Northern Regionals. See p9 for a revised comps calendar and p13 for the situation as we went to press. For any later developments, see *www.gliding.co.uk*

WE ARE sorry to report the death in a glider crash of Mike Carter, while flying his Kestrel from Husbands Bosworth, in June. A BGA investigation is ongoing.

IN HIS post-election reshuffle, Tony Blair transferred transport responsibilities from John Prescott, who remains deputy prime minister, to trade and industry secretary Stephen Byers. Former defence minister John Spellar is transport minister, replacing Lord McDonald. Kate Hoey has been replaced as Sports Minister by Richard Caborn (*www.number10.gov.uk*)

FOLLOWING the RAeC Trust's conference *Flying For Youth* (see page 12) a discussion group and website are being created. To join, tel/fax: 0207 603 3133 or email Fred Marsh at *chairman@royalaeroclubtrust.org*, or see *www.royalaeroclubtrust.org*

IF YOU'RE an instructor who would like to help out at Connel GC in Scotland, read on. "The area must be one of the most beautiful and the flying some of the most demanding and satisfying that can be had," says Scottish pilot Al Eddie. If you're interested in running a course or two up there, contact CFI Alex Fleming via *al.eddie@lineone.net*

BARGAIN books available from the Vintage GC sales department include *Slingsby Sailplanes* at £25 and *German Air Attaché – the Peter Riedel Story* at £13. Add £1 for UK p&p for each and order from VGC Sales, 22 Elm Avenue, WATFORD WD19 4BE, UK or tel 01923 241924.

UK AIRPORTS last year handled 180 million passengers, an increase of seven per cent over 1999, according to CAA figures. This figure is much in line with the general increase over the last 50 years. There was rapid expansion in Stansted (26%), Luton (18%), London City (14%) for the London area, and Prestwick (29%), Cardiff (15%) and Southampton (14%). (*www.caa.co.uk*)

WINNER of the BGA 1000 Club Lottery's June draw was WEJ Pottinger (£54.00). The runners-up (each winning £10.80) were: A Jacobs; A Thomas; G Cole; A Galbraith; and J Pretty. Winner of the May draw was B Waters (£54.00). The runners-up (each winning £10.80) were: A Jacobs; S Knox; R Ashurst; J Stanley; and D Shepherd.



Do you know anyone within the General Aviation community whose good airmanship has averted a serious incident or possibly fatal accident during 2001?

The General Aviation Safety Awards are presented to individuals and organisations in the UK to recognise their good airmanship or practical skills and abilities when faced with potentially serious incidents directly related to flying. Anyone involved in UK general aviation may be nominated – pilots, instructors, engineers, aircraft operators and air traffic control staff. Nominees should be over 16 years of age and may be either individuals or organisations. Please note that only 'one-off' incidents will be considered. The selection committee regrets that it cannot consider awards for life-long service to aviation.

Nomination form for CAA Safety Awards 2001

Closing date for nominations: 17 December 2001

Nominee's Contact Details: Name: .....

Address: .....

Telephone number: .....

Brief details of reason for nomination: Description of incident: .....

.....

.....

Continue on separate sheet if required

Your Contact Details: Name: .....

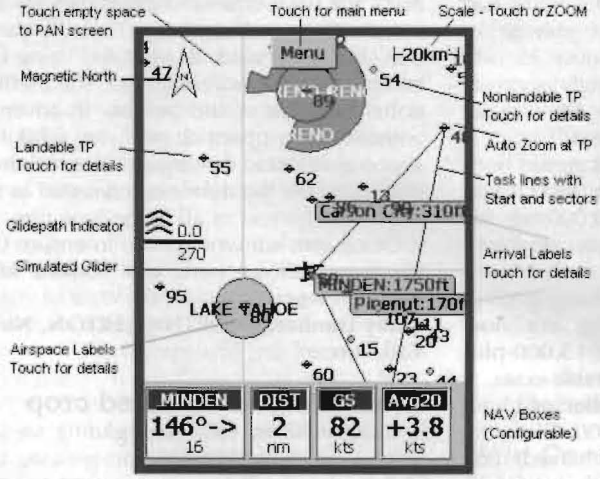
Address: .....

Telephone number: ..... Signature: ..... Date: .....

How to return this form to the CAA: By Fax: 020 7379 4784, By Post: Civil Aviation Authority, Corporate Communications Dept, CAA House (K101), 45-59 Kingsway, London WC2B 6TE (photocopies are acceptable). Alternatively you can visit our web site www.srg.caa.co.uk/ga/award.asp - and fill in the form online.

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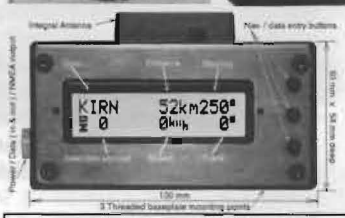
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Your letters

Strong views on turbos

THERE are some strongly-held views about turbo sailplanes – both for and against. But where can anyone in the UK get unbiased advice about buying and using them?

The top pundits usually only ever land out in competitions. This group, however, is only a tiny percentage of the UK gliding population. The comment that: "the engine is only there to save you from the field landing that would not have been necessary without the weight of the engine" has been common advice to those contemplating the purchase of a turbo, along with lots of other ill-informed comments.

About 80 per cent of new Schempp-Hirth sailplanes have engines. LS and Schleicher are expanding into the turbo era. Turbo LS8s are available and I am waiting for a turbo ASW 28. Some insurers recognise the benefits of turbos and give very good rates, but the excess is doubled for field landing accidents! All competitions in Germany and across the world allow turbos and self-launchers without penalties.

There have, however, been some very serious accidents, which are attributable to the additional workload placed on the pilot during the field landing phase, and these need to be addressed.

There is a decision-making process required to abandon the start and manage the field landing with engine erected – while trying to carry out a successful field landing. All safely manageable if well understood and anticipated.

We have no statistics for the number of slow/failed engine starts or the reasons for them. The BGA Flight Safety Committee might consider gathering this information to help us reduce future problems.

The BGA's coaching operation could provide turbo guidance and hands-on training with its own turbo two-seater. It would undoubtedly attract utilisation as well as enabling club instructors to have first-hand experience of the thought processes and skills required to operate a turbo sailplane safely and to best advantage. The BGA would be seen to be promoting a reduction in field landings.

On the subject of reducing the number of field landings, the current comp rules in the UK for turbos/self-launchers are forcing field landings which would be wholly avoidable. With the crisis in our countryside, how can the BGA justify this? Perhaps it is time to extend the turbo trial to all UK comps.

Bernie Morris, HIGH WYCOMBE, Bucks

Pilot numbers: if it ain't bust

IN 1964 gliding was about the only 'inexpensive' means of getting airborne. Around 10,000 people in the UK chose to and for many years the number held near that level. No-one selected this figure or tried to change it; it could have been 8,000 or 12,000. That year was notable for two developments: 1,050,000 babies were born in the UK and a particular pharmaceutical was introduced which was to have a profound effect on population numbers (for a family mag, I blush about further detail).

Over the next decade, family economics due to oil-price hikes stemming from Middle-East wars and a two-year doubling in house prices helped get the annual birth rate falling to less than 600,000. As the 1964 arrivals grew older, from 1970 schools had empty seats and, after 1982, the universities saw falling intakes. They are now 35 (ish) and we see airlines increasingly short of pilots and learn that the one other major pilot-employer is recruiting abroad!

The UK annual birth rate has never since approached the 1964 value. In 2000 it was down to a new low of 510,000 so the number of under-35s continues its downward trend.

Also, rival airsports like hang-gliding, microlighting and parasailing are now available and getting a further 15,000-plus pilots off the ground at comparable costs.

By 2000, we saw the number of glider pilots had drifted down to ~8,500. Given the 35-year trends in birth-rate (halved) and available rival airsport activity levels



the *White Planes* picture co.

Motors in gliders generate emotions as well as power. *See* Strong views on turbos, *top left*

(approaching double the number gliding), it might be observed that this 15 per cent fall in our numbers is far less than we might expect and perhaps is an indication of the success of our marketing efforts!

If this is anywhere near the case, we might just find that it is over-coercion which is leading to the high drop-out rates we seem to be experiencing.

I hope all this evidence does not spoil the debate.

Tony Gee, MARLOW, Buckinghamshire

More power to glider pilots

WITH reference to the ongoing discussion on recruitment and retention of glider pilots, I wonder whether there would be any practical way of seducing aspiring PPLs into using gliding as the best entry route. I have always maintained that glider pilots make better power pilots for obvious reasons:

- much better understanding of the environment in which we operate;
- better understanding of the penalties of inaccurate flying;
- greater experience of flying close to the stall and of actually stalling and spinning;
- better appreciation of approach control due to the one-shot gliding requirement;
- experience of close-proximity flying and the need for good lookout.

And so on. Thus I have always encouraged anyone who asked my advice to go gliding first – the basic costs and formalities are less and the teamwork more fun. Then the transition, if still pursued, to powered flying can be cheaper and more effective. The 64,000-dollar question would be how to advertise without overly upsetting the flying schools? I suppose it could be argued that anything that increases the numbers interested in flying would benefit us all in the long run.

Of course, we would have to ensure that the new recruits were well looked after, wouldn't we?

Wally Lombard, NORTHALLERTON, North Yorkshire

Eradicate this outdated crop

IF YOU were to visit most gliding sites in Britain, you would find a crop growing that glider pilots in the past have used to great advantage. These were harvested at any time of the year and placed in piles around the airfield. Their main use is as ballast to hold down our very expensive aircraft in any wind above a mild breeze.

We like to think that the diversity of our flora and fauna in England is pleasing to the eye; this crop, however, has I feel served its time and needs to be replaced!

It is the (very) common Car Tyre, *Rubbisious Tyrannicus*. This is a grubby black, normally covered with dirt and stones, and sometimes has a large amount of water inside. If left unchecked it will grow rapidly and spread itself over a large area. Visitors to airfields see this and can't be very impressed. So it should be classed as a weed and eradicated as soon as possible!

The gliding fraternity is resourceful; what we need is something that is waterproof, easily cleaned, and fairly mobile with a scratch-proof surface. Someone out there has already found a solution to the problem, I'm sure. If you have any ideas, contact me at the East Sussex GC. After all, would you put them on your car's bonnet?

David Williams, UCKFIELD, East Sussex

Twin tows in two countries

MARTIN Yates' article (*Just add a second tug*, p33, June-July 2001) on twin tow Halifaxes is very interesting. One thing, though, a Hotspur could only carry soldiers. The Horsa could carry a field gun or jeep.

The Germans did it a different way. They stuck two Heinkel 111s together and added a fifth engine in the middle to tow their ME 321 Gigant. They even tried three Messerschmitt 110s to tow it. Eventually they put six engines on the glider, did away with the tugs, and called it an ME 323. Hanna Reitsch was involved in the testing.

Mike Wood, YORKSHIRE GC

Airbrake – and Pawnee – mods

I REPLY to Godfrey King's letter in the last issue (*Airbrake mod from Germany*, p8, June-July 2001). My Std Cirrus airbrake mod was approved by the BGA and Schempp-Hirth in 1985 and a similar mod for the Nimbus 2 (and 2b) in 1987. Most aircraft worldwide have now been modified. The increase in sink rate is about 50 per cent, which, in most pilots' opinion, converts the airbrakes from unacceptable to acceptable.

The BGA issues an annual list of glider modifications to inspectors and it is now on the BGA website. I strongly recommend consulting this list before designing something "new". It may well have "all been done before".

Details of all mods are available from the BGA office. The originator will normally be happy to supply drawings at nominal cost.

After a recent mid-air between a tug rope and an K-13, Nympsfield are keen to fit a cable winch in our Pawnee tug. Tost make a system that costs about £2,000 and is approved in Germany. To get CAA approval will cost money. Are any other clubs interested in sharing the cost? The system should improve turnaround times and safety.

Tim Macfadyen, NORTH WOODCHESTER, Gloucestershire

Sincere thanks

ON BEHALF of Lynn and myself, I would like to express sincere gratitude for all the good wishes expressed to me on my enforced retirement due to my continuing ill health. We have both made many friends over the last few years and shall miss visiting the gliding clubs during the summer season.

I would like to thank all the clubs for the hospitality given to me over the years and all our customers for their continued support during this time.

Safe and happy gliding to you all.

Nev & Lynn Cawte, Nevynn International, MANSFIELD, Nottinghamshire

Look afresh at learning

AS AN average pilot – with no particular safety expertise – I thought I would put in my two pennyworth on the subject.

Part of my occupation requires me to teach new contact lens wearers how to put their lenses in and remove them (bear with me, it is relevant). This takes about 30 minutes and the wearers, although nervous of learning this new art, pay great attention and try their best – perhaps because they *are* nervous. Then they go home with the lenses and return a week later to let me know how they got on.

Invariably, the story is the same: their technique became worse before it got better again. I then watch them go through their method and I keep quiet and observe. Most are OK; some can do it but have learned bad habits; a few have lost the technique completely. The reason? They stop paying attention to detail: they think they can do it properly because they've done it a few times. They lack experience.

The remedy, for the ones who are below par, is another lesson from me. Ideally, this should be when they are at their worst, just a few days after the initial instruction.

The relevance to gliding? I think gliding is a similar learning process, just over a longer timescale. So weed out bad habits after going solo by a compulsory P2 refresher course, say the next few hours' worth of flights after 30 hours or so. Initially, I would suggest the instructors keep quiet and just observe. This allows P2 to relax and allow their full repertoire of bad habits to surface. Thereafter the instructors can have their fun.

I know that many accidents involve experienced pilots, but some bad habits take time to show themselves.

I'm fully aware that there is no cure-all for accidents. Check flights are invaluable but perhaps a more in-depth assessment of our flying skills is required once in a while?

Paul Sheffield, HENLEY-ON-THAMES, Oxon

Wild Goose chase

READING "where are you now?" pleas in other letters moved me to wonder if my old Olympia 419 is still about.

Called *Wild Goose*, she had been owned by Sir Peter Scott, hence the name. I bought her in March 1971 and owned her until October 1976. I remember that she was big. The cockpit was roomy and comfortable with a nice sit-up-and-beg position for the pilot. The trim wheel would have done justice to a Lancaster.

I called the wings people-scarers. The whole wing came in two sections, and it was very, very solid. I had only to land at the end of the day and small groups of horror-struck club members could be seen scampering over the nearest horizon.

The long arm of coincidence reached out one day in 1972. I landed at Inkpen and was on the ground run when another 419, also on its landing run, went past in the opposite direction.

Quite apart from the shock of finding that either I, or the other pilot, was an idiot, the chances against two 419s being together were enormous.

There were, I think, less than a dozen sold. About seven, I believe, went abroad so the number operating in England on any specific day was very small. The entire fleet must have been at Inkpen that day.

Is *Wild Goose* still giving pleasure out there somewhere? I would like to know of her adventures and present whereabouts.

Pat Ladd, BRADFORD ON AVON, Wiltshire

Please send letters – marked "for publication" – to: The Editor, Sailplane & Gliding, 6 Salop Close, Shrivenham, Swindon SN6 8EN, UK or to: helen@sandg.dircon.co.uk
Please include your telephone number and full postal address, and try to keep your letter concise. The deadline for the next issue is August 14

Dates for your diary

Event	Location	Dates
Enterprise*	**Sutton Bank**	**Cancelled***
VGC Rendezvous	Zwickau	Jul 22–9
Northern Regionals	**Sutton Bank**	**Cancelled****
1st Women's Worlds	Lithuania	Jul 27–Aug 12
Regionals	Hus Bos	Jul 28–Aug 5
Open Class Nationals	Lasham	Jul 28–Aug 5
Regionals	Lasham	Jul 28–Aug 5
Coupe D'Europe	AC de Poitou	Jul 29–Aug 11
VGC International Rally	Zbraslavice	Jul 31–Aug 9
Inter-University Task Wk	Saltby	Aug 4–12
2nd Junior Worlds	Issoudun	Aug 6–18
Standard Class Nationals	Nympsfield	Aug 11–19
Inter-Services	Bicester	Aug 11–19
York GC 40th anniv.	Rufforth	Aug 18
Oxford GC 50th anniv.	Weston	Aug 18–19
Regionals	Dunstable	Aug 18–26
Regionals	Gransden Lodge	Aug 18–26
Two-seater Comp	Pocklington	Aug 19–26
Junior Championships	Aston Down	Aug 25–Sep 2
15-Metre Nationals***	Booker	Aug 25–Sep 2
Regionals***	Tibenham	Sep 1–9
Mountain Soaring Comp	Deeside	Sep 2–8
Aerobatics, Saltby Open	Saltby	Sep 8–9
27th Worlds	South Africa	Dec 18–31
2nd Club Class Worlds	Germany	August 2002
Europeans	Hungary	2002
3rd Junior Worlds	Slovakia	2003
2nd Women's Worlds	Czech Republic	2003
4th World Class Worlds	New Zealand	2003

Bold text above indicates changes from the last issue.

* See also *www.Comp-enterprise.com/*

** Cancelled because of foot-and-mouth

*** Moved from earlier in the season due to foot-and-mouth

Vintage GC Rally at Zbraslavice

THE Vintage GC International Rally returns in 2001 to Zbraslavice Aerodrome in the Czech Republic. They previously went there in 1993 for the Rally and 1998 for their Rendezvous. Built in 1935 as an emergency aerodrome for the airline Prague-Brno, the airfield was used in the war by the Luftwaffe, at first for gliding, then as a base for Stukas and ME109s. After the war, crated gliders were used as firewood. Under the Communists it became a centre for sport flying. When Communism fell, the ensuing financial difficulties were solved by inviting clubs from abroad. A military TMA is close, but co-operation with the Czech Air Force is excellent. See also *http://zbraslavice.vztlak.cz* **Bruno Zijp**

Wave in the Andes

FRENCH and Italian pilots are establishing a wave camp from mid-November 2001 to mid-January 2001. Organised by Top Fly, it uses a Nimbus 4DM at San Martin de los Andes (where Klaus Ohlmann started his 2,463km). The organisers say their Nimbus is the first glider certified for VFR night-flying. The price of US $3,000 covers flying costs only (excluding retrieves or personal insurance) First pilots in the two-seater include French national record holder Jean-Marie Clement. For details, tel: + 39 02 4870 5377 or email *topfly@attglobal.net* Or, if you want to fly in a local club, you can try the one at Chos Malal: *www.patagoniasoaring.org.ar/*

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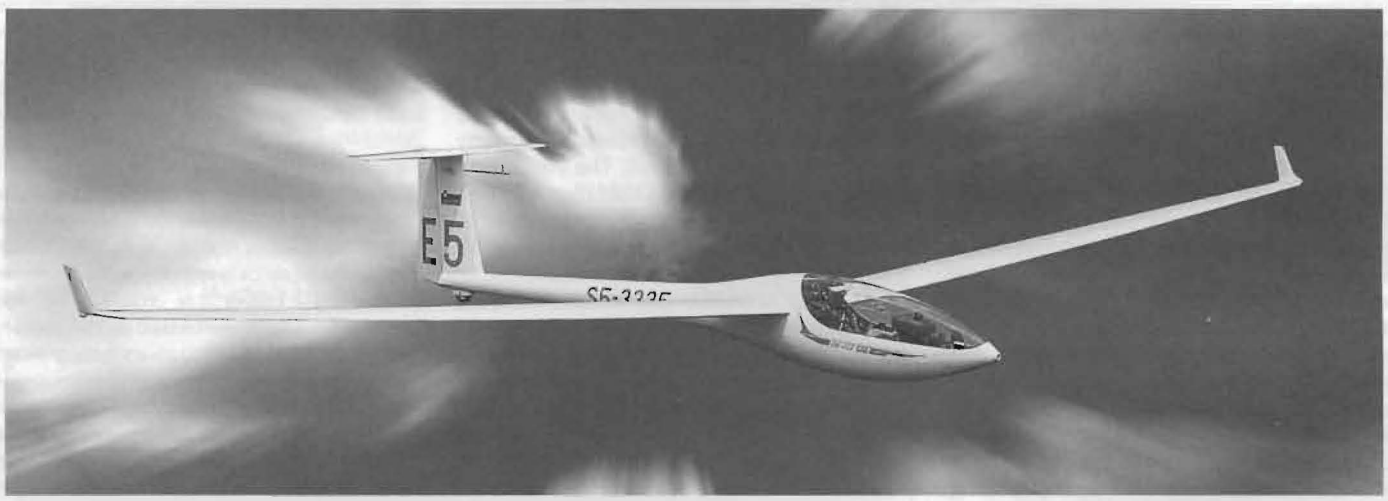
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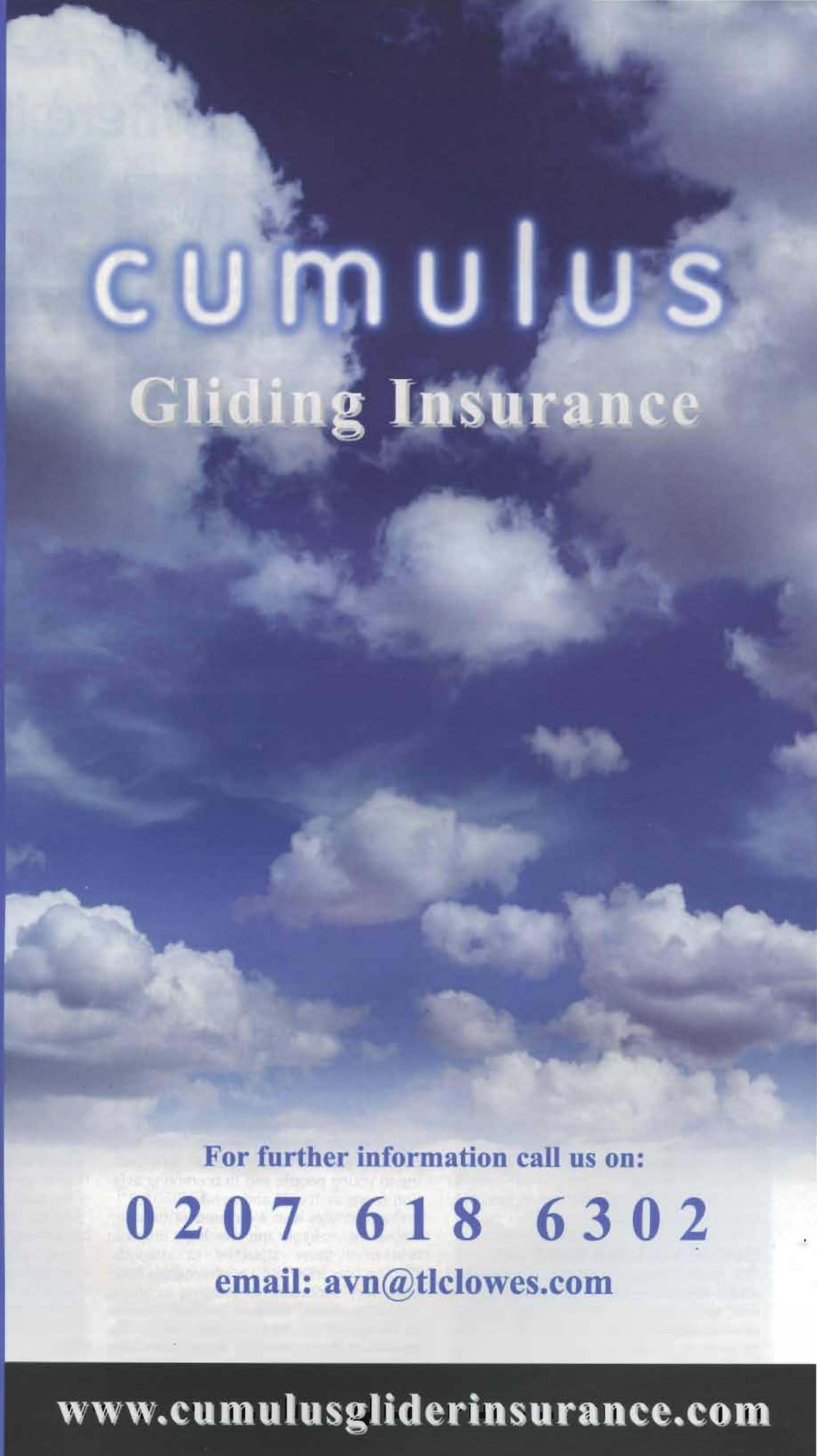
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Representing gliding where it matters

WORK IS continually being done behind the scenes to make sure that the BGA's views and those of its members are properly represented at both central and local government levels. The interests of gliding need to be protected, otherwise there is a risk that local development plan policies will exclude us entirely.

Without recognition in a plan-led system such as ours, there is little chance of gaining planning consent for gliding developments. Indeed, there is a greater risk that other developments will threaten unprotected gliding sites. The BGA's responses have been wide-ranging. Together with the General Aviation Awareness Council (GAAC) we seek protection for gliding at all county structure plan reviews.

Already this year we have responded to a whole crop of consultation papers from the (then) Department of the Environment, Transport and The Regions (DETR) and have made BGA's views known on the following:

(i) Control of Noise from Civil Aircraft. Whilst sounding innocuous enough in itself, the devil was in the detail and we pointed out that rules applying to the major commercial aerodromes did not necessarily apply to unlicensed gliding sites.

(ii) The Future of Aviation. The need to protect the use of airspace for gliding was explained in our response to DETR – otherwise it had been totally ignored.

(iii) Review of Planning Policy Guidance (PPG) 17, Sport, Open Space and Recreation. DETR had made absolutely no mention of gliding or indeed of any other airsport. However, we did not let them get away with that!

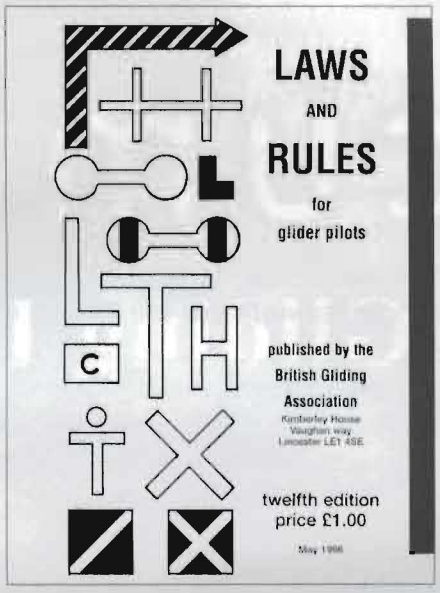
(iv) Airfield Safeguarding. DETR's proposed Direction excluded reference to the protection of small airfields and unlicensed aerodromes, such as most gliding sites. Once again, we explained the special needs of our sport.

In all these initiatives, the BGA has the support of GAAC and of its safeguarding adviser, Philip Isbell. In the House of Commons, we can rely on our parliamentary representative, Lembit Opik MP, who does sterling work in tabling parliamentary questions and in pursuing the cause of gliding at ministerial level, on occasions.

All rather boring, perhaps – but all very necessary if the sport of gliding is to have any sort of future in our increasingly crowded country.

Revision of Laws and Rules

The well-known publication, *Laws and Rules for Glider Pilots* requires reviewing and updating periodically. However, the BGA Executive Committee has decided to carry out a complete overhaul of it in time for the 2002 soaring season. The new edition will be published in a new format, possibly in a loose-leaf form to allow for regular updating. The proposed changes will be subject to extensive consultation will be discussed with club chairmen at the proposed Chairmen's Conference, provisionally arranged for Saturday, October 27 at The Soaring Centre, Husbands Bosworth.



Any changes to BGA Operational Regulations will require the approval of the AGM to be held in February, 2002, when all the proposed changes in style will form a comprehensive resolution. Meanwhile, any comments or observations on improving the existing *Laws and Rules* will be most welcome. Please write to me at the BGA office.

Flying for Youth

The Royal Aero Club Trust recently held a conference for all airsports organisations to determine common ground and to discuss common problems encountered in attempting to attract young people into gliding and other aviation-based sports.

Briefing papers were produced from a wide range of individual airsports, from gliding and microlight flying, through parachuting, model flying and flight simulator enthusiasts. As was to be expected, a widely fragmented range of opinions was expressed. Much emphasis was place on recruiting, publicity and the "WOW Factor" in appealing to young people and in promoting aviation sports as "cool" and trendy.

Concern was also expressed at the high degree of wastage and the high drop-out rate from those attracted to airsports. Gliding bursaries and cadet schemes have been very successful in bringing in young people to gliding, but how do clubs manage to hang on to these recruits once the subsidised flying runs out? Young pilots who succeed in flying solo at 16 frequently give up gliding within a year or so.

Two valid areas were exposed for further work and research. Firstly, the provision of post-solo funding if that will persuade young people to stick with the sport until they can afford to support their own "habit".Secondly, the need for gliding clubs to have a proper Youth Policy, as required by the Children Act, 1989, in order to safeguard those protected by the Act and to ensure that young people below school leaving age are properly supervised when attending gliding sites. The Air Cadets, the Scouts, the Faulkes Foundation and the Girls' Venture Corps have all had to prepare youth policies and if we intend to recruit more young members under the age of 16, then the BGA will have to follow suit and adopt this "best practice".

Your development officer will research the matter and will produce a specimen Youth Policy for gliding clubs' use.

Roger Coote , BGA Development Officer

Technical notes

Glider log books

I AM seeing more and more glider and motorglider log books without correct entries recording flights and flying hours. Recent examples surveyed have included no entries at all or a complete year's flying on one line. Both of these have been addressed, but as a reminder to all aircraft owners, you have a responsibility to ensure each day's flying is entered into the respective log book.

The only exception is that engine hours on motorgliders may be entered in weekly blocks if preferred.

Your inspector has the Technical Committee's backing if he refuses to sign your C of A or maintenance check if the log books are not completed.

Without this information, required inspections cannot be ascertained and this may cost you more in the long run if inspections are completed that are not due.

Registered owners of aircraft

IF YOU purchase a used glider with current C of A please ensure that you notify the BGA of the change of ownership. In the case of a motorglider you should notify the CAA. The main concern is that if you do not, you may not receive important airworthiness information appertaining to you aircraft. This could be a before-flight safety inspection or similar. Please do not wait for the C of A renewal.

Additionally, for motorgliders, you should replace the engraved plate with the owner's details on it.

Jim Hammerton, BGA Chief Technical Officer

Ban lifted outside infected areas

The BGA's decisions of June 6 about the foot-and-mouth ban are below. For later news, see right and www.gliding.co.uk

THE BGA IS pleased to announce that on Wednesday 6th June the BGA Executive Committee decided to lift the mandatory cross-country restrictions for the whole of the area east of a line drawn through the following points: Lyme Regis, Bristol, Cheltenham, Coventry, Nottingham, Ashbourne, Halifax, York, Scarborough. This modification was effective from 06.00 on Saturday 9th June.

This notice applies to England, Wales, Southern Scotland and Northern Ireland.

Scotland north of the Clyde-Forth valley remains the same status as advised at the beginning of May.

Infected areas

Landings should not be made off-airfield in infected areas. Pilots who do so may incur a fine of up to £5000 impounding of the glider and/or detention of the pilot. Pilots are also advised that in addition to the legal consequences there is the risk of physical confrontation together with the long-term negative effect on our relationships with the agricultural and landowning community.

Some clubs in infected areas may still be subject to local restrictions imposed by MAFF or by their landlord and should abide by those restrictions. Other clubs in, and particularly on the edge of infected areas, but well away from FMD infected sites, may seek local advice from MAFF offices as to the possibility of flying cross-country into



the White Planes picture co.

adjacent non-infected areas. Unless such advice is positive, cross-country flying from gliding sites in infected areas continue to be subject to the ban announced in February.

Gliders located at airfields in infected areas, but at least 5km from an infected site, may now be taken in trailers to other clubs providing (a) appropriate precautions are taken with respect to disinfecting trailers, tow vehicles and footwear etc. and (b) the agreement of the destination club's officials has been obtained and (c) return of the trailer to the home airfield would not breach any agreement with local MAFF officials or the club's landowner.

Outside the infected areas

Outside the MAFF-designated infected areas there are still risks of adverse reaction from landowners towards pilots who land out. However the risks are considered to be far less than in the infected areas.

For the rest of the UK, west and north of the line and outside of infected areas, the conditions for cross-country flying remain as stated in our previous modified restrictions of 4th May (see June-July 2001, p23, *Ban is modified for some*).

