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Testing times in New Zealand

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April ~ May 2000  
Volume 51 No 2

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*Your contributions are welcome. If you would like a guide for contributors or want to discuss your idea for an article with the editor, please feel free to get in touch by email, letter or phone.*

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# Sailplane & Gliding

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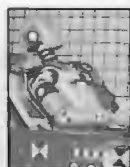
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The day the Colditz Cock replica flew, watched by Prisoners of War who designed and made the original, was impressive for all present. Our feature on pages 26-29 is illustrated by the white planes picture co. which also took the cover shot of John Lee. As well as flying the glider, John built its wings



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# BGA *and* General News

## From the Chairman

WHEN I started gliding in 1969 I never imagined how deeply I would get involved, nor how much pleasure I would derive from our wonderful sport. It has its frustrations but it has many rewards in the air for those who stick with it.

There are rewards on the ground, too, in the people one meets. I have made many friends in gliding, in the UK and abroad, but I want to mention just two of them now.

Firstly, Dick Dixon, your Chairman for the past four years. He has led the BGA through some difficult issues, providing leadership and direction to bring us to where we are today.

Dick took the initiative to set up Project 2000 to look at the BGA's future – work due to start bearing fruit this year. He also established the very able team leading our current negotiations with the CAA over the future regulation of gliding and motorgliding. I believe he has also set an unofficial record for the number of clubs visited by the Chairman. So, to Dick, our thanks and best wishes for happy soaring over the South Downs – and further afield – free from the constant phone calls.

The second friend I want to mention is no longer with us. As I write this I have just returned from Bill Scull's funeral at Alton (see opposite, and page 58).

I first met Bill in the early 70s and quickly came to respect his knowledge and common sense, particularly when my own club, Cotswold, was in the process of buying its airfield. My experience of him mirrors what speakers at the service said. They praised Bill's integrity, warmth, humour and dedication to gliding and sport aviation; his determination to make the BGA's voice heard in Whitehall and Westminster; and his invaluable contribution to the sport beyond the UK. Internationally, Bill was the BGA to many, particularly in the spheres of training and safety. The large number of pilots who came to say farewell bears witness to the high regard in which he was held. Yvonne's message at the service of thanksgiving said it all: "Safe journey, my love, fly high".

The BGA could not achieve what it does without people like Dick and Bill,



**"The freedoms we enjoy must be robustly defended with reason and logic, and by winning friends not just within gliding but also outside it"**

**– David Roberts**

whether employees of the Association or volunteers. Many others give their time to help gliding survive and thrive in the UK and abroad.

It is vitally important that we continue the work that others before us have started so successfully. The freedoms we enjoy must be robustly defended with reason and logic – not by sounding off unthinkingly – and by winning friends not just within gliding but also outside it.

I shall do my best to carry on the traditions of previous Chairmen and other glider pilots who have provided an environment for gliding that is almost unique in the world. At the same time, however, we need to respond to rapidly-changing times and markets. Change is constant. Some in gliding do not want change and find it difficult to embrace. But the majority, I believe, see the need for gliding to adapt to a changing world and recognise that, properly evaluated and planned, change is essential for survival and growth. We must pass on a healthy sport to the younger generation. If the current negotiations with the CAA turn out in our favour, then plans will be needed for a major overhaul of what we do as an Association and how we do it, for the benefit of all UK glider pilots.

All those working for you through the BGA will be depending on your support in the work to come.

**David Roberts**

## How to help your juniors

YOU CAN help your club's young pilots get to Weston on the Green for the Junior Championships (August 25-September 3, this year).

Any pilot aged 25 and under with a Silver badge can enter the Juniors, and any young pilot – even pre-solo – can apply for flying experience there.

The BGA subsidises the Junior Championships, seeing it as a very important means of helping young pilots.

Please encourage them to enter, and consider making your club's best gliders available – especially where entrants do not have a suitable glider. If you own a glider, why not loan it to a young pilot for the week?

Coaching is available for all entrants, and BGA two-seaters will fly young pilots not entering the competition who want to learn about cross-country and competition flying. There are places in the Duo Discus, DG 500 and Puchacz. The Scottish ASH 25 will take students from Scottish clubs. Excellent support from some private owners means we may have as many as 20 student places.

Each two-seater, flying *hors concours*, will be crewed by one coach and two students. Students will normally fly on alternate days and help on the other days. NO qualifications, other than being keen, are required for this. The costs will be minimal – basically the cost of getting there and food, and possibly some lunches. Most of the juniors camp on site and they have a great time.

The young pilots' soaring course at Bicester (August 20-24) will also be a contest practice week.

Applicants for two-seater places should be supported by their club and send a short written submission to me at the address below or the BGA office, explaining why they should get a place. The closing date is April 30, and places will be allocated by May 30. Full competition entries should go by April 30 to the Competitions Committee via the BGA office. Contact me or the BGA coaches if you need more information.

Please spread the news among your young pilots: we will need them to lift us into our gliders and launch us in years to come!

**Terry Slater**

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Banochry, Kincardineshire AB31 4PW  
01339 883455 (h); 01224 775171 (w)  
0802 892936 (m) Email TerryWS@aol.com



## New mandatory insurance levels

OPERATIONAL regulations state that all gliders shall be covered by third party insurance and that all two-seaters shall additionally be covered by second seat insurance for at least minimum amounts to be decided from time to time by the BGA Executive.

In December, the Executive decided to increase the mandatory levels to one million pounds for single-seaters and two million pounds combined for two-seaters. These levels should be applied as soon as possible, and in any event no later than December 31, 2000.

## Lottery results

Winners of the January draw were:

**R Barrett (first prize)** £69.50  
Runners-up:

SM Holmes	£13.90
MJ Wooldridge	£13.90
JA Johnston	£13.90
W Gordon	£13.90
BE Cleugh	£13.90

Winners of the February draw were:

**KV Chatburn (first prize)** £66.00  
Runners-up:

S Hill	£13.20
T Salter	£13.20
B Morris	£13.20
A Mayhew	£13.20
SF Duerden	£13.20

## BGA and General News

### Year 2000 TP list

AMENDMENTS to the BGA Turn Points for 2000 have been finalised and are part of the definitive TP files on [www.spays.demon.co.uk/turningpoints.htm](http://www.spays.demon.co.uk/turningpoints.htm). This can also be accessed from the BGA website through a link. Data can be read by Word, WordPerfect, etc; as an ASCII (DOS file) list; and in comma-separated (CSV) format for direct use in databases. The first of these is divided into regional groups (Scotland, N England, Midlands and East Anglia, and S England and Wales), so downloads are not too big. There are changes to points at Lyveden and Rivar Hill. Clubs without an accurate point are encouraged to choose one and inform Ian Strachan [ian@ukiws.demon.co.uk](mailto:ian@ukiws.demon.co.uk). There are new points in Scotland, and near Banbury, Brighton, Cambridge, Exeter, Grantham, Leicester, Newcastle, Oxford, Peterborough, and Worcester. For the complete list of changes, see "Amendment 3".

### CTO appointed

JOHN HAMMERTON is to replace Dick Stratton as BGA Chief Technical Officer. John, who comes from British Airways, also looks after Southdown GC's fleet. He started on March 20; Dick Stratton retires at the end of April.

### The gliding world pays its respects to Bill Scull

AROUND 200 people gathered in Lasham clubhouse on February 7 to mourn former BGA Director of Operations Bill Scull and to celebrate his achievements.

The reception followed a packed service at St Lawrence's Church, Alton, where the presence of international speakers testified to the influence Bill exerted beyond as well as in the UK.

Bill, who died on January 27, was diagnosed last year with Motor Neurone Disease. He leaves a wife, Yvonne, and daughter, Wendy.

BGA Vice President Bill Walker OBE, who worked closely with Bill for 20 years, said at the funeral: "It is my view and the view of many involved in gliding that Bill's contribution towards the best interests of the BGA and recreational aviation – in the UK, Europe and internationally – has never been matched".

Prof Loek Boermans, representing the Organisation Scientifique et Technique Internationale de Vol à Voile (OSTIV) and the International Gliding Commission (IGC), told mourners: "With great dedication Bill strove for higher levels of safety in gliding and was the successful leader of this work within the world's international gliding organisations OSTIV and IGC."

Bill, who was recently awarded the

## EGU's new president and secretary

THE EUROPEAN Gliding Union Congress in Amsterdam on February 26-7 opened with a period of silence in memory of our good friend and colleague, Bill Scull, whose wide knowledge and expertise was invaluable. The meeting was attended by delegates from nine countries.

After eight years of diligent work, the President, Francois van Haaff, stood down. He will not be completely lost to EGU, however, as he remains Technical Officer for Airspace and Radio. His place has been taken by Peter Eriksen from Denmark. Peter flies a Ventus and is based in France, where he works in Air Traffic Control administration. There is also a new Secretary, Roland Stuck, who is well known in European gliding circles.

Wolfgang Scholze (environment) outlined progress made in Germany towards allaying the fears of environmentalists opposed to aviation. Studies have been made of the impact of aviation on wildlife and results show that establishment of airfields is beneficial to wildlife and

plants. It was discovered, though, that flight over sensitive breeding areas below 700m was sometimes detrimental to birds of prey. In order to protect their breeding area they would see gliders as a threat and leave the nests to attack the intruder. Other predators would then raid the nests, thereby destroying some of the work of conservationists.

The researchers included people who had a background in biology or similar. Airfields which participated in procedures to make them more 'environmentally friendly' have obtained grants in order to assist with the extra expense.

This year it is hoped that the problems of mutual recognition of licences will be finally resolved. There is growing scepticism and opposition to the requirement for medicals for gliding. The EGU will tackle this and other issues on behalf of the thousands of European glider pilots.

**Lemmy Tanner**  
BGA EGU Representative  
[www.come.to/egu](http://www.come.to/egu)



1998 Grand Master's Commendation by the Guild of Air Pilots and Navigators is pictured (above, left) receiving the award from the Duke of Edinburgh.

For a tribute to Bill Scull, see p58.



# Letters to the Editor

Please send your letters (marked "for publication") to: Helen Evans, Editor, S&G, 6 Salop Close, Shrivenham, Swindon SN6 8EN or email [helen@sandg.dircon.co.uk](mailto:helen@sandg.dircon.co.uk)

## Why "nearly" is an Australian success

Several people recently have mentioned Wally Kahn's letter (*Why 'nearly' ain't good enough for British gliding*, February-March 2000, page 9). Unfortunately, in Australia we have the same problems with government funds – and it's even worse when our footballers, cricketers, rugby players, swimmers and Olympic athletes keep winning everything! I realise the British are good at weak weather flying – they have to be, just to stay up. We Aussies really need to get overseas for some grovelling practice.

I coined the name "nearly" badges myself as I gained my 900km badge on my first 1000km attempt, which was also my first attempt at a distance over 500km. I am surprised the Poms don't have "nearly" badges – England has nearly good enough weather to go cross-country. These badges are not a failure to achieve the next distance up but a success in achieving the distance advertised. They give young pilots some goals to aim for on their way up. Nearly 1000km or 750km is still better than Gold/Diamond distance – just! In fact, Britain probably needs 200km and 400km badges – the 800km and 900km ones would be much too far! Since no one has claimed a 1000km badge

in Britain, I was surprised by Wally's sniping. (Yes, I know a couple of national coaches did 1000km in an ASH 25 but they did a yo-yo: really, only straight out, O/R and FAI triangles count.) In Australia, a modern Open Class glider needs to do 1,100-1,250km to gain respect, leaving 1000km for the Standard or 15 Metre Classes. The 750km is a fine stepping stone badge after Diamond distance – but how many have been done in Britain by Libelles, etc? They're probably only done by obscenely large Open Class machines. I did my only 750km because I arrived too late that day for 1000km – a late lunch, launch and 750km triangle speed record in under six hours to be home for cocktails!

I would send Wally an entry form for the Quarter Century Club but of course he is well past a half century in gliding and working on three-quarters – good on him! Being a good loser is a peculiarly English tradition – Aussies have rarely had need to be – "wimps" indeed!

Tom Claffey, SYDNEY, Australia

I cannot resist commenting on Wally Kahn's undignified criticism of English professional sportsmen and women. Whilst I sympathise with his sentiments regarding the apparent lack of financial

support for gliding at international level, surely knocking cricket, rugby, tennis and football won't improve our image or help our cause?

His comments regarding funding for local clubs are misleading. As an administrator in professional football over the last 16 years or so, I can assure him that funding from the Sports Council is simply not available for the professional game. All of the "carefully chosen foreigners," as well as our home-grown "losers" are paid for through the significant efforts or very deep pockets of those committed to their chosen sport. It is a risky business and the stakes are high but our wage bill is in no part funded through Grant Aid. And let us not forget that there are no foreigners in our various National teams – just Brits happy to pull on the jersey and give of their best, win or lose.

There are a variety of sources of funding for amateur sporting clubs and participants and gliding is no exception. Many, if not most, UK gliding clubs have benefited substantially from National Lottery grants, my own (Trent Valley) included.

Geoff Davey, NETTLEHAM, Lincs

As a member of the UK Sports Council as well as a glider pilot, I am writing in response to Wally Kahn's letter to outline

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## Complimentary flights for farmers – a national, reciprocal scheme?

Many pilots carry a ticket that offers a flight to a farmer as a "landing fee". Only a small proportion of launches is ever taken but the goodwill generated is well worthwhile.

One problem is that a farmer in East Anglia can't travel to Cornwall for his flight and vice versa. Could I suggest that the system should be made national and reciprocal?

Unless any Treasurers object I propose to use the form (right) this year and recommend that others use similar ones.

Only the launch cost is to be charged to the pilot, no membership or soaring charge is to be made.

**Tim Macfadyen, STROUD, Glos**

### Bristol & Gloucestershire Gliding Club Farmer's complimentary glider flight ticket

This ticket allows one flight by Winch/Aerotow

Name of farmer or landowner:

Address:

Name of pilot:

Account No:

Signature:

Date:

This ticket is valid for 12 months. Please phone 01453 860342 to arrange your flight at the Gliding Club at Nympsfield, Nr Stroud, Gloucestershire. If you can't get here but would like to fly at another club, please ask the glider pilot to arrange this for you, or phone the British Gliding Association on 0116 2531051 for details of your nearest club.

To any Gliding Club Treasurer: Please allow the holder one flight and charge the launch costs to the pilot named above.

the criteria used by the Sports Council in assessing a sport's significance for funding purposes.

Contrary to Wally's impression, international success is one of the criteria used in allocating Lottery funds. In this respect, gliding should be well placed, with its record of international success. Unfortunately, the other criteria place us in a weaker position. They are: public perception of the importance of the sport (because public money is being spent); and the number and spread of countries competing internationally.

Compared with most sports receiving Lottery funding, gliding involves a relatively narrow range of competing countries and it does not fare well in public perception of its significance.

An additional factor which may be taken into account is the contribution to international standards, for example, in safety or technical matters. This may be an area to explore as a route to increased funding. Finally, Wally is quite right in advocating a high and more focused profile for competitive soaring, as this could help improve public understanding of our sport.

If more funds are to be brought into gliding, this is a task to be undertaken at every opportunity by all clubs and individual pilots as well as the BGA at national level.

**Diana King (Council Member, UK Sport), SOLIHULL, West Mids**

### Roadside recovery – latest news

Following my previous letter urging members to write to Green Flag regarding trailer restrictions, I am pleased to report that, according to a letter I have from SAGA, Green Flag appears now to have lifted the restriction on length. If you are over 50 you get a very good deal on membership or renewal if you give SAGA a call.

**Tony Challans, LASHAM, Hants**

*The terms and conditions of SAGA motor assistance provided by Green Flag are under review. Green Flag do not intend to cover glider trailers, they say – Ed*

Car and glider trailer recovery can be arranged through the RAC as follows. First join the Camping and Caravanning Club – call 01203 694995. Membership costs £27.50 (no joining fee if paying by credit card). You then get an RAC membership code. Telephone the RAC on 0800 581077, quote this code and choose the level of cover required. The plan number is DT0028. There is an extra £8 discount for leaving another scheme, and free spouse cover. Amongst the benefits of this "Arrival" membership are no limit on trailer length, and recovery from private property. Happy retrievals.

**Denis Campbell, HIGH WYCOMBE, Bucks**

*Steven Hopkins of Bromsgrove, adds that "membership of the Camping and Caravan club attracts an 18 per cent discount on RAC membership renewal" Angie Veitch, of Drumnadrochit, says: you can join the Horse Box and Trailers Association (01488 657651), which uses AA Truck Rescue. You/your trailer are rescued as you would be by AA Relay*

### School's out – gliders out?

One advantage of being a teacher is the holidays. At my club, though, most of the spring/autumn trips are outside school holidays (for obvious reasons). This can make it difficult to get a group together.

I was wondering whether there were any other teacher pilots who might like to swap details and plan a few trips to other sites to make better use of our time?

If so, you are very welcome to telephone me on 01273 480364 or email me at [wboxlyth@rmplc.co.uk](mailto:wboxlyth@rmplc.co.uk)

**Adrian Lyth, LEWES, East Sussex**

*Your letters are welcome. Please keep them as concise as possible and remember to include your contact details (address, telephone, fax and email if you have it).*

*Letters published do not necessarily represent the views of the British Gliding Association or of the Editor*

## Dates for your diary

### Vintage events:

May 27 - June 3: *Soaring Sortie*, Keevil contact David Shrimpton 01749 841084 or Al Stacey 01249 890077

June 3-4: *Whispering Wardrobes Rally*, Booker airfield contact: Graham Saw 01628 776173

June 24 - July 1: *Millennium Vintage & Classic Glider Rally*, Camphill Contact: Ian Dunkley: [vgc@datron.co.uk](mailto:vgc@datron.co.uk)

July 28 - August 6: *Vintage Glide 2000*, Tibenham Contact: Alan Harber 01953 860346

### Military and Civil Air Safety Day

June 1, RAF Leeming. This event aims to promote closer ties between general aviation and the RAF and focus on the shared use of the lower airspace. It is primarily aimed at those who operate in the Vale of York. To apply to attend, or for more information, fax the Project Officer, MCASD 2000, on: 0208 838 7617

### Deadline for Air League awards

Flying Scholarships are awarded to young British men or women aged 17-22 on June 30, the deadline for receipt of applications. Winners will be awarded 15 hours of power flying instruction to be flown during 2000. For more information, see [www.airleague.co.uk](http://www.airleague.co.uk) or phone 0207 222 8463 for an application form.

### See Shelly Dawson on *Blind Date*

Shelly, a Juniors pilot who flies at Bannerdown GC, is meant to be featuring on the popular ITV show on April 15, with a follow-up appearance a week later.



# BGA Development News

## Cutting the risks your club faces



Representatives of 35 clubs went to the second Chairmen's Conference to learn more about protecting their clubs, assets and members from a range of risks

THE AIM of the day, at Husbands Bosworth in January, was to inspire chairman to improve the health of their clubs, where this was needed, and to give them a forum within which to share their experiences of the issues they face.

The programme focused on risk management strategies and was brought to life by a case study of Anoractica GC. This imaginary club – at least, the delegates hoped it was imaginary – faced a number of interesting management challenges: from an airprox report, on a day when the club had no permission to operate, to an ageing instructor base and a Club Secretary who hadn't responded to enforcement notices from the local authority's planning department. Throughout the day, groups of delegates (see picture) were asked to analyse the

club's situation, assess the risks it faced and plan a course of action for it.

Alongside this case study ran a full programme of speakers. Topics covered included: developing a risk management approach; managing people; Health and Safety; insurance, airspace, managing operations and managing external relations. David Roberts reminded the assembled club dignitaries that, as chairmen, secretaries and treasurers they were the officers most likely to be in the front line if anything went wrong. He recommended that the club committee regularly carry out a risk assessment and management plan, and offered guidance on how to do it.

At the end of the morning, Dick Dixon and David Roberts offered thoughts on the future of the BGA.

In the afternoon, there was a presenta-

tion about the Sport England Lottery Fund and one from Diana King on why trying to attract more women, disabled members and people from minority ethnic groups could help with recruitment problems as well as helping clubs to qualify for government funding.

*Clubs present were: Black Mountains, Borders, Buckminster, Burn, Cambridge, Cotswold, Derby & Lancs, Dukeries, East Sussex, Essex, Essex & Suffolk, Kent, Lasham, Lincolnshire, London, Manby, Midland, Needwood Forest, Newark & Notts, Oxford, Peterborough & Spalding, Portsmouth Naval, RAFGSA Bicester, Rattlesden, Shalbourne, Shropshire, Southdown, Staffordshire, Stratford on Avon, Surrey Hills, The Soaring Centre, Vale of White Horse, Welland, Wyvern, York and Yorkshire. Was your club there?*

## Your rating revaluation – revisited

WE ARE receiving reports of hefty increases in gliding clubs' Uniform Business Rates (UBR) as a result of increased Rateable Values, following the revaluation of their premises.

The Department of the Environment, Transport and the Regions (DETR) has published a free booklet, *Revaluation 2000*, giving a guide to the revaluation of business rates. Rateable Value (RV), in theory, equates to open market rent that a property or facility can command. If you think your club's RV has been increased unreasonably, you can appeal.

The immediate payment of increased UBR is sometimes offset or mitigated by

the application of a mechanism known as Transitional Relief. Although this might ease the blow in the early years following revaluation, the new demanded rate will eventually catch up.

**The UBR or non-domestic rate demand is calculated as follows:**

Rateable Value X Non-domestic multiplier (41.6%)	= Gross UBR
Less % discretionary or mandatory allowance	= Rate relief
	= Rate payable

Many gliding clubs have been successful in achieving 80 per cent or more discretionary allowance from local authorities. Some authorities, however, have refused discretionary rate relief altogether. Charities qualify automatically for 80 per cent mandatory relief.

The Central Council for Physical Recreation (CCPR) has made proposals to the Government for voluntary, non-profit-making organisations, such as sporting clubs (and including most gliding clubs) to qualify for the same rate of mandatory relief as registered charities. Support and lobbying for this change in legislation is probably the most profitable line of attack in attempting to

reduce UBRs to gliding clubs and the BGA Executive will be undertaking this. Meanwhile, we need to negotiate. If your club needs help to challenge your revaluation or appeal against an increased RV, please contact your BGA development officer.

**Roger Coote**



# A Rotax Falke for Faulkes?

**T**HE FAULKES Flying Foundation Ltd is a new venture to provide adventure training for youngsters in gliding to inspire them to consider a career in aviation or aeronautical engineering, or to develop a love of gliding.

The Foundation buys launches and accommodation from gliding clubs as required. Eventually, we plan to have a definite base at a BGA site, with regional centres. Our hardware is currently based on Blaniks, ideally suited to training young people as well as capable of being parked out of doors in all weathers. Our operations focus on aerotowing to give quality flying time, with motorgliders for nav exercises.

Because of this and our perceived need for our own launch capability, we decided to look at the new breed of aerotowing motorgliders; and, in particular, at the SF25C Rotax Falke.

For many years, I had a share in one of the original Falkes, at Nympsfield. I learned to value its many admirable qualities for training and pure fun. However, with a small three-bladed prop, a 1500cc Stamo engine and a 60kt cruise this was no performance machine. Careful application was required at take-off to clear the trees at the end of the field without scaring the wits out of the nesting birds. As you cleared the airfield boundary you did become acutely aware of the whites of their upturned eyes.

So I was considerably surprised when I test flew an SF25C Rotax Falke at Lasham to evaluate its suitability for the Foundation. The short (90m) take-off run meant we seemed airborne almost immediately; my instinctive reaction to keep the nose down so the airspeed could rise resulted in red-lining the engine and a protest from P1. We then climbed at an attitude I would have considered impossible for a Falke – more than 5m/s at 50kts (compared to a figure of 3.2m/s for the previous Limbach-powered Falke 2000). In the cruise, 80kts in level flight was easily achieved despite the fixed-pitch prpp.

Getting over my surprise, I began to suspect that the engine responsible must inevitably have compromised something. But to my delight, all the attributes I appreciate about the Falke – its glider-like handling, docile stall characteristics, and light controls – have been retained. Furthermore, the noise from the non turbo-charged 100hp Rotax 912S seemed more acceptable both inside and outside the cockpit than earlier variants.