General and retrieves

We urge all pilots to act responsibly and to continue to avoid outlandings where possible within the bounds of safety and good airmanship. In particular it is stressed that if you are in a situation where you should land out, then do so safely. Avoid the temptation to try and stay airborne too long with the increased risk of leaving proper field selection too late.

Pilots are responsible for ensuring that all reasonable measures are taken, prior to launching, to minimise any risk of infection. In the event of retrieval of a glider from any landout (including a non-infected area) then again all reasonable precautions must be taken over disinfection as required by the landowner. Clubs should have appropriate equipment available and display a notice specifying the procedure for disinfecting retrieve crews, their footwear, retrieve vehicles and trailers. It is advisable for crews setting out on a retrieve to have with them the minimum necessary disinfecting equipment.

Competitions

In areas outside the infected areas it is proposed to allow BGA competitions to go ahead. Separate guidance will be provided to competition organisers and task-setters regarding risk assessment and management during competitions.

Insurance

Pilots are also advised that standard aviation insurance policies carry an exclusion clause in respect of pollution and contamination caused by the insured aircraft.

Feedback

It is important that the BGA receives feedback – preferably by email – on landouts that do occur so that the reaction of farmers and landowners is monitored.

Future developments

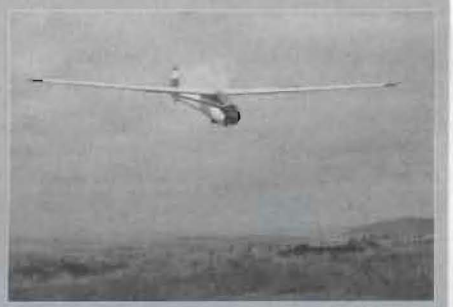
The BGA's Foot-and-Mouth Liaison Group will continue to review the situation regularly and any further changes will be advised through *www.gliding.co.uk*

Back in the air

THE OUTLOOK for British glider pilots is improving as the foot-and-mouth epidemic recedes. Dumfries and District GC (below) is one of many clubs closed when we last went to press that have since gained access to their site and to the skies.

As of July 1, there had been 1,803 cases of the disease in the UK, with recent outbreaks in Powys, Devon, Somerset and Yorkshire. The latter led Yorkshire GC, which is open, to cancel its Regionals.

Midland GC (**www.longmynd.com**) waited for local footpaths to open before commencing flying in early July and North Wales (**www.nwgc.org.uk**) hoped to return home in mid-July. Both were flying elsewhere in the meantime. Dartmoor Gliding Society re-opened on June 30 with a number of restrictions but Carlton Moor GC remains closed.



Charles Ferrier

Above: Dumfries and District GC emerged on June 24 to fly for the first time since February 25. The previous day, the CFI cut the grass and test flew the two club gliders, as Cs of A had expired during the closure. The club welcomes visitors: please call 01387 760601 before setting out

From the BGA

THE BGA Chairman attended a meeting at the National Farmers' Union in London on June 21 together with representatives of other airsport associations and officials from DEFRA (Department for Food and Rural Affairs, ex MAFF). It was made clear that the NFU and landowners really do appreciate the voluntary actions taken earlier on by the gliding community and some really good PR has been generated. It was also clear that the BGA is well ahead of other airsports in terms of resuming "normal" operations. The various bodies involved are now trying to put together a voluntary code of practice very much along the lines of the BGA's current position. In the meantime the BGA will continue to consider modifications to the current geographic "line" bearing in mind any further FMD developments.

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The hand that rocks the cradle is too damn busy to do much else

I INADVERTENTLY slandered one of Britain's great woman pilots when I did the after-banquet cabaret at the SSA convention in Indianapolis earlier this year. In my presentation I paid tribute to the recently deceased Anne Burns as the UK's only female national champion. This she achieved in 1966, flying the Schempp-Hirth SHK; I remember well, since I flew a new Dart 17 in the same competition.

Immediately after my SSA speech I was waylaid by one of Britain's greatest gliding instructors, who currently runs a soaring operation in the US of A. He reminded me in stentorian tones (he looks quite young, by my ever-stretching standards, but he must date back to the days before radio, the way his voice carries) that I had omitted Sally King.

To my horror I realised he was right. The charming, gracious and lovely Sally (latterly Mrs Peter, née King) Wells won the UK Standard Class in 1988. Of course!

I slapped my forehead. How could I have forgotten? Probably because I have never flown against her. I never had what it took to compete in the restricted-span classes where real men, sorry, real pilots do what a real pilot's gotta do, namely battle it out with our island's most aggressive would-be champions, not in gaggles but in swarms.

So when I met her with her daughter Kirsty (age 4) at the British Gliding Association conference shortly after the SSA do, I made a point of apologising in person, but also of asking what happened since that triumph. Sally said that bringing up a family had severely restricted her competition career – well, had ended it.

Anne Burns, by contrast, had no children, and thus was able to pursue a distinguished and decorated career as an engineer who helped solved the problem of why the early Comets crashed, and also to travel around the world breaking gliding records. It's still tough being a woman who wants to achieve success in gliding or anything else and raise children. Despite years of publishing magazines for liberated women, and those who wanted to be liberated, I have no constructive suggestions to make to Sally; especially as if I did, the wiry, witty and dynamic Pete Wells might be around in a flash to straighten me out.

You cannot hope to bribe or twist

thank God! the British journalist
But, seeing what the man will do
unbribed, there's no occasion to.
(Humbert Wolfe, 1886-1940)

On Independence Day I head out to Minden, Nevada. There, with safaris and unexplored horizons very much in mind, I shall celebrate the 10th anniversary of my first visit to what is probably the world's finest soaring site. If I achieve something spectacular and noteworthy I shall write it up for you in a future issue. If I achieve



head out to Minden

nothing spectacular or noteworthy I shall write it up for you all the same, just digitally-enhanced a bit. After watching *Pearl Harbor* I can see how history can benefit from a helping hand.

Why do I just say: "probably the world's finest," instead of: "indisputably the world's finest"? Is it because I am fearful of abusive mail from other airports scattered around the globe? Not at all: indeed I am hoping that I might get a letter from some place in the Southern Hemisphere or the vast expanses of Central Asia that I have not yet terrorised by my airmanship. In my day-dreams the letter goes like this:

"Sir,

In this month's edition of the BGA's esteemed organ, instead of causing us great mirth as is your customary wont, you cause us great anguish. By omission your column grievously disparages our superb aerodrome and its opportunities for record heights and distances 365 days a year.

In the evenings you will find that our cuisine and local wine is superb, served by attentive brown-eyed maidens, who early the next morning will also top up your oxygen and polish your empennage without having to be asked. (What you get up between dinner and breakfast is your own business, but I do warn you our national television service is abysmal.)

We invite you to fly here for a month, staying gratis at the five-star hotel next to the hangar where your own ASW22BL – maybe an eta, depending on how the price of our oil is doing by the time you get here – is waiting for you.

A first-class air ticket is enclosed. We look forward eagerly to your response.

Yours worshipfully, etc

PS: In some Western cultures I believe that this offer might be mistaken for what you call a bribe. We are glad to assure you that there is no word in our language for such a concept, and that therefore the problem does not arise."

I'll lie about my age – and the rest

Twice at Minden in the past ten years and nowhere else ever I have been respectfully asked by gliding trainees from Soar Minden or High Country Soaring, "Sir, did you fly for the Royal Air Force in World War Two?" My indignant reply in each case has been: "Great Scott, I was only five when the war broke out!" To be taken for a veteran 12 or so years older must mean that I am getting awfully wrinkly in the relentless Nevada sunshine. I may be worn out but I'm not decrepit. *(I'll be the judge of that. Ed.)* But on reflection I see how unkind it was to shatter young people's illusions. I also realise that just as American teenagers are a bit hazy as to where Britain is, they may be equally hazy as to exactly when the Battle of that island took place, despite the fact that countless Hollywood stars fought in it.

Next time I am asked that question – it's bound to happen – I won't actually deny it but shall cough modestly, stare into the far blue yonder and subtly imply that true heroism is something gentlemen don't discuss. Then, to break an otherwise

embarrassing silence, I might add: "Y'know, the whole damn war was fought in black and white. Funny, that." and stroll off while they are still looking puzzled.

Come back. Walter Mitty, we need you

However, the same question may be put to me during the Happy Hour (a rare case of American understatement, since in most bars one can get half-price drinks for two or three hours) whilst I am watching the warm shadow of the Sierras creep gently up the Pine Nut ridge. Then multiple cold martinis could embolden me to put on a different act. By the insertion of a few mannerisms, the odd twitch and some broken English, I will let the questioner infer that I did indeed fight in the Battle of Britain – but for zee ozzer side.

Well, it was either that or be a U-boat captain, and I always had a dread of depths.

Holy cow! Grosse-segelflugzeug goes aux vaches for the first time

Hans-Werner Grosse phoned to say he is still testing *eta* carefully: so far no records, but a modest 800km has been flown.

This June, *eta* was at Walter Binder's workshop at Braunsweig, where new dimple-tape and longer rudder-horns were installed, the latter improving the handling considerably. "I decided to fly back home to Luebeck under eight-eighths cloud in



a dread of depths

strong westerlies, using the engine where necessary. The weather forecast was going from bad to bloody awful. After 140km, using rotor and bits of wave, I ran out of hills. While I was trying to stay up near Northeim, a gliding site, drizzle began to fall. I decided to deploy the engine."

Unfortunately, the engine did not deploy fully, but stuck in the position of the Grand Old Duke of York's army, neither up nor down. Hearing this story gave me a sharp sense of déjà vu, in that I had flown with Hans-Werner in one of his little ships (the 27-metre ASH 25) in 1994 in eastern Germany and then the motor stuck in the same, drag-inducing position when the time came to retract it after launching. On the earlier occasion Hans, resourceful as ever, called the engine's designer on his mobile phone and received immediate advice on what to do. The engine retracted smoothly and a very enjoyable piece of local soaring (300km or so) followed.

However this time *eta*'s engine remained stuck 2cm from the correct position, no designer came to the rescue, and Hans arrived in a wheatfield five wingspans short of Northeim without any ill effects.

"Six club members and their guests were eager to help me towards the airfield," said Hans, "from which I wished to launch. They did not know what they were in for. There was no fence, but a little ditch was hidden in the wheat. After three hours of slavery, with soiled trousers and wet to the bone, they got me onto the small (600m) airfield. They were still smiling – a bit – and waved goodbye as I took off and flew back to Braunsweig. Wonders of high tech – the engine worked this time!"

This was the first field landing for the world's largest-span and most expensive (and heaviest!) sailplane, but it has not harmed Hans' enthusiasm: "I like the big ******* more and more".

How to bring a little sunshine into the drab lives of comp pilots

Our syndicate ASH-25 was the very first to arrive in Britain, way back in 1988. So when I flew it in a regional competition it was the only large-span machine to take part, and since the weather was resolutely British I did pretty well despite the massive handicap. It was only simple justice, therefore, that on the grey and drizzly last day of the contest I landed out, and all the



big-hearted Platypus doing his charitable stuff

little-wing competitors flew slowly over me, though not by a very large margin in most cases. Later I learnt that the pleasure obtained by the other contestants, when looking down on my long wings parked in the dirt, was so intense and blissful that I felt that I ought out of kindness to make a point of pulling out the brakes and landing out more frequently, so as to maximise the sum total of human happiness. I have up till now kept that impulse under control, but I am mellowing. Maybe next year I shall do some reconnaissance and find a large meadow or a cut cornfield with a friendly farmer and good pub nearby, and arrange to drop in there, especially on the last day. After all if we are going to have to derig anyway before driving home at the contest's end, it is not such an added chore for my devoted crew. Indeed I shall allow my devoted crew to pick the pub and the field – in that order. Once you have lost the urge to get a rating that will propel you into the National Championships, you might as well devote yourself to worthy causes, such as helping to boost the self-esteem of your fellows. God knows, some of them need it.

So now you know: if you fly over and see me sitting in a field next season, that's just big-hearted Platypus doing his charitable stuff. Honest.

mdbird@dircon.co.uk

The Platypus Papers: fifty years of powerless pilotage (hardback, 160 pages, 100 Peter Fuller cartoons) costs £19.95 + £3.50 p&p. See www.hikokiwarplanes.com tel 020 8748 6344, fax 020 8741 1757 email mdbird@dircon.co.uk *Also available from the BGA on 0116 253 1051 or www.gliding.co.uk*



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DG-1000

Jochen Ewald flies the new two-seater from DG-Flugzeugbau that aims to challenge Schempp-Hirth's Duo Discus



DURING recent years the 20-metre two-seater class has been dominated by Schempp-Hirth's Duo Discus. Now, DG has come up with the DG-1000s. Like the Duo, it is unflapped, but it also has an 18-metre mode for aerobatics (not yet certified) and basic training.

If the newcomer appears familiar that's because the basic fuselage design comes from the DG-500/505 series, albeit with some new features. These include the big, well-sprung retractable mainwheel. The tail design is new, with profiles that produce less drag, and a new, double-trapezoid shape for the horizontal tailplane.

Another new idea is the ballast system in the fin. To compensate for the second pilot, brass weights can be placed in a Plexiglass-covered box at the left side of the high fin. For serial production there will be two pieces compensating for 40kg (88lb) and two for 10kg (22lb). There's also a water-ballast fin tank, which takes up to 7.4 litres (1.6 gallons) to compensate for the wing tanks (up to 160 litres/35 gallons). For light pilots, there are the usual ballast weight boxes under the pilot's knees. All this means you can fly the DG-1000 in the best c of g range, dual or solo.

With empty weights of 411kg (904lb) for the 18-metre and 415kg (913lb) for the 20-metre versions, the wing loading range goes from 28kg/m² (5.74lb/ft²) solo to 42.8kg/m² (8.77lb/ft²) dual with water-ballast in the 20-metre version with its 17.53m² (187ft²) wing area. The 18-metre model has a wing loading of 29kg/m² (5.95lb/ft²) to 44.9kg/m² (9.2lb/ft²) with a wing area of 16.72m² (179.9ft²). Max take-off weight is 750kg (1650lb). The new HQK-51 wing profile designed by Karl-Heinz Horstmann of the DLR Braunschweig has been tested in the Stuttgart wind tunnel. The wing-fuselage section and the winglet tips are the work of Loek Boermans of Delft University. Great care was taken to use a profile to minimise losses if flown dirty (bugs) or wet. The wings have big two-bladed Schempp-Hirth airbrakes on the upper surface. The inner section is 17.2m (56.4ft) with "shark fins" to make it 18m. Longer outer sections with higher dihedral and winglets bring the span to 20 metres.



Left and above: Swen Lehner flying the DG-1000s

For a 20-metre glider, rigging is quite easy. As carbon fibre is the main material, the weight of each of the inner sections is about 90kg (198lb). The spar connection is of the fork (right) and tongue (left) type, with two main pins. The airbrakes and ailerons are automatically connected by torsional tubes, the water outlet valve by a swinging lever. The tailplane is positioned very high, but at least the elevator connection is automatic. Beneath it in the fin there's a 10Ah battery.

Empty, the DG-1000s rests on the tailwheel: to lift the tail you need someone to press down on the nose. A tail dolly is also required for ground handling. Climbing into the cockpit really does mean climbing. The comfortable seating positions are familiar from the DG-500 series. The rear seat is higher than the front one, and is without adjustable pedals. The seat pan can be adjusted for height by a strap, so small as well as big pilots will find a good, comfortable position and can enjoy the excellent view, which isn't blocked much by the middle canopy frame.

The cockpit equipment is similar to older DG two-seaters. Innovations include the airbrake lever's connection to the new Piggott-hook to prevent the brakes from opening during take-off if they haven't been locked; the undercarriage lever design has been improved to give a better 'locked' feel. Thanks to a well-balanced support system, the big undercarriage is very easy to raise and lower. The trim spring release trigger is mounted to the front stick and can be locked "open". In the rear cockpit, meanwhile, the control column can be easily disconnected and removed for solo or passenger flying. The tail tank valve opens automatically with the main valves. The storage space in the fuselage ends in a Plexiglass screen, through which the brake fluid container and rear fuselage can be checked.

The panels have space for modern competition instruments and leave plenty of room for an emergency exit. You jettison the canopy with the normal opening lever (on the left) and the emergency jettison lever (right), which I think are both a bit too far back for comfortable reach.

I aerotowed in the prototype in 20-metre mode from Karlsruhe's grass runway. With DG's engineer Swen Lehner, we weighed c 590kg. In the fin, ballast weights were installed to bring our C of G in the middle-to-rear position. In serial production, lights on the panel will show the amount of ballast in the fin, but as the weights are behind a Plexiglass cover, they can be checked easily when taking the tail dolly off. Before take-off, I carefully lined the fuselage up – for the first metres of the ground run I expected the fixed tailwheel to stop directional corrections.

The glider's dihedral gives good ground clearance, useful in a trainer. Despite a light crosswind, the ailerons responded immediately. (On a later flight, the wing was left down: it could be levelled almost immediately.) After a short ground run with the stick slightly forward, the tail lifted and the DG felt nice and stable with light, definite control forces. At about 75km/h it got airborne. The undercarriage retracts easily. On a later flight with the 18-metre tips the only difference was a lift-off speed of 80km/h.

The stall is gentle: at 73km/h (39kts) a light shaking starts. If the nose is pulled up further, the ASI indicates 70km/h (37kts) when staggering starts, finally resulting in a wing drop. This can be stopped easily by easing the stick forward and applying opposite rudder. Spinning is "standard" with normal and rear c of g positions. With front positions the DG goes into a spiral dive after one or two turns. Spin ➢



Front cockpit of the DG-1000. The airbrake is fitted with the new Piggott hook



The rear cockpit control column can be easily removed for solo flying

➢ recovery is standard, too. With airbrakes out, the stalling speed goes up by 4-5km/h, with the same behaviour, but a bit less of a tendency to drop a wing. The same can be said for the 18-metre configuration, it's just a bit more stable. Here I measured 77km/h (41.5kts) for the warning by shaking and 73km/h (39kts) for the beginning of the "staggering" stall. Again, it was about 5km/h more when the airbrakes were out.

I measured the roll rate from 45°-45°at 100km/h (54kts) for the 20-metre wing at 4.9-5 seconds – quite good for this span. The control harmonisation is excellent. At 105km/h (57kts), rolling with full aileron and rudder results in no sideslipping, at slower speeds only a little bit more rudder than aileron is needed. This helps make the glider fun to handle in rough conditions. I was a bit disappointed by the 18-metre wing: although harmonisation was still good, at 105km/h (57kts) I measured a roll rate of about 4.7 seconds. Swen told me that DG decided to design the DG-1000 with a little less aileron movement, to get lower control forces. They were asked to do so by many pilots, while only a few (mainly aerobatic) pilots preferred higher roll rate with higher forces. And I admit the DG-1000 is easier to fly than the unflapped DG-500, which was already good.

That day at Karlsruhe, it was easy to get the most out of the weak, smooth thermals, at 80km/h (43kts), while other gliders slowly disappeared downwards. In more turbulent thermals, the optimal thermalling speed is 85-90km/h (46-48kts). Flying closer to the stall speed with this profile did not seem to improve the climb rate. At high speeds, the control forces increase proportionally but the DG-1000s is still stable, safe and easy to handle. Only the trim spring setting was not perfectly adjusted.



Above: the main wheel with hydraulic disc brake

The undercarriage swings out easily, the lever locks clearly. Trimmed to 85km/h (49kts), the speed increases to the recommended basic final speed of 100km/h (54kts) when the airbrakes are taken out, in both span configurations: it's good not to have to change trim before landing. Airbrake efficiency is good, maybe a little bit below that of the 500.

Fully held off, it touches the ground at minimum speed with main- and tailwheel at the same time. The well-sprung, strong undercarriage damps even bad ground and the disc wheelbrake is effective and easy to use. There is no significant tendency to nod down the nose when braking.

DG decided not to equip the 18-metre version with winglets, as these would decrease the aerobatic qualities. I couldn't try out its aerobatic qualities: new stiffer ailerons required by flutter tests had not been high speed tested in flight. But the intention is to have the18-metre version certified fully aerobatic.

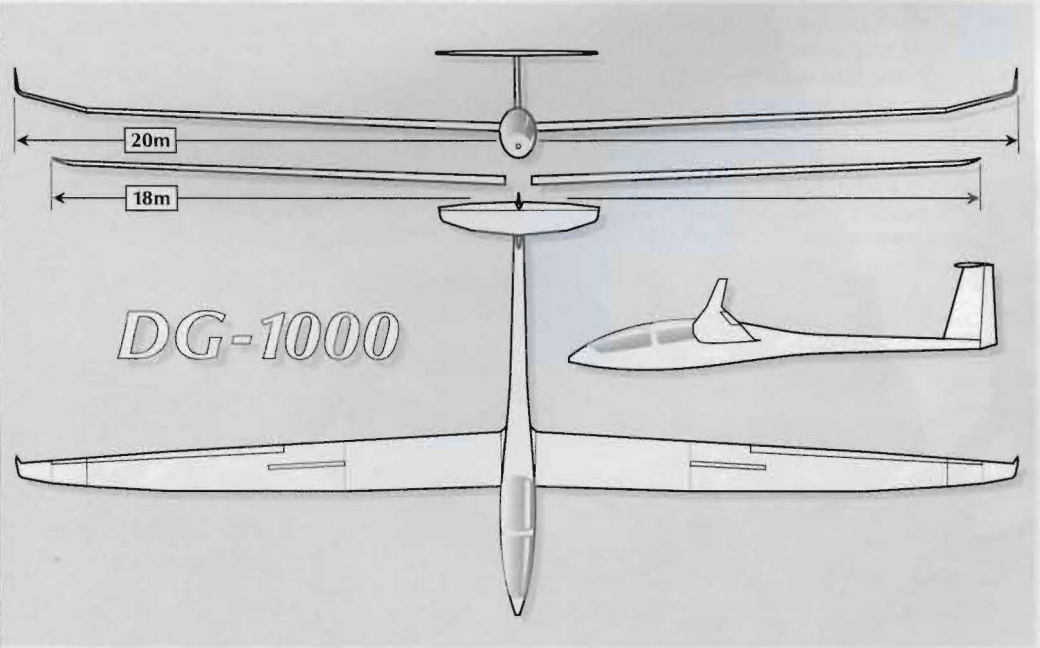
What about the performance? Has the design team of Wilhelm Dirks created a real competitor for the Duo? I would say, yes. An IDAFlieg polar is not yet measured. But DG says that its own unofficial comparison between a club Duo and the 20-metre prototype, at identical wing loadings, showed that around min speed, the Duo performed a bit better, then, up to 140km/h (75kts), the DG glided 1 to 2.5 glide angle points better, at 160km/h (86kts) there was no difference; above that the DG was a little bit better again.

I think both gliders have to be placed at "the top of the ladder" – there was already practically nothing to be improved on the Duo! Both undercarriage systems have advantages and disadvantages in handling, comfort, performance and strength.

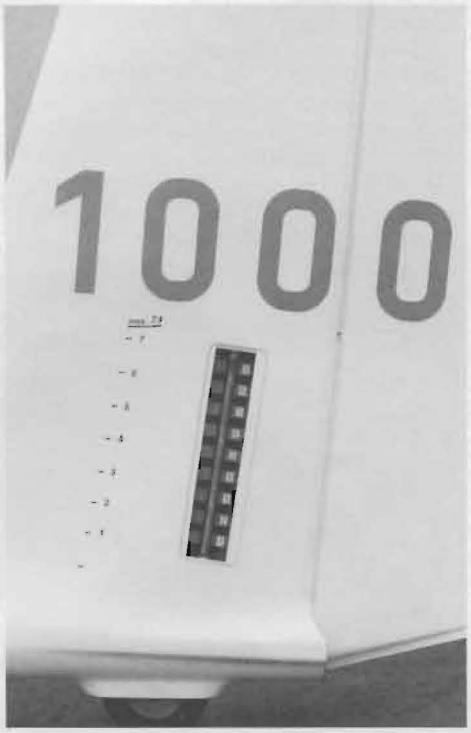
At the time of writing, DG-1000s production is partly at the new DG factory at Bruchsal, where the wings are being built and final assembly is done, and at AMS in Slovenia, who build the fuselage. The whole glider may be produced there in future. (AMS is the new name for the glider building section of the Elan factory, now separate from DG). Of course, this luxury class of club, competition and aerobatic gliders has its price. The DG-1000s with 18 and 20 metre wingtips is 137,100DM (+ VAT). A cheaper "Club" version, the DG-1000c (with nosewheel undercarriage, 18-metre span and without waterballast) is 111.000DM (+VAT); variants in between these two can also be produced. For both Duo Discus and DG-1000s, the wait is about two years if you order now.

Over the next two years, DG also plans a flapped 20-metre version, which will also be available as a self-launcher, replacing the DG-505B and DG-505MB, which will stay in production until then.

Words and pictures: Jochen Ewald



Above: three-view of the DG-1000, by Steve Longland



Right: the tail fin, showing the ballast system

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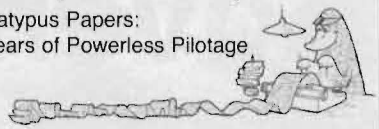
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Adventures in the Alps



The awe-inspiring arena of the Barre D'Ecrines, in the French Alps (all photographs: Guy Westgate)

In part two of Guy Westgate's travels with his DG-400, he has arrived in the Alps

I WANDERED around Gap's terminal building waiting for the restaurant to open for breakfast, but it never did. Jacques Noel – alpine soaring guru and photographic genius – gave me a personal translation of the met brief. He highlighted that the mountain winds were going to be light and variable so I would never be able to predict dynamic lift, and there were numerous inversions throughout the temperature sounding from St Auban, with the possibility of instability in the upper air suggesting storms for later.

I watched a few other gliders launch and followed quickly, chasing the tug's route down the valley. My first lift came off the change of slope at the base of the Céüse ridge and I followed the limestone edge, milking a line of thermals like ridge lift. Within 25 minutes I was at almost 10,000ft climbing in 5kts and looking down on the most hauntingly mysterious mountain, the Pic de Bure.

The peak towers above the surrounding terrain, a giant rock amphitheatre, 8,900ft of arid, unyielding mountain. From my perspective now it was no less impressive. There were gliders high above the south-west flank and after topping out over the observatory I set off south to explore.

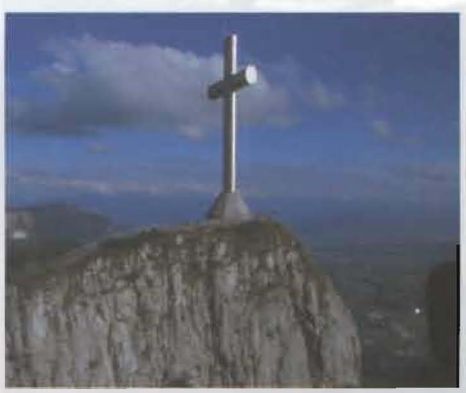
The French Maritime Alps are covered in limestone ridges, formed as the prehistoric seabeds have risen and tilted. The bare rocks provided a constant stream of thermals, so my leg down to the Mediterranean was easy although the cloudbase dropped significantly south of Puimoisson.

I wanted to fly over Mt Viso, one of the most prominent mountains on the eastern edge of the Maritime Alps and a landmark I had reached two years ago. As I got closer to the border, I could see a different airmass hugging the wide Po valley to the east. The tops of the valley cloud were barely to the level of the lowest mountain peaks and this gave Mt Viso both a thick cloud skirt and a rough-looking cumulus hat from the dryer mountain air.

Flying north into the Aosta Valley was impossible as the Italian cloud looked too thick, but conditions seemed better west through the Écrines. I passed over Briançon and for the next half-hour everywhere I looked there were gliders. I followed a



Morning on the airfield at Gap, where Guy got his own personal met briefing from Jacques Noel



The giant crucifix 6,000ft above Chambéry, dwarfing tourists at its base



The moraines of the Mer de Glace were uniquely patterned – "like a Bakewell Tart," says Guy

couple of plastic 15-metre ships up a route a little more daring than I would have tried, along a rising ridge to Barre des Écrines, a majestic 13,500ft peak in the heart of the Écrines. Glistening snowfields swept down a ridgeline to the east and a harsh precipice pierced the northern valley. I took a few turns to marvel at the beauty of the awe-inspiring arena. When my concentration clicked back, my guides had vanished! I realised that I had sunk below the saddle I had crossed and was now stuck with thick swirling cloud descending around me. I wanted to push north but there was a wall of cloud ahead. The only route out to safety was the valley west through the gaps in the cloud. I drifted over the ski resort of Les Deux Alps and had to descend fast as the cloudbase tumbled further. Finally at 6,000ft I could see Grenoble to the east and the Isére valley. It felt like I had been ejected from the Alps!

I crossed towards a plateau beyond Grenoble where I found my first lift for quite a while. I ridge soared a slope on the far side of the escarpment with a wall of rock on one side, a thin cap of cloud and the sloping plateau only a few hundred feet below. In strengthening lift, with my grin slowly growing again, I traversed the entire hanging valley and burst out of my tunnel, still 6,000ft above Chambéry! Who needs big mountains to be impressed?

The breeze was north-westerly, blowing onto the multiple limestone cliffs behind Chambéry and, after taking a couple of weak thermals, I flew the rest of the day in dynamic lift, exploring as far as Annecy. Before retiring to Challes Les Eaux, I loitered at the end of the last cliff, marked by the largest crucifix I have seen. It was quite bizarre to scream past at VNE, the wing tip level with the ridge but still almost a mile above the airfield and the city below. The only indicator of size or speed was a group of tourists huddled at the base.

Next morning's briefing at Challes les Eaux was outside the hangar (in French) and afterwards several pilots gave me their interpretations. The resoundingly clear message was the best weather would be in the south – not what I wanted to hear!

I got quite excited when a grid of at least 20 gliders formed, but then everything stopped for lunch. A Dutch visitor said it was possible to tell when thermals were lifting off the little ridge to the north by checking the windsock. He, too, was frustrated: irrespective of conditions, the locals would always break for lunch then after one o'clock, meticulously check the windsock and launch anyway!

There was a stable layer low down and it made the first 2,000ft difficult. By the time I had established on the second ridge back from the site there were a dozen gliders soaring a mixture of thermal and ridge lift.

I reached Annecy then followed a higher ridge north past Mt Charvin and Percée, their snowy peaks well into cloud. Above one of the breaks in the ridge I found



"Before me lay the Altesch Glacier, the longest in continental Europe. I ran the length of it like a toboggan run"

Tour de France cyclists, but there were helicopters everywhere. I joined the deep Arve valley linking Geneva and Chamonix. Despite strong, punchy thermals from the sunny spurs on the valley sides, a heavy inversion stopped climbs early. I felt an increasing sense of claustrophobia as I turned the corner at Le Brévent. I had never been through such massive mountains without the slightest chance of getting over the peaks. I was surrounded on all sides.

Quite suddenly, there in front of me stood the glittering jewel of the Alps, its soft snowy peaks still almost two miles above: Mont Blanc. I was entering the unknown, an unpredictable stadium filled with oppressive shadows and violent beauty. A few feet further the view up the valley towards Chamonix made me gasp with amazement. It's one of the most beautiful mountain scenes I have seen, not only for its overwhelming size but also richness of detail, texture and colour.