The salesman explained the concept behind the new SF25C Rotax Falke: to

**Mike Woollard, Chairman of the BGA Technical Committee and Managing Director of The Faulkes Flying Foundation Ltd explains why he is considering buying one of the new SF25C Rotax Falke motorglider/tugs for this recently-formed youth organisation**



produce a simple, cost-effective motorglider which can also aerotow. The non turbo-charged Rotax 912S had therefore been selected, ideally used with a fixed-pitch propeller to avoid the extra cost, weight and complexity of a turbocharger and variable pitch mechanism (I gather a variable-pitch propeller is available, giving a higher cruise speed of c 97kts, albeit with impact on cost, complexity and cockpit loads).

## High power:weight ratio

The engine achieves its relatively high power: weight ratio from the higher engine speeds (up to 5,800rpm) which the use of a reduction gearbox allows. This means an engine weighing much the same as earlier VW variants can achieve many more horses. Water-cooled heads quieten the unit down while reducing cylinder head cracking problems.



*The comfortable, functional cockpit has more space than I remember. The redesigned panel is more sophisticated, and a removable cowling gives better access to instruments and wiring*

As a tug, the SF25C Rotax Falke seems to perform very well, climbing with heavy two-seaters at 400ft/min. This is marginally slower than, say, a Robin DR400, but this Falke uses only half as much fuel and the noise pollution is much less. In Germany, official analysis of comparative tug noise estimates a single tow in a Robin DR400 type tug equates to 4.8 tows in a SF25C Rotax Falke. Glider-tug speed compatibility, similar wing loadings and aspect ratios, and reduced wake turbulence, mean the motorglider aerotowing option offers significant safety features.

The manufacturer's fuel consumption figures are 16-18 litres (c 3.5 gallons) an hour – hardly thirsty for tugs. Taking into account all the costs of operating the Falke, including an engine rebuild every 2,000 hours, insurance, fuel and maintenance costs, a Falke is estimated by its makers to tow at about 60 per cent of the cost of today's conventional tugs.

The Falke I want has the fixed-pitch propeller and an undercarriage with a lockable castering tailwheel and two main wheels. This version weighs 650kg (compared to 610kg for the Limbach-powered version). Cockpit limits are 190kg (425lbs), ideal for us.

In my opinion, this new Falke retains all the functionality of before, with welcome added performance which allows for safe aerotowing. I love the simple functionality of this motorglider – its robust construction is so suitable for operation at typical BGA clubs and it can be easily derigged for trailer transport. It is ideal for the work of the Foundation and I can't wait until circumstances enable us to have one.

the white planes picture co.



# Reviews

## *Fit to Fly? video*

Produced by GASCo

£17.99 inc VAT from Transair Pilot Shop, Shoreham Airport, Shoreham-by-Sea BN43 5PA

SINCE the emergence of human factors awareness, the airline industry has significantly reduced its accident rate. During the same period, the rate of general aviation and gliding accidents has remained unchanged. Careful analysis shows that 80 per cent of these occur to perfectly serviceable aircraft – the pilots generate the problems.

The General Aviation Safety Council (GASCo) is a non-profit making UK organisation which aims to foster the safe development of general aviation through disseminating information. Some years ago it was recognised that there is a need to foster a culture in which all pilots are fully aware of the predominance of human factors in the causal chain of fatal accidents.

It's taken a lot of time and effort to produce, so how does *Fit to Fly?* – the new human factors awareness video – shape up in front of a gliding club audience? It begins with some pertinent



statistics and offers the right incentives to watch and listen. The first two stories are about power flying. If you ignore all the fiddling with throttles as thermals bump our hapless PPL holder around the sky, the various human factor aspects of the build-up to near-disaster are interesting to observe. All apply to any form of flying – perhaps more so in gliding than we are willing to consider. The

third story concerns an inexperienced glider pilot finding himself in a situation that neither his experience nor skill can deal with. Of course, the sight of all that GRP wheeling around in blue thermals over a sun-baked gliding field perked up the glider pilot audience I was watching the video with, but again the lessons applied just as much to the powered fraternity. All three stories link to the concept of pilots adopting a human factors checklist, addressing the pilot, the aircraft, the environment and the operation.

This video runs for 50 minutes – twice most people's attention span – and watched in one session can, to be frank, become a bore, losing much of its impact. However, used correctly as part of a facilitated training or briefing session, the information can be much more easily and permanently absorbed.

This video is a 'must see' for pilots of all experience levels.  
**Pete Stratten**



## *The Platypus Papers: Fifty years of powerless pilotage*

by Michael Bird

£19.95 plus £3.50 p&p (UK/Eire), from Hikoki, 16 Newport Rd, Aldershot, Surrey GU12 4PB, phone 01252 319 935 or e-mail hikoki@dircon.co.uk

FEW PEOPLE read every article in a magazine; they pick the contributions that interest or amuse them. But I bet that every reader of *S&G* invariably reads *Tail Feathers*. Now we are no longer rationed to one treat every two months, or to scrabbling through back issues to find some much-loved piece. It is all here in a compelling mixture of gliding stories, lore, humour, philosophy and nostalgia. *Platypus'* vignettes range over the entire gliding scene and little escapes his observant but kindly eye.

## *Exploring the Monster – Mountain Lee Waves:*

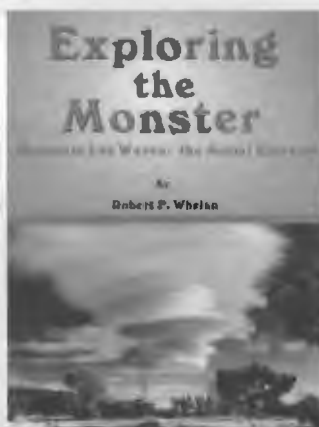
*the Aerial Elevator*, by Robert F. Whelan

\$24.95 plus US \$3.00 p&p from Wind Canyon Books Inc, PO Box 1445, Niceville, FL 32588 - 1445 or www.windcanyon.com

ON APRIL 25, 1955 Larry Edgar flew a Pratt-Read glider from Bishop, California to an altitude of 39,400ft during one of the final flights of the Jet Stream Project. This altitude seems remarkable by any standard, but was almost routine for this project and the earlier Sierra Wave Project. The end of this flight, however, was anything but routine.

Despite its general-sounding title, Robert Whelan's book is really a detailed and fascinating history of the Sierra Wave Project (1951-52) and the Jet Stream Project (1955). Both were intended to examine the effects of winds in the high terrain of California's Sierra Nevada mountains and Owens Valley, and each produced a series of spectacular wave flights. It is easy to overlook how remarkable this flying was. In the late 1940s wave flying was poorly understood and rarely attempted. Yet a small group of pilots from southern California quickly taught themselves how to fly in rotor and wave now known to be among the strongest anywhere in the world, to altitudes rarely matched even by military aircraft.

This book is well timed. The flying is now nearly 50 years in the



past; increasingly few of the participants are able to tell their stories.

The author's research included interviews with nearly all the participants still alive. Among them was Bill Ivans, whose 1950 world altitude record of 42,100ft demonstrated the possibilities of the Sierra wave. Sadly, Bill was killed in a crash at Minden, Nevada, in 1999.

Beyond the slightly misleading title, a few other weaknesses are notable. Though the book is not exclusively aimed at those with knowledge of waves, there is no basic explanation or diagram of the structure and mechanics of a mountain wave. The book contains some interesting flight accounts, but no maps to give meaning to the place names that are used.

Larry Edgar's flight ended in a violent reminder that experience and skill are not always sufficient. His glider was broken into three pieces by a vertical gust that produced an impact near 20g. Mr. Edgar was seriously injured and partially blinded, but managed to bail out and survive a harrowing parachute ride and landing. The pictures of the mangled glider are memorable.

This book does a good job of describing the people and events that led to this flying and includes some detailed accounts of the flights themselves. It should interest any pilot who has had even a brief encounter with wave.

**John Good**



The real delight is that the variety of subject matter is matched by the variety of the writing. Platypus is witty, erudite, wise, sometimes lyrical, occasionally tender, but, above all, he is funny and at times hilarious. I read some of this on the train, on my way to London for a business meeting. I got to Platypus' visit to the chemist for assorted gliding and aeromodelling supplies and started to chuckle. A few pages later I came to the aliens' view of a grid squat and the chuckle became a chortle. The other pinstripes edged away nervously. Do not read this book in public unless you do not mind making an exhibition of yourself!

Platypus' observations ring true because they are rooted in his deep knowledge of the sport. The other thing that shines through is love – love for his late wife, Veronica (whose contributions are every bit as entertaining as his own) and deep affection for the activity that has captivated him for so long.

David Allison

### ***I Learned to Fly for Hitler***

by Joe Volmar

Kron Publications

£10.80 inc p&p from the BGA

THIS self-published book tells a unique, fascinating story. Glider pilot Joe Volmar, now a joint American/German citizen, returned to Germany from the USA in 1941, aged 14. Joining the Hitler Youth, he learned to build and fly primary gliders, going solo at 15.

He then became a soldier at an anti-aircraft battery: schoolboy in the morning, gunner in the afternoon, air raids at night – and punishment camp if you fell asleep on duty.

As Germany faltered, Joe (then Jochen) opted for training in the the Habicht – an aerobatic sailplane which was fitted with prismatic gunsights. This prepared pilots for the Luftwaffe's remarkable but risky rocket-powered fighter, the ME163 Komet. "I have often thanked my lucky stars that the war ended before I got this far," he says. Finally, when the front line reached his training camp, he became an infantryman facing advancing Russian troops.

The book is set against Germany's experience of initial success and final collapse. If you're interested in history – of gliding or of World War Two – you won't be able to put it down. I couldn't.

Helen Evans





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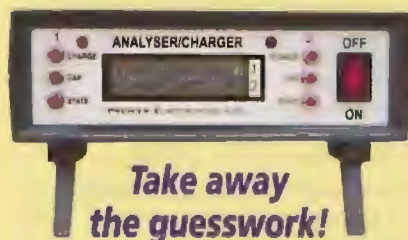


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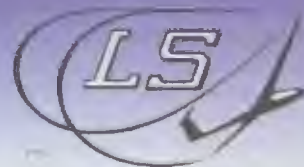
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temporary hospitalisation**

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**We shall be closed from Monday April 17th until Wednesday April 26th**

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# BGA Conference 2000



A varied programme of speakers and the prospect of an evening's fun attracted pilots to a highly successful conference and dinner dance. At the AGM, Dick Dixon handed over to David Roberts

## You have control

**S**OARING pilots attending the BGA AGM, Dinner and Conference on February 26 saw the month continue its remarkable run of good flying weekends with yet another day of fair-weather cu.

It left them wondering whether the plaintive plea from the platform for the return of the BGA Duo Discus main pin was a genuine request – or merely a ploy to stop frustrated pilots hijacking it from the static display. At least the conference hall itself had no windows...

The day – in Hinckley, Leicestershire – began with a session on how S&G should respond to the internet; delegates filled in a questionnaire on the subject (*please ask the Editor if you'd like one*). Next, Brian Spreckley fascinated the audience with an account of the World Air Games, to be held in Andalucía, Spain, in 2001 and of a 3-D gliding project which aims to bring the thrill of racing to the public.

By now, there was standing room only in the hall. Andy Davis, a British Team coach, led a discussion about BGA-funded team training. Gill and Brian Spreckley, Martyn Wells, Al Kay and Jay Rebbeck joined him on the platform to describe how the money is spent and what benefits come from it. All were convinced that it led directly to the recent outstanding successes of the women's team in Europe and the juniors in the Junior Worlds.

After lunch came the AGM, which began with a few moments' silence in memory of Bill Scull. The appointment of Jim Hammerton as the BGA's new Chief Technical Officer was announced, as was the formation of two new sub-committees arising out of the Project 2000 task forces: Marketing and Communications, and Strategic Planning and Finance. The result of the ballot for the election of



*Dick Dixon (seen on the left of the photograph) has been the BGA Chairman for the past four years. He retired at the AGM, entrusting the direction of the BGA to David Roberts (right), a Cotswold GC pilot who was previously BGA Vice Chairman. Dick, who hopes to have more time to glide as well as to spend with his wife, Mary, was presented with a carriage clock by David*



*Members of the BGA Executive able to attend the AGM (from left): John Glossop, Claire Thorne, Mike Jordy, Terry Slater, Keith Mansell, Barry Rolfe, Malcolm Sanderson and David Roberts*





*The new Spitfire Trophy went to Junior Ladder winner Peter Masson, right. Left, Chairman's wife Gilly Roberts presents the De Havilland trophy to Sue Heard (far left). Other cup winners were: Richard Smith (Wakefield); John Bridge (Furlong, Enigma); Sarah Harland (California in England, Frank Foster); Tim Macfadyen (Volk, Firth Vickers); Richard Baker (Seager); Peter Harvey (Maniot); Leigh Wells (Rex Pilcher); Dave Allison, Owain Walters (Goldeborough); Mike Jefferyes (John Hands); Roy Pentecost (L DuGarde Peach); and Paul Crabb (Slingsby)*



Executive Committee members was given: Mike Jordy, Keith Mansell, Malcolm Sanderson, Terry Slater and Claire Thorne joined Lemmy Tanner, John Glossop, Dave Salmon, Richard Yerburch, Ron Armitage and David Roberts. Dick Dixon handed over the chairmanship to David Roberts. BGA Diplomas went to Dick Cole, Peter Manley, John Patchett and Ivor Shattock.

Then came an awe-inspiring talk from Richard Noble OBE about Thrust SSC,

Over the next two issues *S&G* will be printing photographs of BGA Executive Committee members so that you know who to question, blame, or praise.

We start with two newcomers to the Executive, elected this year by clubs. They are (right) Claire Thorne and (below) Malcolm Sanderson. Claire is known to many as the volunteer who organises the AGM and



Conference. She is a member of Oxford GC; her fiancée, Cris Emson, is its CFI. Malcolm Sanderson (left) began gliding more than 40 years ago, aged 13, at the Newcastle Gliding Club. He is now Vice Chairman of Borders GC at Milfield.



the first supersonic land vehicle, and a thought-provoking session about the K-21 lightning strike by Peter Claiden. At the dinner – packed to its capacity of 250 – BGA trophies were awarded, including a new one given by Leigh and Marilyn Hood, made from a Spitfire propeller blade (see top of page). A watch was given to Dick Stratton, soon to retire as technical officer. Finally, the BGA's man in Parliament, Lembit Opik MP, exploited his talent for stand-up comedy to round off the formal proceedings.

## Prize pilots going places



FOUR LUCKY pilots were presented at the conference with a chance to extend their cross-country flying. They were all winners of awards from the Ted Lysakowski Memorial Trust. British Team Coach Andy Davis explained that the Trust aims to give any pilot with potential the opportunity to develop cross-country soaring skills. He urged delegates to spread the word at their clubs: application forms would be out in June and needed returning to the grants committee, chaired by George Metcalfe, by October. Ted's daughter, Karen Lysakowska, then presented the awards for 2000. Lasham member George Dadd (seen above, left, with Karen) won a five day cross-country course. A week's competition experience at Lasham Regionals will be shared between Welland GC's Michael Burrows (below, right) and the same club's new CFI, Nigel Perry (below centre). David Wardrop (below, left) won a prize which Andy Davis admitted he himself would like: a week's mountain-flying course at Rieti in Italy. David, now at Lasham, was previously a member of Yorkshire and Shenington GCs.





# Practice makes...



Double World Champion and US Team Coach George Moffat explains how to practise to improve your competition performance

**G**IVEN our 'druthers\*, most of us fly during the best three or four hours of really great days, with – in the US – reliable 6kts-plus thermals, 8,000ft bases (5kts-plus and 5,000ft bases in Britain) and lots of good-looking cu, preferably streeting. Fun? You bet! and it makes for great stories at the bar. Practice? No. Not the kind that wins major competitions, anyway.

So how do we practise – meaningfully? Four areas need attention: diagnosis; goal setting; techniques; and psychology.

## Diagnosis

Use a diagnostic chart covering all areas of contest flying, similar to the survey opposite, taken from a much longer one used by the US Team. Look realistically at your strengths and weaknesses:

- a) Try to spot patterns in your flying. Do you never have any 'luck' on weak days, POST days, or ...?
- b) Consider the locale of the upcoming contest. Flying in flatlands won't help for mountain competitions.

## Goal setting

- a) Be specific: for instance, improve weak weather thermalling.
- b) Evaluate potential gains. Put high-gain or frequently-encountered problems first.
- c) Set priorities (usually not more than three at a time).
- d) Design a practice scenario which can make use of strong, medium and weak weather.
- e) Evaluate progress monthly.

\*American slang for "I'd rather..."

Americans who do most of their flying around Hobbs or Minden can be at a serious disadvantage when it comes to the kind of practice which wins the big ones. How do I know? Of 22 World Championships in which the US has flown, Americans have come first five times. If you add seconds and thirds, nine pilots have finished in the top three 12 times. Not one of these has come from west of the Mississippi. The majority have come from within a couple of hundred miles of New York, with its short seasons of iffy flying weather. How come? Anyone who has flown against Western pilots such as Ray Gimmey, the only person ever to win the US Nationals in all four classes, knows how good the Westerners can be. Why haven't they won in the Worlds, even when they have been held in Hobbs, Australia and Uvalde? Too little flying on the weak and uncertain days that are often the only game in town for Easterners?



Adrian Hobbs

## Techniques

- a) Keep a log of cross-country and contest flights, noting especially your problem areas. You might use a tape recorder. If so, transcribe your recordings.
- b) Fly maximum-effort cross-countries with pre-selected TPs, preferably against competition.
- c) Practise weak weather flying short, as-many-times-as-possible, triangles.
- d) In survival-level weather practise: thermalling, especially getting past others; and very short tasks, putting the airfield in the centre of a triangle with five-mile legs.
- e) If you are in a predominantly strong area: fly in the morning as soon as it's sustainable; set an arbitrary upper height band limit of 3,000ft-4,000ft (say 1,500ft-2,500ft in Britain) to increase use

of thermals; or take off at 17:00hrs and fly a task as late as possible – excellent weak weather practice.

- f) At the end of the day do at least a 30km final glide to finish exactly 1,000ft above the airfield. Practise getting back up. Stop at 2,000ft, pull brakes and drop back to 1,000ft and find another thermal. Great for low-save confidence.
- g) Push the envelope. If you don't land out at least once or twice a season, you aren't trying hard enough.
- h) If possible, get some dual with a better pilot, but it must be in a Grob or better, preferably a Nimbus 3D or ASH 25.
- i) Transitions are where the money is: how long does it take you to get centred in a thermal? How decisive are you about leaving it? Count up the number of transitions in a 300km flight. What if you gained 15 seconds on each one?



# Diagnostic questionnaire for competition pilots

## Practice techniques

1 Number of cross-country flights normally flown before the first big contest of the year (not counting flights of under 100km)

2 Typical length of flights in kilometres/hours

3 Are flights normally races against other pilots? Yes/No

4 Area in which you usually train:

5 Specific problem areas you have worked on (eg, weak weather flying, starts, final glides) and the techniques used?

## Contest techniques

In the following questions, assess yourself as compared to the three best pilots you normally fly against, rating major strengths as 1 and weaknesses as 5

1 Do you make good use of the time between launch and start? 1 2 3 4 5  
– techniques used?

2 Thermalling: overall, is this a strength or a weakness? 1 2 3 4 5  
a) Entering and centring ability? 1 2 3 4 5  
– techniques used?

b) Using other ships in thermals? 1 2 3 4 5



*Exercising your mind before you fly will help you make the most of your practice flights – use this questionnaire to identify weaknesses*

c) Relative comfort in crowded thermals (do you feel you will gain or lose in these)? 1 2 3 4 5  
d) Ability to thermal automatically while planning inter-thermal moves? 1 2 3 4 5

e) Decisiveness leaving thermals 1 2 3 4 5

3 Inter-thermal flying: overall, is this a strength or a weakness? 1 2 3 4 5

a) Use of clouds 1 2 3 4 5  
b) Use of gaggles 1 2 3 4 5  
c) Use of streets 1 2 3 4 5  
– recognition/use of dry streets 1 2 3 4 5  
d) Confidence and effectiveness in ridge flying 1 2 3 4 5  
e) Confidence/effectiveness in mountain flying 1 2 3 4 5  
f) Effectiveness in dolphin flying (badly done, it works in reverse) 1 2 3 4 5  
g) Recognition/effective use of operating altitude band 1 2 3 4 5  
h) Other special abilities in inter-thermal flying? (specify) 1 2 3 4 5

## Weather preferences

Which sorts of weather make you feel most or least confident relative to other good

pilots? Assume it's the last two days of a major contest, and you are 50 points away from first place. You would feel the most confident (1) or least confident (5) of gaining the needed points in which of the following conditions, and to what degree?

a) Strong (6kts+) thermals, cu and streeting 1 2 3 4 5  
b) Strong thermals, scattered cu 1 2 3 4 5  
c) Strong thermals, blue 1 2 3 4 5  
d) Mod thermals with streeting 1 2 3 4 5  
e) Mod thermals, scattered cu 1 2 3 4 5  
f) Mod thermals, blue 1 2 3 4 5  
g) Weak (under 1.5kts) with cu 1 2 3 4 5  
h) Weak, blue 1 2 3 4 5  
i) Extensive ridge flying opportunities 1 2 3 4 5  
j) Extensive wave flying opportunities 1 2 3 4 5  
k) Mountainous terrain 1 2 3 4 5  
l) Hilly terrain 1 2 3 4 5  
m) Plains 1 2 3 4 5  
n) Other (specify)..... 1 2 3 4 5  
o) POST task 1 2 3 4 5  
p) Speed task 1 2 3 4 5

## Attitude/psychological preparedness

1 General optimism in contests? (there are those that go out to get, and those who go out to get got) 1 2 3 4 5

2 Speed with which you recover, in terms of attitude, from low saves, near misses, tight situations 1 2 3 4 5

3 Ability to recover from a bad day 1 2 3 4 5

4 Ability to feel at home in strange countries, areas or weather 1 2 3 4 5

5 List the three most helpful sports psychology books you have read with brief notes on why/how you found them effective:

a) .....  
b) .....  
c) .....

## Psychology

Most sailplane pilots are hardware-oriented: interested in the latest computer, vario or nav device. Actually, if skills are reasonable, the key to success is mostly psychological:

a) Seligman's book *Learned Optimism* demonstrates conclusively that the single most vital element to success in many different fields is a positive attitude.  
b) Note the pattern of those who have won multiple Worlds: Helmut Reichmann, George Lee, Ingo Renner. Most lasted under ten years. Skills remain, but obsessive energy burns out, the conviction of being the absolute best.  
c) The ability to retain a positive, racer's attitude despite the ups and downs that

go with soaring; to keep your mind on the whole game plan and not to be derailed by bad breaks, bad days, bad contests; to recover instantly from setbacks.

d) The home court advantage and how to compensate for it: fly in as many different areas and contests as possible.

US pilots are at a disadvantage from flying in too few, too strong and too similar areas. Many have worn a groove in the Minden-Hobbs-Uvalde circuit and get demoralised in areas with strange countryside and different problems.

e) Sports psychology is the area offering the biggest breakthroughs. Many excellent pilots get in their own way in big contests or in different cultures ... as in the Worlds. We all have "on" and "off" days and sports psychology can help to

eliminate the negative.

f) Separate score sheet results from your own knowledge of how you did. Know and acknowledge that you can win with a mediocre flight and lose with an excellent one.

## Two final reasons to practise

a) Remember the flight I mentioned at the start: strong thermals, super streets? With all the practice, you'll do 100km more – won't that sound great at the bar!  
b) With all the thought, energy and time you'll have put into practising, you won't be able to STAND the idea of losing. So of course you'll win.

*Next issue: in the third and final article of the series, George Moffat writes about team flying in competitions*



# Tail Feathers

Platypus

## Up the creek without a paddock

IF I SAID to you there's a top soaring pilot living in New Zealand by the name of Wills you'd think I was talking of Justin Wills, whose farm is near the foot of Mount Cook. But Gavin Wills, Justin's half-cousin, is a mountain soaring pilot of amazing skill. His flights in the New Zealand January 1999 Nationals left me, as hapless (and useless, except as undroppable ballast) passenger in his Duo Discus, quite staggered at the untamed beauty of the landscape, which I viewed at much closer quarters than I normally care to, and at his skill in extracting updraughts from every crevice. He wrote for the New Zealand magazine *Gliding Kiwi* this account of a New Year's Eve adventure that I shall not forget. What is unique about this narrative is that Gavin was nowhere near the scene of the action at any time. From a few fragments of phone conversations and hearsay he has constructed a remarkably accurate picture of a near-disaster that was somehow averted. Over to Gavin:

*Platypus is a well-known and respected correspondent for the English magazine Sailplane & Gliding. During a recent flying visit to New Zealand he left a message on my cell phone. It was obviously important but it was so full of unanswered questions that I thought it might be fun to share around.*

*He and Justin Wills were enjoying a glider flight from Lake Manapouri in the south of the South Island back to Omarama. Justin was flying his immaculate Libelle and the Platypus was pair-flying in Justin's ASW 17. They went via the scenic route (as Justin was wont to describe it) which meant 250km of scraping along mountain ridges and over some of the most inhospitable valleys of the Southern Alps.*

*The cell phone message went like this... "Hello Gavin, I've landed in a little meadow by the lake at the bottom of Timaru Creek" I'm thinking – yikes, what are you doing there, mate? Timaru Creek is full of precipitous rock, forests and a long boulder-strewn valley floor. Glider pilots have spent many a drunken night debating how to deal with the awful consequences of getting low in Timaru Creek – does one land in the*

*rocks, the lake or the trees?*

*"I'm fine..."*

*"What about the glider, then?"*

*"... and I'm drinking beer with the Lake Hawea fire brigade."*

*What? Not a good move: it's New Year's Eve and 30km away from the glider!*

*And anyway how did they get the fire engine up the track beside the lake and who the Hell called them out?*

*"Do you have Gillian's cell phone number?"*

*"No. But where is Justin?"*

*"Please let her know that I'm not with glider but I'm at the fire station."*

*"OK, but where's Justin?"*

*"Thanks a lot, see you later."*

*So I called Gillian at home but there was no reply and it was not until the next day that*

*the story began to unfold.*

*The Platypus had lost radio contact with Justin, his pair-flying guide, at about the time they entered Timaru Creek. Whilst trying to establish radio contact and with Justin circling overhead, presumably with his head out the window trying to shout instructions, the*

*Platypus descended inexorably into airspace hitherto unexplored by glider pilots – the terrifying canyon of Timaru Creek. The GPS trace subsequently showed that he was below about 500ft above ground for 15 mins before he exited the valley at 250ft heading for Lake Hawea. Whilst he was preparing for a water landing, the "little meadow" apparently popped on to glide slope from amongst the trees and the Platypus gratefully ground-looped to a stop. He landed without damage.*

*And what about the fire brigade? Justin, ever mindful of his responsibilities, had called an emergency via the local gliding frequency and the Lake Hawea Fire Brigade took off up the lake. But what they are still puzzled about is how and why they were called to a crash site*

*15 minutes before it never happened! The meadow is clearly an important place that should pass into local gliding legend. It should be known as the Platypus Patch, and, because he solved the debate of what to*

*do when one gets low in that inhospitable canyon, all South Island glider pilots should be forever grateful to the Man from Timaru Creek!*

Platypus insists on having the last few hundred words: I'm bristling somewhat at the suggestion that I wilfully chose to abandon the glider and goof off to some party 30km away.

Within minutes of my arrival the police, ambulance and fire brigade, in that order, all turned up on the unmetalled road that came reasonably near the clump of grass I'd landed on – meadow is far too grand a term. After I had photographed the ambulance ladies and the fire engine and all who sailed in her, the cop car whisked me away to the fire station to try to communicate with my friends at Omarama. Here the firemen insisted, against my protestations, that I was in shock from my ordeal and needed a stiff brandy or two. This diagnosis licensed an instant emergency raid on the medicine chest.

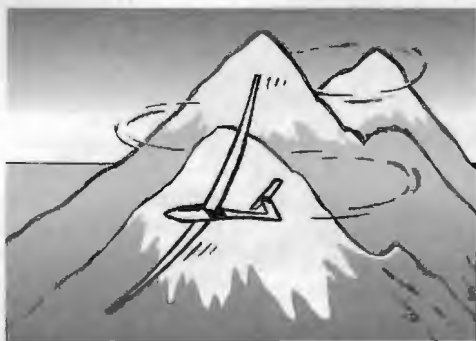
Trauma is clearly contagious, because several of the off-duty volunteer firemen decided that they might be in shock, too. Since it was New Year's Eve, wives and girlfriends began to arrive and it became pretty gregarious.

After some hours waiting patiently by the phone, I eventually said that I had better head back towards the glider since dusk was approaching and I had no idea where anyone was. A police car came and fetched me, and had gone about a kilometre when to my astonishment I saw Gillian and Justin Wills in their Holden station wagon, with trailer – and smiling! Apparently Justin had seen me hit the ground and knew exactly where I was, and soared home. A four-wheel drive vehicle and a large band of strong men supplemented the Wills team, and all had gone straight to the spot, found the glider quite unharmed (to general astonishment), and derigged it without any interference from me. Then the

strong men headed back to Omarama to resume their interrupted New Year's Eve party on the site, and Gillian and Justin headed for the Lake Hawea town, where we joyously met.

I walked carefully and thoughtfully over that patch of ground two weeks

later when on a motoring tour of the South Island. I would not accept £3,000 in hard currency to do that landing again, even after having the advantage of inspecting every hummock, hillock,



A mountain soaring pilot of amazing skill

### LAKE HAWEA FIRE SERV



Trauma is clearly contagious







... if I did not meet a certain foolish deadline

gully, rabbit hole, tree and bush close up. Well, not if the other side of the bet was that I paid for any damage to the glider or myself.

## Beau Peste

Some kind, anonymous person has sent me via the Editor a two-page promotional leaflet for the French Foreign Legion, which, you may remember, I sort of promised to join if I did not meet a certain foolish deadline, the precise date of which I have, in the best traditions of the Legion, totally forgotten.

The minor misspellings make me sure the document is genuine, or at least genuinely French.

The minimum stint is five years, though another paragraph says ominously, "enlistement is permanent". I think that means you can't change your mind once they have your signature or thumb-print. Or you can change your mind as much as you like, but it'll make no difference. Just don't get drunk in Marseilles and wander into a recruitment centre at 3am for a jolly jape. They are open all hours, no doubt netting quite a few strapping young fellows before breakfast.

"- knowledge of french is not required. It will be acquired throughout the contract" (I bet it will!)

## Le plumer de ma tante est dans la Legion

If you think you may soon tire of bayoneting crazed Dervishes or throwing hand-grenades at hordes of besieging Tuareg tribesmen, you can qualify as "secretary, typist, accountant, electricien, carpainter, plumer, musician, cook, printer or cartoon designer"

However, such accomplishments are no easy dodge, but are extra skills, employed "while remaining a combat soldier". So keep the bayonet and grenades handy. I am delighted that they need cartoonists. Peter Fuller can join me if his illustrations aren't ready in time. For myself, I am a reasonable musician, but painting cars sounds fun, too. A *plumer* is obviously someone who

feathers, as in tarring and feathering – or is it to do with rowing a boat? Or maybe it is to do with plucking birds in the cook-house. They all sound pretty easy numbers.

Who was the kind person who found and sent the Editor the leaflet? Why anonymous? You may well ask. I now darkly suspect the Editor herself. After only a couple of issues the stress of working with this cranky columnist is beginning to tell.

## Self-starting mechanism

A few days ago I told Jill Burry that by announcing the publication date of my book long before it was completed, I had deliberately chosen to risk being publicly humiliated. The horror of that fate would motivate me to get off my fat behind and finish the manuscript. Clever, eh?

Jill was quite unimpressed. "Come off it, Platypus, you've been humiliated umpteen times before, and it never makes any difference!" That's what friends are for, to stand ready with a bucket of ice-cold water when you look as if you are about to delude yourself on any subject.

Talking of fat behinds, I have lost 11 pounds in weight since my promise to lose 14 pounds by April Fool's Day, and a plain un-cushioned wooden chair feels



A reasonable musician

pretty hard now. That's a good sign. I should be able to get into my dinner jacket for the BGA Conference on February 26 without the fear of vile splitting noises – the sounds of people laughing behind my back.

## Grounded by a stiff rule

Apparently Viagra does strange things to one's eyeballs.

No, that's not a misprint. Colour vision may be impaired for quite a while after use.

The Netherlands Air Force is warning pilots not to fly within 12 hours of taking Viagra.

That's all very well, but what on earth is one supposed to do in those 12 hours?

# Platypieces

The Ed arbitrarily steals bits of Plat's new book, *The Platypus Papers*:

"FCBGA (Future Chairman, BGA): You're not going very fast.

P (Platypus): Will the P2 kindly confine his observations to those of a purely navigational nature.

Long Pause

FCBGA: Navigator's Report coming up. The village we are over now is the same village we were over half an hour ago."

"Some years ago the legendary Walter Neumark, one of the most creative minds in our sport, made a precise copy of the glider in which Percy Pilcher killed himself, and adhered as faithfully as possible to both the original location and means of winching himself up. The subsequent crash could have been a totally authentic replay of Pilcher's, except that such unauthentic modern aids as telephones and motor transport got Walter to the hospital quicker."

"The last World Championships was an education to me, as a backseat observer. The French team in particular – who conducted themselves with great gravity in the air and great levity on the ground – flew identical pairs of gliders as if tied together with invisible string, and talked incessantly to each other and their manager, giving their respective positions accurate to ten metres: *Ou etes-vous, Jean-Claude?*

*Pas de problème, Pierre, mon nez is right up votre derriere*

– and so on all day. The general rejoicing when, in spite of flying brilliantly in many weeks of practice, they failed to win anything was quite unseemly but understandable."

"Competition pilots seem to suffer from the four least attractive of the seven deadly sins – envy, avarice, anger and pride. (I quite like the other three myself: sloth and gluttony in particular, and, if I have the energy, a spot of lust.) If you asked a racing pilot as he stumbles blearily out of the cockpit after twelve days of speed flying: *Did you enjoy the flight?*

he would say:

*How do I know till I've seen the scoresheet?"*

"I am intrigued by the [accident] report: *collided with running cow*. What was wrong with just saying: *Hit cow?* Well, for a start, it would look un-British ... we are not the types to shoot at sitting pheasants out of season, or ram stationary browsing cattle with sailplanes, right in mid-cud, as it were. The other implication is that it was really all the cow's fault for running into the glider; had the ruminant beast's nerve not cracked, the whole fracas would have been avoided."



# Two up

**Julian Fack of Midland GC puts forward the case for small shares in big gliders**



**I**T ALL STARTED with the ASH 25. Until the mid-80s, two seaters were almost universally club gliders, used for training, but the ASH changed all that. It was big and expensive, but it performed as well as the best open class single-seaters of the time, and it attracted a new breed of syndicate.

I was fascinated by an advert in *S&G* which promoted single seater owners getting together to buy an ASH, and funding it by selling their own gliders. It suggested that they would enjoy better flying and learn from each other, and that running costs would be similar to before, since there would be more

## 'Enjoy better flying'

people to share them. Rigging would not be a problem since there would always be two people available.

Some years later, Andy Davis asked if I wanted a small share in a Duo Discus syndicate he was forming with his father at Nympsfield. This brought back memories of that advert, and since the Duo had had some rave reviews, I thought it worth a try. Andy assembled ten willing partners, and the glider duly arrived. The Duo (802) turned out to be just as lovely as Andy promised: easy to fly, easy to rig, and a surprising performer, given best L/D at about 44.

Having seen this syndicate work well for a couple of years, I floated the idea at my home club at Long Mynd, and was very surprised to receive nine suitable applicants within the month. We ordered a Duo and waited for two years (losing one of the nine members in the process).

Like 802, the Mynd Duo (494) was very popular right away, and racked up an amazing number of hours for a private aircraft. Naturally there is an element of wanting to play with "the new toy" but heavy usage keeps the hourly cost down: 494 cost syndicate members just £11/hour in its first year, including professional C of A charges.

It is often said that you should choose



## Gliding Art Gallery

These watercolours are by Stephen Nesser, Chief Flight Instructor for the Minnesota Soaring Club – which has a five-glider club fleet, one tow-plane, 100 members and a grass strip about 2,500ft long in the farm country just south of Minneapolis, USA. Stephen, who has a Silver badge gained in K-8s, has been an artist all his adult life. Having recently gone part-time, he hopes to do more painting. Above: K-21 leaving a dissipating cu at 5,000ft.

Above, right: first solo – cumulus maximus (Schweizer 2-33). Right: club K-7 in flight. "I have had hundreds of flights in the K-7 and developed a great fondness for it," says Stephen. Below: self portrait



Thanks to everyone who has sent in photos for *Gliding Gallery*. Pressure of space has prevented our using them this issue but the gallery should be back next time. Your photos are always welcome. To avoid disappointment, you might find it helpful to know that most digital photos still do not, sadly, reproduce well enough to use at a good size in *S&G*. Sorry!



# can be double the fun

syndicate partners even more carefully than a spouse, and in a big syndicate this is particularly important. It should be obvious that pilots who can only fly at weekends should not form the majority of the syndicate – though changes to working patterns are making this less of a problem.

The 494 syndicate varies from a very capable pre-Silver pilot, through Basic Instructors, to a couple of Full Cats. They are also mixed in their ambitions, from local soarers to wave enthusiasts and comp pilots, with a core of serious cross-country flyers.

What is interesting is how well the disparate members get on with each other, how they enjoy flying together, as well as flying with others. Less confident cross-country pilots can enjoy exciting flights in the company of more adventurous souls, and this applies to club members too (see *We paced the traffic on the motorways*, below) although syndicate rules and insurance considerations prevent training apart from syndicate members' advanced training.

Not every syndicate member was

the white planes picture co.



*Exciting dual flights in the company of the more adventurous*

originally cleared to fly P1, but this has not caused problems; currently only one remains restricted to P2. The Duo is big and heavy, carrying a lot of energy. It can be a bit intimidating in the circuit, so the less experienced members have not been too eager to take complete responsibility before they are ready.

To avoid friction over availability, we allow one nine-day week per partner to allow for a comp, or some wave or overseas flying, and we roster two pilots for every day in the soaring season. The advantage of this is that if a pilot who is not rostered on any particular day would like to fly, he only has to phone two others the night before, rather than the whole syndicate.

The Duo Discus is an expensive glider to buy, and a two-seater costs almost as much as two singles to equip, so it does make sense to spread those cost amongst a larger number of people. The capital costs for each of the eight 494 members were rather less than a typical quarter share in a modern standard class glider. A £35 monthly fee each covers all outgoings at present, which makes for cheap flying. ✈

## We paced the traffic on the motorways, cruising at 80kts

MY CHANCE for a flight in the Duo Discus, 494, came last year in early May. After a busy weekend tugging, Paul Stanley was in the bar, pondering a flight for Monday, even though visibility had deteriorated. On Monday the valley was wreathed in mist but the skies were blue above. Paul arrived at the last moment to claim his glider for the day. I helped him rig; it seemed to be me as P2. He decided on Lasham O/R. No time to look at a map. I was strapped into the back and we were off on aerotow. Amazing speed on the ground, those beautiful, gleaming wings curving up and we were skimming, white on green, behind the tug, and then we were airborne.

So we flew to Lasham and back. Five and a half hours of hard work and mostly silence except for the beeping of the vario, the constant radio chatter and Paul's swearing at thermals.

We went straight from the tow, climbing at Cleve Hill and the Malverns, struggling at Cheltenham, low onto the

Cotswold edge into the murk where there were more climbs, then off to Cirencester and Swindon, weaving and dolphining, sometimes circling. By now the almost aerobatic manoeuvres were making me sick. We paced the traffic on the motorways, cruising at 80kts. Incredible machine, she just went and went. In thermals Paul stood the Duo on her wingtip, finding 4kt averages,

**'Incredible machine – she just went and went'**

sometimes more. He simply rejected poor lift after a few seconds.

Lasham was busy, with gliders everywhere, then we left them behind and headed north, east of our outward track. Near Brize Norton, Paul said cheerfully: "We'll take a climb." In what? Weak lift here. He scratched, nothing, so flew on. Getting low at the Cotswolds he again abandoned the weak climb and headed for the only cloud that looked possible, which worked. He

turned one of the murky climbs into an actual cloud climb up into a cooler, clearer grey. Glorious to burst out without warning, cruising among the clouds. We might get home, or make Shobdon?

He worked us towards the Long Mynd, again leaving the poor lift. We didn't need much more height. Up past Ludlow, dumping water. The Mynd, now visible, looked impossible. He flew towards it, in nothing. We wouldn't make it. Almost blue sky, the clouds gone, and the landscape was rising up around us. Then he circled, and there was Wenlock Edge, the trees close beneath.

Gradually, so slowly, we climbed away from the glider in the field below. The altimeter crept to Mynd height, and above it. Then we lost the thermal. "Wind shear," Paul answered himself, moved and reconnected with the precious one up. Which got us home, complete with racing finish, in time for tea.

**Ann Parry**



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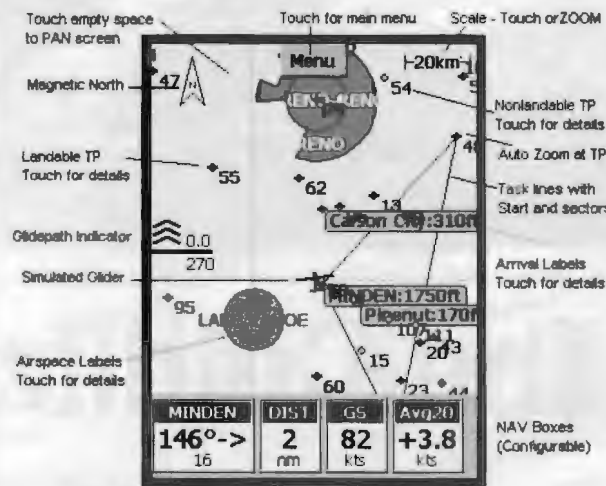




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the white planes picture co.



The glider is checked over before filming by Windfall Films/Channel 4

Mike Fripp, whose family's firm built the replica, leads the glider out

**For 56 years people wondered if the glider built in secret by PoWs would really have flown – Derek Piggott was the first to try**

**T**HE BUILDING of the Colditz Cock replica for the Channel 4 series *Escape from Colditz* seems to have been almost as secretive as the construction of the original. Although the replica was made mainly at Lasham by Southdown Aero Services, the first I heard of it was when Mike Fripp phoned to ask if I could make the initial test flights in three days' time at Kestrel GC, Odiham. Who could refuse such an opportunity? Certainly not me, and I quickly re-organised things to be free.

Odiham is, of course, an active RAF base, so armed with a passport to make sure of being allowed in, I arrived at the guardroom just behind an open trailer with the fuselage of the Cock perched on top. It looked very smart, but also very unusual in its blue and white checked covering. Close examination showed that it really was covered in patterned cotton fabric, like the original.

My immediate reaction was to suggest

that it needed some "dirtying down" before filming as it looked too beautiful. The whole aircraft is covered in the same material, a great change after so many all-white glass machines.

Rigging took some time; meanwhile I had been to the launchpoint to check the wind direction. Whereas Kestrel's K-21

**'CB SIFT CBE seemed rather a joke, with just stick and rudder'**

was making light work of the 90-degree crosswind, it was obvious that certainly for the first flights we would have to move the winch and go into wind. The CFI was happy to hold up launching to let us to get off as soon as we were ready.

Climbing into the cockpit, like many of the early vintage machines, required some dexterity and care not to go through the floor. An ASI, altimeter and pitot tube had been added to the original design. I was surprised as I had

expected no instruments apart from a yaw string. I borrowed a nice warm helmet and used my old filming goggles: there is no windscreen and it promised to be a draughty cockpit. CB SIFT CBE seemed rather a joke with little except the basic stick, rudder and cable release.

My first intention was to make a low hop to try out the controls before trying a circuit on the second flight. However, the ground was slightly downhill to the winch and with no airbrakes I was apprehensive of floating down the slope and into the far boundary. So I told the winch driver that I might well decide to go for a circuit rather than a hop and that he should not cut me off thinking that I was getting too high to get down easily.

Although the Colditz Cock has the release hook in the nose, the fuselage is short and the wing fairly high, so I thought it should get a reasonable height without much bucking. The winch driver

# How the Colditz



*"It would have been flown by the seat of the pants, the wind in your eyes..."*

*... and by praying," says Jack Best, a prospective ab-initio at Colditz*





Cable on as John Lee prepares to be filmed for C4's *Escape from Colditz*



Winching was tamer than launching in darkness from Colditz Castle roof

# glider finally flew

was excellent and gave me a quick take-off and absolutely steady 50kts all the way up. Just after leaving the ground I checked the aileron and elevator control and, as it all seemed normal, carried on to the top, about 650ft.

It is a long time since I flew a Kirby Cadet and I had anticipated having to

**'The aircraft showed no signs of wanting to come down'**

turn 180 straight away to ensure having enough height to get all the way back for a landing close to the launchpoint. In a Primary this is seldom possible and you either have to turn in very early or land downwind. The aircraft showed no signs of wanting to come down and I made several circles, checked the stall and

sideslip before making a slipping approach. Even then it floated on and on down the slope before finally wanting to land.

On the second flight, I got a little higher, again looked at the stall and also dived it to just over 55kts IAS. The stalling speed was a mere 20-22kts, an obvious under-reading because of the cockpit static. So circling at 30-35kts seemed about right. Although it could obviously do with a much larger rudder, a quick reversal of the turn did not result in much residual adverse yaw.

I thoroughly enjoyed the flights and am sure that if the original launch had been successful, the two lucky occupants would have gone quite a long way before their inevitable landing – and their chance of freedom.

Right: How John Lee built the wings and flew it for filming. Overleaf: making the rest of it, and how PoWs set up wartime Germany's only British glider-manufacturing enterprise

Bill with his drawings, Jack and his tools – then it's over to me

YOU DON'T get many offers to build Colditz Cocks, but I had designed, built and flown similar-sized machines before: two Hutter 17s, and a Penrose Pegasus. When Mike Fripp asked if I'd join the team, I was hardly likely to say no. I took on the wings, and built them in the front passage of my house. It was cold, it wasn't easy, we had a deadline. It never is easy. Nobody knows unless they try it.

I was born in December 1944, right after the original Colditz glider had been completed. My uncle had been one of the early lost Blenheim Boys. Bill Manuel, whose rudder design was used for the Colditz Cock, was a close friend of mine.

Having looked at the plans, I thought: this should fly all right. That's just what I told Bill Goldfinch.

I cleared the workshop of 463, ordered some material, and got down to some serious work, often 18 hours a day. There were just two drawings; mostly I used >



*'The way it flew was unbelievable,' said Jack, as the replica landed*



*Jack Best (right) and Bill Goldfinch watch their brainchild – 56 years on*



Being towed out by a German VW Passat...

➤ one. You had to think laterally ... Jack Best brought his original Colditz-made tools and we again proved they worked.

Time was running out; there was a penalty clause. I worked harder and harder, right to the last day. It was finished on time. With good co-operation all round, the various bits were fitted together and inspected.

Off we trailed to Odiham, where Derek Piggott had been brought in for a test flight. He walked around the machine a couple of times, muttering "huh"; climbed in; pulled down his goggles (slightly tinted); gave a casual wave; and shot straight into the air, climbing to 600ft, leaving me gasping audibly into the video thing. We were all still gasping for air when he landed, right in front of us. What an example to follow! Somehow I survived it, six times altogether.

People ask: "How does it fly?" I tend to say: "By attachment to a 350hp winch..." What else can one say? It flies as well as a Hutter 17 and could be soared in thermals for several hours, if you like that sort of thing. It would be a bad idea to spin it, and you need a little extra speed to get it turning.

This was surely the hardest I ever worked – and the greatest privilege.

John Lee

Next issue: John's plans to build a Fafnir



Non-original features included a skid (with tennis ball shock absorbers), altimeter, ASI and yaw string – none of which would have been much use on a one-off night-time flight

S&G's thanks to: all writers, Bob Bickers, Simon Boyden, Adrian Hobbs, Neil Lawson, Marc Morley, Ann Welch, and Chris Wick

# A replica in six weeks

**B**OTH MY brother Mark and I grew up in an environment of aircraft and gliders. Our father Mike, grandfather Ken and Uncle Max were involved in film productions, including the *Magnificent Men in their Flying Machines*, *Blue Max* and the Cayley glider, which was for Anglia TV and for *On The Wing*.