There was little sun on the north-west slopes of Mt Blanc Massif. The rocks, ice and snow stacked in vertical patterns felt cold and stil, but they drew me. I noticed



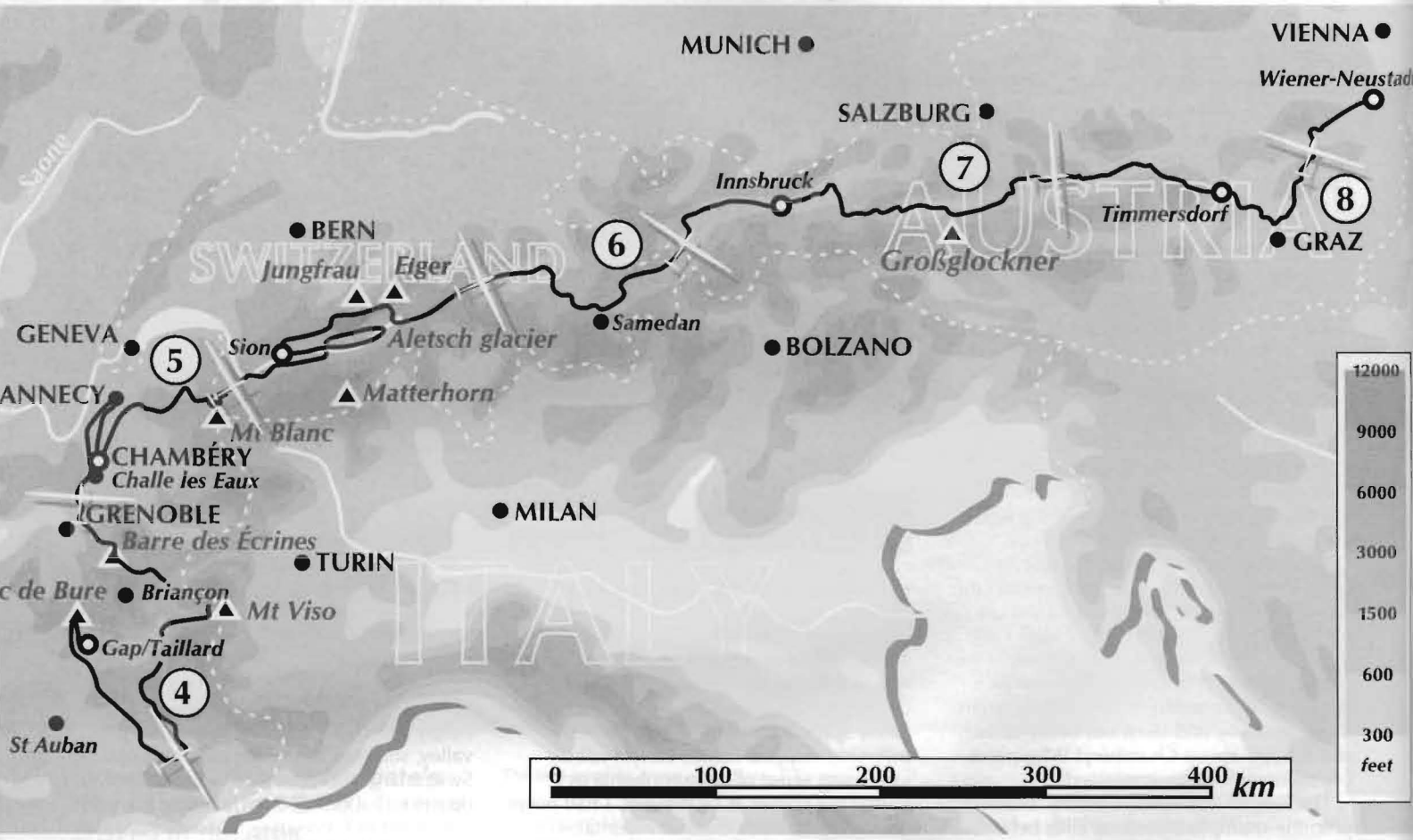
"Storms were building over the Lechtaller Alps," says Guy, "blocking my way through to Innsbruck"

several thin layers of cloud stacked from the valley floor up to almost the highest peaks of the Aiguelles and eventually found enough lift to track past Chamonix. I had barely reached 7,000ft by the end of the valley, still way below the pass towards Switzerland and started to wonder what to do next. Out of curiosity I crossed over the last snowfield, strewn with giant chunks of black rock below Aiguelle du Tour. Suddenly a wild surge tipped me towards the bleak snowfield as a tiny thermal ripped through the inversion to 10,000ft.

I had my ticket to leave but from my new lofty perspective the valley didn't feel so threatening. I tracked back to the glaciers with renewed confidence and used the extra height to explore the hanging valleys leading into the core of the Massif. As I reached the first glacier, my neck hairs rose with anticipation. It felt like I had entered a narrow dead-end street with a big angry dog tethered at the far end. I followed the glacier as far as I dared before I thought the big dog could rush out and bite me; but how long was its chain? The mountains were so vast and I felt so insignificant that I erred on the side of caution.

I reached the Mer de Glace with enough height to lure me in to see the corrie under Aiguelle du Tacul and the junction where the glacier splits. The moraines below me were unique, patterned like a Bakewell tart. I was totally lost in the wonder of the rock amphitheatre that surrounded me – time stood still – there was no past, no future, just the heart-pounding present. The air was crisp and clear so that the ice and snow seemed almost whiter than white, a brilliant white, the rock a menacing black: a scene of extremes.

I decided that white glaciers filled with seracs and crevasses were not the best places to go looking for thermals and I became aware of my predicament ➢



➢ almost as suddenly as I had slipped into my dream. I turned and ran, the big dog of the mountain snapping at my heels.

I slipped out of the valley towards Switzerland and the wide Rhône. I chose the southern side and found little lift until I got low. Working my way up a rocky cliff a few miles from Verbier, I caught a flash of red out of the corner of my eye on an outcrop just below the top. Next time round I saw the lone climber, thousands of feet up. I almost picked him off with my wingtip as my little thermal burst into life, rocketing me upward and away from his ledge. I had invaded his private alpine day for a few seconds. Had I made his day or spoilt it?

My dream was to fly the north face of the Eiger, and that might mean a landing north of the Berner Alps towards Interlaken. It was now past 4 o'clock and I thought I should push as far as I could to prepare for tomorrow. I romped east up the Rhône valley towards Austria and crossed to the north of the valley when I was clear of Sion. There were many feeding valleys, offering tempting routes into the heart of the big Swiss mountains but, hard as I tried, the turbulence and broken thermals would not allow me more than a tantalising glimpse towards Monch and the Jungfrau.

On reaching the Fisher Glacier, I finally took stock of my slowing progress. Heavy rain showers were catching me up from the west. I had a tenuous 65km glide back to the only gliding club, Sion, but I couldn't predict if my path would be clear of rain. Certainly, the longer I waited, the more I risked getting stuck.

I picked up some convergence lift from the advancing storm and at 11,000ft asl I had 9,500ft to glide 45km (about 1:16). I hoped even a shower and a headwind would have trouble stopping me. Seconds later it started raining, a fine mist at first so the glider's handling went soft, then the inevitable depressing sweep of the vario needle downwards! The rain was never heavy enough to see a defined edge; all I could do was continue my plunge into the valley. I arrived at Sion with an uncomfortable lack of height but cleared the rain just before I landed. There was little sign of life around the aeroclub hangars. The only people I found were a German couple who quickly explained my predicament. They could let me out with their electronic pass, but once outside the high security perimeter fencing, I would not be able to return until morning. The only shops and restaurants were outside, but my bed, an offer of the floor in the clubhouse, was inside. Eat or sleep? The couple gave me all they had, a tin of apple juice and a single bread roll and I waited for better fortune in the morning.

The air in the Alps was still far too wet to be described as classic but I knew I should push as hard as I could while they were still soarable. The airport authorities told me there might be some gliding late in the afternoon, so today I was on my own.

I kept to the north side of the wide Rhône valley, hoping to pick up the best of the late morning sunshine. As soon as I got above the first rocky cliffs there was lift. What was impossible yesterday was now disturbingly easy. Finding lift on the corner of the Lonza valley, I quickly escaped from the Rhône, climbing along a steeply-rising ridge towards the biggest mountains in Switzerland. Everything I had learnt in the last few days indicated there would be no lift above the shadows but incredibly there was. By Aletschhorn I was up to almost 12,000ft and still expecting sink at any moment. I planned escape routes either back down the Lonza, or ahead, over a very high col. I continued but waited until the last moment to commit – by now almost willing sink to force a decision but it never came. I crossed into the corrie at the head of the Aletsch glacier and before me lay the longest glacier in continental Europe. I had reached adrenalin saturation.

The glacier was overwhelming. Thick moraines showed the sweeping curve of the ice back to the Rhône and all around were the highest mountains I could comprehend; Finsteraarhorn, Monch, Eiger and Jungfrau. I ran the length of the glacier like a toboggan run until the ice spilt out to the valley and I could follow the Rhône eastwards once again.

Cloud was sitting in three distinct bands. In the highest mountains, now behind me,

the peaks were just capped with a cloudbase between 12-13,000ft. On the valley sides, however, the main cloudbase was no higher than 9,000ft, and just above the main valley floor, damp grey banners lay against the valley walls only a few thousand feet up. I found no lift until the Furkapass where I managed to climb alongside the lorries twisting their way up the hairpin bends. Soon I was high enough to see north through the Grimselpass. A mass of low cloud was boiling up from InterLaken and I was very glad yesterday's endeavours had not taken me further north.

I was now in the Rhein valley, which had quite a different feel, almost softer with more green in the peaks and less industry below. As I slipped along, the clouds capping the Glarner Alps to the north began looking wetter and their bases dipped, forcing me out into the valley. There was less sunshine on the slopes and soon the peaks to the south followed suit. Before Chur I went south down the HinterRhein towards calmer skies but quickly the airmass looked unstable everywhere and wherever there was good lift there was rain. For almost an hour the only lift I could take was the weakest of thermals from the valley floor, but I was keeping dry. I was flying close to maximum weight and paying a penalty for every kilogramme.

The showers appeared to die away to the north and the valley wind increased, flushing me along to the next high peaks, the Ratishe Alps. Lift was scarce and over Tiefencastel the balance started taking a downturn. I was getting stressed and after skimming the first landable field for hours, I climbed 2,000ft with the engine to give my furrowed brow a break for 15 minutes.

I began to doubt the wisdom of my route and the nearest low-level airfield, Bad Ragaz, was now miles into wind towards the rain. I knew I was flying into a trap and my maps were not good at showing details of the smaller valleys. With some lateral thinking, I found a railway marked that did not appear to break with a tunnel through the mountains and concluded it had to be a pass. There was an airfield too, in the long valley beyond, so I pinned my hopes on finding the railway.

I approached the head of the valley with little more than 5,000ft; my GPS confirmed that the airfield at Samedan was only 5.5km away – but I just could not work out where it could be. I had a wall of rock in front of me! The pressure increased again as I turned round to see a curtain of rain stalking me; again I was not in lift. I could feel the adrenalin start to pump.

The clouds were looking more and more oppressive and there was little sunshine. I found very weak lift over a spur and once I was high enough to start a beat, I climbed the valley head in dynamic lift.

I had failed to notice Samedan's altitude of 5,600ft, so nothing quite prepared me for the height of the Albulapass. After what seemed like the whole afternoon I was

Opposite: Guy's travels through the Alps (Map: Steve Longland)



Right: Guy's DG-400 in the Aeroclub hangar on Innsbruck airport. In the roof is a Fox two-seat aerobatic trainer

level with, then finally climbed above the railway line and could visualise the pass and the mountainscape surrounding me. I topped out at just over 10,000ft and had a beautiful outlook towards the harsh landscape of St Moritz and Italy. There was no sun; the snowy peaks looked depressingly cold and merciless. I still could not see Samedan. I slipped along the long pass as my anticipation built and finally at the end of its southern wall, I could see the airfield in the Engadin Valley. There was no sign of activity. I should have cut my losses then and landed. I had already had more than enough excitement for one day but figured that it would be wet tomorrow and I had precious few Swiss francs left. I was over

'In the next hour and a half I experienced every kind of emotion possible in a glider'

the river Inn and after a quick scan down the map I decided to start towards Innsbruck in Austria.

In the next hour and a half of soaring and exploring I experienced every kind of emotion possible in a glider. I had the frustration of a 35km glide without lift, which just proved that I had not learnt anything about valley winds. I then went for an engine start as I was down grazing the soft green valley sides and had a couple of minutes of very rough running. I turned the engine off to save it for a real emergency and just as I was hitting total despair and surveying fields again, I stumbled into convergence that whisked me back to 10,000ft.

I romped through the Stubaier Alps under fat cumulus that looked ready to burst but the elation was short lived, as I turned round to see my way back towards Samedan blocked by sheets of rain, and more storms building over the Lechtaller Mountains. The crosswind was still strengthening and I knew I had to move quickly to reach Innsbruck before the rain. I eventually climbed high enough for a glide but delayed to take even more height as I could see a band of heavy rain that looked as if it would cross the valley ahead. I delayed too long as heavy raindrops started to slap into the canopy – I was going down! I called Innsbruck approach and declared my intention to divert to their field, then with everything crossed I started the engine again to try and slow my terminal slide downwards. It fired perfectly and with everything working right for a change, I was given clearance to enter the Innsbruck control zone. I asked if I could land on the grass rather than the main runway, a request that was granted. I landed and rolled up to the aeroclub hanger to be met by a couple who though very pleased to see me, seemed confused as to why I hadn't landed on the grass runway but had chosen the winch track!

The next day's forecast was not good and the advice I had was to launch onto the south-facing cliffs above the airport. The airspace above the airport is split into glider zones, with permission required to cross between the zones and to cross the valley over the instrument approach.

An hour after takeoff, my GPS still read 2.2km from the airport. I had seen three jets land and take off below me and my best efforts to gain altitude had won me a total of 800ft. The cliff still towered above and in frustration I pressed on a little east, to a different-shaped summit, to find my first thermal to cloudbase at 4,000ft.

I crossed over a low peak covered in hang-gliders waiting to launch. The hillside looked like an oversized boomerang factory; a single paraglider was the only thing flying. I crossed the Inn river and followed the Zillertal valley fork south, towards Zell am Ziller. Soaring options were thin on the ground; the lush valley floor was not producing lift. After flitting from knoll to ledge, hunting for lift, I was down to a few hundred feet above the green fields and started the engine rather than land in a paddock. I climbed 1,000ft but it was enough to reach a wooded ridge facing the weak valley wind. I watched 20 paragliders drift down from a peak above Mayrhofen, 5km away, and kept sweeping my ridge for anything more than dynamic lift. I worked east again, up a rising valley to the Gerlos pass, mainly ridge soaring, occasionally gaining a



"I crossed over a low peak covered in hang-gliders waiting to launch," says Guy. "The hillside looked like an oversized boomerang factory; a single paraglider was the only thing flying"

➢ few feet in thermals before the wind drifted me too far away from the ridge. It was uncomfortable flying, often a few feet from the spurs of the ridge in poor lift with the strengthening wind creating pockets of punishing sink.

Once over the pass, thermals improved quickly and my optimism returned at cloudbase, now 6,000ft above the valley floor. I had entered the Enns valley, the longest in the Alps, stretching over 250km towards Vienna. The Alps were looking lower and lusher with every kilometre east but I kept mindful that the 11,000ft peaks of the Zillertaler Alps were only a few kilometres south, deep in cloud.

Towering cumulus surrounded the last high massif of the Tirol, the Großglockner. The highest peak, at over 12,000ft, was never in view, but the lower valleys let me explore up to the high lakes under the Kitzsteinhorn. I had contemplated stopping at Zell am See as I knew there was a gliding club, but although the cumulus were spreading out further south, I hoped for a few more hours of soaring. I left Großglockner at 8,000ft but the spreadout was soon reducing lift and it wasn't long before I was back at ridge level. The westerly valley wind provided some lift on the corners of the valleys joining the Enn, with few thermals from the valley sides.

I drifted past Niederöblarn, venue of the Glider Aerobatic World Championships in 1999, and set my sights on Trieben, 20 miles further east. I followed the southern split in the river valleys and arrived at 2,000ft, enough height to survey the town and field for signs of life. There were some buildings close to the runway, but nothing that looked like a clubhouse. The town was dominated by a couple of industrial chimneys, painted in typically Eastern European style – white and red stripes. The landscape felt cold and oppressive, an overcast sky was leaking no sunlight to brighten the scene and the radio was dead. I was tired and with an uneasy sense of unwelcome I played with my GPS frantically to find Timmersdorf, the next field 25 miles down the valley that might just be in reach.

I started the glide a thousand feet short but the air was buoyant. Occasionally there were spikes of lift when the folds in the hillside tripped up the valley wind, but I rarely climbed. By hugging the valley side the continuous reduced sink improved my arrival prediction. It was a good thing too, as I hadn't noticed that the valley I was following was now rising to a new pass, at over 3,000ft. I crossed the col by virtue of good luck rather than judgment and arrived in the next valley to find the airfield a few miles short of Leoban. I couldn't believe the difference in first impressions. Velvety-green fields surrounded the short grass strip; there was a small clubhouse, hanger and windsock, and vehicles in the car park. I finished my landing roll in front of the hanger, and within seconds the doors had been opened, an impossible number of gliders moved to create some space and I was shoehorned in. The club president was a complete gentleman, let me use his caravan and took me out to dinner in the village. Top choice!

The next day did not fill me with confidence. There were a few visiting pilots from Germany, who had all chosen Timmersdorf as a launch site for a huge flight into the mountains, but had settled for local soaring due to the continuous wet weather. By lunchtime everybody had given up. Showers and low cloud were blowing in from the north-west. I took my chance in the early afternoon, and made a long climb towards the brightest-looking sky to the south-east, downwind.

I found lift under the first cloud with shape, but the thermals were weak and broken. A long line of convergence curtain cloud was running roughly crosswind, but any strong lift brought with it a fine mist of rain. It was a pyrrhic victory for soaring! I stumbled from soaring disaster to catastrophe in and out of rain until I could see Graz and knew I had to stop drifting downwind or I would be in airspace.

It dawned on me eventually that the Alps were running out; the terrain was flattening into hills but in weather like this even low hills were becoming a burden. I wondered about possibilities of continuing south-east towards Slovenia and Hungary, but I hadn't investigated visa or customs requirements so decided to clear the end of the Alps northwards to the edge of Austria.

I found a brighter patch and climbed over the last high escarpment for a long crosswind glide to Wiener Neustadt, on the western side of Vienna. I radioed the gliding club on the military field, past hosts of the worlds, but they were quite sure I did not have permission, and glider or not, I was not going to land. The civil airfield next door was initially no more helpful, directing me back to the glider field, but eventually accepted I could land.

There was a warm dry wind as I tied down on the end of the flight line, away from the helicopter activity nearer the hangers. I had broken my Euro-converter plug so before I could charge my soaring batteries I found a supermarket on the airfield perimeter that sold plugs, but to my horror they did not accept plastic, leaving me with a stark choice of charging batteries or eating! I wished I had changed more money earlier and tried to convince myself I loved soaring...

Next issue: will Guy make it home?

Velvety-green fields surround the small grass strip of Timmersdorf, where the club president gave Guy the use of a caravan, shoehorned his glider into the hangar and took him out to dinner in the village



Your club's met on the net

Alex Latty describes the web weather station that helps with your early-morning worries about what conditions are like at your gliding club

HAVE YOU ever wished you could view the weather at your club *before* you decide to jump in your car and drive there, only to find that everyone is confined to the clubhouse drinking coffee and reminiscing about their last epic flight?

For members of Borders GC, this is a thing of the past. Since their webmaster devised a system to upload weather information to the internet, members can now view information or use their mobile phone to access text messages containing weather info.

There is also the added benefit of being able to view the latest weather at work throughout the week, thinking of what could be for the following weekend.

It all started when Borders GC moved to its new site in 1997: not only did Transco provide us with a new airfield because of the logistics of building a venting station but also gave us a new clubhouse and hangar free of charge. What a pack of lucky so-and-sos, I hear you say. I think this is a classic case of having an airfield in the wrong place at the right time syndrome.

Spurred on by these new surroundings, the members thought it was about time Borders GC had a web presence. A site was duly created (*www.bordersgliding.co.uk*) with interesting but static content.

If you look at the majority of gliding club websites, I'm sure you will agree that the content doesn't change very much from week to week, and the local webmaster gets hassled to do something about it. Finding myself in this situation I decided that I would silence the masses and add a webcam to provide some dynamic content and increase the hits (a web term which means someone has accessed your site). This webcam was positioned to view College Valley (see photo, right). This is an area south of the clubhouse, which extends for some six miles or so; most of it is a ridge at 1,800ft, ending at Cheviot (3,000ft ASL).

Having looked at some of the webcam software on the market, I found that there was nothing that I could use to provide exactly what I wanted. Being a software engineer I decided to write my own. As things progressed this proved to be a good decision as new functionality was later required which I could have not provided if we had bought a dedicated webcam software package.

I'll mention at this stage that the club already had a Pentium 200 computer, running Windows 98, which we used for EW barographs. So all we needed in addition to this was a modem, a webcam and some software. The chairman kindly donated a modem and the committee sanctioned the spend of a massive £60 for a Philips Vesta webcam. This uses a USB connection (which, incidentally, Windows 95 does not support).

As previously mentioned, the small matter of the software was left to me.

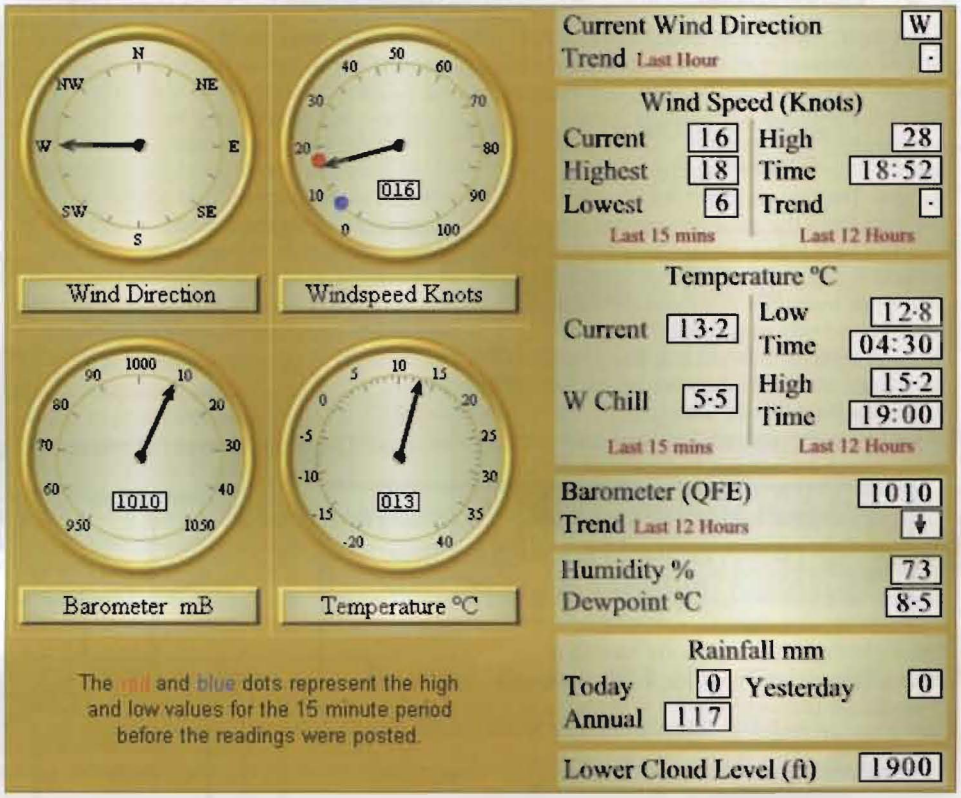
Anyone who has done any software development will know how long it takes – and finding the time with a wife and two young girls, not to mention work, gliding and being hassled by Helen to write this article – was difficult, but my thanks to the girls for being so understanding.

On those gloomy days when everyone sat in the clubhouse (on new furniture – might as well rub it in) and told their tales of Diamond heights (we did have some last year) and other exploits, I decided to get on with the job of developing the software, only surfacing for a dose of caffeine.

After many hours and a phone bill to match, the process of taking a picture and uploading it to the Internet had finally been tested and was robust enough to deploy. The software was installed and configured to take pictures at predefined times.

The software allows the user to select any time (15-minute slots) on any day to take a picture and upload it to the net. Time menus for each day are dynamically created. That is, the time does not appear unless a picture exists to view. The main emphasis in the design is for someone who has very little computer knowledge to be able to install and operate the system successfully, which I think I have achieved.

Having completed this piece of work, I basked in the glory. Then the rumblings started again and requests for weather information to accompany the pictures ➢



Hundreds of hours of work went into the devising of a web weather station for Borders GC. Webmaster Alex Latty drew on 20 years' experience of computers and electronics as well as his background in gliding



The weather station webcam at Borders GC, Milfield, showing a wave day when its pilots got to 17,500ft

➢ became a topic of conversation. This was to prove more of a technical problem than the webcam but with 20 years' experience of electronics and computers I pushed ahead.

The club already had weather monitoring equipment, which was bought from a British company called Instromet Ltd (we couldn't get this from Transco, unfortunately). This consisted of the usual wind speed, temperature and pressure, which was read from a nice wooden cabinet housing the gauges. The first problem was to transfer the data from the existing weather sensors to a PC. This was achieved by purchasing an additional piece of kit called MetLog, also from Instromet. This connects to the sensors and provides the information through a serial connection. This meant that, once installed, it could be connected to our existing PC.

First problem solved, I moved onto the next, which turned out to be about 400 hours work. This involved developing the existing software further. The presentation remained the same with the addition of weather information tagged below the picture (see screen, on the previous page).

In addition to the internet content, I thought that, with everyone having a mobile phone (essential for those landouts), it would be useful to send a text message (see diagram, right) to registered users at certain times. This is proving very useful as you can view the weather while playing with your mobile in bed at 7am. (Takes all sorts, I suppose!)

This article is not meant to give detailed technical information (that can be found on my website, *www.latsoftware.co.uk*) but some of the features are as follows:

- Runs on Windows 98 and above.
- Weather information is sampled and stored in a database every 15 minutes.
- The software caters for Webcam and/or Met operation.
- Data can be automatically uploaded to the net, with very little experience.
- A "real-time" screen is available on the PC with MET4NET installed.
- Graphical trends for the last week.
- Table trends for the last week.

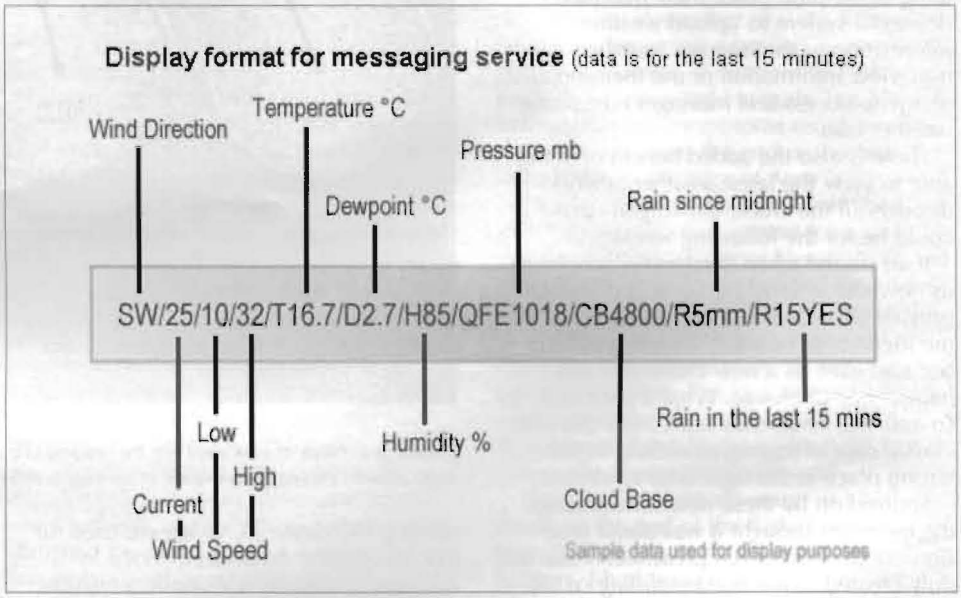
Future developments include: *MET Phone*, allowing members to dial up a number and listen to the latest weather; *MET Query*, a module to query the database and output to a format which can be imported and examined with a spreadsheet program and a Local Area Network version of *METActive*. This will allow computers connected across a network to view information in real-time.

Borders GC is in Northumberland near the Scottish border. It is in close proximity to the Cheviots and so we experience a wide range of conditions, ranging from wave even in summer (the conditions shown on p28 gave a 17,500ft climb!) to thermals and ridge soaring. The weather is volatile and can be completely different to that only 20 miles away. For this reason, the equipment is excellent.

I now look at the message on my phone at 7am on Saturday and if it's raining, yes, you guessed it, I still go to the club to talk about the latest exploits and listen to the rumblings!

I hope this article has given you an insight into what is involved. Enjoy your gliding and keep a good lookout (pun intended) for more details on my website. Anyone want an autopilot for their glider?

Alex, webmaster for Borders GC, can be reached at: met4net@latsoftware.co.uk



Met4net offers a text messaging service to registered users, decoded above. "You can view the weather at 7am while playing with your mobile in bed," says software designer Alex Latty. "Takes all sorts, I suppose." For more technical details of the system he's devised, see his website at www.latsoftware.co.uk



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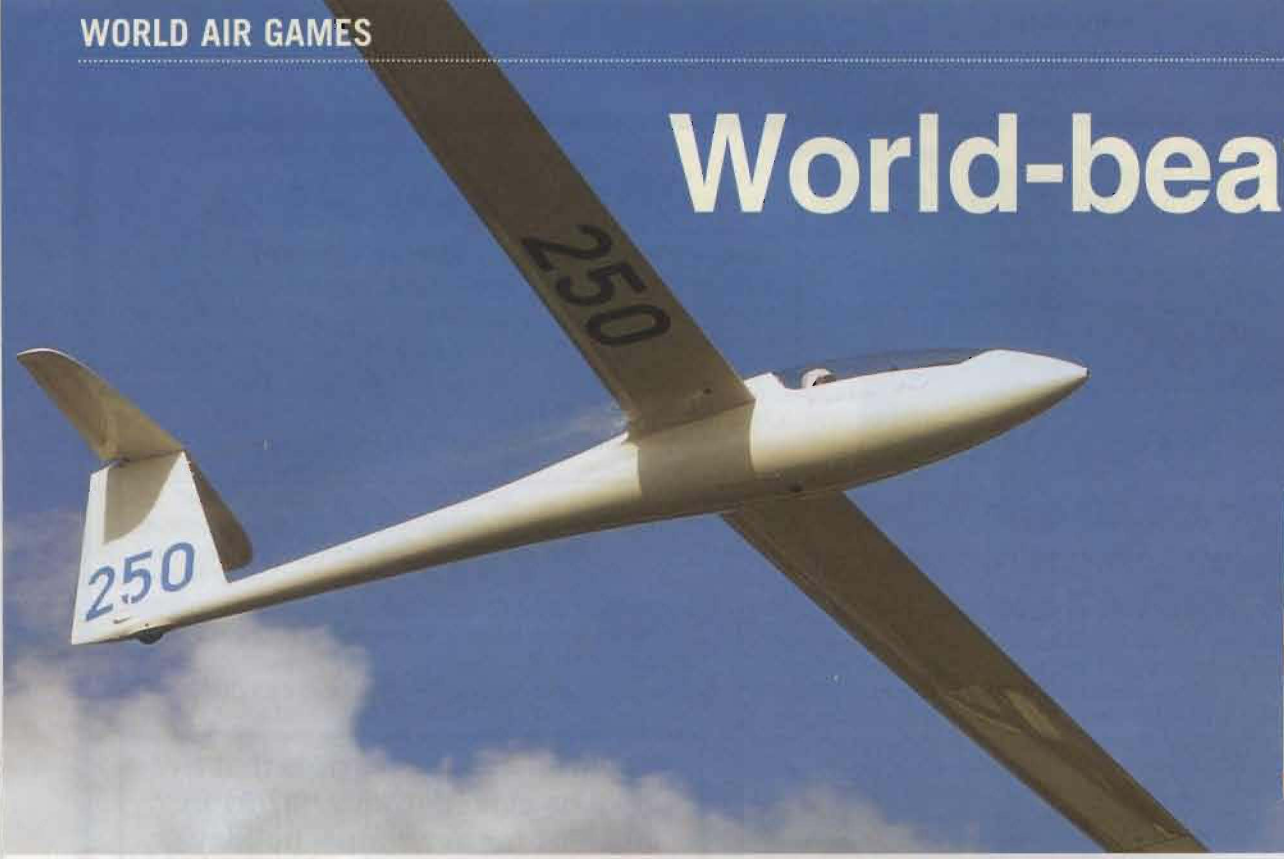
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World-beaters





the ***White Planes*** picture co.

S&G reports on the three Worlds – and talks to the second British World Champion of the year

THE SMALL, new airfield at Lillo in Spain had received much preparation, *writes British Team Manager Harry Middleton,* to ready it for the World Class and 18-Metre World Championships.

Competing for Great Britain in the World (or PeeWee) Class was Sarah Steinberg (née Harland), in Burn GC's PW-5, HZB. Steve Jones and Dave Watt flew the first 18-Metre Class worlds: Dave in DW, his 15-metre Ventus 2a, and Steve in Bill Murray's 18-metre Ventus 2cT, 250 (*above*).

Angel Garcia, the director, put in an immense amount of effort but there were considerable organisational problems – after all, this was Spain. A rumour was heard on the grid (started, I believe, by the Dutch team) that a BBC camera crew were due to film a further episode of *Fawlty Towers* at the airfield. Get the picture?

The opening ceremony and Mayoral reception were in Lillo town, but the real ceremony took place at the airfield at 20.30 with an aerobatic display by a Stearman, nicely flown.

Around 700 people attended: the locals were invited, having had their taxes from the last three years spent on developing the airfield. At 23.30 I left a ceremony that looked like lasting all night.

Task areas were mainly to the south and west of Lillo with the Madrid TMA just to the north at 8,000ft. Lengths varied from 196km to 505km. The weather was mostly blue, with just occasional cu in the Toledo mountain area. Thermals were very strong – often given at briefing as 4-5m/s (7-10kts) up to 16,000ft early in the competition.

Day 3 scores were protested by our team for the handling of airspace infringements. Our action resulted in day disqualification for the offending pilots. The Italians then objected to that, and the disqualification was reduced to a 100pt penalty. After that, the Swiss protested but were not upheld.

If Dave had not confused a TP on Day 3, scoring only distance points, he could well have won the 18-metre worlds – in 15-metre mode. But he and Steve pair-flew, and Steve won, well supported by crew Andy Lincoln and Dempster Hamilton.

Sarah had the encouragement of all the competitors. She flew three blinding day wins, and was third twice. She deserved the title for sheer determination but on the last day was pipped by the French who had pair-flown the whole comp very well.

All in all, another very successful worlds for British pilots – well done.

For World Air Games news, see www.fai.org *and, for gliding results,* www.aeroclubdetoledo.com

Blistering temperatures and numerous delays at the aerobatics

THE BRITISH Team at the 9th World Gliding Aerobatic Competition, *writes Guy Westgate,* was the most comprehensive ever: the British Aerobatic Association provided a full judging team (Ben Ellis, Dick Happs and Judi Jones) to complement the five pilots at Palma Del Rio in Andalucia, Spain.

Of all the World Air Games disciplines, our contest organisation had some of the worst problems. It was held up for a day as the judges' facilities were late and there were numerous delays throughout the nine days caused by poor logistical support, equipment failure and a lack of tugs. The midday temperature was regularly a blistering 40° and it was almost dangerous to leave the shade between 13.00hrs and 17.00hrs. The comp became a test of endurance; if you were drawn to fly in the afternoon it was hard to find 100 per cent concentration after a day of desert sunshine.

There must be three tasks to validate a world aerobatic championship and that was achieved with only one day to spare. The organisation came good on the last day, however, and completed a fourth programme to give victory to a Russian, Panfierov, who had shown world-class performance throughout. The British suffered the same fate as many of the 55 pilots, succumbing to some small mistakes in manoeuvres and disorientation in the aerobatic box. Our results reflect our lack of training compared to many subsidised teams but are an improvement on the last Worlds.

We would like to thank the BGA Executive who recognised our team for the first time this year, but there was disappointment that, once again, we were not supported by the BGA Comps committee. Aerobatics is no more a minority sport than some soaring categories and as a fledgling team we are in desperate need of better support.

Overall results: 1, Alexander Panfierov (Russia); 2, Jerzey Makula (Poland); 3, Adam Michalowski (Poland).

UK pilots: 36, Guy Westgate; 39, James Allen; 45, Ian Tunstall; 51, Paul Conran; 54, Chris Cain.







Photos this page: Harry Middleton

'I hadn't done 450km in 3hrs before'

Left: Dave Watt took two day wins in 15-metre mode Centre: the 18-metre podium. Above: thermal, anyone?

STEVE Jones *(inset, left)* has won the third worlds he entered – the first one over flatlands. Lillo, in central Spain 100km south of Madrid, is on a 2,500ft-high plateau, with some higher hills.

The 33-year-old new champion is an aircraft engineer for the family business, Southern Sailplanes – agents for Schempp-Hirth, makers of the winning Ventus. He has 400hrs power but gliding is his first love: "It runs in the family – and in the business as well," he says. His father, Ralph, has won seven nationals. Steve, 20th in New Zealand and 12th at St Auban, has 3,000hrs gliding and his wins include last year's 15-Metre Europeans. His Lillo title guarantees him a place in the 18-Metre worlds in Rieti.

"Most gliding comps are basically repeat experiences – this was completely different," says Steve. "We had a forest fire that burned off two ridge lines: straight over the top, down in the bottom then over the next top. I went into it at 7,000ft and Dave at 5,000ft. We'd only been getting 10,000ft: this thing spat us out at 15,000ft. The Pole who went in got a 22kt climb."

Another high spot – metaphorically speaking – was the last day. By then, Dave's confusion of a TP – he missed the penalty box for the correct one by just 70m on Day 3 – had put paid to his title hopes. But Steve was just five points behind the leader. At that point, the experience of the Brits came into its own. "We started the last task – 450km – at five to four in the afternoon," says Steve, "and the finish line closed at 7.30pm! We just sat there floating around and waiting. We were very relaxed about the whole thing but had we not done similar things before, we wouldn't have been. We needed to do around 130km/h. It's a tall order. But we were pretty confident that conditions were going to be reasonable. Nothing had changed from the day before, and the weather before the start confirmed that. I've never done 450km in about three hours before!" Dave won the day with 146.8km/h and Steve came in second at 145.2km/h.

"We came here to win," says Steve, "and we went into the last day aiming to win, not to come second. We were either going to succeed or come 10th – and we won. We took a bit of a risk and it was nice to see that pay off."

"The rest of Europe is taking the British team very seriously nowadays," he adds. "At Lillo they commented several times that the French are getting fed up, saying: 'The English, they have got no weather – how can they do this?'"

British results	Day 1	2	3	4	5	6	7
Dave Watt	*12*	*14*	*27*	*1*	*2*	*2*	*1*
Day points	*796*	*627*	*389*	*590*	*992*	*941*	*1000*
Steve Jones	***15***	***10***	***1***	***10***	***1***	***3***	***2***
Day points	***786***	***672***	***944***	***510***	***1000***	***938***	***981***
Sarah Steinberg	*1*	*1*	*3*	*18*	*1*	*3*	*22*
Day points	*1000*	*610*	*981*	*436*	*1000*	*822*	*557*

Overall, 18-Metre Class	Country	Points
1. Steve Jones	**GB**	**5831**
2. Leonardo Brigliadori	Italy	5570
3. Werner Danz	Switzerland	5422
7. Dave Watt	**GB**	**5335**
Overall, World Class	**Country**	**Points**
1. Olivier Darozze	France	5524
2. Sébastian Dubreuil	France	5500
3. Sebastian Kawa	Poland	5468
5. Sarah Steinberg	**GB**	**5403**



Sarah Steinberg, European Women's Champion, at Lillo. She won three of seven days in the World Class

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Now bank on the mathematics

In his concluding article about turns, Sam St Pierre explains the maths behind his theories

THERMALS come in a variety of sizes, strengths and degrees of roughness. Their shape varies – all too often becoming pear-shaped when we find them. Some, such as those under a continuous line of cloud, are like curtains of rising air, with sharp edges. Some seem to have multiple cores. This analysis is based on the classic, reasonably round isolated thermals most often found on days of fair weather cu or blue conditions, with gentle wind, but the conclusions will often apply to other types, in particular, wave rotor.

Experience shows that in normal thermals the lift is strongest in the centre, decreasing to zero at the edge. Sometimes there is sink between the lift area and the surrounding, essentially zero air. The question is just what angle of bank will give the best rate of climb. Tight turns will put us in faster-rising air, but our rate of sink will increase.

To answer the question fully, we would need to know the velocity gradient from centre to edge (a future article, perhaps?). This is unlikely to be exactly linear. However, among various possibilities examined in *New Soaring Pilot* (Welch & Irving), the only measured example (Konovalov) is essentially linear.

The table (below centre) is based on a DG-200 without waterballast. From these figures we can plot rates of sink for different radii of turn, transfer them downwards from various gradient lines, and arrive at visual representations of the resulting rates of climb (diagram 1, below).

It is immediately apparent that the significant factor governing the best angle of bank is the steepness of the gradient between, for this glider, 170ft and 415ft from the thermal centre, corresponding to bank angles between about 55° and 20°. A steeper gradient requires more bank. For gliders with a lower minimum sink speed, the radii would be less, and for faster ones more, but the same range of angles applies.

A 4kt centre/400ft radius/linear thermal would have the same gradient as the 10kt centre/1,000ft radius example illustrated. Similarly, 6kt centre/1,500ft radius gives the same gradient as the 4kt/1,000ft example. So there is no direct correlation between either actual thermal strength or thermal width and best bank angle. There is even less between achieved rates of climb and best angle. The highest rate of climb in figure 1 is 6.2kts, in a British Standard 1,000ft radius thermal.

Given 800ft radius, 6.2kts climb requires a core strength of 10.7kts at the best bank angle of 45°. The 1.5kt climb in the 4kt core example could be equalled in a 600ft radius thermal only if the core strength was 5kts, at the best bank angle of 41°.

At first sight, the graph seems to indicate that flying at more than the ideal bank is more disadvantageous than lesser angles. However, when the resulting climb rates are plotted against bank angle (diagram 2, bottom right) it can be seen that 90 per cent of the best climb rate can be obtained with quite a wide variation symmetrically either side of the ideal. This range becomes smaller for weaker and/or narrower thermals, but for weak thermals a more realistic consideration would be the range giving no more than a quarter of a knot less than best – around 10° each way.

Given a linear velocity gradient, one could reasonably conclude that strong and/or narrow thermals need steep bank angles. Even in weak or wide thermals, the much-reduced radius of turn (15 per cent) at 30° bank compared with 25° more than compensates for the increased glider sink rate (7 per cent). 30° looks like a practical minimum. At the other end, glider sink rate increases rapidly for a small reduction in radius, and even in the strongest, narrowest thermal 60° should not be exceeded. This range of bank angles can be translated into: "a turn radius between 336ft and 164ft" for the DG – no matter how wide the thermal

Whatever our climb rate is, we don't know if we have the correct angle of bank for that particular radius and strength of thermal, nor if we are not turning tightly enough for the narrow and/or strong thermal we might be in. We can reason that low down, thermals will be narrow, but some (particularly wave rotor, and 'snowplough-effect' thermals set off by an advancing large cloud shadow) seem to stay narrow all the way up.

Since there is no more to lose by turning a bit too tightly than too gently, it would probably pay to always assume the worst, narrow case. If the thermal is weak but wide, it will make virtually no difference to use even 35° as a minimum – we wouldn't be getting anywhere anyway.

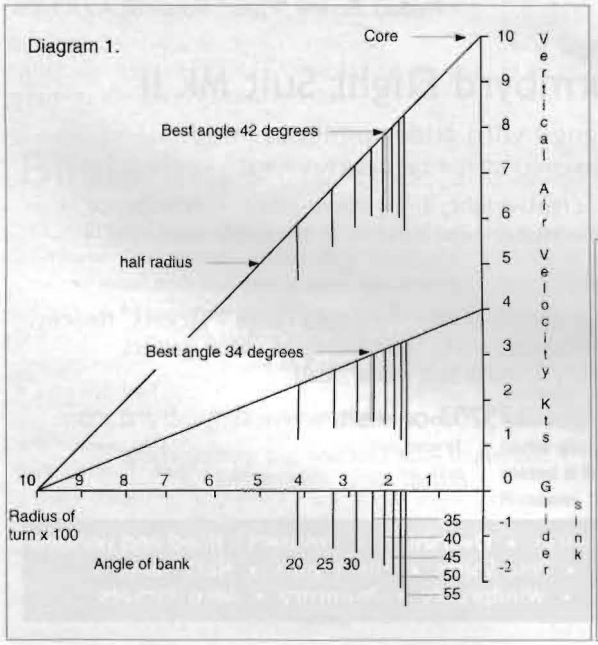
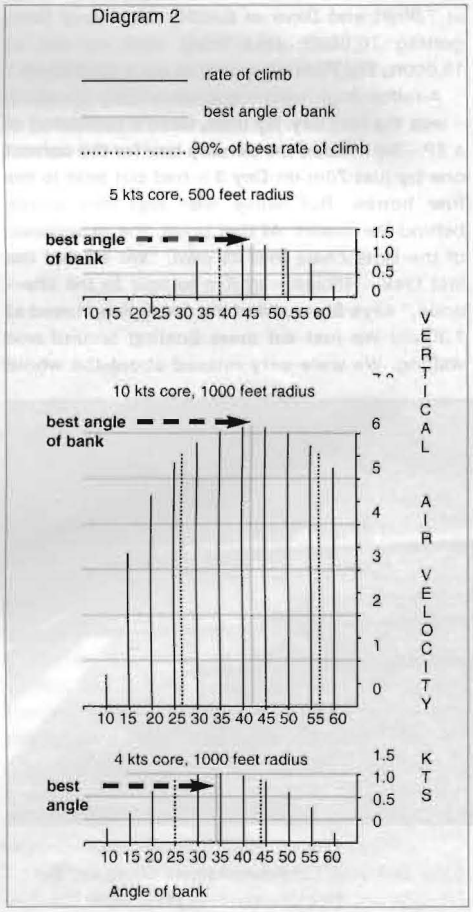


Diagram 1 (left:): rates of sink plotted against angle of bank for a DG-200 without waterballast

Diagram 2 (right): climb rates plotted against bank angle. The solid vertical lines represent rate of climb. The dotted lines represent 90 per cent of best rate of climb

Angleg of bank		IAS (kts)	Sink (kts	Turn radius (ft)	turn time (secs)
0	1.000	40	1.10		
10	**1.015**	**40.31**	**1.13**	**817**	**75.4**
15	1.035	40.70	1.16	548	50.1
20	**1.064**	**41.26**	**1.21**	**415**	**37.4**
25	1.103	42.02	1.27	336	29.7
30	**1.155**	**42.98**	**1.36**	**284**	**24.6**
33	1.192	43.68	1.43	260	22.2
34	1.206	43.93	1.46	254	21.5
35	1.221	44.20	1.48	247	20.8
40	**1.305**	**45.70**	**1.64**	**221**	**18**
41	1.325	46.04	1.68	216	17.5
42	1.346	46.40	1.72	212	17
43	1.367	46.77	1.76	208	16.5
45	1.414	47.57	1.85	201	15.7
50	**1.556**	**49.89**	**2.13**	**185**	**13.8**
55	1.743	52.82	2.53	174	12.2
60	**2.000**	**56.57**	**3.11**	**164**	**10.8**



Running fast on ridges

In the first of four articles about mountain soaring, Gavin Wills offers advice on ridge-running

THE TRUTH is that even before the canopy blew off Jeff and I were not doing well. Struggling below the ridge crests we seemed unable to get "up on the step" to absorb the energy and keep moving on. It was teaching us patience and determination: common lessons for soaring pilots racing in the mountains.

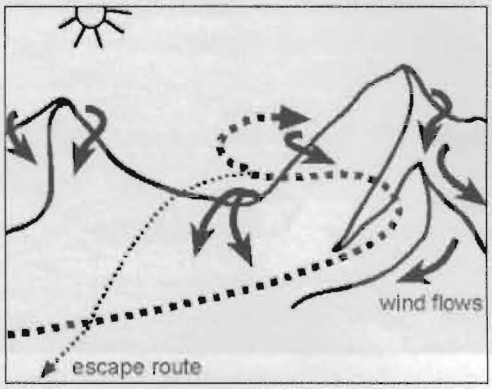
One particular mountain pass crossing had set us up for a fast run south. But it was an advantage we squandered even before our *Mayday* calls went out.

We approached the unnamed pass from the lee side following a subsidiary ridge leading to the main range. Maintaining energy (80kts and full ballast) but below glide slope, we plugged into wind and descending air until we met the main range and turned toward the pass, a hundred feet above us half a kilometre away. Then, beneath the rotor with rocks off our right wing and heavy sink to our left, we gently climbed the leeward slope. At the last minute and using our excess energy, we punched up through the rotor, rolled right and into a 20kt headwind. We crossed the pass and climbed in strong lift. It felt great!

Scraping over mountain passes against strong headwinds is a speciality of the experienced mountain pilot. There are many tricks but only one rule. That rule is: *Don't Hit The Hill.* Here are some of the tricks. Know the wind. Be aware of the sun and try to approach the pass up a subsidiary ridge or leading spur. Imagine the wind swirling around and over the pass towards you and along that leading ridge creating little areas of convergence. Notice where the sun heats the ridge or where its shape may shelter and encourage thermal activity. Use these scraps of lift to maintain energy, keep an escape route clear and have a plan B in case you don't make the pass (*see fig 1*).

I am often asked how close one should fly to the hill to gain the best lift. "Close enough to see the grasses blowing," is often my tongue-in-cheek reply. Because I love to fly in close, swooping around the rocks and basins and popping over ridges, I sometimes soar closer then one really needs to be! But if the winds are light and the grasses barely moving you have to be within a wingspan or two to read their motion and to take advantage of the weak lift. Further out, there may well be nothing.

Flying in close is like driving a car on to a narrow bridge. You look at the space ahead and never at the bridge sidings. Likewise in the air look ahead and plan your glider's route to swoop the delicious mountain's curves. Distances off the hill are not judged by the size of the sheep's eyes rolling but by one's subconscious use of parallax principles and the relative movement of the scenery ahead.



1: *Follow the subsidiary ridge towards the pass, using local heating and convergences to maintain the glider's energy*

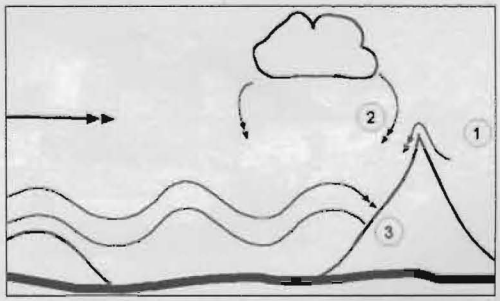
Practise flying closer to the mountain on a calm day. Contour fly the slope slowly but with 10kts added for mother. Fit your glider into the spaces made by the mountains for your enjoyment, and revel in the scenery flashing past. Be careful if the hill is bubbling because your outside wing's flying into a thermal can initiate an alarming tilt toward the rocks. Mother will thank you then for the control brought on by her extra bit of speed!

The fastest route along a windy mountain ridge is at the ridge's crest. Here the wind velocity may be five times greater than above or below the edge. If you are really in a hurry, use surges of lift to build speed rather than altitude. If a ridge is working from low down it is generally fastest to climb gently on track until you reach the crest then accelerate to stay there.

How do we know if a ridge is working before we get to it? Know the wind *All Ways*! Understand how it will interact with the terrain at every level. Unless the wind is so strong as to be blowing dust, snow or small trees off the ridge tops, cloud shadows may be the best indication of wind on a mountain ridge. Cloud shadows climbing a mountain face ahead always puts a tingle of anticipation up my spine. Remember, however, that cloud shadows are indicators of the wind at cloudbase and may not always relate to the ridges below.

How low can you be to join a mountain ridge? That depends on a lot of things, including how desperate you are! Some daring pilots have climbed away from a couple of hundred feet when others landed out or, worse still, crashed.

The direction and strength of the wind on the valley floor will indicate if the lower mountain slopes are working. The indicators will be seen on water, from smoke, dust, trees, mother's washing or from a friendly windsock. For the hill to be working very low down, the wind has to be blowing on to it and not around it. Upwind, there should be no obstructing terrain, nor nearby thermals dumping.



2: *Three possible reasons why Billy Walker's Rule works:*
1. a wind change on the hill (convergence in the valley)
2. a thermal is dumping on the hill (lift in the valley)
3. local wave triggered by an obstruction upwind (lift upwind)

Before I finally made it to the South Island playground I thought I knew about ridge running; Talgarth, the South Downs and various ridges I'd scraped on over the years. Day one out of Omarama was an eye-opener! It's easy to fly down a straight line, smooth, grass-covered ridge when you know what the wind is doing. Ridge-running sharp, pointy mountains with teeth, unexpected bits of rotor and no landing place in sight is totally different. A real challenge for the soaring skills and psychologically difficult as well (read scary!) I've never, ever had so much fun in a glider. – G Dale, the CFI of Booker GC as well as the UK representative of Gavin's flying school

Which brings me on to Billy Walker's Rule: "If you fly onto a hill slope expecting lift but encounter sink then immediately fly away at a right angle". It sounds reasonable but it's surprising how long you can scratch around on a slope that you think should be working when the only thing climbing is the valley floor (*see fig 2, left*).

Things settled down for Jeff and I after the *Maydays* went out. We retrieved the canopy and held it half shut as we thermalled back up the mountain and limped home. Last place on day one was not an auspicious start to our nationals.

Later the Schempp-Hirth factory voiced surprise that the Duo's canopy had not torn from its hinges like it was designed to do. We, on the other hand, voiced surprise that the catch could have worked open in flight, but the factory replied that they had never heard of it happening before. Now we use rubber bands to keep the latch shut.

Happy ridge-running!

Gavin, who has over 7,000hrs, worked with daughter Lucy and cousin Justin to make the award-winning film: Windborn. He runs a mountain soaring School in New Zealand: see www.GlideOmarama.com



Phil Lazenby took this picture of a magnificent sky at Beverley Soaring Society – that was after doing a quick 300km Sadly, he had been forced to land to go to a late afternoon meeting...

Wiz glid

WHAT DO you need for a great gliding holiday? Number one must be superb gliding weather – and then modern gliders to enjoy it in, safe flying and the backup facilities to make it all hassle-free.

Add a dash of superb food, wine and beer, a sprinkling of some of the great tourist destinations of the world, a generous dollop of hearty hospitality and you've defined Australia. And because their summer is our winter, you can do all this without missing the UK's good gliding week of the year!

This article tells you all you need to plan your Aussie holiday: when, where and how to go; the weather to expect; what you can fly; how to prepare; and what it will cost.

Magical names

I discovered Oz six years ago and have been a regular ever since. I fly to TPs with names like Wakool, Burrumbuttock, Jerilderie (held up by Ned Kelly and gang) and, wait for it, Grong Grong. And, unlike in the UK, I fly almost every day. Locals reckon that summer 1999/2000 was the worst for 15 years, but I still flew for all 11 planned days, only two of which were really poor as the cold change passed through. I flew at least 300km on each of the other nine days, logging 3,600km and 55 hours in total. Australia has provided my longest flight (640km) and, so far, I've never lost more than two days of my planned 10 or 12 days of flying to bad weather – it really is great to get a concentrated dollop of flying without the eternal UK wait for the good days. And I'm a pretty average glider pilot from a normal UK club (I belong to both Aquila and Deeside). Nuff said!

Of course, if you do your first 300 or 500 in Oz, many UK club colleagues will tell you it doesn't really count. Ignore them. The only 500 they rate is a downwind dash in a K-8.

Where to go

There are 90 gliding clubs in Australia to serve a population of about 18 million, though only a third of these have a membership of over 30. Just like UK clubs, they will all welcome the casual visitor, but it obviously helps to plan ahead. You will be visiting Oz for one of these reasons:

• Specifically for a gliding holiday – you really should visit one of the five major sites which are set up to host overseas visitors and rent gliders to them. Some are commercial operations, but this need not concern you – even the clubs operate semi-commercially, just like the wave season in Scotland, and none, club or commercial, will survive unless they give you a great stay at value prices. You must book well ahead to get the best gliders.

• For an expedition with your fellow club members – your choice is increased by another 12 sites that have told us they can host such a visit and provide some gliders.

• On business or visiting family and you hope to escape for a day or two – choose any of our listed sites plus another eight chosen for proximity to cities and tourist spots.



When to visit

In the south, from Perth across to Sydney, the prime summer season is from November to early March. As a guide, November is like a good UK May, and January like August (but it's all much hotter and better!). Further north, into Queensland, the year lasts longer, but, with the closure of Dalby, there is no full-time operation – and the rainy season, especially further north, is January to March. However, even the Aussie winter will give some good flying – remember Brisbane is at the same latitude as Tenerife.

Travelling companion?

Not alone? Want to escape for a few days' or

Left: the bus may look familiar, but in Oz it shelters you from sun not rain, and has its own drinking water supply

zard ding



Mel Eastburn explains how to get wizard soaring in Oz



Left: Bernard Eckey's ASH 25 over Wilpena Pound, a huge natural oval formed from some of the world's oldest rocks
Above: the locals are friendly: this farmer cut a runway through his wheat to make an aerotow retrieve possible

a week's gliding? All the major sites are in small-town Australia and you'll soon use up the tourist spots. If your travelling companion won't relax by the pool (and it does get HOT) there are two solutions. Buy a one-week gliding course – most beginners solo in a week here, and your partner may even get Ingo Renner as instructor. Or send them off in the rental car to tour the Victoria coast – mile after mile of beauty.

Costs and how to get there

In June 2001, with the Australian Dollar at $A2.70 to £1, here is what you may expect to pay (but prices do vary a lot):

- A glider and membership for five days will cost from £300 to £500 for a Cirrus or similar, up to £700 for the latest ASW 27 or LS8-18, and more for a Duo Discus or Nimbus 4.
- Check the hire terms; some sites charge only if it's flyable (Orana), others ask you to bear the first lost day (Tocumwal), and some charge you for the full five days regardless (Benalla); it can make a rainy week expensive.
- Launches cost around £14 to 2,000ft and an aerotow retrieve about £70 per hour (more at sites using Pawnees).
- Reasonable accommodation in a single room costs around £100 to £150 per week.

Both Airtours and Britannia have stopped their cheap direct flights to Australia, but with a growing number of new airlines serving the continent, there's lots of capacity and fare competition. The key messages are:

- For the best fares book at least 3-6 months ahead – last-minute fares can be cheap, but you may find all the gliders booked.
- There is more choice to the two main cities of Sydney (most choice) and Melbourne.
- If you want to fly direct (no change of aircraft) you have only a choice of BA and Qantas; their cheapest fares are about £750 but may include some free local flights in Oz.
- All other airlines fly via their hubs where you change aircraft; their cheapest fares are about £550. Choose a good airline – you'll be on board for nearly 24 hours.
- Expect to add around £50 airport taxes to the above fares, depending on destination and stopovers.Most fares allow stopovers en route for a few days.
- Book via the consolidators who advertise every week in the Sunday press (watch for occasional limited time offers) or using one of the good on-line services.
- To avoid jet lag, switch to and think Oz time when you board and take at least a litre of water, sipping frequently, like when gliding.

Once you've arrived

You'll need to have arranged a VISA to get in (via your ticket agent or Australia House). Then you're in a land of entrepreneurs where everyone seems to have a deal going. For example, car hire is cheaper in Sydney – try Bayswater Rentals who rent older cars – but you'll find almost every small town garage can provide something inexpensive. When you book accommodation, always ask about special deals. And you can eat a very good quality meal in any village pub for £6 or so.

Last year Australia introduced their own form of VAT called GST (General Sales Tax) which infects virtually everything, though at a milder 10 per cent than the UK's VAT. Petrol costs in cents what it costs in pence in the UK; at around $A2.70 to £1.00, that makes the big distances no problem.

Even if you're going for a gliding holiday, stay an extra week and see something of this fantastic country and its people. Yes. I'm an enthusiast, but I guarantee you will be, too, after your first trip.

Overleaf: where to go and a typical flight
On p39: the weather you can expect
Next issue: flying in Oz with George Lee



Right: a sky to make you eat your heart out: 300km is like "a stroll in the park" says Phil Lazenby

Five top sites for visitors to Oz

Mel Eastburn lists five sites (west–east) that specifically target visitors. For information about other Oz clubs, see *www.gfa.org.au/clubs.htm*

SITE (Operator. Club or Commercial . Number of gliders for hire)
Location
How to get there
Who else visits from overseas
Basic trainers **Typical high-perf gliders: 5-day hire inc membership**
Cross-country trainers **Other single-seaters: 5-day hire inc membership**
Aerotow retrieve Road retrieve Launch
Website **Email**
On-site accommodatioan per person, room-only price, 7 days (bunk/ensuite single)

Left: the key to the information in the table below about five of Australia's top visitor sites for foreign pilots. More clubs are shown on the map on p39

I WAS AT **Waikerie** in March, *writes Trevor Hills*. With two grass runways, a dedicated hangar (and swimming pool), it was set up for all skill levels. The area is too dry for anything other than Mallee scrub to grow without irrigation and this is very clear from the air – at 5,000ft the landscape is completely flat right to the horizon, and tasks can be set in any direction. The 09:15 weather briefing is in English and Japanese. Then it's into the air behind one of two Pawnees in a beautifully-maintained club glider – not the very latest types, but a good range at good prices. Protected from the coast by a range of low hills, Waikerie has excellent conditions through to April but it's best from November to February, when thermals can be off the clock to 12,000ft or more. The locals don't bother until the temperature goes above 35°C, and seem to prefer blue conditions because the pesky cloud prevents climbs to the tops of the thermals – cloud flying is not permitted in Australia. Will I visit again? You bet!

BUILT IN 16 hectic WW2 weeks to bomb Queensland after the expected Japanese invasion, two of **Tocumwal's** four massive runways survive along with three of the six huge hangars. One of these wood-framed giants houses Sportavia's modern glider fleet, supplemented by some of the very latest models shipped from Europe's winter. Alongside are the bar, superb restaurant and some accommodation, with the rest in adjacent modern units around a lawn and swimming pool – Toc really is set up to give you a proper holiday. Shielded from the southern ocean by the Great Dividing Range, Toc was chosen after a detailed study of local weather records. It has been the starting point for many major records over the years and 25 1,000km flights over the last three. Three Bellanca Scouts (like Super Cubs) aerotow from grass strips by the runways; tasks are mainly over the flat farmlands to the north, though there are mountains to the south-east. Outlandings are hassle-free in enormous paddocks, and aerotow retrieve is standard –if you are not cleared, two-seat tugs can ship an instructor out. And you can fly with the master – Ingo Renner – in Nimbus or Duo Discus.

PROBABLY THE oldest gliding site in Oz, **Benalla** is where most Brits head, and some choose to over-winter here. Some gliders are shipped from Europe and available for hire by visitors, so Benalla, too, has the latest models. Its grass strips and hard runway are just outside town, not far from Lake Mokoan, a good landmark. It is about 60km south of the Murray River and the huge flat farmlands to the north, just 30km west of excellent mountain soaring among the Great Dividing Range which shelters Benalla from the ocean, giving it mainly hot and dry weather. The highest mountain in Oz is only just over 7,000ft, so it's mountain flying with a difference. A daily temperature trace is flown prior to the morning met briefing and task-setting help can be had from duty instructors each morning after briefing. As well as the usual Oz check flight, field landing practice is possible in a motorglider. Pawnee retrieves are available if you're cleared, but you might find a fellow Brit to fetch you by road.