Therefore, the challenge we were faced with when asked to make the Colditz Cock was just that – a challenge. In six weeks, we reproduced it to the exact aerodynamic specification as the original, constructed 56 years ago.

The original drawings were passed to us here at Southdown Aero Services. We decided to take it on, asking John Lee to construct the wings.

All components had to be lofted out full size before construction could begin, this then commenced with the fuselage structure using Baltic pine. Wing profiles Clark Y H were downloaded from the internet. About two weeks after starting, all appeared to be going well, with our first filming date imminent and the excitement building.

However, the day of filming was long and tedious, and in real terms we had lost a day's work.

But the real bonus was meeting Jack Best and Bill Goldfinch, who designed and built the aircraft. After that, we felt that we all had a real desire to make this work, not just from our point of view but especially for them.

Work continued over the Christmas period. Adam English, the Producer, arrived with the gingham material. Tests were carried out and it proved to

'The producer suggested a launch from a Scottish castle'



The Southdown team with the partly-built fuselage in their larger-than-original workshop. The glider cost £3,000 to insure and, according to the programme-makers, £30,000 to build

be satisfactory. K-13 rudder pedals were now installed, along with Hutter 17 wing-to-fuselage fittings, Slingsby Cadet tailplane fittings, Nord 2000 cables and a seat from a T-21.

We considered where and how to launch it. The producer suggested launching it from a Scottish castle roof, but his idea was dismissed and the most suitable launch reconstruction would have to be on a winch.

We had another tense day when John Lee arrived with the wings. Built 60 miles away, there was a question of whether they would fit. Our fears were unfounded as Mark and John put the four main bolts in within an hour, with the aileron deflection checks taking no more than 20mins. This was a miracle! The next two days were spent covering

## Permit to fly half a century late

WHEN work was started on the replica by Southdown Aero Services, it was due to fly in about six weeks, which demonstrates the average TV company's grasp of the real world. It was going to require a BGA Permit to Fly, and I and Dick Stratton were deputed to make sure it was sufficiently airworthy.

The basic design was on two sheets of paper, copied from the originals. One showed the fuselage, to a fairly small scale, and the other the wing. Most of the structure was quite conventional: the fuselage was a straightforward structure of wooden longerons, spaced apart by wooden members and diagonals, whilst the wings were of quite a low aspect ratio, doubtless due to constraints relating to the size of the "workshop" at Colditz. These were of very

conventional pre-war design, to the extent that torsional stiffness was provided by an arrangement of diagonal and fore-and-aft members, with a little ply on the leading edge for handling purposes. So the span was slightly over 32ft with a chord of about 5ft giving enough wing area to keep the wing loading quite low.

It was a two-seater with the rear pilot as passenger, facing backwards. In the replica, the second seat was eliminated. It was not designed to very specific requirements, because all the pre-war requirements went on to about two pieces of paper, and it is doubtful whether they could be remembered anyway. But Lorne Welch had been brought into it at a fairly late stage and declared it to be strong enough. Since there was no time



it with the material; we finished it with four days to spare.

The test flight was arranged at the Kestrel GC at RAF Odiham, for security reasons. The BGA asked that Derek Piggott carry out the first two test flights. Now was the time when we would find out if our efforts had been worthwhile. My feelings when the aircraft took to the air after 25ft were of total ecstasy and elation – along with relief. With that, Derek Piggott carried on with the winch launch up to c 700ft, landing perfectly three minutes later.

The next time the glider would fly was in front of the ex Colditz prisoners and a film crew, so although we knew that it could fly, there was still apprehension. John Lee flew it, four times, for the filming but more importantly for the Colditzers, who enjoyed it immensely.

It has been an experience dealing with the media, and Southdown is now



Adrian Hobbs

Wood and fabric fuselage under construction

getting back to composite aircraft and gel coat. This was a great opportunity for all of us, one we shall remember for the rest of our lives. We would like to thank the following, without whose efforts this project would not have worked: all Kestrel GC members; Ian Smith, Vintage GC; Frank Irving; John Lee, Ann Welch; and all staff at Southdown Aero Services.

Neil Fripp

for extensive calculations, we accepted this and, indeed, looking at the structure it seemed more than adequate. However, there were some serious omissions from the information available: the drawings showed struts, but no detailed drawings were available and the control systems consisted of a few dotted lines. Rather than build an assembly from scratch, Southdown had obtained a system from an old Nord 2000 and cobbled it into the existing space. As it happens, the pulleys provided by the French were of light alloy, which is pretty bad news in conjunction with steel cables, hence the very limited duration of the permit.

On the day, it all worked splendidly and the designers were accordingly exultant. After 56 years, their design and Lorne's stressing was shown to work!

Frank Irving

# How they did it at Colditz

PILOT Officers Jack Best and Bill Goldfinch went to Colditz Castle from the Luftwaffe PoW camp at Sagan, having been captured in Greece where Jack flew Marylands and Bill, Sunderlands.

Bill, inspired by a sloping roof at Colditz, had been drawing sketches for some time, but the glider project didn't really take off until two army PoWs, Tony Rolt and David Walker, arrived. Lorne Welch and Walter Morison (see below) came after the scheme had been hatched. "We hadn't started building it," says Jack, "but Bill's plans were approved by Lorne. He said it would fly, which none of us had any doubt about."

According to Jack, a PoW friend called Bob Barnes christened it the Colditz Cock; he was also responsible for a tense moment during construction. "He made a little model of it and flew it in the courtyard," says Jack. "It landed at the foot of a certain Hauptman Preiber who said: 'Thank goodness, at last you British are doing something sensible and not thinking of escaping all the time!'"

Jack made tools, such as a chisel from a broken-off table knife, and helped create a secret attic workshop, too small to rig the glider in, entered via a concealed trapdoor.

"We went round and found what could be used," says Jack. "On all the joints on the main frame we used three-ply off a tea-chest. The spars were found right the way across the other side of the castle. They

were floorboards and it was a job to find lengths with no knots."

Metal for essential fittings was hardest to source. "There aren't many, but the struts have got three and of course the wing has another couple," says Jack. Cotton palliasses covers were used for fabric, and dope was made from millet rations.

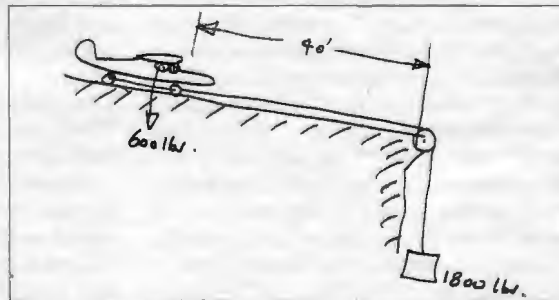
The glider was once nearly discovered by a German civilian who approached Jack: "I don't think he could have seen the glider but I knew he'd found the trapdoor." A bribe of 700 cigarettes solved the problem.

When the PoWs took over the castle before the American army arrived, the glider was assembled in the room below the workshop. "It didn't take very long; we did it one day before breakfast," adds Jack.

The result of what he estimates, very roughly, at 2,000-3,000 hours' work, had an inglorious end. When they asked to go back to get it, they were told there were more important things to get out of Russia; it is believed to have eventually been burnt.

Jack adds: "The sad thing is, we never took Eggars, the [German] Escape Officer, to see it. He was a schoolmaster type, very clever, and knew the British mentality. I would have loved to see his face. There was a little Airfix model of it after the war. I sent him one and he sent me a letter thanking me very much and saying he'd give it to a grandson."

*The proposed launch method (right, as sketched by Bill Goldfinch) was from a sloping roof, attaching the glider to a weighted bath which would then be dropped. Would it have really worked? Some people had their doubts, but not Jack Best: "Obviously there was going to be a lot of work and problems in doing it, but we had the time, the labour and incentive"*



Bill Goldfinch

WALTER Morison helped work on parts of the glider at Colditz.

"To build a glider you only need a bit of glue and some fabric and wood," he says. "Castles are stuffed with it: floorboards; joists; ply and light stuff from cupboards; bedlinen. But castles aren't stuffed with glue. They might have used condensed milk – much the same as casein, a glue – but in the event bribery produced the real thing."

How was it hidden? "Ever heard of a positive hole? No? Well, cut a hole out of a wall. That's negative. Create a hole by enclosing open space and that's positive. A workshop was needed, big enough for the fuselage and complete wings. On one side of the castle the top two floors

were empty, the top one being just a triangular roof space some 70ft long. So they shut off the far end with a false wall. Lo and behold, there you had a positive hole big enough for a workshop. On casual inspection who would notice the room had got a few feet shorter?"

Would the glider have flown? "Of course. It was a properly designed aircraft, as has now been proved. Launched off the roof, at night and preferably during an air raid blackout, it would have flown out across the river to fields on the far side. No, it didn't have an artificial horizon."

Flak and Ferrets, the book of Walter's wartime experiences, costs £12 from Fiddlers, Smugglers Lane, Bosham, PO18 8QP



# Six-point belt on test

**T**HE SOPWITH Camel in 1914-18 was initially fitted with a lap strap seat harness. Under negative g, the pilot slid upwards in relation to the cockpit, and was thus unable to make full control movements. So shoulder harness was introduced to solve the problem, resulting in a four-point seat harness. The father of Dr Peter Saundby – the BGA's current medical advisor – was involved in its flight trials.

To prevent submarining and to maintain the geometry of the harness, a fifth (crotch) strap has been used for many years in military aircraft, aerobatic aircraft and in gliders. This five-point harness has been most satisfactory in aircraft with an upright seating position. The fifth strap passes down and forward to the anchorage point on the cockpit floor, clear of the crotch of the pilot. The fifth strap works by opposing the upward pull of the shoulder straps on the lap strap. The lap strap remains in position on the pelvic bones, instead of being pulled upwards on to the soft, vulnerable abdomen. Modern gliders have a semi-recumbent seating position: the glider frontal area is reduced in order to give a better flight performance. This seating position results in the fifth strap pressing directly on to the pilot's crotch as the strap passes forwards and down to the anchorage point on the cockpit floor. The strap may therefore cause injury to the crotch in an impact accident.

The German Federal Ministry of Transport financed a study by Dipl Ing Martin Sperber of TuV Rheinland, Cologne, to see if this risk of injury could be reduced. Martin Sperber concluded that by redesigning the shape of the seat

**Dr Tony Segal has been back to the crash-test rig to examine a new six-point harness. He reports on the results of his tests**

*This six-point harness (right) has two lap straps, two shoulder straps and two crotch straps. But how does it perform in simulated crashes and in flight?*



pan and by specifying definite lap strap anchorage points, a four-point harness would prevent submarining. This seat and harness design is now used in many modern gliders.

In January 1999, the German glider manufacturer DG Flugzeugbau ceased fitting five-point harness in their gliders – a decision they reversed in February 2000. The removal of the option to fit a fifth strap had caused concern in the UK, and Dr Peter Saundby asked me to carry out an experimental study on seat harness, carried out in May 1999 at the Centre for Human Sciences, DERA, Farnborough, with the help of Leslie Neil, Graham Reece and Philip Murtha.

A Nimbus 3DM front seat pan was used. Although representative of modern seat design, this had a larger transition radius, between the inclined thigh ramp and the horizontal portion of the seat

pan than specified by Martin Sperber. As the pilot's buttocks cannot fit into this narrow space, I do not consider this to be of significance in affecting the validity of my experimental results. I fixed the H point using a seated 50th percentile male dummy, and drawing the intersection of the centre lines of the torso and thigh. The attachment point for the lap strap, so marked, coincided with the flat on the seat pan designed for this purpose by the manufacturer. Martin Sperber has designed a device for marking the position of the H-point on the seat pan. When I used it, I obtained a different position from that I obtained using the dummy. Again, I do not consider that this affects the validity of my results.

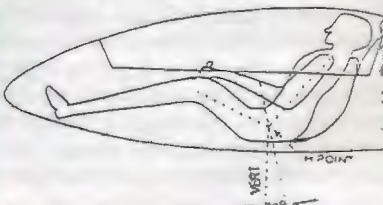
Three pilot dummies – a 50th percentile male, a 5th percentile female and a 95th percentile male – were seated statically in turn in the glider test seat.



*A four point harness on the test rig, ready for testing*

*After impact, the shoulder and lap straps are out of position. There is potential for serious injury to be caused to the vulnerable abdomen by the movement of the lap strap*

*Below: the OSTIV airworthiness standard for lap straps, showing the location of the H point*







In each case, with a five-point harness, the lap strap remained in position on the pelvic bones. When the fifth strap was released, and the harness used as a four-point harness, the lap strap rotated upwards under the unopposed pull of the shoulder straps and came to rest lying on the soft abdomen.

The effect of negative g was then simulated. The 50th percentile male dummy was fastened in the glider seat and the entire test rig was then inverted. The dummy was left hanging vertically in the seat harness. The separation of the buttocks of the dummy from the seat pan was measured. The following values were obtained:

Five-point, tight: 24mm separation

Ditto, slack: 31mm separation

Four-point, tight: 51mm separation

Ditto, slack: 83mm separation

It is clear that the five-point harness is superior under conditions of negative g.

The effect of a vertical accident impact – the most severe situation as regards submarining – was then simulated on the test track. The impact was at 10m/s at 16g. A 50th percentile male dummy was used. Five and four-point harnesses were both tested tight and slack. With the five-point harness, tight and slack, the lap strap remained in the correct position on the pelvic bones following impact. With the four-point harness, tight and slack, the lap strap moved upwards until it was lying pressed under the rib cage following impact. Serious injury could be caused to the vital organs situated in the upper abdomen.

The load on the harness straps was recorded during the impact. The peak load in the fifth strap was 2068 Newtons. There are 4.45 Newtons to a pound force, so the load exerted on the crotch was about a quarter of a ton. Clearly this presents a grave risk of injury to the organs in the crotch region caused by the fifth strap in an impact accident.

This experiment showed that the fifth strap is essential to prevent the lap strap moving up into the vulnerable abdomen

in an impact accident. However, the same fifth strap could cause serious injury in the crotch. This dilemma was resolved by the next experiment.

Terence Willans of Willans Harness Manufacturing Ltd, an expert on racing car seat harness, kindly modified a racing car harness for use in a test rig. This six-point harness (see picture, left) consisted of two lap straps, two shoulder straps and two crotch straps. The latter passed upwards between the thighs from the anchorage points on the test rig of the glider. They then passed sideways through two rectangular buckles sewn to the lap straps. The crotch straps ended in webbing loops which passed inward towards the quick release fitting (QRF). The webbing loops were anchored to the QRF by the metal lugs of the shoulder straps.

An experimental test was carried out in January 2000 at the Centre for Human Sciences, DERA, Farnborough, (pictured above) with the technical assistance of Leslie Neil and Graham Reece.

The harness was tested for ease and speed of emergency egress under positive g and under negative g. No problem was experienced under either condition.

A test was carried out to show the effect of negative g on the performance of

the six-point harness, the test rig being inverted. The separation of the buttocks of a 50th percentile male dummy from the surface of the seat pan was measured by a probe. The results were:

Six-point, tight: 13mm separation

Six-point, slack: 25mm separation

This is a better result than that found for a five-point harness.

The effect of a vertical accident impact was then simulated on the test track, using a 50th percentile male dummy. The impact was at 10m/s at 16g. The six-point harness was tested tight and slack. It remained in the safe position on the pelvic bones.

I conclude that a four-point harness is unsatisfactory under conditions of negative g and on impact. Submarining of the pilot may take place. A five-point harness will perform well under negative g, and will prevent pilot submarining in the accident case. However, injury may be caused to the crotch of the pilot in the case of an accident.

A six-point harness works well under conditions of negative g, and will prevent submarining of the pilot in an accident. There is no risk of injury to the crotch of the pilot. The male pilot can pass urine in flight without altering his harness.

Flight testing was carried out in February 2000 at the Joint Service Adventurous Training Glider Centre, RAF Bicester, with the kind permission of the Officer-in-Command, Sqn Ldr (retd) Ted Norman. The harness was installed in the rear seat of a K-21; no modification to the anchor points was required. I (below, rear seat) was flown by Ian Tunstall (front seat). Two flights were made, one with the harness tight, the other with the harness slack. The test went to -3g, and tail slides were flown. The harness performed well in both flights. It is now being assessed by the Bicester gliding instructors in routine club flying.

With minor modifications, the Willans six-point harness should be suitable for widespread use in gliders.





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Illustration shows the new airspace layer and includes maps which are copyright © Bartholomew Digital Data (1998)

## Choice soaring at Aboyne

Deeside Gliding Club would like to wish all our friends and visitors a Prosperous New Year. We look forward to welcoming you to Aboyne in the New Millennium.

The programme for 2000 is:

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# Soaring in Fiordland

THREE Juniors pilots – Andy Perkins, Luke Roberts and I – headed to New Zealand last Christmas to extend our summer and explore the amazing flying conditions we had heard so much about. For about three weeks we flew from Omarama, under the guidance of Justin and Gavin Wills. This introduced us to the New Zealand way of gliding and the weather that have made this place almost legendary.

Through Gavin, we heard of the Southland GC's annual expedition to Fiordland, in the south-west corner of South Island. Glaciers have sculpted South Island over millions of years, and the most impressive effects are in Fiordland (see map) where U-shaped valleys go east to Lake Te Anau or west to the Tasman sea. Southland GC visit with a handful of single and two-seaters. We had a couple of days to spare, and this was an opportunity not to be missed. Few glider pilots get the chance to venture into Fiordland, so we felt very lucky.

Our first view of the region came as we aerotowed a Grob Acro over to Manapouri airfield, our base for the week. The airfield is on the shore of Lake Manapouri, at the foot of the mountains in the east of the region. Dense forests shroud the lower slopes and, apart from walking tracks, the place is untouched. No roads, no inhabitants – and certainly nowhere to land. At times, this focuses the mind.

On our first day there wasn't good soaring weather, so we drove to Milford Sound, looking at the three landable airstrips on the way. These are up to 20km away from the start of the Fiordland mountains. "Always keep your landing options in mind" was a much-repeated phrase.

Over the next few days we explored around Manapouri and Te Anau. The landscape has such a huge influence on flying conditions that we were told it was "all a bit experimental round



Luke Roberts borrowed a Hornet to fly in NZ

here" – a polite way of saying how changeable the weather is. You have to keep a constant watch for changes in conditions, always know the wind direction and think about sea breezes. The ridges produced strong thermals up to 7,000-8,000ft. Sea breezes could arrive from two or three directions in places, and ➤

# Mountain high



**Pete Thelwall (left) describes how he and two other British juniors had fun in Fiordland, while Phil Swallow (below) gets stuck on a cross-country in New Zealand's Southern Alps**

**I** WAS GETTING to know the area. The immediate area. Getting to know it so well that the craggy lump of rock that I was miserably, hopelessly circling was becoming more boring than daytime TV. "You're going to have to go at some point," I told myself. "But where to?" I had no idea.

I was flying on a cross-country course run by Gavin Wills at Omarama in the Southern Alps of New Zealand. I have flown here for five out of the last six years and my comfort zone has slowly expanded further into the mountains. But I had reached a plateau in my soaring, cautious about venturing too far into 'tiger country.' I wanted to learn more about the conditions, the mountains, my flying, my Kestrel 19...

When I heard about the course, I jumped at it. Gavin, a mountain guide for many years, knows the rocky ridges more intimately than most glider pilots would ever want to. He is knowledgeable about Met in general and local conditions in particular. And he is a good teacher.

This particular day was late to get going. We launched into strengthening thermals

*Pete Thelwall, Luke Roberts and Andy Perkins flew from Manapouri airfield in Fiordland (see map, right: the left hand box shows the terrain they were exploring)*

*Phil Swallow was based at Omarama. His route is shown in the two boxes on the right hand side of the map*

*Above and above right: photos by Phil Swallow. The two small pictures are stills from a video he took on the flight he describes on this page*

*Map: Steve Longland*

and a light, south-westerly flow. Cloudbase was relatively low after recent wet weather but the ridges were working. Once established, we practised our ridge-running in the Dingle: pull the brakes from 8,500ft to dive on to the ridge, then the first one to turn is a sissy.

From the end of the Dingle, we crossed into the Hunter and then hopped across



# hs and lows



Makarora and got into the west branch of the Matukituki. It was a great run, practising our new-found skills on the ridges and flying with the native keas, tumbling and twisting in the gullies. I was amazed at how much ground we covered.

Still, a late start and playing in the Dingle had eaten into the afternoon. As the thermals started to look at their watches,

we reluctantly set off for Omarama. Becoming slightly dispersed, we decided to meet at Makarora for the run home.

I arrived first and began loitering in a confusing mixture of lift – convergence, ridge and thermal – next to the ridge we would cross to go home. It felt like hanging about in the doorway, rattling the car keys while others are still saying goodbye in the

hall. I was getting a bit tired and my bum felt numb, unused to four-and-a-half hours in the air. Still, I was quite happy. “We’re on our way home,” I said to myself. “I’ll just wait for Mother Duck and paddle along behind.” In my mind, I was already putting the wing covers on.

Suddenly, Gavin appeared at ridge-top height. “Okay, time to go,” the speaker crackled. “You’re looking for sun on the ground and a ridge running on track. You know the way...” The great white Duo Discus rolled right, framed for a moment

**Could I fly with one hand on the stick and another on my mobile: “Hello? Samaritans? I’m lonely and depressed ...”**

between two piebald peaks, patched with snow and black, gleaming rock. Then he was gone. “Oh,” I thought, “OK, sounds easy enough.”

It wasn’t quite so easy. Hanging around, I had let the Kestrel sag below ridge level and it took me five minutes to climb back up. Finally, I too banked right and, as the ragged edge of the saddle slipped below me, looked for the ridge that branched off from the peak just to my right.

My heart missed a beat. A deep V-shaped valley opened below me. There was no ridge. A sinking feeling in my stomach accompanied the realisation that I didn’t know where to go. I had assumed the ridge would be there. My brain stalled and I think I stopped breathing for a few seconds. I wasn’t fearful or panicky: I just did not know what my next step should be.

My eyes fixed on a lower spur coming off the ridge I had just crossed and I made for it – surely I’d find a friendly thermal there? I started to circle, just maintaining in the warm air trickling up the partially-shaded sides of the spur. The vario was not impressed by my choice: *Peep - poop - poooooop - pe-eep - pooop*. I gazed at that wretched lump first from below, then from above, and then from below again. The sharp crags on either side began to look like jagged teeth, poised to snap at the soft underbelly of the Kestrel. Certain muscles in my lower abdomen began to work out, trying to lift my glider and me over the ridges. I wondered if I could manage flying with one hand on the stick and one on my mobile: “Hello? Samaritans? I’m lonely and depressed...”

I tried to consider my options. Makarora strip was just over the saddle but an envious look back confirmed that I was too low to attempt it. The lift on this side was only enough to maintain height: I was on the less sunny side but home was this way. I could glide to a field landing way down the steep-sided valley. But I wanted to get home. I stared at the by now hated lump of unfeeling ugly rock. I should be able to make Omarama – and I couldn’t see how. ➤



➤ strong convergence lift was to be found, marked by a 2,000ft step in the cloudbase. The geography is mind-blowing – I used to think Sutton Bank was big!

On our last day conditions looked a little better. Andy and I decided to fly together in the Acro, promising to take no more than an hour and not to get too far away. After a reasonable climb over the airfield, we headed west to the hills. As we got higher we could see the Tasman sea where dolphins, penguins and fur seals live undisturbed by humans. The strong lift and high cloudbase gave us confidence; when we heard Gavin say he was going to Milford Sound, we decided to go that way too. Gavin radioed to give us a friendly reminder – “remember to fly IFR: I Follow Ridges”! Following mountain crests in thermals drawn up the steep hillsides, we rarely met sink.

As we tracked north the peaks got higher and the valleys deeper. We crossed the fiords of Lake Te Anau and went up to the Homer Tunnel, where the only road to Milford Sound passes under 2,000ft of rock. At this point the clouds met the highest peaks, and the view down the length of the lake reminded us that home was quite a long way away for 17.00hrs.