NARROMINE is the home of both **Soar Narromine**, a Japanese-run commercial operation, and **Orana Soaring Club**, which operates semi-commercially, rather like Benalla. Both have one or two of the latest single-seaters. The airfield's two hard and three grass strips are in the middle of the great eastern wheat belt of the Murray-Darling basin, which stretches to the horizon in every direction. It is also a neat 500km from Benalla and Tocumwal and is similarly protected by the Great Dividing Range from the southern Pacific ocean, giving very stable weather patterns. Really long flights like 1,000km are possible from November to January *writes Christiane Takizawa*, with 500km flights from October to March and 300km flights feasible all year round. Many Gold height claims have also been made here, *adds Orana's Anne*

TOCUMWAL (Sportavia. Commercial. 22 gliders)
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Nimbus 4DM, Duo Discus, ASH 25 **Cirrus, LS4 (3), Libelle** **£350**
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www.sportavia.com.au **info@sportavia.com.au**
£50 > £230 B&B

BENALLA (Gliding Club of Victoria. Club. 24 gliders)
Victoria; 200km north-east of Melbourne
About 2 hours by direct train (longer from Sydney on the same line)
Visitors two-thirds from the UK including many who over-winter here
IS-28 (4) **Ventus 2-18, LS8, LS6** **£735**
Duo Discus, ASH 25, Nimbus 3 **Hornet (2), SZD Junior (2)** **£380**
£135 per hour £17 per hour + 17p per km £13
www.gliding-benalla.org **gliding@benalla.net.au**
£60 > £160

LAKE KEEPIT (Lake Keepit Soaring Club. Club. 8 gliders)
NSW; 475km NW by road from Sydney or 45km from Tamworth
Tamworth served by local airlines from Sydney
About half of visitors are from the UK
K-21, Puchatek, Twin Astir **Discus, LS6** **£460**
- **Junior, Hornet** **£300**
£67 per hour £6 per hour + 24p per km £13
www.users.bigpond.com/keepitsoaring **keepitsoaring@bigpond.com**
£34 > £100

WAIKERIE (Waikerie International Soaring Centre. Commercial. 9-12)
South Australia; south bank of Murray River 170km NE of Adelaide
Daily bus or hire car from Adelaide
UK visitors fairly rare so expect some other Europeans and Japanese
Twin Astirs (2) **Discus** **£600**
Duo Discus **Cirrus** **£520**
£110 per hour £11 per hour+ 30p per km £12
www.airnet.ne.jp/waikerie/english **wisc@riverland.net.au**
£45 > £75

NARROMINE (Orana Soaring Club. Club. 13 gliders)
NSW; 450km NW of Sydney
20 minutes' drive from Dubbo with flights from Sydney (may get as a free leg)
Some UK visitors
K-7, Twin Astir **LS8-18, LS8, LS6** **£425**
- **Cirrus, LS4, DG-300** **£310**
£56 per hour 19p per km £11
- **annell@hwy.com.au**
N/A > £110

NARROMINE (Soar Narromine. Commercial. 14 gliders)
Location, how to get there and visitors as Orana, above
K-21 **Discus 2, Discus (4)** **£775**
Nimbus 4DM **Hornet, DG-101** **£450**
£85 for 60km retrieve – £13
www.soarnarromine.com.au **info@soarnarromine.com.au**
N/A > £170

Elliott, and pilots of all standards come here, from students to the world's top pilots. Orana's many comp pilots mean it has a well-researched task list. There are no significant airspace restrictions, landouts are straightforward and aerotow retrieves are the norm, with two-seater tugs.

LAKE KEEPIT's grass strips are separated from the lake (a huge reservoir that is an excellent landmark) by scattered trees, with denser woodland on the far side, *writes Eddie Chalk*. On the opposite side of the lake, which can vary from almost dry to full, is a watersports centre with campsite, chalets and a restaurant. Though it has the smallest glider fleet (with some newer types) LK shares with Orana SC the prize of being the least expensive site in Oz – by a goodly margin. It's also much more of a 'get to know the locals' club operation, perhaps lacking the slickness of the bigger centres. Cross-country is normally to the hills and flatlands to the north/north-west and to the lower hills and flatlands to the west and south. On the western slopes of the Great Dividing Range, Lake Keepit is protected from most maritime weather influences and there are good mountain flying opportunities, with ridges not far away. A weather briefing and task-setting assistance are provided daily. Flatland landouts are simple and aerotow retrieves are available. One unique feature is the close proximity of Aussie wildlife, with Koalas in the trees and kangaroos sometimes on the strip during a late landing!

FOR BALANCE, **Beverley Soaring Society** is a typical local weekend club, two hours' drive from Perth, WA, *writes Phil Lazenby*. I have spent twelve weekends there and feel very much at home. The hangars house two Blaniks, a Twin Astir, two Pawnees, a PW-5, Astir and Std Jantar. The clubhouse has a dormitory, kitchen, briefing room and showers. Training, maintenance and flying discipline at the club are very professional. It's also cheap – a 2,000ft aerotow is £7. Conditions are great by UK standards but probably average for Oz. Virtually every day from October to April is a cross-country day. My best flights have been in October and March, when cloudbase is more than 10,000ft with shallow cu and average climbs around 8kt. Midsummer is better but very hot. Visibility is great but there is not much to see. A 300 is a stroll in the park, even in the PW-5, and 500s are normal. After flying it's a few drinks around the inevitable BBQ or into town for a steak and beers at one of the two pubs.

Unfortunately, *writes Mel Eastburn*, lack of space stops us giving details of other clubs (all those on our map on p38 responded rapidly to our enquiries). However, the Gliding Federation of Australia website – *www.gfa.org.au/clubs.htm* – gives detailed data on *every* club in Oz. Many thanks to David Head and Anne Elliot for their help.

A typical day's flying

Checklists can help make your flight a success. Here, in bold text, is Mel Eastburn's for Oz, in the form of a day at Tocumwal

WAKE UP, shower, dress, breakfast, and drink that first coffee. The 08.30 **weather briefing** by Ingo Renner confirms that the cold front went through during the night so we're on day 1 of a new cycle (*see overleaf for more details of Oz weather*). Forecast cu to 7,000ft and westerly/south-westerly winds of 25-30kts at 5,000ft.

It's my last day in the ASW 27B and I agree a 640km east-west task with Ingo.

After extracting, washing and drying the glider – each has its own bucket, sponge and leather – it is DI'd by CFI Eddie Madden (DIs in Oz may only be done by those with CAA authorisation). I add copious water to the 27. Then it's time for my own preparation. As well as the usual task plan and declaration, there are some extra steps here in Oz.

First, all exposed skin is liberally covered with **Factor 30 sun cream** and lips with **sun block** (a German is taking his third rest day to recover from flight-induced sunburn!). A sun hat and pee bags join the cream in the cockpit. Next the **drinking water** is readied – two 500ml in-flight bottles plus a 1.5 litre 'landout' bottle behind the seat.

Then I check my **GPS/Logger**. I take my own GPS, held on a padded aluminium frame strapped just above my right knee at panel height (so no looking down) and it's connected both to the EW logger and main battery via a single plug which will pull apart if I have to bale out.

Although, like most modern gliders, the ASW 27 has its own built-in system, it's too complex for rapid familiarity and I cannot read the logger data anyway. So I use its excellent vario and final glide functions but my own GPS tells me I've turned the TPs. All clubs can supply mechanical barograph and camera – take them, at least as backup on all **badge flights**.

A word about **TPs**. In farmland Oz, most are grain silos or railway stations – both easy to find from their adjacent railway lines, often now closed. But co-ordinates are not infrequently wrong and different lists of TPs often give different co-ordinates for the same feature. The solution is to use only absolutely proven TP co-ordinates, to declare co-ordinates as well as location and to check with a GPS that you've turned the Lat-Long you've declared.

We tow the gliders to the launchpoint. With up to five gliders roped nose to tail behind one tow car, even this is different in Oz. I keep the water intake going, re-apply the Factor 30, take a final drain, get set up for launch and go at 10:40, with Ingo Renner as my wing runner. It's **low tow** in Oz, but most sites are happy if you drop into low tow at about 300ft. As Toc is a licensed airfield, the tug flies a fixed pattern rather than to a thermal, and I go to 2,100ft before releasing in low tow and **turning right off tow** – be careful not to slow down too suddenly or your banking left wing may just catch up the tow rope above you.

My first thermal takes me to cloudbase at 4,000ft and, at 11.00 I set off due east, downwind. For the next eight hours I see only three or four other aircraft or gliders. This is big, empty sky country, and there's no need to consult the map for restricted airspace – there isn't any. As usual the **thermals are much tighter** than in the UK, which means that 45° of bank is the minimum to stay in the core. I often need 50-55°, especially with a heavy load of water. Larger clouds often have multiple cores, but there's usually a best one.

With a strong tailwind, I can dolphin much of the time with occasional climbs. It's near noon when I turn Burrumbuttock. The land below and to the north is the huge



On the ground, seemingly sparse trees block your view

north-south and east-west grid of farmland of the Murray-Darling basin. It's easy to navigate provided you remember **the sun transits to the north** in Australia – so put it behind you and you're travelling south. To the south, I see the smaller fields and orchards of Victoria across the Murray River. The next 220km into 25kts of wind slows me down. The climbs do not seem to be fully organised yet and very similar clouds produce wildly different results. I manage a 60km run losing only 1,600ft and then lose 1,000ft in the next 10km. I have my mandatory mid-leg crisis.

In this part of Oz, anything below 2,000ft is LOW. **Landing out** is easy because the paddocks (Strine for 'field') are huge, flat and generally smooth. You choose the grey ones (grey equals grass) for preference. That's the easy bit. You need a paddock close to a homestead, preferably **one with signs of life** (4WD parked outside): over half of homesteads are abandoned. And you must orient yourself in circuit because, once you've landed, the trees that ➢



Lake Keepit; the reservoir is an excellent landmark



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➢ seemed so scattered from the air will hide your chosen homestead completely – there are true tales of pilots setting out on eight-hour overnight walks in the wrong direction. You need the homestead for its phone (your mobile won't work outside major towns and you'll be lucky to reach a nearby glider by radio to relay a message). Sorting all this out uses up a lot of height!

Given a GPS bearing and range, a tug is on its way, so back to the glider to prepare for re-launch. If you have to **fly a retrieve** yourself, the technique is simple: after attaching the tow rope, the tug takes up slack, holds on its brakes whilst increasing to full revs, the glider pilot levels his wings in the prop wash and the tow starts when wings are level.

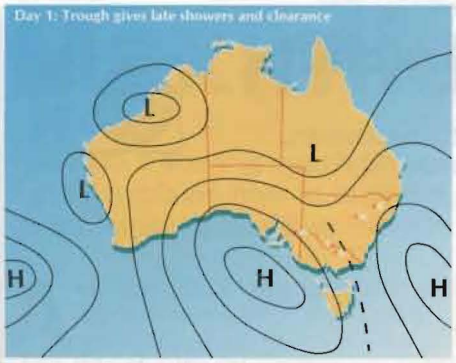
Fortunately, I overcome my own crisis, reach the second TP and race back downwind; 540km done by 16:30 at my third TP. The thermals are much more organised with 4-6kt averages and cloudbase has risen to 6,000ft. Like everyone else, I've under-set and 750km was clearly on – two days ago I did a 255km return leg from a 16:40 turn. I decide to add a fourth TP to fly 750km – even if not a strictly kosher task. Nine days out of 10, this would have been easy, with thermals lasting to at least 19:00. I head west again – and discover my original task was just perfect.

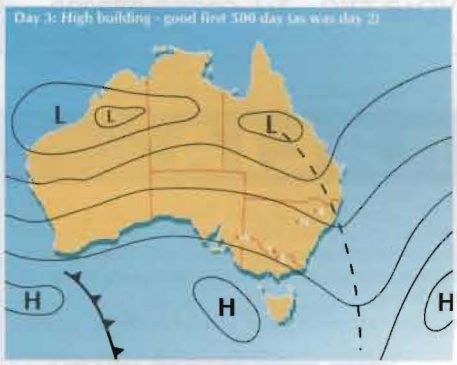
Fifteen minutes later I'm down to 1,200ft near a homestead and recalling my mental landout checklist under the completely overcast skies of a small trough that had been following me eastwards on the previous leg. I dump water, survive in 1kt increasing to 2kt and then 3kt, find three more climbs and tip-toe back in to Toc at min height after the standard **downwind radio call**. A few days earlier, after a late 300, I **practised staying up** on the last dying embers of the day and was last to land – even in Oz this is a useful skill!

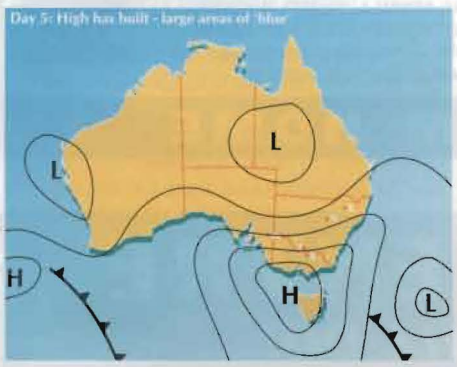
After **hangaring the glider**, I download the EW onto my portable computer, hook up to the mobile phone, do my e-mails, and retire to the bar for a Hahn Ice. The evening menu contains one of my favourites, a superb Australian fish called Barramundi, to be washed down with a nice sharp, local Semillon-Chardonnay, shared with two Belgians and Frenchman. Tomorrow is another day…



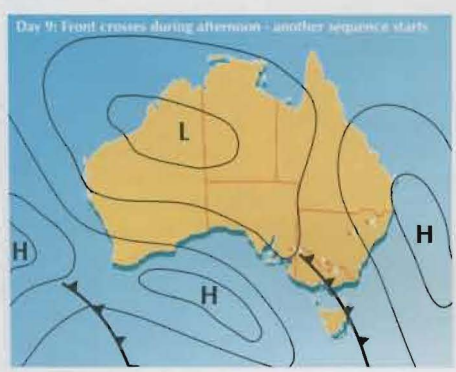
Tocumwal, with the gliding operation extreme top left











The weather to expect

A MAGICAL moment during a recent visit, *writes Mel Eastburn,* was watching four-times World Champion Ingo Renner give a weather briefing to an audience including three-times World Champion George Lee. I am grateful to Ingo for teaching me about the Aussie weather. There are three things to remember that affect it:

- It is a major continental land mass (the same size as the US without Alaska), so it has the generally stable and predictable weather patterns associated with continents.
- It has huge oceans and ocean currents to the west, south and east, and the northern half of the country is within the Tropics.
- The major gliding sites are at latitudes equivalent to the northern half of Morocco, so it gets very hot in summer.

During the summer – roughly November to February – fairly regular cycles of weather cross the southern part of Australia from west to east roughly every 7-10 days with each High followed by a cold clearance and the next High. Meanwhile, Lows track across northern Australia, occasionally developing into cyclones that bring the tropical flood season to the north.

The maps show how this sequence moves past the sites featured.

A genuine cold front gives the best clearance and better conditions for the next High after a couple of days of wet and windy non-gliding weather. Just as in the UK, the best gliding days are the two or three immediately after such a front passes through with the new High building. This is when 10,000ft cloud bases and 10kt thermals enable normal pilots to make light work of a 750 or even a 1,000. With good thermals from 10.00 to 20.00 and the last 120km a 'free' final glide, you can do 1,000km without needing to average more than 95km/h!

Unfortunately, such days are almost as rare as 7,000ft cu bases over England and Wales. Often, and especially later in the summer, the clearance is little more than a very weak front or trough, and the next High is usually hotter with more blue days and much lower thermal tops. In general, blue days seem more common further west – in Western and South Australia – and after the New Year.

As a typical High goes through its life, inversions start to become a problem from day 3 onwards. There are frequently multiple inversion layers with a low level inversion at perhaps 1,500ft and a higher one at 4,500ft. As the days progress, the air above each inversion gets hotter, the level lower and so the trigger temperature needed to break it up gets higher; gliding days start later and so are shorter.

By day 6 onwards, it can be 13.00 or 14.00 and over 30°C before the lower inversion breaks, and it will often be blue unless the upper inversion rises or breaks in late afternoon. However, with reliable lift to 19.00 or 20.00, a 300 is routine and 500 often feasible.

Of course, this is a typical pattern. I have known the same High to get stuck for 10 or 12 days with everyone begging for a clearance to the low, rough, blue days. I've flown for eight straight days without even the experts managing a 500km. And occasionally, the clearance may be a Low which also gets stuck, bringing several days of damp sightseeing weather.

Most often, though, the cycle continues, giving thermal tops of 6,000ft-plus and strong lift for perhaps five days before it starts to degrade again.

A 10-day trip should give an average pilot eight good cross-country days including two or three 500 days. But be prepared for that 1,000 day!

Below: five main visitor sites (red) are described on p36. Sites shown in green can cater for small expeditions by arrangement and can supply some gliders. Those in blue, which have more than 30 members, welcome your calling in during their operating times. For a full listing of Australian gliding clubs, see www.gfa.org.au/clubs.htm



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Maximising your chances

The BGA's soaring coach Simon Adlard explains how to improve your chance of avoiding mid-airs

A RECENT run of three mid-airs in ten days this spring (with, very luckily, no fatalities) has again reminded us of the risks of getting closer than you want to another glider. There have been some good articles on lookout and the limitations of the human eye. There is more, however, to avoiding mid-air collisions than merely looking out of the window. Here I will not only talk about how to look out, but how to interpret your surroundings and minimise the risk of becoming an accident statistic.

So why do mid-airs happen? Three major reasons are: pilots aren't seeing each other; pilots aren't recognising the situation early enough; and, finally, complacency.

Pilots not seeing each other

This is probably the single biggest cause of collisions. So, assuming that we are looking out, why aren't we seeing each other?

Poor visibility: one problem with flying close to cloud is being unable to tell where exactly the base is. A pilot may be flying close to the base of a cloud in full view of the ground but their horizontal visibility is seriously reduced and they can't see other aircraft at a similar level. This generally starts to occur at or about 300ft from cloudbase. It is a good idea to avoid flying in this area, especially if you are running a cloudstreet. Flying above or alongside cloud, especially flying around a finger of cloud, also carries significant risk. It is impossible to tell if there is another glider coming in the same direction (likely when entering wave or flying along sea breeze fronts). We have a cloud flying frequency; you don't have to be in the cloud to use it.

Another factor that can affect our ability to spot other aircraft is our view out of the canopy. Canopies should be kept clean and free from grease marks at all times; but it is not only dust and fingerprints that harm visibility. Internal reflection can be just as bad – if not worse. This can be reduced by finishing the cockpit in a dark matt colour and not wearing bright white clothes. If you are flying dual in the front of a two-seater, that includes wearing a blue or grey hat, not a bright white one (see right).

Bad scanning technique: unfortunately, the eye and brain have several limitations when it comes to scanning the sky for aircraft. The first and probably the most important is the time taken for the eye to focus on any particular piece of sky. It may take three or four seconds to study a piece of sky and register what is there; a complete scan from left wingtip to right wingtip could take as long as 20 seconds to look and see. A quick glance before turning is therefore insufficient. So it is a good idea to look around behind you and check the area is clear 15 or 20 seconds before you reach the cloud that you intend to thermal under; this way you stand a better chance of seeing and registering if there is anything behind you that could be missed in a quick glance before you turn.

Target fixation: this applies to any time in the flight where a constantly-changing situation needs monitoring, and includes:

Joining other gliders in a thermal: if you are attracted to another glider circling then so will other pilots. Look out for other gliders converging from different directions. Remember to give yourself time to look behind to check for following gliders.

Thermalling with other gliders: you are bound to attract other pilots – look out for them as they come to join you.

Flying the circuit: it's easy to find yourself flying the circuit staring at the landing area (don't worry, it won't go away). Monitor your height and distance from time to time and use the audio vario to alert you heavy sink whilst scanning the rest of the circuit for other traffic, especially:

- Behind and below for lower gliders
- Outside the circuit
- On the opposite circuit (especially during the diagonal and base legs)
- On long finals (during diagonal leg)

Approach and landing: almost all our concentration is on monitoring the reference point. However, we still need to look out for other landing aircraft converging on us and, above, for descending aircraft. Make sure there is plenty of room in the area you intend to land (don't land close to things that move – cars, people, etc). Airfield controllers can do a lot to help by ensuring that landing areas are kept as clear as possible at all times.

Diverted Attention: there are many reasons why your may be diverted; however, by far the most common cause is looking at instrumentation. Over the years instruments have changed a lot with the aim of allowing the pilot more time for airmanship and lookout; however, this presupposes that you are proficient in their use. Before you fly with a new instrument learn how to use it on the ground or, even better, in a two-seater equipped with the same instruments. This may take many hours. Use the audio vario at all times: try to learn how to centre using it, with the mechanical for reference only. GPS is another innovation that can be a valuable aid to safety: if used properly it frees the pilot from a lot of head-in-the-office map work. As with a map, however, it requires that the route is pre-set before flight. You should become familiar with its use before flying with it, so you can change screens/waypoints within five seconds or so.



Not recognising the situation

Unfortunately, the best way of recognising problem situations early is experience – not recommended in this case! There are, though, a few guidelines you can follow:

- Identify the other glider's direction of travel.
- Try to predict the piece of sky it is going to occupy in the next few seconds
- Is there any possibility it will occupy the same piece of sky as you? If the answer is yes, then move.
- Any aircraft that is remaining stationary in your field of view and is growing larger will eventually hit you.
- If in any doubt, then move anyway.

Complacency

Human nature helps us believe that disasters will never happen to us, even though we all know that one day they may. It also leads us to believe that we govern our own destiny. This may lead us to ask ourselves: "what are the chances of my hitting someone?" when we should perhaps also ask: "what is the chance of someone else hitting me?" If you don't like the answer to that question, there are a few things that you can do to stack the odds in your favour. First of all, fly defensively. Assume that:

RULE 1: Other pilots haven't seen you and will alter course towards or in front of you

RULE 2: Even if they have seen you, they don't know what to do to avoid you.

RULE 3: Nobody has absolute right of way

These rules are a good start, but you also need to assess the risk you are subjecting yourself to. To do this, ask yourself:

Can I see other pilots and can they see me? (Am I flying at cloudbase?)

How busy are they? (Are they thermalling, flying the circuit, flying the launch?)

How busy am I? (Am I giving myself enough time for an effective scan? You will probably have more time to look out when thermalling at 2,000ft than at 600ft)

Am I doing something strange? (landing across the normal area is asking for trouble.)

From what area are they likely to come? In short, lookout is more than just looking for other gliders – it is flying in a state of mind that used to be called airmanship.







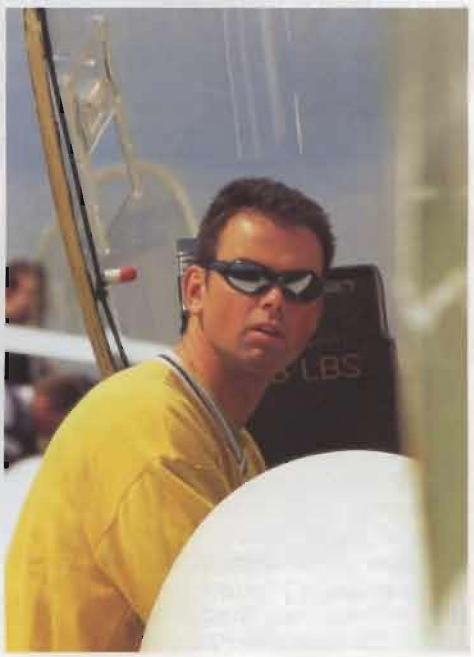
The UK's first nationals since the outbreak of foot-and-mouth witnessed a dream victory for Richard Hood (left). Sarah Drury reports

YET AGAIN Richard Hood combined talent, training and experience to secure a string of day wins – and overall victory – at his third consecutive Club Class Nationals.

Despite initial worries about the foot-and-mouth epidemic, the competition (from June 16-24) was run under normal rules after the BGA's partial lifting of its cross-country ban. This released a more than adequate task area. Contest director Derek Westwood, though satisfied with the turnout, was a little disappointed by pilots pulling out late, despite the Nationals being fully rated. Over six flying days there were 59 landouts – Day 2 saw all but two land away – and not one irritated farmer. In fact, pilots reported only positive reactions: evidence that consultation between the BGA and NFU had been fruitful.

The contest opened on Saturday to inclement soaring weather, but a warm welcome from the Husbands Bosworth team and a speech from Peter Masson, World Club Class Champion. He sang the praises of an affordable Nationals that can be a stepping-stone to other things.

Sunday's weather proved disappointing, too, though pilots knew they could rely on the met man, Hugh Brookes, who initiated them into the secrets of his extremely accurate pine cone prediction system.





Three times a champion

Photos this page and opposite: the ***White Planes*** picture co.

At lunchtime on flying day 1, Monday, the 27 competitors launched on a 206.3km task (Norman Cross-Newmarket-Caxton Gibbet). Richard, Silver medallist in the 2001 Club Class Worlds, took a day win (70.1km/h); Afandi Darlington (fourth in the Worlds) was second and Paul Fritche third.

Richard notched up another victory on Tuesday, though no flying took place: his team won the quiz evening.

Day 2, Wednesday, was the low-scoring mass-landout day due to tricky conditions around a 114.3km (Saltby-Kettering South). Finishers Richard and Mike Jordy claimed first and second but Afandi's fortunes plummetted: his crew had an accident with car and empty trailer on the retrieve.

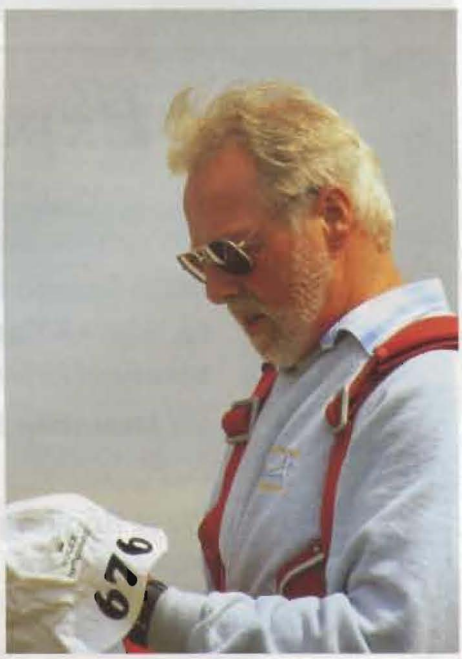
Ron Bridges set an assigned area task of 210 minutes for Day 3, Thursday. Rose Johnson stole the show with a 1000-point 298.2km at 70.1km/h, with Mike Jordy second and Gordon MacDonald third. Everyone got back apart from Richard, who clearly thought his crew needed an outing. He chose a small billiard-table-surfaced field at what he had hoped was an all-girls boarding school. To his dismay, it was the all-boys Maidwell Hall Prep School. Better luck next time, Rich!

On Day 4 – Friday – 263.8km was set (Goring-Wantage-Thrapston). Conditions deteriorated beyond Milton Keynes but improved for the run home. Mike Jordy won (74km/h), Paul Fritche was second and Richard third.

Saturday, Day 5, looked unpromising for 228.5km (Bourton-on-the-Water, Banbury and Thame airfield). A delayed start due to a low cloudbase and high cover gave ➤

Above: Richard finishing in Cirrus 152, the glider he flew for a Silver medal at the Club Class Worlds in Australia
Left: Paul Fritche, who came second at Hus Bos. Right: Mike Jordy had to settle for third after an early landout
Below: A final glide for Mike Fox in his beloved Libelle, HWG – his last flight in it before passing it to new owners







➢ pilots a testing time. Pessimistic crews consoled themselves with the thought that at least the Cotswolds was cream tea territory. However, ten got back and Richard took pole position (64.3km/h) with Mike Jordy and Paul Whitehead second and third.

On the last day the pine cone was fully open and competitors were presented with a final race over 182.4km (Newport Pagnall-Gaydon-Rushden). Once again Rose Johnson won (85.1km/h). Everyone returned in time for prizegiving with Iain Evans second and Richard third. So, overall, Richard won his third overall consecutive Club Class title. Paul Fritche and Mike Jordy came a close second and third.

This year's organisers are due many thanks from the competitors for a well-run and safety-conscious contest as well as for the quality of venue and facilities.

My thanks to all those who were interviewed, cajoled and bribed with beer or tea to contribute to this article

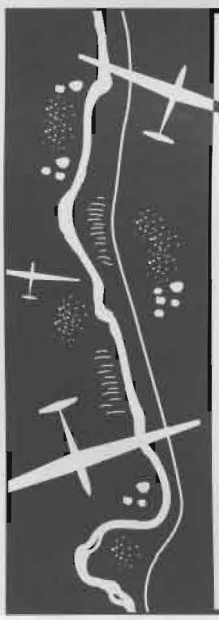
Above: met man Hugh Brookes and his pine cones. Below: Club Class grid at Hus Bos (Sid Gilmore)





Above: Richard Hood, 26, was photographed at prize-giving with director Derek Westwood by Sid Gilmore. Richard first learned to glide with Four Counties GC, then flew the Cirrus belonging to his father, Leigh Hood. Richard spent 1996 in New Zealand, where his cross-country flying was fine-tuned and his thoughts turned to racing. Talent-spotted at the Juniors, he was coached, team-trained and mentored by the likes of Justin Wills, Andy Davis, Martin Wells and Brian Spreckley. A first Club Class victory followed at Nympsfield in 1999 (where he was the youngest pilot) and was repeated at Pocklington last year. As for his ambitions – watch out, Standard Class team!

Place	Pilot	Glider	Points
1	Richard Hood	Std Cirrus	4555
2	Paul Fritche	LS4	4081
3	Mike Jordy	Pegasus	4071
4	Gordon MacDonald	DG-101	4026
5	Paul Whitehead	ASW 19	3962
6	Mike Cuming	Std Cirrus	3921
7	Mike Fox	Std Libelle	3788
8	Allan Garrity	LS4	3756
9	Rose Johnson	DG-101	3694
10	Bob Fox	Std Libelle	3675
11	Angus Watson	LS4	3591
12	John Williams	Std Libelle	3562
13	Jon Smith	Std Cirrus	3509
14	Graham Drury	Pegasus	3494
15	David Innes	ASW 19	3412
16	Alistair Nunn	ASW 19 Club	3357
17	Iain Evans	Hornet	3198
18	Jack Stephen	DG-100	3102
19	Gerald Bass	PIK 20b	2950
20	Dave Ruttle	Janus A	2707
21	John Bevan	LS4	2612
22	Nils Peter Wedi	LS4	2484
23	Afandi Darlington	LS1f	2426
24	Gwyn Thomas	SHK-1	2395
25	Derek Copeland	Std Cirrus	2078
26	Julian Hitchcock	LS4	1916
27	Peter Andrews	Std Libelle	1469



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DEESIDE GLIDING CLUB

Not for the fainthearted

Gary Stingemore reports on a truly cosmopolitan Overseas Nationals – and exciting flying

THERE are a few things that are certain in this world: death, taxes... and having a tremendous time at the Overseas Nationals in Spain. This was my second visit to the home of Spain's gliding centre, Ocana, where life has that *manana* feel. When the thermals start, their pilots stop because it's too bumpy – and the Overseas Nationals begins, with excellent racing and thought-provoking conditions.

Ocana is about 35 miles south of the Spanish capital, Madrid. It takes two days to cover the 1,200 miles from the UK, via Calais (poor people), direct ferry to Spain (obscenely rich people) or St Malo (poor people who think they're rich). Whichever route you take, it's worth arriving with a couple of spare days, to recuperate. It's going to be tiring. Over the last two years I have flown 28 out of 31 days (including practice ones). You can't afford to be knackered at the start of this competition.

Place	Pilot	Glider	Points
1	Martin Wells	LS8	7118
2	Mike Young	LS8	6689
3	Leigh Wells	LS8	6670
4	Gary Stingmeore	LS8	6613
5	Richard Hood	LS8	6409
6	Richard Browne	LS8	6268
7	Graham Smith	LS8	6255
8	Keith Nicolson	LS8	6003
9	Paul Crabb	LS8	5966
10	Andrew Hall	Ls6	5923
11	Oliver Ward	Discus 2	5855
12	Paul Shelton	LS8	5836
13	George Metcalfe	Discus 2	5813
14	Gillian Spreckley	Ventus 2a	5753
15	Russell Cheetham	ASW 28	5699
16	Tony Mountain	Duo Discus	
	Martyn Pike		5595
17	Stephen Crabb	LS8	5495
18	Iain Evans	LS4	
	Rose Johnson		5469
19	Mel Dawson	Ventus 2a	5468
20	Harry Wondergem	Ventus 17.6	5433
21	Phil Jeffery	LS8	5399
22	Bart Reckens	Ventus 17.6	5360
23	Robert Welford	LS8	5301
24	Nigel Gough	LS7wl	5240
25	John Glossop	Discus	5204
26	James Clark	LS8	5184
27	Peter Batenburg	Discus	5159
28	David Innes	Nimbus 4	5151
29	Mak Ichikawa	ASW 28	5034
30	Bernie Morris	LS8	
	Jeff Warren		5016
31	Mark Wering	Nimbus 3 24.5	4699
32	Alan Binks	LS6	4677
33	Chris Lyttleton	ASW 27	4671
34=	Mark Jerman	ASW 27	4628
34=	Frans Klappe	DG-300	4628
36	Richard Blackmore	ASH 25	4596
37	Ged Mcknight	LS6	4570
38	Sven Olivier	LS4	4480
39	Reb Rebbeck	LS8	
	Jessica Pennant		4447
40	Jim Weston	LS6	4298
41	Kevin Houlihan	LS3	3721
42	Peter Dixon-Clarke	DG-300	3645
43	Adrian Emck	LS8-18	3569
44	Jose Paulo Rosado	Lak 17	3529
45	Andrew Perley	LS8	3511
46	Jorg Herrmann	PW-5	3267
47	Rick Walters	LS4	1853
48	Augusto Ferrera Pire	Lak 17	1480
49	Dave Williams	LS8-18	572
50	Michel Cruchaga	Speed Astir	0

The local area has many attractions: excellent cheap food and wine, with plenty of culture; but unlike the Costa Lot down south, very few people speak English, so a phrase book is a necessity.

The comp was truly cosmopolitan, with pilots from Portugal, Germany, USA, Japan, South Africa, Kenya, Ireland and Holland.

We had nine out of 12 days, with most people getting back on all nine. There was one no-contest day (in the UK this would have been a contest day but the FAI rules and scoring we were using required 25 per cent of the field past Y). Numerous pilots ended up in fields that day, with lots of stories about heroic retrieves in many feet of mud, with much carrying of gliders. Spain after rain is not a place to land out!

A new concept this year was that within 2km of the airfield on final glide you have finished. This helps with the congestion back at a small airfield, and is therefore safer, but makes for a very dull spectacle. A tractor driver a few fields back, however, got a regular air display and drenching.

Although the weather was not as good as the previous two years, the flying was no less exhilarating: convergence lines, high cloudbases and regular 6-8kt thermals. Add to this hills/small mountains to the west, thunderstorms and (for all you twitchers) very big budgies marking the best thermals.

Crabb FM was its usual entertaining self. It doesn't matter if you started 20km ahead, you still find yourself being drawn to their frequency, listening for the next gem. On one occasion Steve had told Paul at least six times the that the air was better to the left; after Paul had then lost 300ft he chirped up: "Stephen... you seem to be in the better air"..."I've been telling you that for the last five ***** minutes!"... "Stephen, you have to press the transmit button before you speak!"... And so it went on.

On Day Four, storms had been brewing through the day; by the time we were final gliding, most people were clipping them or being rained on heavily. From the ground the view was quite spectacular: dark background, gliders dumping water through the rain and flashes of lightning close by, just to concentrate the mind. Three people on the ground were struck by lightning.

The weather improved by the end of the week – genuine racing days. The best was probably Day Eight, an assigned area task. Down one convergence line there was a squadron of LS8s travelling at 90-110kt, all pushing and pulling within yards of each other, stopping only for 7-8kt. Then two long glides of 35-40km to the next cu, back into 6kts, 10,000ft and home for tea and medal; Martyn won (124km/h over 460km).

On the last day, Martyn had such a lead he only had to get back to win – which he duly did – as day winner, to boot. Second to fifth places, however, were up for grabs: Mike Young, Leigh Wells, Richard Hood and yours truly playing cat-and-mouse at the start of a 361km task. I eventually left last at 14.58hrs, 10 minutes behind the rest. 360km at 3pm – it's insane, isn't it? We nearly came unstuck near the furthest west TP with conditions going blue-ish and poor climbs low down. I never saw Mike, but had managed to get within 400ft of Leigh and Richard. Leigh then did a vanishing act and got his 10 minutes back. Mike, as usual, finished strongly – leapfrogging into 2nd overall, with Leigh 3rd. For those of you with ASW 28s on order, there appears to be no difference in performance at any speed; LS8s finished 1st to 9th.



the **White Planes** picture co.

Gary Stingemore: "360km at 3pm: it's insane, isn't it?"

Martyn took the lead on Day Two and never relinquished it, winning the title for a second year. Day winner on five of the nine days, he proved yet again that he is one of the best racing pilots in the world. I think it's Great Britain's loss that he's not competing in South Africa this winter.

This is a fun, exciting competition at which you actually do get to fly; don't be fooled, though. The flying is spectacular and the standard extremely high. Twelve of the top 30 UK-rated pilots competed – add the hills and the storms, and it's not for the fainthearted. Thanks go to Brian Spreckley (director, task-setter, met man and chief marshal) and his small team: his experience and knowledge of Spain is invaluable.

At the end-of-comp dinner, there was much frivolity and not a dry eye in the house –everyone was thrown into the pool. A warning, girls: do not wear a posh expensive frock, there are no exceptions! It was noted that the Crabbs went to bed early and escaped; boys, next year be afraid, be very afraid.



Antares

Jochen Ewald took his camera to AERO 2001, Europe's premier light aviation showcase. Here he supplies the latest news

EVERY TWO years, towards the end of April, around 50,000 air-minded people head for Friedrichshafen in south-west Germany. AERO, Europe's biggest sports and general aviation trade fair, provides not only an excellent overview of what's new, but also boasts fine air displays of historic and new aircraft.

2001 was the fair's last year in the old exhibition halls close to the town centre. From 2003, it will be based in new, bigger halls on the edge of Friedrichshafen airfield. This year, displays at nearly 500 stands in ten halls – and at the airport – ranged from aeromodelling, hang-gliders, microlights, gliders, motorgliders and light aircraft to fast business jets. Everything relating to light aviation, from engines and parts to books and art, could be found.

The best sales success for a motorglider before the prototype has even flown was reported by Lange Flugzeugbau. Two new orders during AERO 2001 brought the Antares order list to 42, which means about 30 months' wait for a new customer. Lange displayed his proof-of-concept electrically-driven motorglider, the LF-20E, based on the DG-800 design but with a completely new structure, stretched to 20m and equipped with the Antares' electric engine. While the LF-20E is still powered by Ni-Mh rechargeable cells giving c 1,800m (5,900ft) climb height per charge, the serial Antares will come with new Li-Ione cells, allowing climbs to about 3,000m (,9840ft). The maiden flight of the Antares and the start of production are expected in early 2002.

Alongside the latest developments in

Above: five old glider cockpits, fitted with flight-sim screens linked to the controls, were consistently popular



Right: the FVA-27 canard-type glider, from the Aachen Akaflieg, is under development



Left: a Czech microlight glider, the ProFe Banjo, attracted much interest

Below and below right: the LS8-15/18 is now available as a self-sustainer, with a retractable Solo engine





to Zeppelin

motorglider technology, a famous name from aviation history featured strongly at Friedrichshafen. The "local hero" – the new Zeppelin NT airship – was on show. It demonstrated excellent handling qualities, much like a helicopter's. The NT received its final C of A on the first day of the fair, a great success for Zeppelin, which originated there a century ago.

Although the number of glider pilots is stagnating or decreasing, the glider market is very strong, not least due to high export rates made possible by the low Euro. Manufacturers brought their latest kit to AERO 2001.

DG Flugzeugbau exhibited the DG-808b with the new NOAH emergency pilot exit aid, an inflatable air cushion under the pilot. When it is activated after the canopy is jettisoned, it automatically releases the seat belts and lifts the pilot above the cockpit frame, saving valuable seconds. Also on display, of course, was a new 18/20-metre unflapped high performance two-seater, the DG-1000. Serial production of the aircraft is just commencing.

Rolladen-Schneider showed their new LS8/18-metre motorglider, a self-sustainer with a small, retractable Solo engine behind the cockpit. This glider had not then been flown; the maiden flight was due about two weeks later.

Norbert K. Niessler from Austria, who is the general **PW and LAK** importer for German-language countries, displayed the serial production version PW-6U, the new Polish two-seater from the PZL Swidnik factory, which is also the main manufacturer of the World Class PW-5, and the Lithuanian 15/18-metre flapped Sportine Aviacia LAK-17A.

Interest was great, especially in the cheap PW-6U: the displayed glider was sold on the first day of the fair. A new factory in ➢



Right: a colourful variant of Scheibe's SF-25C Rotax Falke 100hp tug



Left: the Slovenian Apis glider is awaiting German certification in the new microlight glider category

Right: the Streifeneder glider rescue system, in Uli Schwenk's ASW 22



Below and below left: the Duo Discus T with Solo self-sustainer engine





➢ Poland, called **PZL Bielsko 1**, has been started by people from former state-owned PZL Bielsko (SZD gliders), which had stopped production. The new Bielsko 1 factory is also building the World Class PW-5 and displayed some new details: they hope automatic control connections, waterballast in the tail, a Mecaplex canopy and other small improvements will make this glider more attractive.

HPH, the Czech scale desktop model and glider manufacturer from Kutna Hora, brought their Glasflügel 304CZ 17.43m as well as the prototype of the 304 Club. This new version of the famous last Glasflügel glider comes without flaps and with big Schempp-Hirth airbrakes instead of the trailing-edge ones, and is offered for the very competitive basic price of 56,000DM (plus VAT). The maiden flight was expected shortly after the Aero. There was much interest; five orders have been placed.

Schleicher brought their new Standard Class ship, the ASW 28, whose long order list brings the waiting time for new customers up to three years, and the rotary engine-powered self-launcher ASH 26. On the stand of the German Aero Club, an ASW 22 was displayed with Streifeneder's parachute glider rescue system built in.

Schempp-Hirth came with their new sustainer engine powered gliders, the two-seater Duo Discus T and the Standard Class Discus 2T, which was also equipped with new, performance-improving winglets available for all Discus 2s.

Most touring motorglider manufacturers were present. **Stemme** displayed their record-breaking S-10VT and told of new developments, expected to fly in spring 2002: the S-8 motorglider with a non-retractable front propeller installation and the side-by-side two-seater S-2, which are both designed for club use. **Scheibe** brought their 100hp Rotax Falke tug, of which more than 70 are already operating in many countries; **Diamond** Aircraft their 115hp turbo-charged Rotax powered Super-Dimona HK 36TTC (called, in some countries, Katana Xtreme), which is also available as a tug; while **Korff** displayed the Grob 109b modified to an effective, powerful tug with the 130hp turbo-charged Korff-Limbach L-2400 EFIT engine.

Motorglider towing is becoming popular as it is safer, easier, more affordable, "green" and economic, using about half the amount of fuel of a conventional tug aircraft.

Clearly dominating the scene at Aero this year were microlights. This sector has been expanding enormously in Europe during recent years. This seems to be the response from customers to the increased amount of money and bureaucracy needed to buy or fly conventional aircraft – people just want to do fun flying. In the new generation of microlights many very fast aircraft can be found – maximum cruise speeds between 200-280km/h (124-174kts) bring several of these aircraft into competition with heavier, conventional aircraft. And now we are seeing aerotowing with microlights. The test programme with about six types seems to be very successful; final permission by the German Ministry of Traffic is expected soon. But there is a real problem in this class. As the empty weight of the modern two-seater microlights is often close to 300kg (660lb), and the maximum legal take-off weight is 450kg (990lb) – plus a bonus for a rescue system in some countries – not much payload remains. If the fuel tank, sometimes up to 100 litres, is filled, these aircraft become, in practice, single-seaters, and are illegal with two people aboard. So customers and manufacturers want take-off weight limitations raised.

A new class of gliders is also gaining ground: microlight gliders. For several years, very light, foot-launched gliders with an empty weight of about 60kg (132lb) have been flying in Germany. Now a new certification class has been created. Gliders with an empty weight below 120kg (264lb) may be operated via the German Microlight Gliding Association (DULSV); certification is done by the German Aero Club (DAeC).

These gliders require a separate licence, which is easy for German glider or motor-glider pilots to get. You just need ten flights under the supervision of an instructor in each launch method to be used. A training scheme for *ab initios* is under development by the DULSV, working with the gliding school at the Wasserkuppe. Here new pilots are going to be trained on normal two-seater gliders before soloing on microlight gliders. The DULSV showed its Czech ProFe Banjo glider, which is already German-certified, while Martin Wezel brought the Slovenian 15-metre design, the Apis, in glider and motorglider (microlight) versions, which are certified in Slovenia and awaiting a German C of A. There was much interest in these aircraft, which promise "cheap and easy" flying with a performance (at least in the lower speed range) comparable to or better than that of Standard Class gliders of the early 1960s.

Finally, one interesting solution to the problem of attracting people into gliding was demonstrated by the very active Südtondern GC. They equipped five cockpits from "scrapped" gliders with computer screens and a gliding simulation programme and screens. It meant that people could sit in a real glider cockpit, "flying" the glider very realistically by using the original controls – on their own or in competition mode with others. The club's instructors briefed the "pilots" on how a glider is flown, and helped those trying it for the first time. For the entire exhibition, all five cockpits were occupied by very interested people, and afterwards many of them asked where to find their nearest site to do a trial lesson in a real glider This system, supported by the German Aero Club, seems to be a good thing and might be copied by other clubs.

Words and photos by Jochen Ewald

Bernie Morris took time out from handing sandwiches to P1 to be S&G's spy-in-the-sky at the Bidford turbo competition

FANTASTIC 7kt averages, 5,000ft base – a pity the comp starts tomorrow. I'm flying our Nimbus 3DT from Lasham to Bidford. Jeff Warren (weekends) and John Young (weekdays) will be my captains. I hope to learn to use our new WinPilot Pro. MAFF's restricted area has shrunk, leaving Bidford outside it. June's revised BGA cross-country ban has arrived.

Saturday: (162km triangle, Northleach-Northampton). It's like a reunion: Aussie Pete Freeman directing and task-setting, assisted by Tim Newport-Peace, who also scores, and Lynn Taylor on start-finish. Justin Wills has entered in a Duo Discus Turbo – his first regionals since 1967 – having made a guest appearance last year. It's the first time he and Ralph Jones, the Duo's UK agent, have flown the same comp. Rain before briefing. Rain during gridding. Launching rained off. Lots of re-lights. We lost an undercarriage door and missed the window. Dave Findon managed to struggle to the second TP to win the day – 10 whole points!

Sunday: (306km polygon, Badminton-Thame-Hus Bos). We began late with Dave Findon and caught up the others to grovel round Thame, then headed north into rain and gloom. We were already engrossed in the engine start at Silverstone when Dave Findon found a 3kt climb, and sportingly called us; we were too busy to hear. He continued to win at 61.5km/h. Bill Inglis was one of only four finishers, having been airborne for over eight hours, but his logger refused to divulge its secrets and he scored nil. *Déjà vu*: his logger was a problem last year, too! His is now a two-logger family.

One pilot had engine trouble before

Overall results

Overall	Name	Type	Points
1	J Wills	Duo Discus T	
	R Starmer		3565
2	**D Findon**	**Nimbus 4DT**	**3180**
3	R Jones	Nimbus 4DM	
	S Marriott		2918
4	**F Jeynes**	**ASH 26**	**2585**
5	I Cook	Ventus 2CT	2555
6	**R Witter**	**Ventus 2T**	**2538**
7	DS Innes	Nimbus 4T	2284
8	**MJ Sesemann**	**Ventus CT**	
	A Moulang		**2275**
9	A Reid	Ventus BT	2263
10	**J Young**	**Nimbus 3DT**	
	J Warren		**2186**
11	J Wand	DG-400	2168
12	**M Costin**	**Ventus 2CT**	**1988**
13	M Pope	Ventus 2CT	1909
14	**W Inglis**	**Ventus CT**	**1837**
15	M Moulang	Ventus 2CT	1806
16	**T Caswell**	**Nimbus 3DT**	**1801**
17	S Edwards	Ventus CT	1356
18	**MT Day**	**Ventus CT**	**1029**
19	S Waterfall	ASW 20F	644
20	**R Mousley**	**DG-400**	**208**
21	D Bricknell	DG-500M	
	B Kirton		0

Turbo Duo powers ahead

launch, then gained the dubious honour of being the first-ever field landing in the turbo comp when it failed to start. Undercarriage damage put him out of the running. The farmer was fine: no mention of foot-and-mouth or worries about the trailer. Justin's fin ballast was a problem; Ralph Jones was seen inserting his bradawl handle in the rear orifice of the Duo.

Monday: (266km polygon, Andoversford-Westcot-Potton Mast). At briefing Pete helpfully distributed Met Office low-level forecast sheets, which Rod Witter wanted deciphered. Pete said he didn't know anything about met and asked the audience. How does Pete task-set and direct so well? A fantastic blue sky with solid cu turned into extensive upper cloud by briefing, with scrub at 15.30. Justin then tried the task but motored home from the second TP.

Tuesday: (3hr Assigned Area Task, East Anglia-Buckingham/South Oxon-control point).Great romp east until Huntingdon or Cambridge, where it all went pear shaped. Justin later attributed this to the oblique angle of the sun but it just looked like spreadout to me. He used the full 5km width of the control point area to increase his distance and win the day. We'd spotted that wrinkle but still got back 38 seconds too early. (Better than last year when we got back 25 minutes early.) The scores on the doors took hours and kept changing. The *Competition Handbook* was pored over but was ambiguous. Simon Waterfall landed his non-turbo ASW 20 in a field and was very well received by the farmer, who suggested an aerotow retrieve.

Wednesday: (307km polygon, Radstock-Welford-Silverstone). Good-looking sky but gloomy spreadout and sea air marching relentlessly in. Justin flew the convergence line to the first TP then found some wave-enhanced thermals to win the day. Mike Costain contacted the wave on the third leg and climbed to nearly 7,000ft to final glide. ATC at Bristol Lulsgate phoned to enquire about the flotilla of passing gliders and revealed they are members of Mendip GC.

Our day was very different. We were last on the grid and had to re-light. (My captain was indignant: "I don't *do* re-lights!"). We started into the gloom 90 minutes late. We found enough of something to reach Cheltenham and climb in the rain but on track the lights had gone out. We headed inland towards sunshine. Blocked by Lyneham CTR, we went over the top of Brize Norton to the south-east end of Lyneham then *backwards* up the second leg to the first TP. The spreadout beat us to the last TP but one remaining patch of sunshine got us up to final glide at 55kt in dead air for 55km. What a memorable day. We were applauded on landing. Justin gave the winner's wine back to Pete for perfectly choosing the task area.

Right: not, as you might expect, Justin Wills (left) getting a day prize from director Pete Freeman; rather, Justin re-presenting Pete with a day prize for being spot on with the task-setting. Justin and co-pilot Bob Starmer in the turbo Duo, won three of six days – and the comp

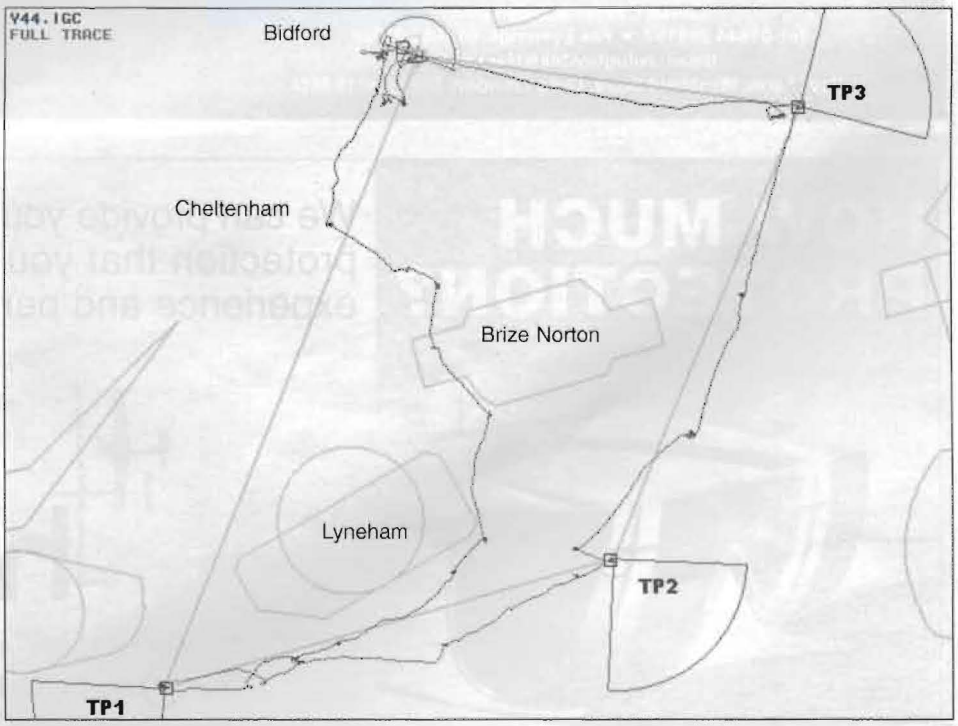
Thursday: (207km, Charlbury-Bedford). Lovely sky at breakfast. Rain was forecast. Pete estimated its arrival at Bidford by 16.00 so got us away early. A great romp down the first leg but then cloud after perfect-looking cloud didn't work. Mike Day is a one-logger family and would have been 4th if it had worked. Simon landed in the same field as on Tuesday to another good reception. Pete was again spot on with the task area/timing and Justin again presented him with a prize. One would have thought Ralph Jones, as UK agent for the Duo Discus, would be very happy that it is so advantageously handicapped and won three days running? (Justin's Duo handicap: 102; Ralph's Nimbus 4DT: 116)

Friday, Saturday and Sunday: Hail and rain. Scrub and prizegiving at 12.30. This year Pete included mini-comps for 15-Metre, 18-Metre and Open Class. Rod Witter won the 15-Metre (having removed tips for handicap advantage). Frank Jeynes won the 18-Metre in his 26E, beating the Ventus 2CTs. (A bit worrying: he has ordered a Ventus 2CT to replace it!) Justin Wills won both the Open Class mini-comp and the overall turbo comp, flying with Bob Starmer (who claimed his contribution was to keep quiet at critical times). Local boy Dave Findon was second and Ralph Jones third, despite his 4DT handicap.



Bernie Morris

I am now a WinPilot bore and have memories of some very special flights. Thank you, Bidford for another great week. This was the first time there have been any landouts in the turbo comp: four – three were a non-turbo. There were 29 turbo retrieves, which would have been landouts. Eat your hearts out, purists!



An original way to get to the first TP from the start (top): via the second one! See Wednesday, left, for the story

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Bye-bye, Bocian



Dr John Carter, who is a General Practitioner as well as the medical adviser to the British Parachute Association, had cause to attend a parachuting convention in Poland...



There, visitors were offered the opportunity to jump from a range of aircraft: military transports and helicopters, Wilgas ... or Bocian SP-3015 from Cracow Gliding Club

John, a skydiver, opted to depart with intent from the Bocian, at Pobiednik Wielki airfield

He admits that he would be unenthusiastic about having to jump from an uncontrollable glider in an emergency situation. But he enjoyed this deliberate departure

"It was a very pleasant experience," he says. "In straight and level flight they're incredibly easy to jump from because they have a fairly slow airspeed, and there's no propwash"

"Don't try this at home," adds John. For an arranged jump in this country, the glider would need approving for the purpose as well as clearance from the appropriate airsports authorities



Club news

Anglia (Wattisham)

WE HAVE just returned from an eventful Inter-Club League at Tibenham, including the IS-28 arriving by low loader and a rope breaking during an aerotow retrieve. Still, we had fun. The club has two new BIs, Frank McKeegan and Richard Misselbrook, who completed at Cosford with the help of its CFI, Trevor Barnes. Mark Rogers and Richard Misselbrook took part in the Aerobatic Nationals. Thanks to Jamie Allen and Ian Tunstall for an excellent course Preparations are being made for the Inter-Services in August with most of the club fleet and many members taking part. New members include a chairman, JD Bryant, and the last commanding officer of the Glider Pilot Regiment, Bob Tipper, who soloed in 1945 and whose types include the Hotspur and Hamilcar. Congratulations to Barry Plowman, DJ Graham and Craig McDougall on soloing.
Richard Misselbrook

Angus (Drumshade)

THE SOARING season has started at long last and Alex Maitland achieved his Silver distance on June 10, from Drumshade to Aboyne. Congratulations, Alex, that's the Silver complete. We managed to continue flying here during the foot-and-mouth crisis, but had another disaster with the last snows of winter. A very heavy snowfall with 3ft of snow lying for about a week at the end of February caused some of the crossbeams of the hangar roof to snap, and the roof started to cave in. Luckily, it stopped when it had come down about 3ft, otherwise four gliders would have been firewood. We had to prop up the roof and derig the gliders and unfortunately ever since then we have to rig and derig gliders when we want to fly, as the hangar is unusable. We are getting lots of practice at rigging the Bocian. Luckily, the insurance claim is now settled and the contractors are starting the repairs. Abertay University GC, which is affiliated to us, managed to get a grant from OPC which enables them to get free soaring here. We are getting a regular turnout now from the students and should soon see more solo pilots.
Wolf Rossmann

Aquila (Hinton-in-the-Hedges)

AQUILA GC has been operational throughout the season, with numerous cross-country flights local to airfields in recent weeks. Congratulations on first solos to Brien Nelson and Simon Anthony. Our courses will run on August 6-10 and 20-24, along with group flying evenings throughout the summer. With Hinton clear of infected areas, Aquila welcomes visiting cross-country pilots, although be advised parachuting is always active above site, and should be monitored on 119.45. The six-month membership scheme for those new to gliding is proving very popular – contact Andy Preston on 01296 720415 or see *www.aquilagliding.co.uk*
Hugh Gascoyne

Please send your entries to *helen@sandg.dircon.co.uk* or Helen Evans, 6 Salop Close, Shrivenham, Swindon SN6 8EN, to arrive by **August 14** for the October-November issue (October 16 for December-January). Photographs – slides or prints from film – are welcome

Bannerdown (RAF Keevil)

CLOSURE of the airfield for the whole of March was not so much of a loss as there was 5in of rain that month. Good recovery was made in April, and in May we achieved 1,000 launches and 359 hours. A team occupied the bleak months with a major re-vamp of the T-61G motorglider and eventually rolled out a handsome and sweet-sounding machine. Unusual for our choice of a soaring week, the end of May brought fine weather and some good flying. Following shortly on her solo, Charlie Hocking added two Bronze legs and a Silver height, and Dave Waller confirmed his Silver endurance with an unequivocal 6hrs, after an earlier nail-biting 4hrs 59mins! We have two new assistant instructors: Keith Mcphee and Nigel Redman.
Derek Findlay

Bath, Wilts & N Dorset (The Park)

AFTER our forced exile due to foot-and-mouth we were lucky to return to our field on the day of our AGM, May 5. We had a record attendance and celebrated by many gliders flying several hours locally and then by 44 members enjoying an excellent buffet supper before the meeting, which saw our largest gathering ever for an AGM. We have just completed one of our most successful flying weeks: nine days of flying coinciding with one of Simon Adlard's soaring courses. The financial losses caused by our two months' absence are mitigated to some extent by an influx of new members. One of our lady members, Chris Chappell, has re-soloed. She flew many years ago at the Swindon club, where she was an instructor. Congratulations to one of our youngest members, Alec Baldy, who should have soloed on his sixteenth birthday, but had to wait until we were back home.
Joy Lynch

Bidford Gliding Centre (Bidford)

AFTER the worst winter ever and foot-and-mouth, salvation has finally come in the form of the best launching month we've had for over three years. All that pent-up energy resulted in a first solo for Julian Coils and a re-solo for Ed Doyle. Matthew Weinle, Andy Cox and Helena Ruokolainen each achieved their Silver duration. We've also had a number of power pilots coming to gliding: Steven Agar-Hutty, Ian Smith and Malcolm Smith all went solo in record time, going on to get Bronze legs too. We had a BGA task week which was hugely successful and, as I write, the Turbo comp has flown five of the six days so far (see p49).
Shelagh Inglis

Black Mountains (Talgarth)

AFTER the inevitable delays, the steelwork for the new hangar is now up and looks great. A temporary water tower for the loos is in place topped out by a splendid Welsh flag (installed by a Scotsman on a very long and wobbly ladder!) We have had some superb flying over the last few weeks dampened only by the ban on cross-countries. June 10 was one of the best days we have seen for years... a 6,000ft cloudbase and unlimited visibility. Fantastic! The AGM returned Don Gosden as treasurer until replacement Charles Baker gets up to speed. Martin Brockington continues (for a while) as chairman to see the building work completed) and several new faces appear on the committee. After many years, Anne and Tony Crowden have finally become locals; Anne will soon take over as secretary. We wish them a long and happy retirement into gliding. We are always delighted to see pilots from other clubs and promise them a thoroughly enjoyable time.
Robbie Robertson

Booker (Wycombe Air Park)

WE WILL definitely be holding a competition at the end of August (starting 25). At the time of writing its exact status is not yet certain, but it will be the nearest we can achieve to a full 15-metre Nationals. Despite the unfortunate clash with the Junior Nationals we intend to provide the best possible environment. We welcome (a little belatedly) Matthew Cook as our seasonal instructor. The cross-country restrictions have delayed field landing checks and early distance flights for several members; however, we can now begin to make progress again. The pause has been used for more trial lesson and general instructional flights. As a result another cadet, Michael Collett, has soloed, as well as Dean Arnold. More experienced cadets are training as BIs. One consequence of this has been to reduce the average age at the launchpoint considerably, as well as to improve the outlook. We also plan to run a full expedition to Jaca next spring, after G's visit this April.
Roger Neal



***Borders GC** promoted gliding at a "sports for all abilities" event in Berwick, taking a K-21 and DG-300*

Borders (Milfield)

MAY ENDED with some good wave climbs to 18,000ft. We are starting to get enquiries for our autumn wave weeks (details available on our website). Brian Brown and a small team have been manning a gliding display at Berwick sports centre where the club participated in a "sports for all abilities" weekend. As well our K-21 on display, Brian took along his DG-300. The Latty brothers set up a computer presentation as well as showing the BGA promotional video. Doug Donald, one of our disabled pilots, was on hand to explain what can be done. The weekend went very well and generated a lot of interest. The Press were on hand to give the event some extra publicity.
Bob Cassidy

Bowland Forest (Chipping)

WE RE-OPENED (after foot-and-mouth) on the first weekend in May, and due to the sad demise of our 150 woolly grass cutters we have had to buy a mower for the tractor. The weather has been very favourable to us so far, with John Wood on one day reaching 10,800ft in wave over the Irish Sea. Bob Pettifer has been appointed chairman of the BGA Instructors' Committee, Pete Desmond (gliding bum) is an assistant instructor, and Phil Punt is a BI. Peter Hill (16), one of our cadets, has soloed before taking a break for his GCSEs. We are delighted to offer our facilities to some members from Devon & Somerset GC for a week. We trust they will get favourable weather after their long trip north. We thank Cairngorm GC and Husbands Bosworth for their hospitality during visits made by some of our members. Whilst at Feshie, John Wood and Paul Myers flew round Ben Nevis (and the ladies' trip to Hus Bos culminated in two solo circuits in the Puchacz for me!)
Eileen Littler

Bristol & Gloucestershire (Nympsfield)

A MENTORING scheme has begun for pre- or early-solo pilots. And daily airfield status and weather reports are now available from 01453 860861. Graham Garnet is doing the catering for the Rolex Standard Class Nationals (Aug 11-19). All are welcome to the party on Aug 18 in our newly-refurbished clubhouse. Can we break the club record of 23 barrels of beer in a comp?