As we turned back the sky still looked good in places, but sea breezes had blown up the fiords and valleys, leaving gaps to cross. We kept high and made good progress until we crossed Lake Te Anau's middle fiord, arriving at the other side lower than comfortable – the hills rose above us. We kept in mind the lessons we had been taught over the past few weeks: go for the crests, know where the wind is coming from. But we found no lift, and had no option but to head further into the hills. A quick panic with the map as we made sure we'd get out if we didn't go up. More sink. Down to 3,800ft. That may not sound low, but it looked awful.

All of a sudden our options were either to get a thermal or risk landing in the lake. I suggested to Andy that we climbed. And at that point we caught a little rising gust and Andy displayed the most accurate thermal centring that I've ever witnessed. The climb grew to 6kts. Soon we were out of trouble and gliding towards Manapouri.

We were asked via radio to take the glider back to Southland's site at Five Rivers, only an extra 50km. We gave it a go, but rapidly-deteriorating conditions left us trying to scrape away at the northern edge of the Takitimu mountains. A well-placed farmer's airstrip was the only option. There was a heady mix of emotions as we got out of the glider. Relief at landing OK in the middle of some serious geography, and elation at getting so far and seeing the most amazing terrain. We revelled in our success. Andy and I had worked well as a team.

It was our last day and we left on a high note. We had been warmly welcomed by Southland club members who trusted us with their gliders. Our flights were awe-inspiring and highly educational, giving us much to think about in a new and challenging environment.



➤ “It's very committing, crossing a saddle,” Gavin said later, debriefing over a bottle of beer. “You need to know what's on the other side and where you're going: you need a plan.”

“Always,” I added with feeling.

Round I went again, the vario *peeping*, then *pooping*, the altimeter wavering at 6,000-odd feet. That might sound OK to you sitting in your armchair with a cup of tea. With big mountains between me and Omarama, I knew it was not enough. Finally, I swallowed my pride and thumbed the switch: “Er... Gavin... I've crossed the saddle and I don't know what to do next...” There – I'd said it! The patient voice crackled back: “Remember what we were talking about. Look for a sunny face, and a ridge that is on track.”

The words took a moment to sink in.

Then dawn broke.

“Doh!” I said aloud.

And for the first time for five minutes, I did more than just look

out. I raised my eyes (yes, unto the hills!) and looked across the valley. No more than a mile away was a green mountain slope beaming at me: “Hi! I'm Sunny – fly me!” And beyond it – could that be a ridge, with clouds on top?

I'm sure you've been wondering why I didn't look across earlier. Maybe I was more tired than I felt. Maybe some learned response that kicked in for immediate self-protection prevented me from taking the wider view that I really needed to be able to protect myself.

Feeling a bit stupid but relieved, I gladly abandoned the rocky lump like a child letting go of the tiled edge of the pool to splash across the fearful depths into the welcoming arms of mother.

I knew there would be horrendous sink in the valley – no, wait, this air wasn't too bad – double “doh!” The tension that had built up in my body began to drain away and my flying improved; I was

beginning to enjoy myself again. My vision was still expanding and seemed sharper somehow. From halfway across, I could see the slope was indeed at one end of a ridge going to the Hunter, the last major obstacle before a final glide.

As I arrived, a few hundred feet below the tops, the vario started to *pe-eep* mildly: I was climbing, albeit at 1kt. The band of lift seemed narrow. I turned right and began to follow the contours of the ridge, hugging the bowls and spurs. I began to cruise along the sunny side close in at 60kts, without turning. “I'll go back and work the face when I hit sink,” I said to myself. Two or three minutes later, without turning and with only a few pull-ups in the odd surge, I popped out above the ridge into the stronger lift fed from both sides. “Hooray!” I said,

remembering to keep my thumb off the mic button.

As I flew on to join Gavin, I absorbed

what I had learned. I thought about how my vision had closed right in, until all I was seeing was the lump of rock and the immediate sky around it. I re-learned that if I follow someone else, I had better know where I am going in case we lose contact. I realised tiredness is as insidious as hypoxia in its onset. I discovered for real that knowing my next step and a couple of alternatives after that is what will keep me safe in the mountains. I reminded myself that a flight is not over until it is over! A big part of successful cross-country flying is having a dynamic, flexible, constantly-updating vision of how I intend to get to where I am going. That really is “in the muscle” now. As Gavin said: “By the time you get near cloudbase, you should already know exactly what you're going to do next”.

Many thanks to Martyn, Richard, Gavin, Jim, Grae, Doug, Malcolm, Stefan and Gandhi for a great week.



# Start cross-countries here

**Mike Cohler, CFI of York Gliding Centre, explains what you need to do for your cross-country endorsement**

**T**O GET your endorsement, you need to do two soaring flights of over an hour from release, one of which must be two hours. You have probably already done a one-hour flight for Bronze, which will count, so look for a decent thermic day, and get a barograph on board. After your return, your instructor or Official Observer will sign the pale orange form which you already asked for last week...

Do the two hours in thermals: sitting in your glider on the local ridge is not really preparation for a cross-country flight in standard British thermals!

While waiting for the right soaring day ask your nearest Full Cat to chat about field selection, field landings and navigation, which you already know about from your Bronze theory. The two field landings (well, approaches) must be done in a motorglider, testing your ability to plan a circuit into suitable but unfamiliar fields. The field selection and navigation can be done in a glider, motorglider or light aircraft but are best done in a motorglider. You will be asked to plan a 100km-long triangular flight, taking into consideration airspace, terrain and other hazards, and you will need to convince your instructor that you can use an air chart and relate features on the ground to those on the map. You probably won't go the whole route, but you have to demonstrate that you could. Along the way you will be asked to select a few fields on the assumption you are running out of lift. These three exercises can be completed in one or two flights in a motorglider, and should give you more confidence that your Silver distance or 100km Diploma flight is achievable without collapsing in a heap of sweat and adrenaline.

Make sure no more than 12 months have passed since your second qualifying soaring flight, ask your CFI to sign the reverse of the orange form and get ready to send it off along with your gliding certificate and a cheque. You are now also entitled to a glider pilot's licence, so get the purple form from the club office, fill out the details, and put the combined cost for the two claims on the cheque. Send it all to the BGA with two more passport photos, and you will be ready to break that unseen umbilical cord as soon as your documents arrive.

*Overleaf: win a flight with Andy Davis*

## TEN PRE-SEASON TIPS FROM TOP PILOTS...

1 Be ready for the inevitable good days that come by having some ambitious plans in the back of your mind. They may lead to sleepless nights before the event but will surely give you hero status if you achieve them – Paul Crabb

2 Decide what your ideal objectives are going to be (in my case, a mix of comps, training and fun). Once you've done this, you then need to work out how best to achieve them. Then rearrange as necessary! – Pete Masson

3 Stay current over winter and remember that most of your flight planning can be carried out then. Use up-to-date maps, compile a file of tasks to suit different weather patterns or wind directions. Stay away from upwind coasts, avoid damp, low-lying regions and areas where the base of controlled airspace is likely to severely restrict your operating altitudes on a good day. Make relevant notes about airspace. On the day, it's much easier to select a pre-planned task than to start planning from scratch. – Andy Davis



*A happy ending to a successful flight ...*

4 Ensure that you are well-hydrated and not tired before flying – David Allison

5 There's no substitute for flying in good conditions to improve your soaring skills so, if you can, head for the Southern Hemisphere in winter or southern Europe in spring. It makes everyone dead jealous and can provide some of the best soaring there is – Paul Crabb

6 Review previous flights and assess what mistakes you made. For example, last year I was not in practice at cloud flying. This year I intend to do a lot of cloud flying prior to my competitions – David Allison

7 Work out what you're going to do when, how to persuade the boss to let you have all that time off over the summer and, of course, how you're going to get your hands on appropriate gliders for it all – Pete Masson

8 If you're an instructor, try to do some two-seater cross-country instruction. There is no better way to help you understand what you are actually doing – or trying to do – than having to explain it in easy terms to someone else – Pete Masson

9 Figure out all the niggling things that don't work, are missing, annoy you, delay you, waste time or scare you and sort them out before you get in the glider. Soaring takes concentration – anything that detracts from that should be addressed before you take off – Paul Crabb

10 Service, overhaul and otherwise check out all your gliding equipment *before* the season starts. Glider C of A should be done in the winter. Pay particular attention to instruments, wheelbrake, loggers, cameras, barograph. Don't forget the trailer: lights, tyres and greasing. Don't wait until the first badge flight or outlanding to test your kit – Andy Davis

## ... AND TEN TIPS FOR NON-GLIDING PARTNERS

1 In the summer, do **not** plan to have a barbecue – if it's barbecue weather it will be dark before they get home.

2 Get used to them watching clouds while they are driving. This takes a long time and a lot of nerve.

3 If they say they're just popping up to the gliding club for an hour, don't believe a word of it. It takes a minimum of four hours – however close you are to the airfield.

4 **Never** talk during TV weather forecasts.

5 Cook casseroles – timing anything else is impossible.

6 Because approach roads to gliding clubs are universally bad, don't drive with your tongue between your teeth.

7 On club expeditions, the best week was last week, or will be next week.

8 Wherever you go in the world, you'll always manage to be "just passing" a gliding club – and to find the way in.

9 If you manage to drag them away for a day, it will always turn out to be "the best day of the year".

10 Smile and often say: "have a good day!"

**Jan Eastburn, Aquila GC**



# Your top 40 bits of cross-country kit



Kit for a well-equipped launchpoint, cockpit or retrieve (clockwise from bottom left):

- 1 Food (other confectionery is available)
- 2 Camera/GPS mounts
- 3 Logger
- 4 Spare batteries
- 5 Cleaning cloth
- 6 Glider batteries
- 7 Vaseline for water ballast fittings
- 8 Water to drink
- 9 Barograph
- 10 Wing tape
- 11 Parachute
- 12 Paperback (other authors are available)
- 13 Brimless hat
- 14 Final glide calculator
- 15 Protractor for marking task on air chart
- 16 Strong footwear for landouts
- 17 Chicken (other mascots are available)
- 18 Pee bags – can be used as sick bags
- 19 Extra clothing for landouts
- 20 Sun cream
- 21 Sunglasses
- 22 Plenty of water to drink
- 23 Maps: road atlas; current air chart(s)
- 24 Cash for landouts
- 25 Mobile phone for landouts
- 26 Pens/ruler for marking air charts
- 27 Credit cards for landouts
- 28 Claim forms for badges
- 29 Spare fuses, to be accessible in flight
- 30 Leave car/trailer keys with your crew!
- 31 Lip screen
- 32 Basic tools
- 33 Checklist
- 34 Rear-view mirror
- 35 Competition licence if relevant
- 36 Film for camera
- 37 Radio
- 38 Camera
- 39 GPS
- 40 GPS/logger cable

**A**BOVE ALL else, we glider pilots owe it to ourselves to fly safely. This is only possible if we are functioning properly. Just as you don't run your car out of fuel and expect it to work, the importance of your consuming fluids on cross-countries cannot be over-stressed. Water (8) will do.

If the day turns blue and tricky, usually at the furthest point on your task, the amount of body fluid you lose is incredible. So take *lots* of water (22). There's no harm at all in arriving at your goal with it still on board. Similarly, you'll be glad of it while you wait for your crew should you make one of those rare decisional errors and plank it. Any that you don't drink will come in handy for removing those stubborn and unsightly bugs which chose death by leading edge and probably contributed to your going agricultural in the first place.

Plenty of liquid is useful even if you valiantly decide to run away and live to fight another day (I mean, "acknowledge your limits, and stay local"). You may find there's some really strong lift in the

**Neil Lawson and Pete Masson suggest some items you might want to take with you on your early cross-countries – and what to leave behind**

blue: it's just not obvious where it is. You will almost inevitably be hot with nowhere to hide (remember those funny white fluffy things on *that* day two years ago?) So you'll be very glad of something to pour down your throat, or elsewhere. Result: you'll have an extended flight, learn about flying in the blue, be less intimidated, gain confidence, fly better and become world champion. Honest! You can also use spare water to douse your ...

Hat (13). You wouldn't put up with someone following you around, hour after hour, with a sheet of plexiglass and a heat lamp two inches from your head, would you? Don't do it in a glider. A fine exponent of our chosen pursuit once

forbade me to share his aerial carriage unless I sported suitable headgear.

"I don't want you flaking out from sunstroke and spoiling my fun," was his argument, and quite right too. Ever since then I have been a vociferous advocate of the sun hat, indeed of the baker's hat, which could have been purpose-made for gliding: *white with no brim*. Other types are available, but for pity's sake please do not wilfully reduce your field of vision, for example, with a brim. If you're about to get close enough to count the number of teeth on someone's turbulator strip, then it's nice to have a few seconds' warning. Wear a baseball cap and you might not be so lucky. I've even seen someone (who shall remain nameless) fly with a pair of white boxer shorts on his head. Granted: a bit odd, but under the circumstances a practical decision.

Map (23). *You must have an up to date air chart*. Yes, even if you've got GPS.

So you've found all the above plus something approximating to a glider. Anything else is extra, a luxury, or just showing off. That's it: don't come back



till you're absolutely certain there are no more thermals. (If you want to do your five hours this is pretty much how it is.)

But before you set off, remember what not to take. There's no shame in using a checklist (33), assuming most of us can cope with C-B-S-THINGY-WHATSIT off by heart. The thing you really don't want to find you've got with you in the air is your tail dolly. There is only one place you're likely to find it, very shortly after take off, and I mean very shortly. I did have occasion once to enquire about handling characteristics with the tail dolly on, just after take up slack had been signalled. The pilot, who released quickly, seemed grateful. So make sure the tail dolly gets back to your car or trailer. This also helps if it's a vital trailer fitting. There's no nice way to say to a stranger who has just given up a large chunk of the weekend to drive across seven counties to your field: "So you decided not to bring my tail dolly, then?" Go on, try it – without swearing.

The same goes for trestles ... but if you find that somehow you've got one of those in the air with you, then you've just entered *Apollo 13* territory and you really do have a problem.

Keys (30). Leaving your keys at the airfield helps you avoid urban myth status. You can probably imagine the

### 'Leaving your keys at the airfield helps you avoid urban myth status'

confusion you can cause simply by flying – or, more importantly, landing out – whilst still in possession of the keys to your car and/or trailer. This is partly why it is often advisable to leave your trailer visibly open... Also, if you're still unaccounted for at dusk and if your friends aren't experimenting with the effects of alcohol on their powers of reasoning, someone might just notice your trailer's still open and you're not there. This assumes, of course, that you have friends. It is also a good way of finding out who your friends actually are.

Retrieves offer limitless potential for improbable tales largely based around human failings. You can, however, eliminate much confusion simply by having two identical road maps (23). Then if you're utterly wrong about your glider's location relative to your half mil, you're at least singing from the same hymnsheet and contact with your crew should be imminent ... barring flood, fire, pestilence and rolled trailers.

GPS retrieves are all well and good, but your crew can be just the other side of the hedge with no clue how to gain access to the field. Through a farmyard is often the way and, as far as I know, very few GPS software packages show farmyards.

## WIN a flight with Andy Davis

**MOST REALLY GOOD** glider pilots will tell you that the best way to learn is to fly with someone better than you.

And who better to fly with than Andy Davis (right), former Standard Class World Champion and now a British Team Coach as well as an international competitor at the highest level?

British Team squad members benefit from Andy's knowledge, skills and experience on the team training programme.

Now Andy has kindly agreed to fly with one lucky S&G reader in a high-performance two-seat sailplane this season.

How do you put yourself in the running for this great opportunity?

Just answer the simple questions below and tell us in no more than 25 words why you want to fly with Andy. The winner will be the person who gets all the answers right and, in Andy's opinion, writes the best tie-break entry. It could hardly be easier. You'll even find the answers to the questions somewhere in this or the two previous S&Gs. But hurry – we must receive your entry by April 30.



1 What glider did Andy Davis fly in the 1999 World Championships at Bayreuth?

2 How does he prefer to orientate the display on his palm computer: north up or track up?

3 When, according to Andy Davis, is the time to do most of your flight planning?

I want to win a flight with Andy Davis because:

Name

Address

Telephone

Email

BGA club you belong to

Please send your completed entry to: "Win A Flight" Competition, British Gliding Association, Kimberley House, Vaughan Way, Leicester LE1 4SE, to arrive no later than **April 30, 2000**.

**Rules:** 1. Pilots of any experience level within gliding may enter. 2. All entrants must belong to a BGA member club. 3. Andy Davis and the winner will agree a site, time and date where the flight will take place. 4. The winner shall pay any travel and accommodation costs for himself/herself but the launch, glider, flight time and any reciprocal membership cost will be covered by S&G. 5. Only one entry per person is allowed. 6. Photocopies of this page are accepted. 7. Andy's decision will be final and no correspondence will be entered into. 8. The answers will be printed and the winner announced in a future issue of S&G.



# TENTH EASTERN REGIONALS

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# Gliding and UK airspace update

**Carr Withall, chairman of the BGA Airspace Committee, provides a brief assessment of 1999, and the annual reminder on airspace knowledge that all pilots should have**

OVERALL, 1999 was a relatively quiet year with no proposals from the CAA that would significantly affect our operations. There were no changes to Class D airspace and changes to higher level airspace had no effect on gliding.

However, any airfield that operates power aircraft and also carries out ab-initio training may apply for an ATZ and so be given a 2 or 2.5-mile radius around the airfield up to 2,000ft above the airfield for their protection. If such an airfield is close to a gliding club it may well have serious safety implications for that club. GA aircraft will avoid the ATZ circle on the map and possibly fly low close to a gliding club that could be winch launching up to 3,000ft.

Aston Down had 11 low level incursions in August 1999 alone, luckily without a collision.

Take a really good look around the circuit before giving the all-clear for launching.

All gliding clubs are being issued with MOR (Mandatory Occurrence Report) forms so that we can report all low level incursions of our circuits to the Safety Regulation Group. This will establish how much of a 'problem' this may be becoming.

## ICAO Airspace Classification

In November 1991 the UK adopted the new system of international airspace classification developed by the International Civil Airspace Organisation (ICAO). The status of a piece of airspace is denoted by a letter which will be shown on all aeronautical charts, and it is this letter rather than the title of the airspace that will determine the rules applying to it.

In the UK, for example, airways will all be Class A, but in other countries they may be Class E. In order to fly within Controlled Airspace, gliders will often require legal exemptions, and the availability and nature of these will vary from country to country.

## Class A Controlled Airspace

Cotswold CTA                      Daventry CTA  
London CTR                      London TMA  
Manchester TMA                  Worthing CTA  
All Airways – except where they pass through a TMA, CTA or CTR of lower status.

As from November 6, 1997, NO airways can be crossed by gliders.

Exceptionally, gliders may cross sections of Class A airspace by virtue of a Letter of Agreement (LoA) which will have very detailed procedures to be followed. These LoAs will be specific to a club operation. Camphill now has an agreement for crossing airway B1. There is also an agreement for crossing airways B2 and B226 in Scotland which applies nationally. However, both these agreements require pilots to have read the detailed procedures and signed the BGA form which MUST be given to the CFI before undertaking a crossing flight.

## Class B Controlled Airspace

The entire airspace over the UK above FL 245, comprising the Upper Airspace CTA and the Hebrides Upper Control Area (UTA), is Class B Airspace.

Gliders are no longer allowed to fly in this airspace without restriction.

Specified areas have been agreed that can be activated by clubs using the procedure for glider operations in Class B airspace. The requirement for giving 24 hours' notice of activation of these areas has been reduced to two hours.

## Class C Controlled Airspace

No UK airspace currently falls in this category, although it is possible some may be so redesignated in future.

## Class D Controlled Airspace

Formerly Special Rules Airspace. All Class D airspace now requires an ATC clearance to enter and transit this airspace. Pilots will also be flying in VMC conditions. Any pilot wishing to enter it must:

1 Contact the ATC unit and pass details of aircraft's position, level and proposed track.

2 Obtain entry clearance.

3 Listen out on the frequency whilst in that airspace.

4 Comply with ATC instructions.

The above rules apply to gliders in all Class D Areas.

Aberdeen CTR/CTA

Belfast CTR

Belfast City CTR/CTA

Birmingham CTR/CTA

Bournemouth CTR

Bristol CTR/CTA

Brize Norton CTR

Cardiff CTR/CTA

East Midlands CTR/CTA

Edinburgh CTR

Glasgow CTR

Leeds/Bradford CTR/CTA

Liverpool CTR

Lyneham CTR/CTA

London Gatwick CTR/CTA

London Stansted CTR/CTA

London City CTR

London Luton CTR/CTA

Manchester CTR/CTA

Newcastle CTR/CTA

Scottish TMA

Solent CTA

Southampton CTR/CTA

Teesside CTR/CTA

There is a form to complete if flying through Class D airspace, clubs should have copies. This will give the BGA and DAP statistics on how many gliders have been granted clearances to continue their flights and identify any ATC units that may be unhelpful. There is NO restriction to asking any ATC unit in Class D for clearance to fly through their area. Most are only 'busy' for short periods usually early morning and late afternoon. Much of the traffic is transiting light aircraft or flying school traffic.

The code of conduct for glider flights through Class D airspace is still relevant as it sets out good airmanship practice.

Most pilots who ask for clearances obtain them from helpful controllers but a few are refused clearances. With more education and visits from pilots to their local ATC unit, clearances should become the norm.

## Code of Conduct for Glider Flights Through Class D Airspace

With the ever-increasing size of Class D areas, the need to fly through them on cross-country flights will become greater. Pilots can ask for a clearance to fly through ANY Class D airspace. The Code of Conduct set out below is a guide to good airmanship practice.

1 Glider pilots should plan to route their flights through Class D airspace when it is clear that there are advantages from so doing, such as better weather and shorter track distance.

2 Flights should try to spend the minimum time in Class D airspace. Pilots should avoid circling on or close to the runway extended centre lines, since this may well interfere with departing or arriving traffic.

3 Keep the controller informed if, for any reason, that is, massive sink, you have to change your planned course.

4 Good lookout is vital at all times, >



# New look to air charts



Chart reproduced with the permission of the OS and CAA (Crown Copyright)

AS A RESULT of the CAA's moves to harmonise its services, licences and products with ICAO contracting states, and in particular with its European neighbours, you will notice changes to the look of this year's VFR air charts. The aim is both to introduce changes recommended by ICAO and to incorporate suggestions from pilots in response to a "trial" chart issued last summer. The ultimate goal is continuity of symbols between all contracting ICAO states.

So, what differences will you see when you buy your new charts this year?

On pre-2000 charts, Controlled Airspace was shown by a line (dashed, dotted or solid) accompanied by a blue tint over the whole area.

The new chart (see above) removes the blue tint, and instead enhances the outer edges of the airspace with a magenta and blue tint.

By following the principle set by ICAO of using magenta for areas or features to avoid and blue for advisory information, a number of colour changes result: aerodromes swap colours (military ones now magenta and civil, blue); ATZ will have a magenta tint with a dotted boundary; and MATZ, although remaining blue, will now have a matching blue tint.

Gliding, microlight and hang-gliding sites change to blue, as do isogonals and parachute DZs. AAIA and ATSU will be shown in blue and both will feature new symbols. Controlled airspace from the surface will now be shown with a magenta tint over the whole area.

Boxed information for nav aids, VRPs and aerodromes will have a white background to improve legibility. VOR compass roses will change and the blue coastal band is replaced by a total sea tint as used on the 1:250,000 VFR series.

The complete 1:500,000 series will be available in the new specification by the middle of this summer (see *Maps* p45), and the eight 1:250,000 charts by summer 2001 as follows (the year of the current edition is in brackets):

- 1 N Scotland West: Nov 30, 2000 (1998)
- 2 N Scotland East: Nov 2, 2000 (1998)
- 3 N Ireland: Aug 9, 2001 (1999)
- 4 The Borders: Jul 12, 2001 (1999)
- 5 Central England & Wales: Aug 19, 2001 (1999)
- 6 England East: Aug 10, 2000 (1999)
- 7 West & South Wales: Jul 13, 2000 (1998)
- 8 England South: Apr 20, 2000 (1999)

For more information, see the CAA's advertisement on p45.

> and glider pilots should be prepared to initiate avoiding action notwithstanding their right of way priority. Gliders are not always visible on radar.

5 Competition tasks should NOT be set through Class D airspace. Where a task leg has to be set close to Class D airspace the ATC unit should be informed. When possible, control point(s) should be established, to help ensure that gliders remain outside the airspace.