Tony Harris took over as winchmaster from Mike Harris. Many sightings of wildlife and plants are reported on our new environment noticeboard, with a magnificent map of the site by Ann Bray. Rob John, Tony Gillett and Matt Crane have become BIs. Tim Crow, Bill Eveleigh, Chris Parker, Roger Burdass, Riccardo Trezzini, Jan Poltock and Alex James have gone solo. Our website, revamped by Nick Kelly, is at *www.bggc.co.uk*
Bernard Smyth

Buckminster (Saltby)

THE GLIDER Aerobatic Nationals saw 18 pilots put on a fine demonstration of the grace of unpowered flight. The first-placed in each level were Ashley Benjamin (Sportsman), John Gilbert (Intermediate) with Andrew Cunningham just 0.2% behind, and Jamie Allen (Unlimited and National Champion). The Saltby Aerobatic Open Trophy will take place on the weekend of September 8-9; why not come along and see what glider aerobatics is all about? The international air tattoo saw us closed (for safety reasons), allowing time to have a major blitz on repairing the potholes in the concrete runways. A new winch store has also been completed, allowing us to reclaim a workshop.
Paul Rodwell

Cairngorm (Feshiebridge)

WITH THE lifting of the cross-country ban here, the sky has been the limit for some members (and visitors). Congratulations to Nic Norman for completing the first 500km flown in thermals from Feshie, and also John Whyte for his 50km over the Cairngorms to Aboyne. The Mediterranean May provided fabulous soaring conditions which our guests from Chipping made the most of during our club flying week. Recent badge claims include: Nic Norman (Diamond distance), John Whyte (Silver distance) and Andy Farr (re-solo). Good news for visitors: membership and aerotow fees have been reduced (yearly reciprocal membership fee £40.00 or £8.00 per day, and no booking fee). This year's Octoberfest wave camp (Sept 29-Oct 20) promises to be the best ever so check out *www.gliding.org* or phone 01667 493459 or 01540 651317 and book early
Chris Fiorentini

Cambridge (Gransden Lodge)

WE welcome our new full-time instructor, Kevin Moloney. With the lifting of the foot-and-mouth ban, the Gransden Regionals are definitely on.
John Birch

Clevelands (Dishforth)

OUR SUMMER social season got off to a very cheery start with another one of our popular wine tasting evenings. Thanks to Mike Wherret for showing us that there's more to drinking wine than sheer quantity! The sight of a bar full of glider pilots swirling, sniffing and sipping rather than glugging has to be seen to be believed. Although the foot-and-mouth epidemic has curtailed cross-country activities, we have enjoyed some excellent (warm) wave to well over 10,000ft during May, all within easy reach of the airfield. We welcome the arrival of John Cook, an ex-Dishforth member and ex-CFI from Four Counties, who celebrated the resurrection of his gliding career by volunteering to become aircraft member – thanks for your help, John. Jim Duncan, our new Army member, joined us after a JSG course, and has already soloed.
Polly Whitehead



*Peter Hill (left) of **Bowland Forest**, being congratulated on his first solo by instructor George Wearing*

Cornish (Perranporth)

FORTUNATELY, we were not totally affected by the foot-and-mouth epidemic. We were not grounded, but cross-country flights were forbidden. Because of their restrictions, we were pleased to host pilots from Brentor and North Hill. Welcome visits, to spend happy hours with friends old and new. Dean Penny, our secretary, leads the gang in the Ladder, with Nigel Climpson and Chris Willey second and third respectively. Dean claims they made the gentlemanly mistake of allowing him a familiarisation flight in their beloved ASW 15b. Turned out to be the best time of the day. There was some suggestion that he abandon the claim. "Boleaux to that!" Dean cried, "Points are points!". Good to see the Olympic flame still flares. Seven-day flying has begun, with courses, trial flights and groups from Territorial Army units. We are holding our own with present membership, but new members are harder to attract. There are many reasons; a sub-committee is preparing a paper to the executive committee on the subject.
Mike Sheedy

Cotswold (Aston Down)

JOHN Harwood, our course instructor has been very busy. So far this year the following pilots have flown first solos: Neil Godwin, Robin Kearsey, Chris Button, Chandra Fernando and Vicky Bentley. In addition, Bob Williamson and Richard Seiry have completed Bronze Badges while Chris Webber and Robin Horsman have Bronze soaring flights. Our first open day of the year was a great success with 108 people experiencing trial lessons. The weather was fine but cold and we had so many visitors that some flights had to be deferred until later. Television cameras recorded the first flight of Grace Nunan. This remarkable 90-year-old realised a lifelong ambition to fly and raised an amazing £5,200 in sponsorship for EMMAUS, a local charity for the homeless. Seventy friends and sponsors were present and enjoyed a champagne toast and afternoon tea. Lemmy Tanner has completed a superb enlargement to the clubhouse bar in readiness for the Junior Nationals and we are carrying out renovations to our original hangar area that dates from the second world war.
Frank Birlison

Cranwell (RAF Cranwell)

WE RETURNED from exile at Barkston Heath following the lifting of the ban on May 9, but not before Arthur Docherty, having soloed at 16, crowned his 18th birthday with his first five-hour flight, in the club Astir. Air experience evenings began with a memorable if somewhat chilly visit for the Boston Operatic Society. Not so cold for Ged McKnight and Richard Browne who, with Mick Baker as crew, went to the Overseas Nationals. This was Ged's first competition and while Richard was seventh overall, Ged made perhaps the longest flight without a glider when lightning struck the ground nearby. We await the right conditions to conduct the first launch of a lovingly-restored K-3. We are also preparing to promote our sport via a stand and ground support to the RAFGSA Aerobatic team display at the Waddington International Air Show.
Paul Skiera

Dartmoor Gliding Society (Brentor)

FEBRUARY 24, 2001: site, winches, vehicles and gliders all in good order and waiting to be used, thanks to the chairman and a small band of activists. For the first time since October the sky was also in good order, giving steady, wide thermals up to 4,000ft. Several flights of two hours were recorded. Spirits, too, began to soar. A splendid season stretched out in front of us... February 25, 2001: site closed, gate locked: no-one allowed to enter, even to retrieve papers from the clubhouse; all private gliders trapped – a situation that remains unchanged at the time of writing (May 25). Happily, it is planned that the national park here will be fully open again by July 1, and we hope to re-open then. Members and ex-members who have been exploring dubious activities such as gardening or DIY must be lured into the air, as well as those who have not yet had the pleasure. It will be more important than ever to get them hooked. Congratulations to our two recent Silver Badge pilots, Mark Arnold (Astir, Australia) and Steve Lewis (Zugvogel, Dartmoor). We hope they will soon join our hard-pressed little band of instructors. The very sudden death of Gwilym Griffiths was a great shock. He was a consistent worker for the club and a good practical friend to all of us. We shall miss him greatly. In the meantime, we are acutely aware that our concerns about our sport are nothing beside those of our landlord and other farming friends. Their worries are about their very livelihood. May they soon recover.
Phil Brett



Rod Salmon

*Beryl and David Clarke's restored Bergfalke at **Burn**, bought from Aston Down as a retirement project. They had to extend their garage before starting work on it*

Deeside (Aboyne)

CONGRATULATIONS to Fran Knowles on Diamond height and Malcolm Soper on his solo. Jack Stephen flew 764km around four turning points. We said goodbye to Marc Schulten for the second time, and wish him all the best in his new career in civil aviation. Welcome to Andras Soproni, from Hungary, who is joining us as the new tug pilot. Mike Whyment has taken over the running of the clubhouse bar, providing cheaper beer, which our club instructor informs me is notable news! May launches were the highest for seven years. The Bronze course is running with five participants. Wave season bookings are filling up rapidly, so book now to avoid disappointment! We are open to cross-country flying, visitors are welcome from unaffected sites (foot-and-mouth) only. Please ring the office for details on 013398 85339.
Sue Heard

Denbigh (Denbigh)

OUR K-7m is resplendent in its new livery and now conforms to DGC's red and white colour scheme for club ships. Flying all year has taken its toll on our airfield and peritracks, both of which are receiving much attention during the summer months. Events for your diary include Competition 50 (September 15-22) and Barry and Mo Meeks' autumn wave camp, September 22 to October 20. See our website for full details. This is my last *S&G* contribution; my short gliding career will be resumed in Canada at the Cu Nim GC, Calgary. Feel free to contact me on:

Club focus



the *White Planes* picture co.

WE ARE a well-established club of about 200 members based at the former RAF airfield at Aston Down near Stroud in Gloucestershire. Members range from under 16 to the oldest participants of our Wednesday Club, some of whom are over 80. The University of the West of England also fly with us.

We began in 1963 as Cheltenham GC, at the old grass airfield at Long Newnton. The rent was peppercorn but members had to help the farmer at harvest time. The fleet consisted of a T-31 launched with discarded ATC cable. We soon became Cotswold GC and moved to Aston Down, flying only at weekends. On Sundays we had to sweep a mile of Tarmac runway prior to the RAF resuming Jet Provost operations on Monday.

Our fortunes improved in 1980, when far-sighted members, including Larry Bleaken, David Roberts and John Holland, succeeded against the odds in buying the airfield on the club's behalf. Full details of this audacious deed have been published before in *S&G*.

Thanks to thrift and hard work, the club now owns almost all the land and buildings within the perimeter track, some 150 acres. The refurbished, extended control tower has been converted to a comfortable clubhouse with sleeping accommodation. The club fleet is housed in a spacious hangar, and, thanks to the hard work of a member, we have a large modern workshop in which both ground equipment and gliders are maintained.

After many years of operating the reverse pulley system of launching we now have a new Skylaunch winch which gives launches of 1,800ft to a Discus or similar. Aerotows are sometimes available, enabling experienced pilots to contact wave over the Severn Valley or ridge soar the Cotswold Edge. For the less experienced, almost the whole area that we own is landable and, with 1.75 miles of tarmac runway, cable breaks can easily be practised, making the site ideal for first solos. Since the airfield is at 600ft QNH in the well-drained Cotswolds, we often have superb conditions with thermals well into the evening. We have few problems with airspace (unless you are likely to exceed FL10.5 over the site).

From April to September weekly courses with professional instructors are extremely popular with beginners or those wishing to re-solo. Accommodation is in the clubhouse, or participants can bring caravans or tents. Some stay at one of the many local pubs.

Recently the club has hosted regional and national competitions and this year will host the Junior Nationals, which is fitting since our juniors are always keen to compete in this.

We welcome visitors (with or without their gliders) to sample summer thermals and a flood-free site in winter.

Frank Birlison

At a glance

Launch type and cost: Winch, £5.85
Aerotow, when available, £17.00 to 2,000ft

Club fleet: K-13 x3; K-8 x3; K-6; Astir

Private gliders: 48

Instructors: 18, plus five Basic Instructors

Types of lift: thermal (wave and ridge for experienced pilots)

Operating days:
Summer: seven days a week
Winter: weekends and Wednesdays

Contact:
Office: 01285 760415 (10.00-15.00 weekdays)
pat@cotswoldgliding.co.uk

www.cotswoldgliding.co.uk



Instructor John Harwood with Vicky Bentley, new soloist

➢ *MartinFVJones@Compuserve.com* Congratulations to Mike Abbott on attaining his Full Rating.
Martin Jones

Derby & Lancashire (Camphill)

FOUR YOUNG people will get a year's membership and flying fully paid for when the Bursary Scheme in conjunction with the Caroline Trust is launched in June. Mike Armstrong and Nigel Howes have completed some cross-countries under the new BGA rules, including a 250km triangle and 185km O/R plus 10,000ft height gain in wave. Three Silver legs have been claimed and there's been plentiful wave to the base of the airway, giving a good number of flights in excess of 10,000ft. Our K-18 was badly damaged after a poor field landing and will be out of action until October. We ran a "flying safely together evening" with the Derbyshire Soaring Club (hang-glider and paraglider pilots) to promote better understanding of each other's needs and problems. There's been an increase in the number of visiting parties including groups from St Andrew's University, Shalbourne and Tibenham – and they've enjoyed some good soaring. Our new launchpoint vehicle has come on line. The "Derwent Discovery" affords excellent launchpoint control and comfortable shelter. Members' courses have been a huge success, with one in three members taking advantage of them. New club steward and stewardess David and Louise ran a good, well-attended Mexican night. They serve food every day. A huge membership survey has been done, the results of which will form the basis of the club's 10-year plan.
Diane Reid

Devon & Somerset (North Hill)

AFTER negotiations with the local community our North Hill site has been re-opened for flying activities. We are still within the cross-country exclusion zone and it seems likely that Enterprise will have to be cancelled this year, a great disappointment to many. DSGC committee and members would like to thank all the local clubs, Perranporth, Heron GC and Dunkeswell airfield, for their hospitality and support during the ban. With our cross-country activities curtailed the weather naturally has produced some absolutely stunning cross-country-able days, ho hum; the final twist of the knife, we hope. Good news, however, Paul Carpenter has successfully completed his BI rating and Peter Palm, our resident commercial pilot, has achieved his five hours and Silver height. The club has come through the black days of the winter as keen as ever and in some ways the past few months have helped us to appreciate North Hill the more. We look forward to some fine flying and a return to normality – whatever that is.
Phil Morrison

Dukeries (Gamston)

WE HAVE had our AGM and a dinner-dance. Trophies were presented as follows: Cross-Country Cup, Gary Wardle; Height Cup, Steve Simpson; Chairman's Cup, Ron Vickers; Achievement Cup, John Talbot. The Roy Lunn Cup for longest cross-country went to Dave Urpeth and Mike Terry. A superb effort by John Swannack and Craig Hobson at Pocklington last year when they flew cross-country with no serviceable varios and waterballast in the cockpit following torrential rain, earned them the Outstanding Flight Cup. Robert Thompson, although ready for solo on his 16th birthday, had to wait for the weather but has now gained his wings. Ron Vickers (clever chap) achieved a 100 per cent pass on his Bronze paper.
Mike Terry

Essex (North Weald/Ridgewell)

THE SUN is shining, courses are taking place, our Ridgewell site has dried out sufficiently for winch launching, North Weald is busy on Wednesdays; with the anticipation of better weather to come what more can enthusiastic club pilots want? Who said: "What

Club news



*Above: Dave Urpeth (centre) of **Dukeries** GC presents wings to 16-year-old Rob Thompson (left) and receives a set of perfect Bronze answers from Ron Vickers (right)*

*Right: Robin May of **London GC** over the Matterhorn on a recent trip to Sion in Switzerland with Ed Downham. Their best flight was 850km. This picture was taken in weak wave from 16,000ft over the 14,461ft high peak, looking south to the Aosta valley in Italy. "We then flew on to Mt Blanc and managed to get into a similar position," Robin says, "but unfortunately the peak was covered in a cap cloud". See* www.may.ukf.net for *more pictures and overleaf for news from Dunstable*



cross-countries?" Thanks to Tony Hampshire and his team for redecorating the clubhouse and kitchen at North Weald. We recently flew a 91-year-old great-grandmother at North Weald; she thoroughly enjoyed it and her comment on landing was: "What a shame it had to end so soon; I was just getting used to it!" Proudly watching were her son, grand-daughter and great-grandson. The event was reported in several local papers. Bookings for evening group flying at Ridgewell are going well and are proving popular with locals. The club enjoyed good weather and flying at Ridgewell on the May Bank Holiday, notwithstanding our voluntary imposition of a 2,000ft ceiling AGL to keep clear of the Southend on Sea Air Show traffic. We hope the weather is as kind on our Ridgewell flying week, June 16 to 24.
Peter Perry

Essex & Suffolk (Wormingford)

WE welcome the conditional lifting of the cross-country ban and look forward to normal service resuming. On one of the rare good days recently two of our more accomplished pilots, Andy Sanderson and Paul Rice, managed respectively 235 and 225km. Let's hope this is a good omen for this belated and curtailed season. Our project to re-engine our number one winch is near completion. This has taken the team rather longer than expected due to a number of factors, some of which were foreseen and others weren't, but hey, that's life. The result of the increased power that the big block Chevvy will deliver should result in more controllable and safer launching ("winch" people will know what I mean) as well as imposing less stress on the whirly bits. Congratulations to Brian Darton on his BI rating.
Steve Jones

Four Counties (RAF Syerston)

WE HAVE been very fortunate compared to some other clubs with regard to flying during the foot-and-mouth outbreak, although we did still lose out to the weather! At least we have managed some limited cross-country within the confines of the BGA restrictions. David Robinson has gone solo and Ian Craigie, Andy Langton and Ewan Burnett have Bronze legs. Nigel Gough put in a very creditable performance in Spain during the Overseas Nationals. The August task week now looks more promising as we are situated to the east of the line enabling us to go cross-country.
Sue Armstrong

Herefordshire (Shobdon)

WHAT foresight the MOD had back in 1940 when they built the Shobdon runway at twice the normal width. Not only were they able to launch Hotspurs, Horsas and Hamilcars on dual tows, but this feature was also to prove ideal in accommodating the new Nimbus 4DT, which was clearly predicted to arrive on site a mere 60 years or so later. We have concluded that even in those days perhaps multi-seater wingspans were directly proportional to the combined age of the pilots! North-westerly winds have brought some excellent wave, thermal and ridge soaring, though on some days it has been difficult to decide exactly which source of lift is keeping us airborne. This was obviously not a concern for Dewi Edwards, when he completed the second leg of his Bronze in the Jantar, despite not having a watch. Thanks to Ken Martin, our new workshop is currently available for members to fettle their mounts and will hopefully soon be equipped with some basic tools, workbenches and storage cabinets. Occasional mid-week flying continues, particularly on Fridays, when entertainment has included radio broadcasts such as: "Shobdon gliders please remain airborne – airfield under attack from the south-west by Harrier formation!"
Mike Hayes

Highland and Fulmar (Easterton)

CONGRATULATIONS to Tony Butler who at 67 years old went solo and has quickly gained both Bronze legs and a one-hour flight. Roy Scothern has completed his Bronze and his Cross-Country Endorsement, Stuart Naylor, Martin Keere, Pete Smith and Ted Murphy gained Silver heights, Mark Brown took full advantage of the lifting of the cross-country ban here and did his Silver distance to Aboyne at the first opportunity. We had an excellent week's soaring at the end of April but it was just too soon for the lifting of the cross-country ban. The Swallow owned by Eddie Traynor's syndicate has been donated to the club and has flown again thanks to Denis Shepherd and Steve Young who did so much work on it. The Fulmar gliders and Highland K-21 flew to (and at) RAF Lossiemouth for the Friends and Families day. We once again welcomed Elgin High School and, for the first time, Speyside High School on their activities days, introducing about 30 youngsters to gliding. During May great work was done on the drainage of the strip thanks again to Geddes Chalmers and Tony Butler.
Teresa Tait

Imperial College (Lasham)

LUKE Rebbeck came back from British Junior Team training in Ontur over Easter claiming flights of 300km at over 100km/h. He was given £1,000 from IC Trust to help with the Junior Worlds in August. I have landed myself a job at Lasham as a BI for the summer. As you read this we will be on the way back from Jaca, badged up and sporting a fresh tan, me included! If Duncan Ashley comes back from Jaca with a Silver, he will be competing in his first Junior Championships alongside Luke Rebbeck, Chris Smart and me. Finally it's goodbye from me as Captain, as of August. I am honoured to have had such an important role in one of British gliding's pioneering clubs. I would like to thank my committee, without whom the club and I would ➢



*Airborne again at **Dumfries and District** after a four-month layoff because of foot-and-mouth. See also p13*



*Tony Butler, aged 67, after his first solo at **Easterton***



*Jack Stockford soloed at **Kent GC** soon after turning 16*

Club news

be lost: all Lasham staff, who continue to put up with students; IC union, who we sometimes seem to take for granted; all the instructors who risk life and limb flying with icGC members; and my mum and dad for never flying with me. Good luck to next year's committee – and remember, enthusiasm comes from the top!
Hemraj Nithianandarajah

Kent (Challock)

AFTER a long drawn out and, at times, painful process we have finally got planning permission to operate a self-launching motorglider for training purposes from Challock. Our chairman, Grahame Underwood, and secretary, Stefan Bort, are to be congratulated on their tenacity in achieving this. The season has got off to a good start with first solos by a recently-turned 16-year-old Jack Stockford and Mike Plant, who is well past his sixteenth birthday! Dave Wardrop has been seen sporting a big smile and two Bronze legs. John Hoolahan is taking over the reins as CFI from Alan Garside. Thanks to Alan for all his efforts in the last year. Our courses, run by John Hoye, have been booking well and blessed with some fine weather.
Caroline Whitbread

Lasham Gliding Society (Lasham)

DAVID Masson has flown 640km, and Chris Lovell and Bob Thirkell have flown 300km within the BGA guidelines. Our Ontur expedition, led by Gordon MacDonald, is going well. Charlie Kovak, an instructor for 30 years, is handing over his voluntary work of running the midweek flying. Spins training will never be the same. Grateful thanks, Charlie. The social committee has been active. A dinner-dance on the theme of the *Titanic* was successful. A Carribbean Night is being organised. Peter Baker will give a talk on Concorde test flying while Derek Piggott will give a talk followed by a showing of the film *Those Magnificent Men in Their Flying Machines*. A new launchpoint vehicle is being selected. Congratulations to our manager, John Gilbert, who won the Intermediate Class at the Aerobatic Nationals. This was his ninth year of competing, during which he has gained two Golds and seven Silvers. Former member Ashley Benjamin won the Sportsman Class and Chris Cain was 5th in the Unlimited Class.
Tony Segal

Lincolnshire (Strubby)

CONGRATULATIONS to Stewart Clark, Jim McLaren and Ian Butler on solos. Dick Skerry has a full rating. A superb spring buffet, organised at the Woodthorpe Inn by Jenny and Ken Allen, was enjoyed by members. We now have a small group of power flyers using the old heliport and its runway, so when anyone can fly in please bear them in mind. We have no circuit restrictions but a see-and-be-seen agreement. Our new grass runway is now in operation, this has made launching slicker and eased the workload on members.
Dick Skerry

London (Dunstable)

MANY congratulations to Ashley Benjamin and Alex Yeats for first and second place in the Sports Class, and to Andy Cunningham for second in the Intermediates, the National Aerobatics Competition at Saltby. At the same time Robin May and Ed Downham were flying glider number 13 out of Sion over the Matterhorn and on to Mont Blanc in what Robin says was one of his most memorable flights. The Duo's been at Sisteron, where several club members have been polishing up their rock polishing. Back at Dunstable we've been getting plenty of time in the air with lots of cross-country flying, aerobatic courses, ridge flying and general training. Our holiday and evening courses are very well subscribed, and thanks to Pete Miles our open day was the most successful yet.
AH





*Bryan Middleton (right) raises a glass to mark the 50th birthday of Gertie (above), his "beautiful and gracious" red-and-cream coloured Slingsby Sky (BGA 698). The **Vintage GC** member celebrated with a four-hour flight (above) over **Dunstable** Downs then tapped a specially-brewed five gallons of his home-made beer for the party*

Mendip (Halesland)

AFTER consultations with MAFF and our farmer landlord we reopened at the beginning of May. We are all becoming quite adept at dancing through the disinfectant that isolates the airfield from the outside world, including our car park. Amidst the mass of check flights for non-current members, Keith Evans at last re-soloed after a 25-year break. Back in January he was checked out and actually strapped in to go when an incident stopped flying for the day. In February the weather suddenly changed just after yet another final check – and then came foot-and-mouth! His 1976 solo was from the now-defunct Withybush.
Keith Simmons

Midland (The Long Mynd)

THE CHAIRMAN was the one that flew over the cuckoo's nest on high jaunts from Shobdon. The poor, displaced chicks were hoping to be back by mid July or at least by publication date. We intend to start limited operations on Wednesdays, Thursdays, Fridays and weekends. Jon Hall has planned an opening party that will have no equal. Thanks to our hosts at Shobdon there have been some most satisfying days, and climbs. A number have flown John Stuart's 100km pentagon, or polygon depending on how close they blundered to the power circuit (only joking). Congratulations to James Moore who did his five hours there. The committee has been meeting almost daily and the club is particularly appreciative of those members who have stood by it by promptly paying their dues and subscriptions. We are not going to be a classless society when things get back to normal with the likes of Messrs Bennett and Rowson soaring to 21,000ft in the Alps and the CFI instructing down there. But will there be any sheep left? Perhaps just a Bronze memorial of a pair of wellingtons!
Roland Bailey

Nene Valley (Upwood)

OUR FRIDAY evening group flying sessions have started well. The bookings will keep us busy through to the beginning of September. Work in the clubhouse is now in its final phase. The official opening is set for September 8. Martin Reynolds and Steve Codd very kindly gave up their Saturday evenings in April and May to give Bronze lectures to a number of members, who had a 100 per cent pass rate. In the East Anglian Inter-Club League, the venue for May was Tibenham, with pylon racing (GPS TPs, equidistant at 9km from the airfield, to the north, south, east and west). Overall NVGC earned a very creditable third place with 24 points. Cs of A for all club gliders have been completed and we are gearing up for our open day on June 20. Our refurbished Transit van is a winner.
John Pike

North Wales (Llantisilio)

DUE TO the severe impact of foot-and-mouth in nearby Cheshire, the club is still not flying from its field. This is a situation that we hope to have rectified by the end of June. Until then we are flying at Caernarfon Airparc, which is interesting due to the very changeable coastal weather – it really does seem to have a weather system all of its own. Since we only winch at the club site and we can only aerotow at Caernarfon, we have been getting all sorts of much-needed practice. Our heartfelt thanks go to Caernarfon Airparc, and all those pilots who suddenly have gliders in the air with them, for being understanding, helpful and friendly. Most powered pilots give us a wave as they pass the launchpoint and, of course, we wave back! Updates, as always, on the website at *www.nwgc.org.uk*
Brian Portlock

Oxford (RAF Weston on the Green)

WHAT WIV the foot and mouf and the not-so-stunning weather, not a lot has happened at Weston on the Green. Even John Hamilton sneaked off somewhere else to go solo, but remembered who his friends are and came back to re-solo. Well done to Maz Makari, Simon Walker and Dave Weekes who all got through their BI course and are now regularly showing amazed visitors the delights of gliding. And plans are still afoot to celebrate OGC's fiftieth year with a weekend of fun and flying on August 18-19 though this may be restricted to just August 18, owing to the difficulty of flying when hordes of people are falling through the air around you.
Steve McCurdy

Peterborough & Spalding (Crowland)

THE SOARING season has arrived even if no one can go anywhere yet. Well done to Jim Crowhurst for completing his BI rating and to Bill Baker for gaining his Bronze two-hour duration; if he had taken a barograph he would have had a Silver height, too. The Astir CS, a new addition to the fleet, is popular with members. We are looking forward to our open day on June 24 and our publicity event in Peterborough on the preceding Saturday. Our flying fortnight is again during the first two weeks in August and we are holding the Inter-Club League event on the middle weekend – dates on *www.psgc.co.uk* and all are again welcome.
Pete Goulding

Portsmouth Naval (Lee on Solent)

THE RNGSA task weekend was marred by somewhat cloudy weather, though about 20 of our members made the trip to Yeovilton. Back at Lee, Mark Holden went somewhere else, with a 50km airfield-hopping flight to Parham. Other such offences have been limited to motorglider solos in the new Venture, which is settling into its life by the sea after its trip from Yorkshire. The RN historic flight demonstrated a proposed glider tug for us, but after careful consideration we decided to keep the Chippie and Cub due to their superior fuel consumption over the offered Sea Fury.
Pete Smith

RAFGSA Centre (Bicester)

OUR cross-country pilots have notched up in excess of 7,000km since the lifting of cross-country restrictions, including an excellent competition training week, when all students completed a 300km. Members of the British aerobatic team, two of them club members, have been practising for the aerobatic worlds. The centre has taken delivery of the RAFGSA's first Ventus 2CT.

Colin McInnes

Scottish Gliding Centre (Portmoak)

THE WEATHER has been very kind to us recently with a mixture of good wave and thermal days. As a result of this, and the easing of cross-country restrictions in Scotland, we have been able to get a lot of flying done. Congratulations to Alan Irving and Andrew Bates for Gold heights, Bob Smallman for his Silver distance, Doug Tait for his Silver height, Ian Easson for his five hours, and Trevor Elliot, David Hyde and Gordon Parker for first solos. George Ross has a full rating, and Andrew Bates has a BI rating. At our AGM chairman Alan Bauld and publicity officer Fred Joynes stood down. We thank them for their service.

Neil Irving

Shalbourne Soaring Society (Rivar Hill)

SIMON Adlard ran our cross-country soaring week in May, rising to the challenge of foot-and-mouth limitations. Hugh Harwood instructed for our *ab initio* week with flying every day and good soaring conditions (the poor old boy was exhausted). Gordon Shepherd soloed (hurrah!). Alan Marpole has converted to the K-8 and has two Bronze legs. We were not overstretched for our April open day but good local advertising should bring larger crowds for our next event. Colin Baines, our publicity guru, has been promoting our evening flying events. Demand has increased significantly over last year with the help of Andy Kaiser and an on-line diary to coordinate bookings. Contact us if you're interested in joining the fun on our task week (Aug 4–12).

Kay Draper

Shenington (Shenington)

WE HAVE a new tug pilot in Christine Bell, and John and Tess Whiting both gained Diamond height on a trip to Cerdanya. We have managed to stay open through the last two months in spite of foot-and-mouth, and have had many visitors from neighbouring clubs. The start of our course season was delayed by a fortnight, but we are now active and busy mid-week. We have a BGA Soaring course on site July 30 – August 3, and a task week planned for August 13-17. We've had a visit



*Ex-chair of **Shalbourne** Steve Ottner (left) gains his ring of confidence with Simon Adlard while CFI Liz Sparrow (standing by glider) keeps an eye on proceedings*

from the British Medical Pilots Association and our next events are the Beagle Pup Club fly-in, June 30 – July 1, and Mary Meagher's American BBQ on July 7. Visitors are welcome to join us: see *www.gliding-club.co.uk*

Tess Whiting

Shropshire Soaring Group (Sleap)

WE HAVE had two soaring weeks, one in May and one in June, with excellent weather and the occasional sniff of wave. Alas, we still cannot go cross-country. We have been pleased to welcome several pilots from the Mynd taking refuge at Sleap. Alistair Gilson has obtained his assistant instructor rating; congratulations from everyone in the group. Alistair is the only student who has trained from scratch at Sleap. His interest was sparked by one of our gliders landing on his grandfather's farm. Thanks to encouragement and serious help from some of our members, after training he progressed to improve his performance in the Junior Nationals. After recently graduating he has started a job down South but intends to continue to fly at Sleap. Colin Ratcliffe is stretching his new Ventus wings. Laura Scott is back with us after an extended period away.

Keith Field

South London Gliding Centre (Kenley)

SUMMER at last! The weather has relented, and we are at least getting some flying done. The trip to Jaca was a success, those who went enjoying some spectacular gliding, with our CFI, Peter Poole, earning Diamond height. Congratulations! We consider ourselves very lucky to have been unaffected by the MAFF restrictions, and as a result have been able to make good use of our latest acquisition, a Falke motorglider. This has proved extremely popular both with club members and those having trial lessons. The annual visit to Hus Bos is planned for August. As always, visitors are welcome to fly with us: see *www.southlondongliding.co.uk*

Alan Seear

South Wales (Usk)

OUR MEMBERS have not allowed the foot-and-mouth epidemic to destroy their spirit of cheerfulness and have used various local pylon tasks and other attempts at competition in the air to keep enthusiasm alive. There are several new gliders on site – a Vega, a DG-200 and a turbo Ventus. Recent achievements include Silver heights for Steve Stokes and Simon Lewis and a Gold height for Andrew James. Congratulations to Allan Donnelly on becoming an assistant instructor.

MPW

Southdown (Parham)

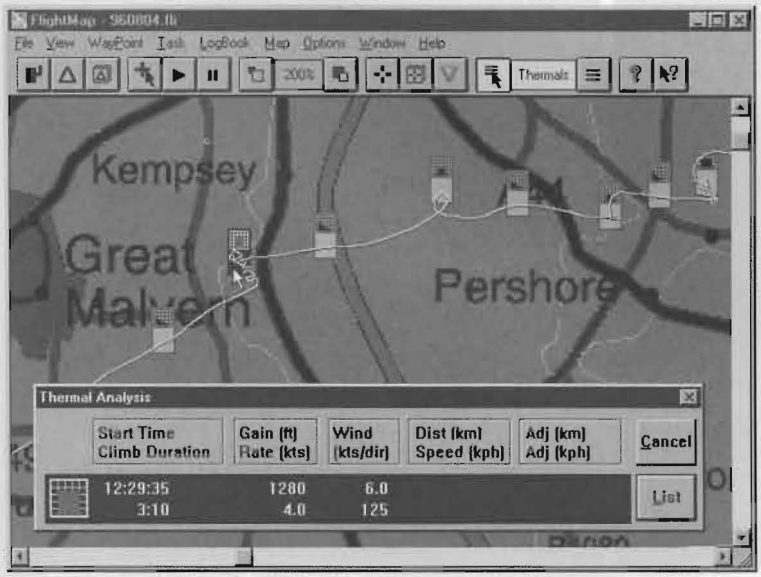
OUR bursary scheme has brought another group of lively youngsters to Parham. With a return to decent conditions, Kate Simmonds has soloed and Peter Montgomery has a couple of Bronze legs. Tony Walker completed his Silver Badge; John Lee, of Colditz glider fame, soared his Olympia for more than seven hours after a hearty lunch. The partial lifting of foot-and-mouth restrictions enabled the East Sussex club to fly the kitchen sink trophy to our doorstep at the first opportunity. A nameless volunteer attempted to return the prize in double-quick time on the same day but, alas, he terminated his endeavours in a meadow near Edburton. The pilot was thankfully uninjured but that was entirely due to the forcible restraining of the CFI.