## Class E Airspace

The Belfast TMA and parts of the Scottish TMA are notified as Class E and permit all aircraft (including gliders) to fly in this area without ATC clearance, subject to maintaining VMC.

## Class F Airspace

An Advisory Route (ADR) is a route used by airline-type traffic but without the full protection of an airway.

Although depicted only as a centreline on UK aeronautical charts, it is nominally 10nm wide. Gliders may cross Class F airspace without restriction but caution should be exercised.

## Class G Airspace

This is the term given to the "open" FIR (Flight Information Region), which is the uncontrolled airspace not subject to any of the foregoing classifications. Within Class G airspace there are various non-ICAO types of airspace which are described below.

Within Class F and G airspace, aircraft are separated on a purely see-and-be-seen concept. A flight information service is provided by civil and military ATC units, if requested. Most small light aircraft talk to whoever will listen as they fly around the country.

## Visual Meteorological Conditions (VMC)

VMC conditions for Class D, E and in the open FIR below FL100 are: that an aircraft shall remain 1,000ft vertically, and 1,500m horizontally from cloud in a flight visibility of 5km. Below 3,000ft AMSL an aircraft shall remain clear of cloud in a flight visibility of 5km and in sight of the ground. Additionally, when flying in the Open FIR below 3,000ft and below 140kts flight is permitted in flight visibilities of 1,500m.

## Local Agreements

A number of local agreements exist which modify the effects of some of the airspace listed above. Letters of Agreement (LoA) between a gliding club and a nearby airport can make airspace either more or less restrictive than described above, depending on circumstances. These arrangements are too numerous to list in full.

Copies of LoAs should be available from your club.



### Aerodrome Traffic Zone (ATZ)

A glider pilot wishing to enter an ATZ must first call the airfield on the notified radio frequency. An ATZ is only active during the notified hours of operation of the airfield. A few ATZs may only be active at weekends and bank holidays. Many military airfields are notified as permanently active, though in reality this is not the case. Nonetheless the ATZs must be regarded as active at all times.

At an airfield with an Air Traffic Control (ATC) unit, that unit is able to give or refuse permission for any aircraft to enter the ATZ and to give clearances to take-off or land.

At an airfield with an Aerodrome Flight Information Service (AFIS) or Air/Ground (A/G) service, that unit is able only to pass information from which a pilot may judge whether or not it is safe to enter the ATZ or to take-off or land, that is, the unit cannot issue clearances or withhold permission.

The following categories of airfield are protected by an ATZ: Government aerodromes and licensed aerodromes with one of the above types of service.

The ATZ comprises the airspace extending from ground level to 2000ft above the level of the aerodrome and within a radius of 2 or 2.5nm of the centre of the aerodrome, depending on the length of the main runway.

At airfields without ATZs, including most gliding sites, regardless of how busy they are, an itinerant aircraft may legally penetrate the airspace near and over the airfield, provided the pilot conforms to the traffic pattern or keeps clear of the circuit airspace, and observes the normal rules of good airmanship to avoid conflicting with other aircraft.

For landing at airfields with or without ATZs, it should be noted that many are listed in the UK Air Pilot as "PPR", "PPR to non-radio aircraft" or even "not available to non-radio aircraft". PPR (Prior Permission Required) means that landing permission must be obtained in advance of the flight, for example, by telephone. All military airfields are effectively PPR and will not permit landings by civil aircraft

except where they have been pre-arranged, or in an emergency.

### Military Aerodrome Traffic Zones (MATZ)

The rules applicable to the penetration of a MATZ are not mandatory for civil aircraft and the same applies to the Lakenheath Military Control Zone. However, radio contact is advised and inside every MATZ there is an ATZ, the rules of which must be observed.

A standard MATZ comprises the airspace within a 5nm radius of the centre of the airfield extending from the surface to 3,000ft above airfield elevation. In addition, projecting stubs 5nm long and 4nm wide extending from 1,000ft to 3,000ft above airfield elevation are aligned with the approach to the main runway at one or both ends. Some MATZ may lack stubs or form part of a combined MATZ (CMATZ).

### Prohibited and Restricted Areas

A Prohibited Area (P-prefix) is prohibited to all aircraft, whereas a Restricted Area (R-prefix) permits limited access by aircraft under defined circumstances, for example, landing at a nearby airfield.

These areas include atomic energy establishments, security areas in Northern Ireland and sensitive military installations.

Most Restricted Areas should be considered as prohibited to gliders, but the following are exceptions:

The Restricted Airspace established around high security prisons is applicable only to helicopters.

R105 at Highgrove House in Gloucestershire applies only to helicopters and microlights.

R313 at Scampton exists for the purpose of protecting the Red Arrows' display training. The area is a circle of 5nm radius extending to 9,500ft AMSL and is active only during Scampton's normal operating hours, which are weekdays and as notified by NOTAM.

During these times, a glider may enter the area by permission of ATC Waddington.

### Temporary Restricted Airspace

Major air displays such as Farnborough or the International Air Tattoo (IAT) display at Fairford are often protected by temporary Restricted Airspace.

**This year the IAT will be at RAF Cottesmore on 22/23 July, 2000.**

Local gliding clubs usually negotiate limited access routes to and from their sites to enable non-radio gliders to continue operating, but a glider equipped with suitable radio may fly in the area if it contacts the ATC unit designated by the NOTAM as the controlling authority.

Other types of temporary Restricted Airspace are effectively closed to gliders. They are established to protect Red Arrows' displays throughout the country, plus major flypast formations, over events of political significance and over the sites of major disasters. The duration and extent of the restriction can be quite short and will be published by NOTAM.

### Purple Airspace

Purple Airspace is established from time to time on a temporary basis to protect Royal Flights in fixed-wing aircraft. Full details are only available by using the Freephone service 0500 354802. Clubs should telephone daily in order to obtain this information. Gliders are not permitted to fly within Purple Airspace, even by contacting ATC. Royal Flight NOTAMs covering royal helicopter flights have ceased. These are not protected by Purple Airspace but all pilots are required to look out for and keep well clear of the royal helicopter.

### Royal Flight NOTAMs

Postal distribution of NOTAMs has ceased. Information on Royal Flights and temporary Restricted Airspace is obtainable on the Freephone service (0500 354802).

### Danger Areas

The UK is covered with Danger Areas of many types, shapes and sizes. They are active part-time, permanently or when notified by NOTAM. Full details will be found in the UK Air Pilot, RAC >

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> Section. The chart of UK Airspace Restrictions is also useful.

The *UK Air Pilot* lists only the type of activity most likely to be encountered, but in practice various hazards may be encountered manoeuvring outside the confines of the Danger Area, especially if it is a Weapons Range Danger Area.

Many Danger Areas contain areas over which flight is prohibited at times within the period of activity of the Danger Area by reason of bye-laws made under the Military Lands Act 1892 and associated legislation. It is also worth noting that the *UK Air Pilot* does not list Danger Areas with upper limits 500ft or less above the local surface, to which prohibiting bye-laws may also apply.

With these exceptions, flight through a Danger Area is not prohibited, but may be foolhardy.

For certain Danger Areas, a Danger Area Crossing Service, most notably for Salisbury Plain is available: call Salisbury Plain Control on 122.75Mhz. A Danger Area Activity Service is available in other cases: this should be viewed as a means of establishing the state of activity of a Danger Area at a particular time, not as a clearance to cross it.

A convenient summary of these two services and the ATC units to contact is printed at the foot of the 1:500,000 series CAA charts.

Particular care should be taken to avoid Weston on the Green (D129) which is used extensively for military paratroops training. Brize Radar on 134.3 will confirm activity status.

### Parachuting

There are many sites around the country and a few operate every day and are extremely busy. The list of parachute sites and the appropriate contact ATSU/ATC for transit information is on the maps. See *Parachuting drop zone procedure*, S&G, Feb-Mar 2000, p16. The airspace is contained in a circle radius 1.5 or 2nm from the centre of the drop zone up to a maximum of FL150. You will NOT see a free fall parachutist in time to take avoiding action.

### High Intensity Radio transmission Areas

These contain powerful radio emissions which may cause interference with glider radios, electric variometers, electronic barographs and loggers.

In particular Fylingdales is so powerful that prolonged exposure may be injurious to health.

### Areas of Intense Aerial Activity (AAIA)

An AAIA is airspace which is not otherwise protected by regulated airspace but where the activity of civil and/or military flying is exceptionally high or within which aircraft regularly participate in unusual manoeuvres.

Gliders may penetrate these areas but in view of the hazards, a sharp lookout is essential.

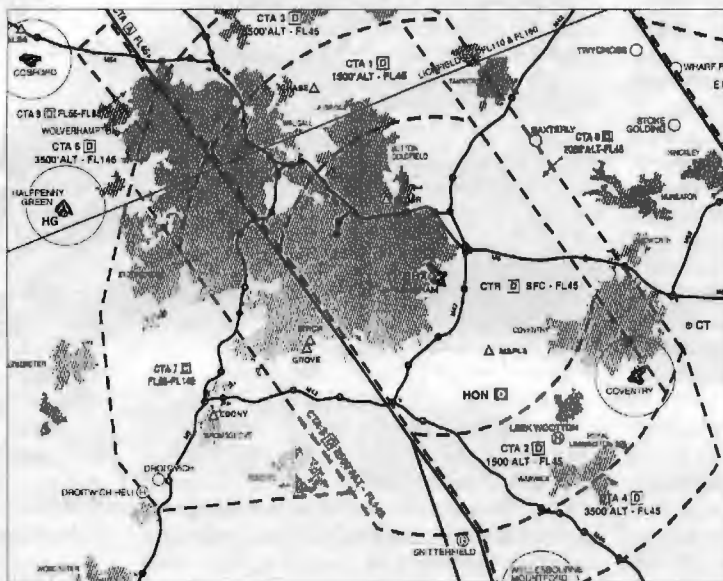
### Military Low Flying System

Low flying by high-performance military aircraft takes place in most parts of the UK up to 2,000ft agl, with the greatest concentration between 250ft and 500ft. A chart is available denoting the system

contact with an ATC unit report to them at once, or if not possible, telephone straight after landing. Call 0800 515544 or call AIS (MIL) at LATCC West Drayton on 01895 426153, who will start tracing action at once and inform the Airprox board. Follow this up with a written report on form CA1094 to the UKAB within seven days. Always use GMT (UTC is the same) in reports.

UKAB can be contacted in working hours on 01895 276121/2/5 or fax on 01895 276124. Their address is:

The Director  
UKAB  
Hillingdon House  
Uxbridge  
Middlesex, UB10 0RU



The new Birmingham airspace (see Airspace Changes, opposite page, top)

(*UK Air Pilot*, RAC Section). Most gliding sites are notified to the MoD, which affords them the status of a Military Avoidance Zone, usually with a radius of 1.5nm.

### Radar Advisory Service Area (RASA)

A RASA is airspace in which a pilot may, if he/she so chooses, avail him/herself of the services of a radar unit. There is no requirement to do so, and a glider pilot should not assume that other aircraft are being separated from him, nor even that the radar unit is aware of the glider's presence.

### The Airprox System

An airprox may be filed by a pilot who considers his flight to have been endangered by the proximity of another aircraft. All airproxes are investigated by the United Kingdom Airprox Board (UKAB), whose deliberations are confidential so as to preserve anonymity. The purpose of a UKAB investigation is to determine what lessons can be learnt, not to take punitive action.

Prompt airprox reporting is vital if the other aircraft is to be traced. If in radio

### Use of Radio

A glider pilot possessing a radio operator's licence (R/T Licence) is entitled to use all the available aeronautical frequencies of a 760 channel radio. This permits seeking access to the following types of airspace that may be otherwise closed to gliders: the new Class B airspace areas; any Class D airspace; Aerodrome Traffic zones; some types of permanent and temporary Restricted Airspace; and some Danger Areas.

Radio cannot be used to request entry clearance into Class A airspace (except by special arrangement) or into Purple Airspace.

All clubs have a copy of where and with whom one can take the R/T licence test. The licence will be valid for ten years.

### Notams

The Notam system has changed over the last few years. Essential flight planning information is obtainable from several different sources:

*UK Air pilot AIRAC Supplements* are the formal method of notifying permanent changes to airspace but can only be obtained as part of a subscription to the entire *Air Pilot*. Airspace changes have also been announced by way of *Aeronautical Information Circulars* (AICs), major changes by way of a dedicated AIC and minor changes via six-monthly summary AICs. A bi-monthly GASIL summary also covers minor changes.

*Temporary Navigation Warnings* (TNWs) are published twice weekly, giving notice of airspace warnings such as air displays, military exercises etc, and outline details of Royal Flights and Temporary Restricted Airspace.

All the above are available from CAA Printing and Publishing Services (01242 235151).



## Airspace Changes

1 There have been changes to the Birmingham area where the western side base has been raised to FL65. See map opposite.

2. ATZs for Kemble and RAF Wyton.

3. Please remember that in the North of England a corridor has been established between Pole Hill and Newcastle which is Class G, uncontrolled, airspace. It is referred to as Northern Off-Route Co-Ordination Area (NORCA) and along which flies all traffic to and from Newcastle and Teeside. It is wise to call Manchester if crossing this corridor.

These changes will be on the new editions of the 1:500,000 maps.

Other changes still under discussion are south of Didcot, north of Birmingham and in the Daventry VOR area.

## Future airspace concerns

Luton has applied for a small addition to their Class D airspace that will affect the London Gliding Club.

Farnborough has plans to expand that will impact greatly on Lasham. The Air Show is now to be held in July which is also going to have a serious effect on their operation.

In the north of England the proposal to open Finningley as a commercial airport will require some Class D airspace in the future.

All these issues are being addressed

and meetings with all parties are continually taking place.

## Maps

After much consultation, with all user groups, new maps with different colourings that show controlled airspace more clearly are being produced. Please read the article based on information from the CAA Maps and Charts Department on p42 of this *S&G*. Publication dates for the new editions of the 1:500,000 maps are:

**Southern England and Wales, Edition 26: March 23, 2000.**

**Northern England and Northern Ireland, Edition 23: May 18, 2000.**

**Scotland, Edition 20: June 15, 2000.**

## Airspace Infringements

If, due to the difficulty of trying to stay airborne, you drift into controlled airspace then PLEASE call the ATC unit and apologise giving your good reason for the intrusion. They do not care if you do not have an R/T licence but they DO CARE if the airspace that is in their control is infringed.

With the requirement to obtain an R/T licence, to fly within Class D airspace, pilots should become more confident to talk to other airfields that they may be flying close by. A brief courtesy call is welcomed by most controllers and will reinforce the position that we are "professional" pilots.

If a pilot is lost there is a service to call at any time. It is the VHF AUTO TRIANGULATION SERVICE on 121.5, the distress frequency. This service can very quickly find an aircraft as long as it is about 2-3,000ft and anywhere south and east of Manchester to the south coast of England. In particular, if you think you may be lost in controlled airspace then give this service a call. They are there to help and can locate you almost instantly on 121.5.

## References

The information in this article is only a brief synopsis of the airspace rules as they affect glider pilots and is believed to be accurate at the time of writing.

In case of doubt, authoritative references should be consulted. These are: *Air Navigation Order 1989*; *Rules of the Air Regulations 1991*; *UK Air Pilot, RAC section*. *BGA Laws and Rules*, 12th edition, May 1996, reflects the current legislation, with the exception that gliders may not enter any Class D airspace without obtaining a 'clearance'. Previous editions are obsolete.

## Abbreviations

CTA – Control Area; CTR – Control Zone; TMA – Terminal Manoeuvring Area (the lower limit of a CTA or TMA is an altitude or flight level above the surface, whereas a CTR extends to ground level).

# Official CAA VFR Charts

## New Specification charts available from 23 March 2000

To ensure that our mapping is in tune with ICAO specifications, and to further satisfy the demands of the user, major changes to the VFR chart symbology has taken place. Our main aim is to increase chart clarity, especially with regard to airspace boundaries. All charts will be amended to the new specification upon their next publication, the planned dates for these are as follows:

### Aeronautical Charts 1:500,000

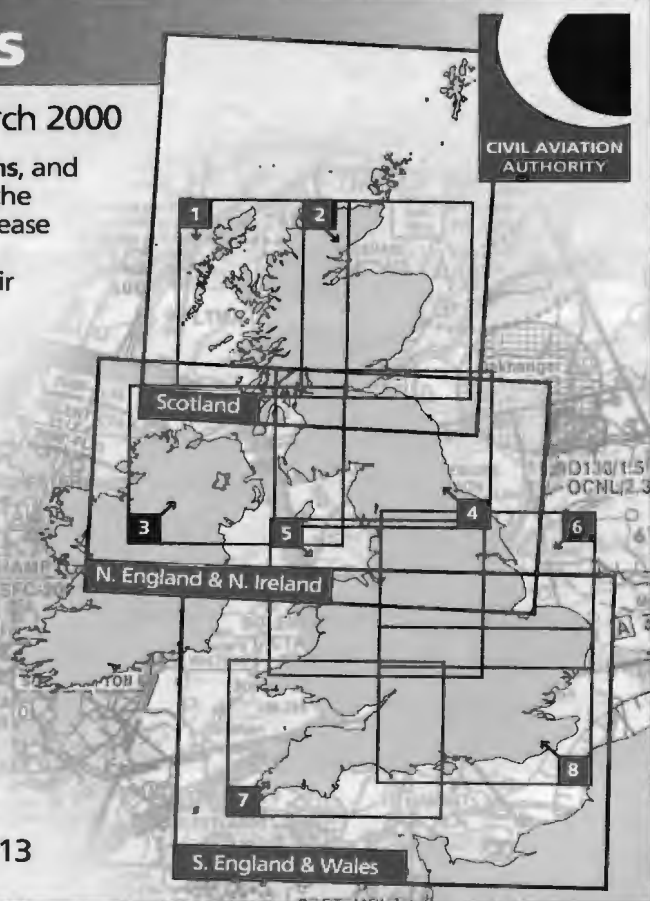
Chart name	Next publication	Current edition
S. England & Wales	23 Mar 2000	25 Mar 99
N. England & N. Ireland	18 May 2000	20 May 99
Scotland	15 Jun 2000	21 May 98

### Topographical Air Charts 1:250,000

Chart No./Name	Next publication	Current edition
1. N. Scotland West	30 Nov 2000	18 Jun 98
2. N. Scotland East	2 Nov 2000	18 Jun 98
3. N. Ireland	9 Aug 2001	4 Nov 99
4. The Borders	12 Jul 2001	15 Jul 99
5. Central Eng. & Wales	19 Aug 2001	17 Jun 99
6. England East	10 Aug 2000	25 Feb 99
7. West & South Wales	13 Jul 2000	26 Mar 98
8. England South	20 Apr 2000	22 Apr 99

(Publication dates are subject to change)

Charts available from CAA Chart Sales 0161 499 0013 and usual Stockists and Flying Clubs.







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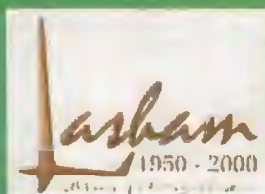
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# Records...

Listed below are the UK and National records as at 22/02/2000 (see also [www.glider.co.uk](http://www.glider.co.uk)). World ones are at [www.fai.org/glider/records](http://www.fai.org/glider/records). The FAI asks would-be world record-breakers to contact [record@fai.org](mailto:record@fai.org) or fax + 41 21 345 1077 for the latest information – before their attempt

Record Categories: (1) National or UK. The latter are flown in the UK, so no location is given; (2) Open to both sexes, except where identified as Feminine; (3) Classes – Open or 15 Metre for National records; Open, 20 Metre, 15 Metre and Standard for UK records



The record-breaking 500km by Mike Young (seen right, with Mike Bird) shows there is a substitute for span. Carr Withall describes the flight (opposite, below)

## National, Open

Gain of Height	10,545m	C Rollings/Bryony Hicks	UK	DG 500 22	08/10/1995
Absolute Altitude	11,500m	Nick Goodhart	USA	SGS 1-23	12/05/1955
Straight Distance	949.7km	Karla Karel	Australia	LS-3	20/01/1980
Goal Distance	892.1km	Robin May/P Rackham	USA	ASH25	06/07/1995
O/R Distance	1127.68km	M T A Sands	USA	Nimbus 3	07/05/1985
Triangle Distance	1362.68km	R L Robertson	USA	Ventus A	02/05/1986
Free Distance	1362.68km	R L Robertson	USA	Ventus A	02/05/1986
Free O/R Distance	1127.68km	M T A Sands	USA	Nimbus 3	07/05/1985
100km Triangle	166.38km/h	Bruce Cooper	Australia	LS-6B	04/01/1991
300km Triangle	157.96km/h	Brian Spreckley	S. Africa	Nimbus 3	10/12/1997
500km Triangle	151.37km/h	Pam Hawkins	Australia	Nimbus 4T	04/01/1999
750km Triangle	136.92km/h	Pam Kurstjens	Australia	Nimbus 4T	02/12/1999
1000km Triangle	122.42km/h	Pam Hawkins	Australia	Nimbus 4T	25/12/1998
1250km Triangle	109.01km/h	R L Robertson	USA	Ventus A	02/05/1986
300km O/R	159.20km/h	Brian Spreckley	S. Africa	Nimbus 3	12/12/1997
500km O/R	167.59km/h	Brian Spreckley	S. Africa	ASW22ble	21/11/1999
750km O/R	130.18km/h	Pam Hawkins	Australia	Nimbus 4T	06/01/1999
1000km O/R	116.27km/h	Pam Hawkins	Australia	Nimbus 4T	11/12/1998
1250km O/R					No current record

## National, 15m

Straight Distance	949.7km	Karla Karel	Australia	LS-3	20/01/1980
Goal Distance	402km min				No current record
O/R Distance	676.68km	Brian Spreckley	S. Africa	Ventus 2	28/11/1998
Triangle Distance	1362.68km	R L Robertson	USA	Ventus A	02/05/1986
Free Distance	774km min				No current record
Free O/R Distance	676.68km	Brian Spreckley	S. Africa	Ventus 2	28/11/1998
100km Triangle	166.38km/h	Bruce Cooper	Australia	LS-6B	04/01/1991
300km Triangle	152.71km/h	David Allison	S. Africa	Ventus 2B	16/11/1998
500km Triangle	149.85km/h	Mike Young	S. Africa	LS-6A	15/11/1999
750km Triangle	119.42km/h	Jill Burry	Australia	Discus B	04/01/1999
1000km Triangle	112.15km/h	G E Lee	Australia	ASW 20B	25/01/1989
1250km Triangle	109.01km/h	R L Robertson	USA	Ventus A	02/05/1986
300km O/R	147.88km/h	Mike Young	S. Africa	LS-6A	19/01/1999
500km O/R	148.38km/h	Gill Spreckley	S. Africa	LS-6C	23/11/1999
750km O/R					No current record
1000km O/R					No current record
1250km Triangle					No current record

## National, Feminine, Open

Gain of Height	9119m	Anne Burns	S. Africa	Skylark 3B	13/01/1981
Absolute Altitude	10,550m	Anne Burns	S. Africa	Skylark 3B	13/01/1981
Straight Distance	949.7km	Karla Karel	Australia	LS-3	20/01/1980
Goal Distance	687.58km	Pam Kurstjens	Australia	Nimbus 4T	10/01/2000
O/R Distance	1002.83km	Pam Hawkins	Australia	Nimbus 4T	11/12/1998
Triangle Distance	1036.56km	Pam Hawkins	Australia	Nimbus 4T	25/12/1998
Free Distance	1037.29	Pam Hawkins	Australia	Nimbus 4T	25/12/1998
Free O/R Distance	1002.83km	Pam Hawkins	Australia	Nimbus 4T	11/12/1998
100km Triangle	136.25km/h	Gillian Spreckley	S. Africa	Nimbus 3	20/12/1997
300km Triangle	153.67km/h	Pam Kurstjens	Australia	Nimbus 4T	03/01/2000
500km Triangle	151.37km/h	Pam Hawkins	Australia	Nimbus 4T	04/01/1999
750km Triangle	136.92km/h	Pam Kurstjens	Australia	Nimbus 4T	02/12/1999
1000km Triangle	122.42km/h	Pam Hawkins	Australia	Nimbus 4T	25/12/1998
1250km Triangle					No current record
300km O/R	140.57km/h	Gillian Spreckley	S. Africa	ASW 22ble	17/12/1999
500km O/R	148.38km/h	Gillian Spreckley	S. Africa	LS-6C	23/11/1999
750km O/R	130.18km/h	Pam Hawkins	Australia	Nimbus 4T	06/01/1999
1000km O/R	116.27km/h	Pam Hawkins	Australia	Nimbus 4T	11/12/1998
1250km O/R					No current record

## National, Feminine, 15m

Straight Distance	949.7km	Karla Karel	Australia	LS-3	20/01/1980
Goal Distance	402km min				No current record
O/R Distance	620.31km	Jill Burry	Australia	Mosquito B	04/01/1994
Triangle Distance	814.01km	Karla Karel	Australia	LS-3	09/01/1980
Free Distance	814.01km	Karla Karel	Australia	LS-3	09/01/1980
Free O/R Distance	620.31km	Jill Burry	Australia	Mosquito B	04/01/1994
100km Triangle	134.93km/h	Gillian Spreckley	S. Africa	LS-8	16/12/1997
300km Triangle	132.54km/h	Gillian Spreckley	S. Africa	Ventus 2	21/12/1997
500km Triangle	134.07km/h	Gillian Spreckley	S. Africa	Ventus 2	22/12/1997
750km Triangle	119.42km/h	Jill Burry	Australia	Discus B	04/01/1999
1000km Triangle					No current record
1250km Triangle					No current record
300km O/R	134.33km/h	Gillian Spreckley	S. Africa	Ventus 2	12/12/1997

500km O/R	148.38km/h	Gill Spreckley	S. Africa	LS-6C	23/11/1999
750km O/R					No current record
1000km O/R					No current record
1250km O/R					No current record

## UK, Open

Gain of Height	10,545m	Chris Rollings/Bryony Hicks	DG-500 22	08/10/1995
Absolute Altitude	11,570m	Chris Rollings/Bryony Hicks	DG-500 22	08/10/1995
Straight Distance	827.9km	Justin Wills	LS-6	29/05/1986
Goal Distance	579.36km	Nick Goodhart	Skylark 3	10/05/1959
O/R Distance	801.3km	Chris Garton	Kestrel 19	22/07/1976
Triangle Distance	770.5km	Chris Rollings	Jantar 2A	28/05/1985
Free Distance	1006.54km	Chris Pullen/Chris Rollings	ASH 25	22/07/1995
Free O/R Distance	801.3km	Chris Garton	Kestrel 19	22/07/1976
100km Triangle	133.97km/h	Phil Jeffery	LS-7 WL	01/08/1995
200km Triangle	119.07km/h	Robin May/P Townsend	ASH-25	18/07/1990
300km Triangle	117.14km/h	Ralph Jones	Nimbus 3	28/05/1985
400km Triangle	114.3km/h	Ralph Jones	Nimbus 3	1/08/1984
500km Triangle	106.9km/h	Ralph Jones	Nimbus 2	31/05/1975
600km Triangle	94.94km/h	Robin May/S Lynn	ASH-25	19/07/1990
750km Triangle	98.46km/h	Al Kay	LS-6C 18W	21/04/1995
1000km Triangle				No current record
1250km Triangle				No current record
300km O/R	114.5km/h	Dave Watt	ASW 22	18/08/1983
500km O/R	111.83km/h	Ralph Jones/Simon Marriot	Nimbus 3DM	13/08/1994
750km O/R				No current record
1000km O/R				No current record
100km Goal	173.32km/h	D Hill/John Goringe	ASH-25	08/04/1990
200km Goal	127.1km/h	Alf Warming	Vega	12/05/1984
300km Goal	132.8km/h	Alf Warming	Kestrel 19	24/04/1976
400km Goal	198.36km/h	Alf Warming	Ventus 16.6m	07/04/1990
500km Goal	90.7km/h	Nick Goodhart	Skylark 3	10/05/1959

## UK, 20m

Straight Distance	827.9km	Justin Wills	LS-6	29/05/1986
Goal Distance	579.36km	Nick Goodhart	Skylark 3	10/05/1959
O/R Distance	801.3km	Chris Garton	Kestrel 19	22/07/1976
Triangle Distance	801.3km	Chris Garton	Kestrel 19	22/07/1976
Free Distance	827.9km	Justin Wills	LS-6	29/05/1986
Free O/R Distance	801.3km	Chris Garton	Kestrel 19	22/07/1976
100km Triangle	133.97km/h	Phil Jeffery	LS7-WL	01/08/1995
200km Triangle	96km/h min			No current record
300km Triangle	95km/h min			No current record
400km Triangle	93km/h min			No current record
500km Triangle	87km/h min			No current record
600km Triangle	88.8km/h	Chris Garton	Kestrel 19	10/05/1976
750km Triangle	98.46km/h	Al Kay	LS-6C 18W	21/04/1995
1000km Triangle				No current record
1250km Triangle				No current record
300km O/R	93km/h min			No current record
500km O/R	101.46km/h	Mike Jefferyes	DG-600	17/08/1983
750km O/R				No current record
1000km O/R				No current record
100km Goal	150km/h	Justin Wills	LS-4	12/05/1984
200km Goal	127.1km/h	Alf Warming	Vega	12/05/1984
300km Goal	132.8km/h	Alf Warming	Kestrel 19	24/04/1976
400km Goal	98.36km/h	Alf Warming	Ventus 16.6m	07/04/1990
500km Goal	90.7km/h	Nick Goodhart	Skylark 3	10/05/1959

## UK, 15m

Straight Distance	827.9km	Justin Wills	LS-6	29/05/1986
Goal Distance				No current record
O/R Distance	817km	Chris Garton	LS-6	28/08/1989
Triangle Distance	633.27km	Tim MacLadysen	ASW 20WL	13/05/1996
Free Distance	827.9km	Justin Wills	LS-6	29/05/1986
Free O/R Distance	617km	Chris Garton	LS-6	28/08/1989
100km Triangle	133.97km/h	Phil Jeffery	LS7-WL	01/08/1995
200km Triangle	114.95km/h	Dave Watt	ASW 24	03/08/1990
300km Triangle	115.85km/h	John Goringe	LS-7	03/08/1990
400km Triangle	99.39km/h	Phil Jeffery	LS-7	13/08/1991
500km Triangle	106.06km/h	Dave Watt	ASW 24	21/04/1995
600km Triangle	88.1km/h	Al Kay	ASW 24	09/05/1991
750km Triangle				No current record
1000km Triangle				No current record
1250km Triangle				No current record



300km O/R	104.09km/h	Al Kay
500km O/R	96.09km/h	Chris Rollings
750km O/R		
1000km O/R		
100km Goal	150km/h	Justin Willis
200km Goal	127.1km/h	Alf Warmingier
300km Goal	131.1km/h	Justin Willis
400km Goal		
500km Goal		

#### UK, Standard

Straight Distance	718km	Justin Willis
Goal Distance		
O/R Distance		
Triangle Distance	609.9km	Al Kay
Free Distance	718km	Justin Willis
Free O/R Distance		
100km Triangle	133.97km/h	Phil Jeffery
200km Triangle	114.95km/h	Dave Watt
300km Triangle	115.85km/h	John Gorringer
400km Triangle	99.39km/h	Phil Jeffery
500km Triangle	106.06km/h	Dave Watt
600km Triangle	88.1km/h	Al Kay
750km Triangle		
1000km Triangle		
1250km Triangle		
300km O/R	104.09km/h	Al Kay
500km O/R	96.09km/h	Chris Rollings
750km O/R		
1000km O/R		
100km Goal/150km/h		Justin Willis
200km Goal		
300km Goal	131.1km/h	Justin Willis
400km Goal	73.8km/h	Justin Willis
500km Goal		

#### UK, Feminine, Open

Gain of Height	7.833m	Alison Jordan
Absolute Altitude	8,701m	Alison Jordan
Straight Distance	454km	Anne Burns
Goal Distance	324.4km	Jane Nash
O/R Distance	386.3km	Geralyn Macfadyen
Triangle Distance	524.5km	Geralyn Macfadyen
Free Distance	569.93km	Geralyn Macfadyen
Free O/R Distance	386.3km	Geralyn Macfadyen
100km Triangle	114.67km/h	Jill Burry
200km Triangle	93.38km/h	Geralyn Macfadyen
300km Triangle	83.57km/h	Geralyn Macfadyen
400km Triangle	89.00km/h	Julie Angell
500km Triangle	86.21km/h	Sarah Harland
600km Triangle		
750km Triangle		
1000km Triangle		
1250km Triangle		
300km O/R	84.80km/h	Geralyn Macfadyen
500km O/R		
750km O/R		
1000km O/R		
100km Goal	135.39km/h	Jane Nash
200km Goal	85.5km/h	Anne Burns
300km Goal	93.16km/h	Jane Nash
400km Goal		
500km Goal		

#### UK, Feminine, 20m

Straight Distance	454km	Anne Burns
Goal Distance	324.4km	Jane Nash
O/R Distance	386.3km	Geralyn Macfadyen
Triangle Distance	524.5km	Geralyn Macfadyen
Free Distance	569.93km	Geralyn Macfadyen
Free O/R Distance	386.3km	Geralyn Macfadyen

ASW 24	28/04/1989
Discus BW	13/05/1996
	No current record
	No current record
LS-4	12/05/1984
Vega	12/05/1984
Std Libelle	24/04/1976
	No current record
	No current record

Std Libelle	01/08/1976
	No current record
	No current record
ASW 24	09/05/1991
Std Libelle	01/08/1976
	No current record
LS-7 WL	01/08/1995
ASW 24	03/08/1990
LS-7	03/08/1990
LS-7	13/08/1991
ASW 24	21/04/1995
ASW 24	09/05/1991
	No current record
	No current record
ASW 24	28/04/1989
Discus BW	13/05/1996
	No current record
	No current record
LS-4	12/05/1984
	No current record
Std Libelle	24/04/1976
Std Libelle	07/06/1976
	No current record

Astir CS	08/10/1978
Astir CS	08/10/1978
Skylark 3A	10/05/1959
Ventus B	15/04/1989
Sport Vega	30/06/1994
Sport Vega	22/07/1995
ASW 20F	13/06/1996
Sport Vega	30/06/1994
LS-8	31/07/1999
ASW 20F	19/08/1996
ASW 20F	04/08/1996
Duo Discus	13/06/1996
ASW 24	15/08/1997
	No current record
	No current record
	No current record
	No current record
ASW 20F	15/08/1997
	No current record
	No current record
	No current record
Ventus B	11/06/1989
Olympia 419	02/06/1963
Mini-Nimbus	07/04/1990
	No current record
	No current record

Skylark 3A	10/05/1959
Ventus B	15/04/1989
Sport Vega	30/06/1994
Sport Vega	22/07/1995
ASW 20F	13/06/1996
Sport Vega	30/06/1994

100km Triangle	114.67km/h	Jill Burry
200km Triangle	93.38km/h	Geralyn Macfadyen
300km Triangle	83.57km/h	Geralyn Macfadyen
400km Triangle	89.00km/h	Julie Angell
500km Triangle	86.21km/h	Sarah Harland
600km Triangle		
750km Triangle		
1000km Triangle		
1250km Triangle		
300km O/R	84.80km/h	Geralyn Macfadyen
500km O/R		
750km O/R		
1000km O/R		
100km Goal	135.39km/h	Jane Nash
200km Goal	135.39km/h	Jane Nash
300km Goal	85.5km/h	Anne Burns
400km Goal	93.16km/h	Jane Nash
500km Goal		

#### UK, Feminine, 15m

Straight Distance	324.4km	Jane Nash
Goal Distance	324.4km	Jane Nash
O/R Distance	386.3km	Geralyn Macfadyen
Triangle Distance	524.5km	Geralyn Macfadyen
Free Distance	569.93km	Geralyn Macfadyen
Free O/R Distance	386.3km	Geralyn Macfadyen
100km Triangle	114.67km/h	Jill Burry
200km Triangle	93.38km/h	Geralyn Macfadyen
300km Triangle	83.57km/h	Geralyn Macfadyen
400km Triangle	67.83km/h	Geralyn Macfadyen
500km Triangle	86.21km/h	Sarah Harland
600km Triangle		
750km Triangle		
1000km Triangle		
1250km Triangle		
300km O/R	84.80km/h	Geralyn Macfadyen
500km O/R		
750km O/R		
1000km O/R		
1250km O/R		
100km Goal	135.39km/h	Jane Nash
200km Goal		
300km Goal	93.16km/h	Jane Nash
400km Goal		
500km Goal		

#### UK, Feminine, Standard

Straight Distance		No current record
Goal Distance		No current record
O/R Distance	386.3km	Geralyn Macfadyen
Triangle Distance	524.5km	Geralyn Macfadyen
Free Distance	524.5km	Geralyn Macfadyen
Free O/R Distance	386.3km	Geralyn Macfadyen
100km Triangle	114.67km/h	Jill Burry
200km Triangle	76.68km/h	Sarah Harland
300km Triangle	83.69km/h	Sarah Harland
400km Triangle	67.83km/h	Geralyn Macfadyen
500km Triangle	86.21km/h	Sarah Harland
600km Triangle		No current record
750km Triangle		No current record
1000km Triangle		No current record
1250km Triangle		No current record
300km O/R		No current record
500km O/R		No current record
750km O/R		No current record
1000km O/R		No current record
1250km O/R		No current record
100km Goal		No current record
200km Goal		No current record
300km Goal		No current record
400km Goal		No current record
500km Goal		No current record

LS-8	31/07/1999
ASW 20F	19/08/1996
ASW 20F	04/08/1996
Duo Discus	13/06/1996
ASW 24	15/08/1997
	No current record
	No current record
	No current record
	No current record
ASW 20F	15/08/1997
	No current record
	No current record
Ventus B	11/06/1989
Ventus B	11/06/1989
Olympia 419	02/06/1963
Mini-Nimbus	07/04/1990
	No current record
	No current record

Ventus B	15/04/1989
Ventus B	15/04/1989
Sport Vega	30/06/1994
Sport Vega	22/07/1995
ASW 20F	13/06/1996
Sport Vega	30/06/1994
LS-8	31/07/1999
ASW 20F	19/08/1996
ASW 20F	04/08/1996
Sport Vega	30/05/1994
ASW 24	15/08/1997
	No current record
	No current record
	No current record
ASW 20F	15/08/1997
	No current record
	No current record
Ventus B	11/06/1989
	No current record
Mini-Nimbus	07/04/1990
	No current record
	No current record



Two record-holders (from left): Gillian Spreckley and Jane Nash

## ... and what the flights that break them feel like

WHEN I arrive at the European Soaring Club's base at Mafikeng, South Africa, Mike Young (LS-6) and Paul Crabb (LS-8) are planning a record attempt.

Monday dawns bright and clear so a 516km triangle is declared. A long wait for the cumulus to appear, with cloudbase expected to be at least 15,000ft. As the flight is only likely to take a little over three hours there's no hurry to get airborne. Far better to cool off in the pool and have lunch.

We launch when cloudbase is 14,000ft, wait until a good line of lift lies along the first leg and speed off cruising at 110kts and only accept a climb if it's 10kts. This is a dream

Carr Withall describes the flight with Mike Young and Paul Crabb when they broke, respectively, British and Irish National 500km triangle records

flight but it's impossible to get away from these little gliders and I wish I could reduce my Nimbus 3's wing span.

The first leg average is about 145km/h, not good enough for a record – but cloudbase is now 17,000ft. We must get faster.

We are continually running into strong thermals, only turning if they are really off the clock. Paul Crabb calls that he's had a 14kt climb to 17,000ft and says in his soft

Irish voice "It really is quite a nice day". Mike replies: "It is a bloody fantastic day and the best day I have ever flown on".

Paul is 20km ahead by the second turn and only one climb is needed before it for the final 160km. I cannot find the big climb, which costs me precious minutes. Paul is home at 156km/h, Mike 149km/h and I come in at only 145km/h! What a wonderful day!

Gillian Spreckley adds that more than ten British, Irish and Feminine records were broken from Mafikeng in November/December 1999, including Brian Spreckley's National Open Class 500km O/R – and Mike Young also secured his 1,000km Diploma.



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# Club News

Please send your club news entries to [helen@sandg.dircon.co.uk](mailto:helen@sandg.dircon.co.uk) or Helen Evans, 6 Salop Close, Shrivenham, Swindon SN6 8EN, to arrive by April 18 for the June-July issue. Thank you.

## Angus (Drumshade)

THE LAST flight of 1999 was a soaring flight, and plenty of launches were achieved on winter weekends. Congratulations to 16-year-old Derek Russell, our first soloist of the year, on January 16. The SF34 undercarriage has been modified from gas to spring, thanks to CFI Allan Black, so our glass two-seater will be on line again. Good news: the club's new committee decided to reduce winch launch fees to £3.00, with a further reduction from the third launch of the day. We normally operate weekends all year round and are planning a flying week again this spring – probably in early April. For further details, call Evelyn Mands on 01575 572994.

**Wolf Rossmann**

## Aquila (Hinton-in-the-Hedges)

THERE has been lots of activity for the season ahead, and even some good flying. The weekend of February 13 saw super soaring at Hinton, a very successful group in Talgarth, and the return of a couple of deserters from Australia. Bryan Searle did his 300 there, spurred on by a 12km walk in the wrong direction when he landed out the previous day. That's gliding!

**Mel Eastburn**

## Bannerdown (RAF Keevil)

SIXTY members attended the AGM in Chippenham where the following awards were made: Jon Arnold (hog of the year and best competition results); Simon Foster (best flight); Nick Hyde (most progress); Shaun Wickham (dedication to club engineering projects); John Burn (development and successful running of the Logstar flight-log system). We have a self-launching Janus CM on loan, which has widened members' flying experience and made the most of getting into weak wave. We have a K-18, ex-Kinloss, to replace the K-8, when the fuselage has been re-covered and the whole given a new colour scheme. A recent weak ridge day led to a flurry of outlandings and consequent muddy retrieves.

**Derek Findlay**

## Bath Wilts & N. Dorset (The Park)

TURBO engines seem to be becoming fashionable. Another arrived recently, bringing the total to four, and a fifth is promised. Although we have had a dismal winter we are lucky to have a well-drained field, local ridges to soar, and occasional wave to make things more interesting. Many hours were flown by a

number of gliders on our first thermal day in mid-February. Our annual course for local schoolchildren has been booked, and in June we hope to repeat the success of last year's BGA cross-country course.

**Joy Lynch**

## Bidford (Bidford)

THE BOGGY airfield was out of action for a while apart from the odd weekend flight but it's now drying out. Rob Jarvis and Matthew Weinle bucked the trend in early February with a dual 7,000ft, 2hr 45min wave flight in the club K-7/13. Thanks to Steve Rolls for organising January's annual Dinner Dance, where the following received prizes: Peter Freeman (club ladder novice, Woodenships for 89km in the Swallow); Rob (Bob) Jarvis (club ladder intermediate); Frank Jaynes (club ladder pundit, Bidford site ladder); John Watson (CFI crook, and Tuggy One); Roger Wilson (*ab-initio* of the year); Richard Palmer



This syndicate-owned PIK 20D came to Borders GC from Belgium  
**Bob Cassidy**

(Cairngorm Shield for 12,800ft height gain, Shobdon); Ivor Enock, John Tattersdill, Will Britton, Rob Jarvis, Warren Davis and Adrian Burt (prop benders); Matthew Weinle (pilot most likely to...); and finally Morris Coleman (Pistons).

**Nigel Howard**

## Black Mountains (Talgarth)

WELL DONE to the working party on our successful Lottery bid for funding towards an M3 tug hangar and a glider store. Work is expected to start this summer. Our task week has been brought forward a week and will now begin on August 19. A club ladder is being run this season to try to encourage a few more cross-country excursions.

**Mike Tomlinson**

## Booker (Wycombe Air Park)

WE PLAN several expeditions this spring: to Shobdon, the Long Mynd, and to Ontur, Spain, taking our Duo Discus in late April with Bernie Morris and John Dobson – our first overseas club expedition for a while. The

first of the new hangars is at last complete, and we are moving back in. Rumour control says that the next door hangar will be demolished in April, when we will gain some refugees for a couple of months. Our regionals date is July 22-30; we may still have a few vacancies, even at this date. We regret to report the death of Barry Amos (*see obituaries, p57*).

**Roger Neal**

## Borders (Milfield)

SOME OF our pilots were soaring in wave on January 1. Unfortunately the climbs were limited: only one pilot had oxygen on and as it was running out, abandoned his climb at 14,000ft in 3-4kts. We soared every weekend in January with flights ranging from one to four hours. Our club statistics show almost as many hours flown as launches, including BI and training flights. Ernie Mills has two Bronze legs. Our wave weeks and bank holiday weekends are filling up fast with visitors and it looks like being a record year for the club.

**Bob Cassidy**

## Bowland Forest (Chipping)

EVENTS are being organised to mark the 50th anniversary of the founding of our club: see [www.users.globalnet.co.uk/~dlittler/](http://www.users.globalnet.co.uk/~dlittler/) Gordon Bleasdale, who joined the club in 1950, is our longest standing member and is still flying with us today. Bob Pettifer has been making the best use of the recent foul weather by delivering a very well-attended series of Bronze lectures. Clubhouse improvements are nearing completion. A mentoring scheme is being set up to help new members and ab-initios to integrate more easily into the club, and we hope to increase the amount of cross-country flying by encouraging cross-country training flights in club two-seaters.

**Derek Littler**

## Bristol & Gloucestershire (Nympsfield)

RICHARD Smith won the Wakefield Trophy and the EW Avionics prize for the best flight of 1999 – his 720km in Ventus 188. Rob Thompson did his Gold height in the club ASW 19 on February 2. Derek Vennard and Richard Smith did an early-season 230km O/R to Welshpool in Nimbus 3DT on Feb 13. The Christmas dinner run by the Lemin family was a big success, and a great millennium party was organised by five club members. On February 12, Geryllyn and Tim Macfadyen ran an excellent Spanish evening for 44 people. Unconnected with all this wonderful catering, the search is on for a new canteen franchisee.

**Bernard Smyth**



## Buckminster (Saltby)

CLUB MEMBERS enjoyed a prizegiving evening in January in the clubhouse with excellent food from our untiring lady members. Cup-winners were Sarah Aldridge (longest flight in a club glider); Mike Cook (club member of the year, league 2); Chris Davison (longest cross-country distance); Lawrence Gerrard (100km achievement); Dennis Hubbard (best improver); Graham Kench (winner of club ladder); Dave Sharp (Pocklington two-seater competition result); and Ron Webster (CFI's award). Club visits to Parham, Pocklington and Portmoak are planned for the season.