Peter J Holloway

Staffordshire (Seighford)

PLENTY of soaring opportunities around Seighford have resulted in most members being able to stay in practice. Congratulations to Daniel Welch who achieved a 17th birthday solo. Graham Bowes and Brian Pearson have now completed their assistant ratings, with Lara Davies now a BI (gulp!). Ian Taylor should soon complete his BI rating. Thanks go to Bob Fraser and all who have helped in the air experience evenings. There are a number of flying weeks scheduled for the summer, with an open weekend on September 8-9. We are hopeful that foot-and-mouth will not unduly affect the annual expedition to Milfield. Organised by Paul Cooper, this is usually very enjoyable, with the chance of good wave.

Paul (Barney) Crump



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Club news

Stratford on Avon (Snitterfield)

AT LAST we're back in business after the long enforced lay-off. Courses and trial lesson evenings are reinstated (bookings via Karin Hulsemann/Jo O'Brien respectively). Phil Pickett is course instructor with winch-drivers Martin Greenwood, Barry Monslow and Mark Pedwell. The T-21 is on line thanks to Derek Phillips and other volunteers. Congratulations to James Ward, a sponsored junior member, on first solos following rapid progress and to Mark Laver, a university member, on soloing. Graham Garner has been awarded a CAA Safety Award for his decisive and prompt action when a ballast weight pivoted free from a securing bolt (see also p61). The largest contingent ever spent a superb week at Sutton Bank in May with a record amount of flying for this annual migration. Yorkshire GC hospitality was, as usual,excellent – our thanks to all involved. Finally, our website is at *www.gbutler.demon.co.uk/soagc*

Harry Williams

Surrey & Hants (Lasham)

WITH THE arrival (at last) of some better weather, the graph of hours flown by the club fleet has shot up so sharply you could ridge-soar it; group one gliders have been working particularly hard, with members using them on Lasham's Solo-to-Bronze and Bronze-to-Silver courses. With the cross-country ban newly relaxed, we are looking forward to the Discuses and the Ventus also spending more time out of their trailers. Sunday, June 3 produced some excellent flying, with completed Silver Badges for Gerry English and Terry Flatt, who bagged the five hours he's been stalking for some time. A few days earlier Pierre Henny got Silver duration and height in one flight; and Ed Foxon completed his Gold, getting the height gain on the Lasham expedition to Spain. If you're thinking of dropping in, Lasham has a new, dedicated airfield frequency of 131.025MHz.

Graham Prophet

The Soaring Centre (Hus Bos)

CONGRATULATIONS to Jason Sanderson, John Parker, John Sheehan and John Hughes on soloing, and to David Cook who did five hours, completing Silver. Roy Spreckley and Jonathan Walker were elected as new committee members at our April AGM. A major new extension to the clubhouse has been approved; work will commence on this shortly. We have five newly-qualified instructors – Rory Ellis, Rick Friend, Phil Tiller, Jim Hathaway and David Cooke. We will hold our annual Task Week on August 11-19 – all are welcome!

Siobhan Hindley

Trent Valley (Kirton in Lindsey)

ANDREW Turk has five hours and completed his Silver. Bob Kmita ran a flying week for us and ordered wave for the Wednesday, quite a novelty for us Lincolnshire flat-landers. Bob and John Williams both made good use of it with flights to 8,500ft and 15,000ft respectively. The Astir has been given the go-ahead for repair and mean-while we are using one of our K-13s for solo flying. Steve Wilkinson takes over as airtech from Tony Smith; our thanks to Tony for his considerable efforts.

John Kitchen

Ulster (Bellarena)

ON MAY 11 we resumed flying after a voluntary three-month foot-and-mouth stand-down in the face of more stringent regulations that you have faced in most of mainland Britain. It earned us Brownie points with farming neighbours. So we hope for an active and rewarding season to make good the loss of flying and revenue. During the hiatus our second K-13 arrived from Germany, an acquisition agreed before the closure. It says much for Ron Lapsley's long stewardship of our finances that we were able simultaneously to expand the club fleet and weather a close-down without incurring debt or facing a crisis. The recent qualification as instructors of Brian Irwin, Jay Nethercott and Phil Hazlehurst gives us the personnel strength to pack the training hours in and earn the revenue fleet expansion demands, if the weather gods hear our pleas. John Lavery and the undersigned were both lengthily hospitalised in April-May but were discharged in time to hope for a decently thermic late spring and summer.

Bob Rodwell

Welland (Lyveden)

IT'S DAY two of our washed-out open weekend, though we did manage to attract two new members and fly about 20 people despite the weather. We also have three new cadets. Congratulations to Chris Curtis on his assistant instructor rating. Good luck to Phil Edgar, off to South Africa to obtain his CPL. Former member Adam Aston is training under BA sponsorship, so with Howard Barnard's CPL we may transform into the 747 club!

Jane Cooper

Wolds (Pocklington)

TV AND radio are recording our dawn-till-dusk flying day on June 23, with flying literally commencing at dawn and going on until the light fades. We should complete 100s of launches, and attract many visitors to the club. The two-seater comp starts on August 19 for a week. This year promises to be excellent, particularly as cross-country restrictions are presently relaxed at Wolds.

Ged McCann

Wrekin (Cosford)

WAVE OVER the site during May gave Trev Barnes a climb to 8,000ft and Mick Davis and Rob Russon a climb to 11,000ft. Simon Blacker and Giles Fowler have gone solo. Rob Kerslake has completed his Bronze and Silver duration. Members manned a stand at Cosford air show which gave the club some good PR backed up with a dramatic aerobatic display flight by Chris Heames that left the crowd gasping!

Sheila Russon

Wyvern (Upavon)

THE *ab initio* courses have had a lot of flying, with some first solos. Wern Stroud and Gavin Deane are BIs. Pundits are keeping their skills honed while remaining local. As this is being written, cross-country flying is still prohibited from Upavon, but we hope to be able to lift the club ban soon. The new Skylaunch has arrived and as soon as the LPG installation is on line we will be able to use it. We are looking forward to our Longest Day party, which we are holding with Bannerdown.

Gavin Deane

York Gliding Centre (Rufforth)

AT THE end of May on a superb soaring day, winching stopped before it started when an observant winch driver spotted a blackbird's nest with four noisy chicks in the drum mechanism. The winch remained unused till the uninvited occupants left. The only DG-1000 prototype was at Rufforth earlier in the year and was flown by pilots from around the country, with Bob McLean and Wolka Heide from DG. Well done to Russell Hardcastle, Chris Sturdy and Dave Wakefield on assistant instructor ratings. The club will have a fly-in and barbecue plus hangar bash on Aug 18 to celebrate its 40th anniversary. Tickets are limited to 200, so contact us early if you are interested. The giant model show is on August 25-27.

Mike Cohler

Yorkshire (Sutton Bank)

BUSINESS as usual continues during foot-and-mouth, with a great week when Stratford came up for the week – over 150hrs flown by the gang. Classic quotes include: "I had to have a day off – the weather has been so good I'm too exhausted to fly again today!" Congratulations to Nick Bamforth on going solo and John May on his Gold height. Another good time was had by the Vintage GC with westerlies all week.

Marian Stanley

Obituary



Susan Hill – Southdown

CLUB members, family and friends packed the church at West Chiltington to pay their last respects to Sue Hill (1954-2001), who was killed flying her Ventus 2 in Australia last winter. Sue had a record of service both to the club and in the community as a Samaritan. She joined us in December 1984 and after soloing progressed to an assistant instructor rating and became a keen cross-country pilot. She gained a PPL and also flew the motorglider at Parham. Her winter flying from Benalla included several flights more than 800km and, elsewhere, she adored Alpine flying. As an accountant and computer analyst, she was superbly qualified to act as club treasurer. She held this post for some years and also organised the Friday trial lesson days. That she managed to do all this with so little fuss or desire for public recognition is an indication of the modest person she was. Our loss is great, but our thoughts go also to her partner, Brian Bateson, and all her family. We shall miss her kindess, competence and experience and, most of all, her friendship.

Peter Holloway

BGA Badges

Diamond distance

1-855	Robert Woodhams	Portsmouth N *(Benalla)*	01/02/01

Diamond goal

2-2779	Michael Benson	Essex & Suffolk	22/08/00
2-2780	Robert John	Bristol & Glos *(Benalla)*	03/02/01
2-2781	Robert Woodhams	Portsmouth N *(Benalla)*	11/01/01

Diamond height

3-1529	Trevor Mills	London *(Cerdanya)*	10/04/01
3-1530	Jonathan Smith	Wolds	14/04/01
3-1531	John White	London *(Cerdanya)*	30/03/01
3-1532	Peter Poole	Surrey Hills *(Jaca)*	11/04/01

GOLD BADGE

2164	Derek Hayward	Lasham *(Mafikeng)*	07/01/01
2165	Ralph Johnson	Southdown *(Cerdanya)*	23/04/01
2166	Robert Woodhams	Portsmouth N *(Benalla)*	11/01/01
2167	John Ferguson	Scottish GC	15/04/01
2168	Geddes Chalmers	Highland *(Lake Keepit)*	23/02/01
2169	Michael Benson	Essex & Suffolk	05/04/01
2170	John White	London *(Cerdanya)*	30/03/01

Gold height

Derek Hayward	Lasham *(Mafikeng)*	07/01/01
Trevor Mills	London *(Cerdanya)*	10/04/01
Ralph Johnson	Southdown *(Cerdanya)*	23/04/01
Francis Broom	Shenington	11/04/01
Michael Staple	London *(Cerdanya)*	09/04/01
Anna Sheldon	Wolds	15/04/01
Roger Taite	Deeside	14/04/01
John Ferguson	Scottish GC	15/04/01
Michael Benson	Essex & Suffolk	05/04/01
John White	London *(Cerdanya)*	30/03/01

Gold distance

Michael Benson	Essex & Suffolk	22/08/00
Charles Cooper	Mangalore, Australia	10/12/00
Robert John	Bristol & Glos *(Benalla)*	03/02/01
Robert Woodhams	Portsmouth N *(Benalla)*	11/01/01
Geddes Chalmers	Highland *(Lake Keepit)*	23/02/01

SILVER BADGE

10869	Graham Burton	Staffordshire	16/04/01
10870	David Cooke	The Soaring Centre	20/04/01
10871	Eric Hibbard	Essex & Suffolk	21/07/01
10872	Chris Holland	Cambridge	04/05/01
10873	John Fletcher	Southdown	05/05/01
10874	William Orson	Shalbourne	03/09/01
10875	Nathan Hanney	Dorset	20/04/01
10876	Andrew Turk	Trent Valley	21/04/01

UK CROSS-COUNTRY DIPLOMA

Pt1	Peter O'Connell	Lasham	30/07/00
Pt1	Gordon Howarth	Chilterns	30/07/00

AEROBATICS

Mark Rogers	Sports Known	24.5.2001
Karen Denyer	Sports Known	25.5.2001

The one you don't see...

IT HAD been a particularly good fur-ball, the Brits vs the Yanks. In the debrief, an English pilot enquired of an American F-15 pilot why he had mysteriously disengaged at one point, for no apparent reason, and ran out of the fight. The reply was: "Sir, I had lost SA".

What did the fighter pilot mean? He was referring to Situational Awareness, or his mental air picture of who was where and what was happening. Once this has broken down, invariably you lose the fight and get shot at – or there is even a risk of collision. It's a concept that applies equally well when thermalling...

How could the summer weather be worse? At last, a good day dawned clear and bright; the sort of day where cumulus were forming early with a sharp-edged outline against a bright blue sky. You could see for miles.

A Phoebus pilot launched by aerotow on a familiarisation flight and found himself climbing in strong lift. By now, the clouds had organised themselves into excellent streets. In what seemed to be no time at all, Phoebus and pilot were at cloudbase, so the pilot ventured upwind along the street at 3,000ft, staying clear of cloud, exploring the handling characteristics. Two launches later a K-8 pilot was able to pull off tow early under the same street; soon this too was climbing rapidly in the lift marked by the Phoebus. The K-8 pilot kept a good lookout, but lost sight of the Phoebus. Three turns later when the Phoebus had still not reappeared, the pilot decided to continue in the strong lift thinking that the same course of action would be predictable. It was such good lift it became the usual magnet! A Dart appeared lower down and the K-8 pilot started keeping track of this whilst still searching for the missing Phoebus, presuming it had gone elsewhere. This predictable course of action assumed that the Phoebus had seen the K-8. Indeed, the Phoebus pilot was aware of the K-8, but when he left on his meanderings it had seemed so much lower down that it would not be a threat. What he had not been expecting was the K-8 to climb like a cork!

As the Phoebus made its way back along the street, the pilot's attention was caught by something in the far corner of his left eye; he was suddenly presented with the rapidly-climbing K-8 closing fast from below. At that very moment, the K-8 pilot was looking down at the Dart, and the Phoebus pilot was amazed to be presented very closely with another cockpit right below his, turning towards him. It was so vivid the clear sight of the top of a soaring hat stuck in his mind. Without hesitation he turned away hard: for a moment, it seemed like he had missed...

The bang of the resulting collision was deafening. This was no gentle nudge: 9ft of the port wing was removed from the Phoebus, leaving just a 1ft section of aileron. The K-8 lost 8ft of the leading edge of its port wing near the middle right back to the mainspar. The gliders separated and both started spinning.

In any case of mid-air collision or structural failure resulting in complete loss of control, an early decision to abandon before airspeed and g forces rise is invariably sensible. The first thought of the K-8 pilot was: "I don't feel like dying!" – but neither pilot could jump. They weren't wearing parachutes. Faced with the unenviable prospect of no other course of action, they tried to regain control – both commented that previous thorough training by instructors proved invaluable. As the K-8 pilot put it: "When I subconsciously asked myself what I had to do, the answers just came one at a time as I needed them".

The Phoebus pilot could not describe his gyration as either a spin or spiral dive, but he managed a recovery. He found himself in a stable situation with full right rudder and right aileron, the stick being well

'Neither pilot could jump. They weren't wearing parachutes'

forward. It was a slow arc in a deep sideslip at approximately 80kt. The only option was to attempt a field landing. Looking at a large set-aside field he became aware that the airbrakes had been open since the collision. As he attempted to make a correction to his flight path he was thrown around violently so – wisely – he returned to the known stable condition, deciding to keep the wheel up and making minimal corrections during the descent. He said at this point that he would have definitely preferred to abandon!

During the fast landing he made what he could of a roundout in long crop, which ended in a groundloop. When all fell silent his first thought was: "I'm alive!"

The K-8 pilot saw the Phoebus falling away inverted: there was debris from the wing and the complete wingtip of the Phoebus falling away too. A spin recovery regained control of the glider. Straight flight was possible with two-thirds right aileron and a large amount of rudder, maintaining high speed to increase control effectiveness. Conveniently, control was regained with the glider facing towards the airfield – but too high to carry out a straight in approach. The pilot could see the severe damage to the leading edge and sensibly decided not to use airbrake, to avoid increasing the stress on a damaged wing. In the circuit, right-hand turns were going to prove difficult with most of the control deflection already in use; similarly, left-hand turns could result in loss of control close to the ground if the wing could not be picked up. The safest option was a straight-in landing, but this only proved to be possible in a ploughed field next to the strip. Once safely on the ground the pilot wanted to do nothing other than get out of the glider as fast as possible, shaking thoroughly from head to foot.

There can never be too much emphasis during training on the importance of a good lookout. All instructors are pedantic in this respect. Anything which improves lookout can only be useful; nearly all single-seaters are equipped with an audio vario: surely it must now be time to equip two-seaters with these as well, and pilots instructed in their use at an early stage. They are hardly expensive and must be within the means of even the smallest club. Sadly, the number of collisions during thermalling has increased in recent years, with several fatalities. Thermalling without a parachute is no longer a sensible option – in this case no expense can be worth the loss of a life.

Lookout, however, is not enough. The maintenance of a mental air picture of those around you is vital. If another glider ever becomes out of sight in a blind spot, this picture will help prediction of when it will reappear. If this does not happen, something must have changed and every effort must be made to regain sight of the lost glider and account for it. Until this is done, and the picture modified, you are a potential hazard to yourself and others. During club flying it is wise to avoid thermalling in another glider's blind spot; a friendly wave and sensible use of the radio help to maintain the other pilot's picture too. Thermalling in competitions tends to become a bit more of a scrap, but there is still no excuse for consistently flying in another glider's blind spot such that they can never become aware of you.

It is never safe to assume the other pilot has seen you, or that his picture is the same. Therefore, intentionally going belly up – and unsighted – particularly when pulling into a thermal, is never wise. Once you are unsighted in this fashion, you are assuming the other pilot will maintain his flight path. If he hasn't seen you, and tightens his turn at that point...

The mental air picture is, of course, complementary to lookout. (It won't save you from seeing the Cessna 'puddle jumper' blundering through unannounced, probably with his head in the cockpit, staring at the GPS.) Returning to another old fighter pilot saying: "It's the one you don't see that gets you!" **Martin Durham**

Bolt from the blue

IT WAS a very crisp and sunny day back in January 2000; my club was using a restricted fleet due to a lack of ground support on the day, for it was very cold.

I was 20 years old and had about 2 hours of solo flying. I had gone solo in 28 launches for I had done a few hours with my father in his motorglider; in fact the instructors say it took that long to get rid of my bad habits!

I had progressed onto the K-8 but my experience was low. I was on daily checks.

On the day in question I had a check flight in a K-13 with the duty instructor. All went to plan. On landing, he cleared me for solo and briefed me prior to the flight.

This is where my stature comes in: I weigh around eight and a half stone wet through, so to solo a K-13 I require full ballast and a parachute to bring the aircraft into placard limits. My instructor suggested that, before I soloed, he would take the ballasted aircraft for a flight. I could sit in

'All went quiet; floor debris joined me. Something hit me on the chin – was it a bolt?'

the back. Great – a free flight! We put the ballast in and off we went to do mild aerobatics and spins. I'm one of the fortunate pilots who loves aerobatics.

Then we prepared the K-13 for my solo. The lead ballast is fixed to the cockpit floor cross ways, attached to the aircraft using winged bolts, one in each floor panel. Both the instructor and I checked for security and all appeared to be correct. We then secured and inspected the rear cockpit for solo flight. Satisfied, I put on the parachute and climbed into the front cockpit. Both the instructor and my father, who was there at the time, re-checked harnesses, ballast, etc. for security. Then I continued with my pre-flight checks.

The launch itself was uneventful: you do get use to the sharp snatch and acceleration modern winches give. Towards the top of the launch I tried to check the attitude prior to release: I found resistance. My stomach sank; speed started to build up very quickly; and my heart was pounding.

I pulled the release with a bang but the glider continued nose up. The stick would not budge; it was still back.

All went quiet, floor debris joined me. Something hit me on the chin – was it a bolt? I was now looking at the ground. Speed began to build up. A bolt from where? ➢

Accident/incident summaries

by Dave Wright

AIRCRAFT Ref	Type	BGA No	Damage	DATE Time	Place	PILOT(S) Age	Injury	P1 Hours
23	Swallow	2014	Write off	06-Jan-01	Denbigh	32	Minor	23
(Revised report)				1420				

During his first flight on type the winch launch power dropped off about halfway up then, after lowering the nose and preparing to pull off, the power returned. At the top of launch the glider pitched violently vertically down. During the recovery there was a loud bang as the centre fairing broke off and so the pilot landed straight ahead.

24	Supermunk Tug G-BCOY		Minor	10-Feb-01 1102	Husbands Bosworth	53	None	403

At 800ft on the aerotow, after a crosswind take-off, the glider released due to turbulence. The tug returned to the airfield but was seen to veer left then take-off again. The left wing clipped a tree but the aircraft continued to climb away before making a second, safe, landing on a more into-wind strip.

25	K-6CR	--	None	--Feb-01	Incident	44	None	85

The pilot was practising solo stalls and spins and had safely recovered from several stalls and a spin to the left. Then, in a spin to the right, found he could not apply full left rudder as it was stuck to the right. The glider stopped rotating and he was able to get some rudder control and landed safely. The rudder pedal pad U-bolts had failed.

26	K-21	2871	Minor	03-Mar-01	Dunstable	57	None	1260
				1630--			None	0

The early solo pilot was expecting a simulated winch launch cable break exercise. When he heard a "bang" transmitted up the cable he thought P1 had released, so pushed the nose down sharply. P1 released the still-attached cable but the chute rose and the strop hit the glider's right wing and tailplane. He then landed the glider safely.

27	K-7	3344	Minor	03-Mar-01 1102	Gamston	49	None	--

After a winch failure at 20ft the pilot mistakenly opened the airbrakes instead of pulling the release. The result was a heavy, bounced landing. After inspection, the glider flew an uneventful circuit. While checking the controls for another flight a control restriction was felt. The skid attachment frame was found to be bent onto the elevator rod.

28	Janus B	2359	Minor	10-Mar-01	Gamston	32	None	450
				1346		41	None	--

This was a training flight with P2's altimeter covered up. After a poor launch to 700ft P2 started the circuit and became rather low so P1 prompted to "stay close in". It started to rain on the downwind leg and P2 overshot the final turn. P1 took control and lined up to land but, with poor visibility dropped a wing, causing a ground loop.

29	Bocian 1D	3345	Minor	14-Jan-01	The Park	--	None	3530
				1330		58	None	172

At about 400ft on the winch launch the rear canopy catch came undone. P1 (in the front seat) heard a bang but continued with what appeared to be a normal launch. After release, P2 shouted that his canopy had detached. P1 flew a normal circuit and landing. The catch was known to be suspect when worn.

30	Vega	2457	Minor	24-Feb-01	Crowland	22	None	219

A flapped Vega was being flown in a competition finish at below V_{NE} and in smooth conditions. As he pulled up the elevator developed severe flutter and a major structural failure caused the glider to rise vertically at low level. After a stalled loop the pilot only just managed to land. Inspection showed a faulty previous repair.

31	SZD Junior	4138	Minor	19-Feb-01 1400	Portmoak	44	None	37

The pilot, who had not flown recently, set up a normal circuit and approach then tried to ease the airbrakes closed a little to improve the flare. However, he mistakenly opened them. He then opened them further and the glider hit the ground heavily in a nose-down attitude, damaging the fuselage, and bounced back into the air.

32	SZD Junior	4138	None	13-Feb-01 1400	Portmoak	42	Minor	15

After a short soaring flight the pilot returned to the airfield and set up a normal approach to the strip, which in the wind direction present was known to be affected by wind off a local hill. On finals he encountered a strong downdraught and the glider decelerated then dropped heavily into the ground, despite closing the airbrakes.

33	Puchacz	3589	Minor	28-Mar-01	Husbands	63	None	1780
				1737	Bosworth	19	None	0

After the last flight of the day the instructor landed long to reduce the retrieve. As the speed decayed he changed direction about 20° to remain on the perimeter track and, as the glider came to rest, the right wing went down and struck a 2ft metal "Flying beware" sign and was damaged.

34	Astir	4702	Minor	30-Dec-00 1502	Parham	69	None	26

In light wind conditions the pilot was unsure if she could stop before two landed gliders so decided to land on the aerotow strip. But, too low to make this, she had to land in the opposite direction, which was into a bright, low sun. Travelling too fast and with the pilot unable to see, the glider bounced up the strip and finally landed on marker cones at the far end.

35	Super Dimona	G-LIDA	Substantial	18-Apr-01 1145	Bidford	39 15	None None	800 --

While flying a trial lesson from the right-hand seat of the motorglider the instructor made an approach with a small amount of air-brake and the engine at idle. During the flare he tried to make a small closing adjustment to the airbrakes but apparently pushed the stick forward (with his left "airbrake hand") and drove the aircraft into the ground.

36	SZD Junior	--	None	---Apr-01	Incident	16	None	17

After a briefing the low-hours pilot attempted a Gold height wave flight. He failed to appreciate the wind speeds at altitude and, losing sight of known features, drifted downwind (unknowingly into controlled airspace) and then had to make a field landing as the wave gaps closed up. Fortunately, the glider was undamaged.

37	SZD Junior	4138	Minor	31-Mar-01 1554	Portmoak	34	None	3

After a briefing the early solo pilot was launched by winch and encountered wind shear generated by a nearby hill. At 300ft the weak link broke and he chose to land ahead in the lee of a band of trees. He opened the airbrakes then, at treetop height, the glider lost speed, he failed to close the brakes, and made a heavy landing on the main wheel.

38	SZD Junior	4554	Write off	01-Apr-01 1500	Long Stratton	74	Fatal	257

FATAL ACCIDENT: The single seat glider was seen to enter a spiral dive when flying downwind of the airfield. It impacted the ground in a vertical right hand bank at high speed, killing the pilot. The accident is subject to a BGA fatal accident investigation. ➢

➢ I looked down and saw that the ballast weight had pivoted around the now single attaching bolt and had gone behind the control column. As I started to enter a second loop. I gave the ballast weight a mighty kick with all my strength. The control came free.

I now had excessive yaw. "What's happened?" I thought. I was shaking and took a second to compose myself, for I now had some control – albeit flying sideways!

Looking down and lifting my left foot I noticed the ballast had now pivoted around and under the left rudder pedal. This, I found, had jammed, but I had still got height, so I slackened off my harness to lean forward and attempt to slacken the remaining fixing screw; this was tight due to my super-powered kick, which had turned the ballast and bolt tighter.

After several attempts I managed to slacken the screw, move the ballast, and regain full control. Holding the ballast clear of the controls I made a successful approach and landing. It was strange that I did not panic while all this was going on. It was only afterwards the enormity of what happened sunk in.

I was offered another flight straightaway but I declined. I flew a week later but it's going to take a long while before I can become fully confident on a winch launch.

I must stress that if it were not for the superb training I have had at Stratford upon Avon GC there could have been a different outcome to the situation.

As for the ballast bolts, a worn thread was the root cause. The bolt screwed in OK, but with one sharp knock it fell out.

Graham Garner

Jonathan Mills, chairman of the BGA Flight Safety Committee, adds: It shows great presence of mind for this pilot with low experience that he worked the problem he faced and solved it in such a calm manner. When fixing ballast weights, also bear in mind not just flight loads, but the likely effect of the heavy ballast's momentum in a crash, breaking free and causing injury

Accident/incident summaries, continued from page 61

AIRCRAFT Ref	Type	BGA No	Damage	DATE Time	Place	PILOT(S) Age	Injury	P1 Hours
39	Skylark 4	--	None	--Apr-01	Incident	73	None	195

As it had not being flown for seven months the pilot made a careful DI of the glider. After a normal aerotow he found he could not release. He flew to the left and waggled the wings to signal the tug, which flew back to the airfield before releasing the cable. The rope fell away onto farmland. Inspection revealed the cause was a stretched release cable.

40	Skylark 2 & K-13	2002	Minor	05-May-01 1711	Winthorpe	60	None	50

This mid-air collision occurred after the Skylark pilot lost sight of the K-13, which was flying a higher, opposite direction circuit. Undershooting his reference point the Skylark pilot closed the brakes to reach the runway. As he made to land, the glider was hit from above by the K-13 , which was on a steeper, curved path and had not seen the Skylark.

41	Astir CS	3701	Minor	02-May-01 1715	Cross Hayes	52	None	353

At the end of the day the instructor took a launch to reposition his glider near the trailer. He forgot to lower the undercarriage and landed with the wheel up. Contributory factors were lack of currency on retractable types and on this flight he had not switched on the electrics (for the non-soaring flight) and hence had no gear warning buzzer.

42	Puchacz	3695	Substantial	12-May-01 1940	Currock Hill	16	None	1.83

The very early solo pilot was allowed to fly solo and briefed to "land on the standard landing area to allow the glider to be returned to the hangar". After a normal approach the glider bounced and weathercocked slightly towards the trailer park. The left wing hit a trailer and the glider turned into the trailers and suffered substantial damage.

43	Astir CS77	2460	Substantial	21-Apr-01 1401	Upwood		None	58

The supervised trainee winch driver apparently drove a slow launch and, at about 50ft, the pilot abandoned the launch and mistakenly opened full airbrake as he lowered the nose. This resulted in a high sink rate and he was unable to prevent a very heavy landing despite closing the brakes.

44	Puchacz	--	None	--Apr-01 --	Incident	43 42	None None	293 12

This was the instructor's third flight that day with this student. During the final approach in gusty conditions the student raised 4the nose too sharply in the flare. P1 took over but was unable to prevent a heavy landing.

45	Twin Acro 2	--	Minor	--Mar-01	Incident	--	None	--

The club member took the automatic Range Rover to pick up pilots and return to the clubhouse. Stopping some yards from a parked glider he then found he could not get the car into neutral because it was obstructed by equipment. Distracted, he allowed it to run forward over the glider's wing – then reversed back over it!

46	Puchacz	3576	None	29-Apr-01 1102	Nr Aboyne --	47	None None	-- --

At about 150ft on the aerotow the rope detached from the tug. P2 selected a field ahead and then P1 took over for the landing. The glider was pulled violently to the left as the trailing rope caught in some power lines. P1 managed to recover from the resulting side-slip and made a sideways but safe, damage-free landing.

47	Astir CS77	2300	Minor	07-May-01 1430	The Park		None	32

During the winch launch the pilot noticed the canopy was not locked and secure. As the climb was started it opened and was restrained in the fully open position by the hinges. At about 300ft the pilot abandoned the launch and landed safely straight ahead.

48	K-13 & Pawnee	2554	Substantial	12-May-01 1330	Nympsfield	44 19	None Minor	258 0

This mid-air collision took place when a dual K-13 was thermalling at about 1,200ft near the airfield near two other gliders at about the same height. The Pawnee tug was descending in a gentle turn with the other gliders in sight. At the last minute the Pawnee pilot saw the third, pulled up but caught it with the rope, causing substantial damage. Both landed OK.

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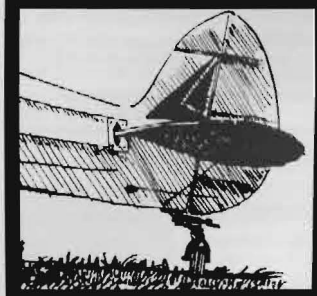
What a line up! Chris Rollings, Tom Knauff and Karl Striedieck are offering soaring courses this winter.

Soaring and Cross-Country Master Classes and Instructor Training will be provided **in Florida this winter** at **Winter Haven** by **Mile High Gliding Inc.** Availability of courses will be from **November 2001 through February 2002.** The Soaring and Cross-Country courses will be each of seven days duration and will include ground school, dual instruction in a Duo-Discus glider and, if conditions permit, escorted solo cross-countries in one of our Genesis II's. Details of the instructor training program are available on our web site; the intention is to have courses suitable for both British and American pilots.

The courses will be under the direction of **Chris Rollings** (Ex-BGA Senior National Coach and five time UK Soaring Champion). Each soaring course will also feature at least one guest instructor of international reputation; guest instructors on the Soaring and Cross-Country courses will include **Tom Knauff** and **Karl Striedieck.**

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Tailwheel Conversions – 5hr flying, 1 night accommodation. £440
Farmstrip Special – 8hrs flying, 2 nights accommodation £698
IMC – 15hrs flying, 6 nights accommodation £1290
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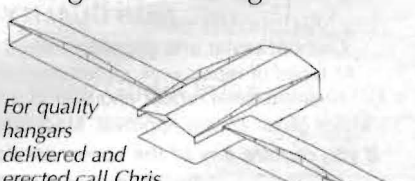
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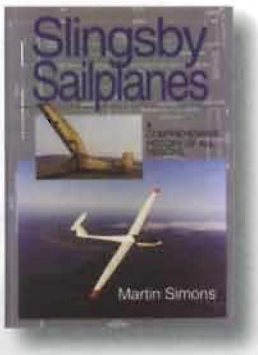
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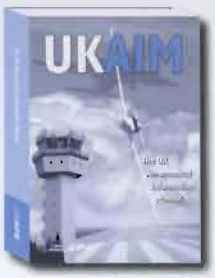
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