Dave Brinkworth

## Burn (Burn)

WE ARE very concerned about proposed developments at Finningley (*Threat to sites and epic flights*, February-March, p10) and are representing ourselves as best we can. BGA support will be invaluable. Runway repairs continue, with a smooth tarmac strip the whole east-west length. Our tug is expected back soon from its major refit. Thanks to Paul Etherington and the Rallye group for bailing us out. Jill Goodison organised a civilised soiree to celebrate St Valentine's. Some of us came straight from the winch but no one seemed to object to the style or bouquet. Michael Forman and Gregory Rybak are solo. Stan Kochanowski

## Cairngorm (Feshiebridge)

MEMBERS have enjoyed some superb winter soaring with wave climbs to 12,500ft QFE being the norm. Badge claims include Jim Riach and John Whyte (Gold heights) and Samuel Paton (first solo). We are looking for another two-seater to join our fleet for what we hope will be an exciting new season. Dates for your diary include our task week (May 6-12) and a PFA fly-in (May 13-14). Bookings are being taken for our celebrated Octoberfest wave camp. Please phone for details (01540 651317). Everyone welcome. We look forward to seeing our old friends and making new ones with the annual spring migration of visitors. Chris Fiorentini

## Cambridge (Gransden Lodge)

AT OUR prizegiving, trophies went to John Bridge, Andrew Warbrick, Sarah Harland, Mike Young, Steve Turner, John Dadson, Paul Browne, Fraser Hayden, Phil Jeffery, Stuart Crawshaw, Peter Baker, Alan Head and Mark Evershed. Paul and Stuart are from the university; it is good to see their pilots progressing so well. Debbie Thomas (also from the university), Bryan Hooson and John Rogers are instructors. Sarah Harland is one of the three pilots awarded the Prince of Wales Cup by the Royal Aero Club for her

performance in the Women's Europeans. Steve Longland will receive a Certificate of Merit. Our winter lecture series included talks from Brian Spreckley and Carr Withall; our thanks to them. We have now introduced a booking system for all training, which we hope will reduce the frustration of queuing. John Birch

## Channel (Waldershare)

THE ANNUAL dinner was a great success: thanks to all who attended. Silverware and engraved glasses were presented to Sandra, Nic, Ron, John (CFI), Ian and Colin. Well done and thanks for all your hard work over the past year. The winch hangar/workshop doors have been fitted, the roof sheeting has been ordered. We hope it will be up and running shortly. Colin Harwood

## Cleavelands (Dishforth)

OUR ANNUAL wave camp started with a splendid Christmas lunch, thanks to chef



Keeping up an Edwards family tradition: Catharina (left) gave granddaughter Susanna Edwards her first flight, for her 7th birthday. Ann Parry, Catharina's daughter (see page 23) also first flew at Cambridge GC, as a seven-year-old, in "Bluebell," a T-21 which is still there

Andy Causer, and the unflyable day meant there were plenty of kitchen helpers. It waved almost every day from then on. Rolf Tietema managed to work his way to the top of the stack in his Libelle most days. Barry Smith gained Gold height, this time with a working barograph, as did Chris Bryning in the club's Astir. Richard Foster took the club K-18 to around 10,000ft on only his second solo wave trip, and came away with Silver height and an awful lot more hours than he started the week with. (Yours truly was this day fighting the Millennium bug at work and feeling very hard done by!) Dishforth wave can work all year round, so drop in with your glider for a launch. Please check our web site – [www.dishforthairfield.freeserve.co.uk](http://www.dishforthairfield.freeserve.co.uk) – for the latest news on our proposed relocation. Polly Whitehead

## Cornish Gliding and Flying Club (Perranporth)

ALL CHANGE in Cornwall: the new company is up and running, with Cliff Clarke as chairman until the elections. Gordon Hunter

is our CFI for the coming year. Our annual dinner with speaker John Stewart-Smith of Flight Safety Bulletin (and, of course, a fondly remembered ex-member) was well attended with representatives from other clubs. Trophies were presented to deserving members and presentations were also made to John Shaw, retiring CFI – a watercolour of the Tiger Moth he is rebuilding – and to Ivan Foster, retiring Chairman. A good time was certainly had by all – which is what we offer to all comers to our seven-day-week with lots of flying, courses and SLMG training. Dick Gillow

## Cotswold (Aston Down)

WE WELCOME the University of the West of England GC who have been flying with us since New Year, and who turned out in force for our dinner dance, resplendent in sombreros. We hope they will not be pursued under the BGA big-brimmed hat rule. Around a hundred members attended and heard former club chairman Derek Vennard recall

early days before we purchased the airfield. At the AGM, Roger Bagley and Richard Parker were elected as chairman and projects manager respectively. Miles Wigfield and Darrel Tucker were thanked for their hard work. Silverware went to Alistair Harrison (best pre-Silver pilot), Robert MacLachlan (achievement over-50s), Mike Oliver (best distance), Oliver Ward (best competition performance), Brian Birlison (club 100km triangle), David Blackwell (best junior), Gary Fryer (club ladder), Ken Lloyd and Danny Goldsworthy (best two-seater flight), and finally Frank Birlison (height gain).

Frank Birlison

## Deeside (Aboynne)

THREE club members claimed the first UK soaring flight of the millennium. Tug pilot Terry Cawthorne and Puchacz FYL pilots Dave and Jack Pirie took off from runway 27 Aboynne Airfield at 08.36hrs on January 1, 2000. Sunrise was seen from 2,500ft over the airfield. FYL released at 3,000ft in weak lift then contacted 'off the clock' lift, climbing to 10,000ft. Congratulations to Craig Robb, Bruce Herkert and Dave Bull on their Gold height, Alex Maitland on his Silver height and Mike Whyment on soloing. We extend a warm welcome to visiting pilots and hope that the year 2000 will produce as many, if not more, height gain awards than 1999! Sue Heard

## Denbigh (Denbigh)

OUR CFI, John Oxley Dean, is a pretty cool guy. But all that changed when TV presenter Lucy Cohen appeared at the clubhouse door complete with film crew: the poor guy was completely lost for words. Well, after a long wait the great day arrived and HTV's *Away Days* magazine programme featured Denbigh. Lucy had a couple of flights with



John and her screams can still be heard to this day because John hasn't stopped replaying the video yet! Congratulations to: Steve Butler (Silver height – this time with barograph); Robin Filer (cross-country endorsement); and Martin Jones (Bronze and cross-country endorsement). We look forward to welcoming Essex & Suffolk, East Sussex, Midland, Cosford and other clubs in the next few months. See our new website at [www.DenbighGlidingClub.welshnet.co.uk](http://www.DenbighGlidingClub.welshnet.co.uk)  
**Martin Jones**

### Derby & Lancs (Camphill)

AFTER 11 years as club manager John McKenzie is moving on. Also moving on after six years is CFI Dave Salmon, who has handed over to Dave Martin. Our thanks to John and Dave for all their work. Dave Oliver has gone solo. Due to the high winds the winter wave was good in quantity. The club is indebted to Bob and Miranda for keeping us well entertained for the last couple of years as our stewards. Catering is now courtesy of Martin. We have a variety of events planned for spring and summer so if you fancy paying a visit to enjoy flying and socialising, please contact us on 01298 871270.

**Tamsyn Cook**

### Devon and Somerset (North Hill)

EACH WINTER we learn a little more about wave soaring possibilities around our site. Whilst not in the big league, it appears to abound around North Hill, apparently emanating from Exmoor, the Quantock hills, the cliffs at Branscombe and Lyme Regis and, of course, Dartmoor. Whilst we wait for the spring, experienced members have amused themselves exploring these new frontiers; lesser mortals have been brushing up on their theory and rules in preparation for their Bronze exams; and the more astute have been planning an early expedition to Cerdanya in Spain! We enjoyed the dinner organised by Dave Brummit and attended a series of lectures on R/T techniques where we learned that we shouldn't start each call with: "123 – 'ow you'm doin' me 'andsom!".

**Phil Morrison**

### Dukeries (Gamston)

NEW ROLLER gear has been fitted to the winch without any break in flying activity, thanks to Mick Burrows, Glen Barratt, Roy Lunn and others. John Talbot has gone solo and yours truly has now been cleared to fly basic instructional flights. The number of courses and flights booked as a result of our successful advertising campaign is well above expectation, more than compensating for the costs incurred. The numbers of BIs at the club will more than double this year, which should relieve the extra load on the already over-worked instructors.

**Dave Hall**

### East Sussex (Ringmer)

WINTRY gloom and despondency were dispelled on February 5 when rare Ringmer

wave took a number of us to FL55, one pilot converted to a K-8, some winter checks were completed and a new member joined! Would that all days were as good. Plans to level and drain the field are complete; we await the contractor's final decision. Winter lectures were very successful. Trips are planned to Talgarth, Denbigh and the Wolds. Our Chipmunk tug has returned from C of A and we look forward to a safe and productive soaring season.

**AWL**

### Enstone Eagles (Enstone)

ANOTHER mild winter meant no problems with frozen pipes in the clubhouse or radiators in the winch and vehicles. We have a good number of people booked on our five-day courses, held the first week of each month, May to September. We will offer trial flights to prospective members on April 8-9. Visiting pilots will be most welcome to join us for our three summer flying weeks and enjoy the Cotswold countryside and freedom from airspace restrictions. We are arranging for a second tug to be based at Enstone to supplement the Dimona and give us more aerotowing, which we run alongside winching. Cross-country pilots should note that although the club is mainly weekend-only, there is usually a tug pilot on site during the week who can help with those long retrieves.

**Geoff Dixon**

### Essex (North Weald/Ridgewell)

WE NOW have a father and son on our tug roster: David Callow joins his father Lionel. Well done to those members who have worked hard on more improvements to our Ridgewell site. Our hangar doors suffered in the recent gales, resulting in superficial damage. The fittings have since been strengthened. Features in the *Sunday Express* and *Essex Life* led to a number of enquiries. Our two delegates attending the recent Chairmen's Conference found the subjects raised and discussed very interesting and informative.

**Peter Perry**

### Essex & Suffolk (Wormingford)

WE FLEW on December 31 and on New Year's Day. Winter is, for flatlands clubs like ours, a quiet time, but very useful for doing annual checks and taking P2 flights to brush up on specifics. There has been the odd opportunity to soar and we have seen at least two flights of 20mins-plus duration, which for very early January in this part of the world is a rarity. Our CFI is busy refurbishing the club K-6E and our T-21 is off site being completely rebuilt ready for the coming season. The club continues to grow and we have acquired land for a new trailer park.

**Steve Jones**

### Fenland (RAF Marham)

OUR AGM was well attended. The efficiency trophy for outstanding hard work for the club went to Mark Pickersgill. The Au Vache trophy (humorous retrieve) went to Mark

## Club News

Pickersgill and Pete Stafford Allen; Pete also won the speed trophy (338.7kms at 95km/h) and the longest cross-country trophy (375km). The Darwin trophy (aka the I messed up trophy) went to Mitch Middleton, who thought he was towing the LS-8 when he went under a 7ft bridge towing a 7.5ft high caravan. Tim Edmunds walked away with best newcomer, the ladder trophy and member of the year for, among other things, his enthusiasm, good quality flying – almost full Silver in less than a year. We are looking for a new home: our clubhouse is being demolished to make way for a new paint shop and we are going to lose our hangar space when two squadrons arrive from Germany. At present we are keeping our options open. Watch this space.

**AJ Padgett**

### Four Counties (Syerston)

After a long absence from S&G, Four Counties is back! Also returning is Graham Heady, who has taken over as our new Deputy Chairman. Thanks go to Noddy Knowles for his hard work in this post over the past couple of years. Our new airfield control wagon is now operational and the club has just purchased a new tractor for cable retrieving. Photos of both can be found on our new website: [www.fourcountiesglidingc.freewire.co.uk](http://www.fourcountiesglidingc.freewire.co.uk) Congratulations to Al Craggs, who joined us in October 1999 and has made excellent progress to his first solo. Chris Gildea has just returned from Benalla where he raced around 750km under a 9,000ft cloudbase. Our club Astir has been based at Dishforth to make the most of the winter wave and, although no badges have been claimed, the members who took advantage of it all enjoyed themselves immensely. We are all looking forward to the approaching soaring season although we got a reminder of what it's like on February 13 with a 4,000ft cloudbase and a few hours' soaring.

**Sue Armstrong**

### Kent (Challock)

Some enthusiasts flew on January 1, although most of us were not airworthy until the next day. February provided thermal soaring, with a 4,000ft cloudbase once. The usual Cs of A are keeping us busy and, as in previous years, John Hoolahan has kindly let us have use of his Robin 400 whilst our Pawnee is in for its annual. Being a mere 40-minute drive from the Channel ports with easy access to the M20, Challock is well worth considering as an overnight stop for pilots heading to or from the continent. A call to the office on 01233 740274 will reserve you a room, or better still, stay an extra night and fly with us. It's a nice friendly club set in a lovely part of Kent and you'll be spoilt for choice of good local pubs for an evening meal. After much work by John Berry we now have a new website:

[www.kent-gliding-club.co.uk](http://www.kent-gliding-club.co.uk)

**Caroline Whitbread**



## Kestrel (RAF Odiham)

WARTIME gliding history was recreated when we were honoured to meet some of the original Colditz PoWs and host the maiden flight of the replica Colditz glider. As screened in Channel 4's *Escape from Colditz*, the flight proved the original concept and design and is a testament to their achievement. We will never moan about lack of workshop space again. Many thanks to CFI Marc Morley for co-ordinating the project, to RAF Odiham for their support, to Southdown Aero Services for recreating the original and to Rob Martin for his excellent winch launching. We thank Ian Pattingale and Mark Bushnell for all their hard work as they relinquish the reins from Aircraft member and Treasurer to their unsuspecting successors Amaury d'Otreppe and Brian Garston. The weather continues to be kind: the number of flights is well up on this time last year.  
**Simon Boyden**

## Lakes (Walney)

FORCED by the demise of leaded petrol, we now have a huge bowser with Avgas on tap for the tug, thanks to the efforts of John Burdett. The club fleet Cs of A have all been completed; our thanks to all involved. Flying has been a bit sparse, but we've had a few decent ridge and wave days, one allowing Graham Welch to fly to Chipping to retrieve the picture which had been away for far too long! Meanwhile, we hear that John and Lyn Martindale have completed various 300s and 500s over in Australia.  
**Alan Dennis**

## Lasham Gliding Society (Lasham)

OUR SYMPATHY on the sad loss of Bill Scull goes to Yvonne and Wendy (see pp7 and 58). Colin Short is chairing the flying committee. Congratulations to cadet Adam Purvis, who went solo on his 16th birthday. The year 2000 flying programme shows increased training opportunities compared with previous years. Cross-country training will take place in the

Grob Acro and the Duo Discus. Racing groups will be formed, with two to five pilots including one coach. Our K-13s are being equipped with LX100 audio variometers. The Grob Acro and the Duo Discus will be fitted with the latest L-Nav. The first issue of the *In The Air* newsletter appeared. The marketing task group is developing a database to stimulate evening trial lessons. Jeff Smithers developed a questionnaire sent to all members. A third replied and 68 members then took part in seven focus groups.

**Tony Segal**

## London (Dunstable)

CHOOSING to ignore the fact that our pre-season dinner is not until April 1, eight of our pilots in mid-February completed Didcot-Bicester-Dunstable (130km). Our aerobatic competition for the Dan Smith Memorial Trophy is on April 1-2, come and join us; the AGM is on April 29 and an open day on May 7.



Twins Niel and Shaun McLaughlin after their first solos on January 3 at Peterborough & Spalding GC. Niel's the one in the cockpit. They gained widespread coverage on local TV and radio and in local newspapers

That's also the revised date for the 70th Anniversary photograph of present and past members of the club. It promises to be a great day, so put it in your diary now. We've persuaded that brilliant team of last year, John Jeffries and Paul Robinson, to conduct our regular and intensive courses throughout spring and summer. Phone Val to get a place.  
**AH**

## Mendip (Halesland)

WE HAVE managed to keep the airfield open in spite of record rainfall. The severe flooding down on the Somerset Levels has given members an interesting drive to the club. This year is the club's 25th anniversary. Among the activities planned are a Barn Dance and a special Dawn to Dusk to which members from "the old days" will be invited. The club expedition will favour the Long Mynd with its custom in May. It is my sad duty to report that, after a long illness, Lew Anderson died at the end of January (see obituaries, p57).

**Keith Simmons**

## Midland (Long Mynd)

MEMBERS who joined on our recruitment weekend back in May 1999 have flown more than twice the hours of the average laid-back Myndite. So come on, the rest of you, get launching – or are you afraid of the checks? Courses are booking well. The tug has

returned after its engine transplant. We now have five instructors who can offer field-landing, cross-country and navigation training in the motorglider. Wave days were a rarity for some time but made their belated appearances in February. Our dinner dance is at Ludlow racecourse on April 1.

**Roland Bailey**

## Needwood Forest (Cross Hayes)

NOW WE'RE fully established at Cross Hayes and have got our first full season under our belts we're looking at ways to recruit and retain new members. By the time you read this we'll have had our first brainstorming session to draw up a marketing plan. We've also set up a new internet site. You can find us on the web at [www.GoGliding.co.uk](http://www.GoGliding.co.uk)

**Grant Williams**

## Norfolk (Tibbenham)

WE MADE a promising start to the season, with soaring flights in January off the winch. Congratulations to Tony Licence, who has gone solo. Entries for both the Eastern Regionals and the Vintage Rally are coming in nicely. We have a big promotion planned for Norwich city centre in February, centred round our Junior, and we hope to attract new members.

**Bonnie Wade**

## Northumbria (Currock Hill)

MEMBERS attending John Greenwell's wave lecture were able to put theory into practice the following weekend with climbs to 10,000ft-plus on both days, including Silver height for cadet Mark Stobo. Hopes are now high for next month's lecture on thermals! Our publicity drive continues with a display in The Metro Centre on April 1. Visit us at [www.northumbria-gliding-club.co.uk](http://www.northumbria-gliding-club.co.uk)  
**Martin Fellis**

## North Wales (Llantisilio)

WE HAVE had to cease operating at the new

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field pending a planning appeal. Councillors went against the recommendation of planning officer Aneurin Phillips, who was reported in the local paper as saying: "The nature of use and scale of operation would not, in my opinion, impact so adversely on the landscape, the amenities of residents or local wildlife in this attractive rural area to merit a recommendation of refusal". Three local community councils opposed us. Concerns voiced included "the possibility of crash landings, noise pollution, road safety and flight safety". Gill Pennant

### Oxford (Weston on the Green)

IT'S THAT time of year: Cs of A, sweeping the hangar, mending the trailers and wondering if you'll know what to do if you ever meet a thermal again. But Emma Cuthill has got her Bronze and become the third OGC recipient of a Mobil Churchill Award, which pleased her dad's bank manager no end. Thanks to Neil and Paul, we have a new launch-point vehicle. Everyone is enjoying the novelty of a 360-degree panoramic view of what's outside as well as the ample seating from which to watch the poor freezing cadet holding a wing. CFI Cris Emsen and crew are packing a picnic for the trip to Germany to pick up the club's new DG-505.

Steve McCurdy

### Peterborough & Spalding (Crowland)

THE NEW year brought a crop of solos, including the first twins to fly solo on their 16th birthday in the year 2000 (January 3 – can anyone beat this?). Congratulations to Shaun and Niel McLaughlin, as well as to Annie Ewer. The club thanks Norman Brown, who has hung up his Full Cat rating after many years' service both as instructor and CFI. Members spent Christmas at Aboyne and were wave flying on Boxing Day at more than 9,000ft. Gerry Pybus, despite a valiant but humiliating display of creeping, failed to get his behind into the Duo Discus – better luck in October, Gerry. Despite the muddy field, we have flown on all winter weekends. More than 27 launches were made on one day, with many pilots doing spin checks.

Pete Goulding

### Scottish Gliding Centre (Portmoak)

WE ENJOYED some unseasonably warm, sunny weather with several good wave days. Over New Year we were visited by junior nationals pilots. Surprisingly, having celebrated Hogmanay in Edinburgh, a number were fit to fly on New Year's Day! Recent gliding achievements include a Gold height for Neil Irving, Silver heights for Dave Hanlon and Guy Hall, and first solos for Steve Hartley and Jim Mattocks. Colin Hamilton, Eoin MacDonald and Mike Ward are running a Tuesday evening group from March 7. We look forward to the start of our visitor season. Neil Irving

### Shalbourne Soaring Society (Rivar Hill)

AT THE annual dinner, attended by over 60 people, the club member of the year award went to ex-CFI Carol Pike for all his hard work. New CFI Liz Sparrow won the Club Ladder. Trophies also went to: Hugh Harwood and Clive Harder (for task week achievements); Michael Edmonds ('You landed where' trophy for the most unusual retrieve); Dave Draper ('get a bloody move on' trophy for 247km at 91.5km/h); and Martin Jones and Liz Sparrow (Bernie Schackell Memorial Trophy for the best two-seater flight). Darren Arkwright's name was mentioned but we felt he had had more than enough recognition. We have a K-8 to restore it to flying condition. We are also considering buying a K-13. Thanks to our new Equipment officer Keith Lovesy and others we have two gas-powered winches and plan



Early morning at Milfield. "Visitors from Staffordshire GC were frenziedly rigging, for some reason," says the photographer, Brian Brown

to convert our old Tost, too. Michael Edmonds is in charge of this year's strong inter-club team.

Clive Harder

### Shenington (Shenington)

GORDON Burkert has gained his Full Cat rating, and Kath Barnes has completed her Bronze. At our Annual Dinner, prizes were awarded to: Leigh Wells (best flight), John Rogers (Clubman of the year), John Vella Grech (CFI's award), Paul Gibbs (Richard Cranium award) and Bruno Brown and Lu Kennington (Geoff Webster award). January has been better than normal: we are keeping our fingers crossed for the long-awaited good summer! We have a BGA soaring course in May and are planning a Task Week on August 14-18 in anticipation. We fly throughout the week, and our course season starts in March. Visitors are welcome at the site or at <http://freespace.virgin.net/fisher.m/sgc/>

Tess Whiting

### Southdown (Parham)

The club awards were presented at the Christmas dinner. Dick Dixon won the league

## Club News

division one title, with his 414km at 100km/h flight on a ridge day, from a winch launch. Mike Brady won the most promising young pilot trophy and Dick Thirkill the Merritt Shield (best flight in a wooden glider). The longest single-seater flight was by Les Blows (420km) and the two-seater equivalent by CFI Brian Bateson and grandson Tim (280km). January brought much rain but plenty of northerlies – timing was everything for ridge running. Visitors could believe Parham to be in the Lake District with the view west, on occasions, a sheet of water. Simon Horman resoloed after ATC days. Bob Adam did a lengthy run along the Downs in a Pegasus, without floats, his K-8 being unavailable. Peter Holloway

### The Soaring Centre (Husbands Bosworth)

CONGRATULATIONS to Brian Marsh on the first 100km flight of the year on February 13, and also to Dave Booth, who completed the first 100km from a winch launch on the same day. Club members gave a successful lecture series, and Bronze lectures are under way. Many thanks to all speakers for their time and effort. The AGM will be on April 29. There will be a task weekend from April 21-24 with the tug pilots' party on the Saturday night. The club website has moved: it's now at [www.thesoaringcentre.co.uk](http://www.thesoaringcentre.co.uk)

Siobhan Hindley

### Trent Valley (Kirton Lindsey)

WINTER gloom was just too much for Ray Parkin, Pete Rocks, Vin Geraghty, Colin Metcalfe and Alister Bell so they decamped to Oz, as you do. A great time was had, especially by Ray (300km). Rex Flint managed our first soaring ride only 19 days into the new year. The Bronze lectures are going well – we all now know our aspect ratios from our occluded fronts. We are all pleased to see Carole Baxter and John Williams back to flying fitness and say thank you to Vin Geraghty, who takes a break from instructing. John Kitchen

### Ulster (Bellerena)

A CONTRACTOR was due in February to level, grade and seed the remaining badlands at our western, loughshore, end, integrating into the main field a huge and latterly redundant sheep pen. When the grass has grown the entire field will be usable. Our latest soloist is Colin Graham. Recent arrivals are Joe Taggart's turbo Discus and Laurence McKelvie's DG-400 self-launcher. Mike McSorley's paid job is currently taking him the length and breadth of mainland Britain. He is racking up a weekend "sites flown" list which would be the envy of pilots with ten times his experience. He may drop in on you. Bob Rodwell



## University of the West of England (Aston Down)

UWE GC has now moved from Keewil. We would like to thank Bannerdown for their support through the years, and express our gratitude for the time and effort shown by their club to our students. We are now flying at Aston Down and thank Cotswold GC for the warm welcome. We hope to build a strong foundation for future UWE students, and thank everyone who made the move possible.  
**Anna Gunn**

## Vale of White Horse (Sandhill Farm)

THE YEAR began well: the field, usually pretty soggy in the winter, was quite dry – but recently we have been back up to our ankles in mud. One of our K-13s and our K-8 are having their Cs of A. The other K-13 and the K-18 are busy making the most of the sunny, and sometimes thermic, days between the commoner grey, wet, windy days of winter. If you fly north-west or south-east between Brize and Lyneham zones, remember we are just a few miles north-east of Swindon. If you want to drop in, we offer a warm welcome, and help with your retrieve or relight.  
**Graham Turner**

## Vectis (Sandown)

DESPITE some very mixed weather the club managed to fly weekends through December and January and succeeded in attracting a number of would-be pilots. Training proceeded in January, with some solo flying, the longest flight being 50mins. Membership increased by five in 1999, though we lost one of our three lady members, and we hope to gain more full members in 2000. Three new privately-owned gliders have joined the fleet. Several ideas for club expeditions are being considered, including visits to Spain in June/July and to UK sites in May and August.  
**Peter Seago**

## Welland (Lyveden)

WE HAVE a new CFI, Nigel Perry, who has been awarded one of the Ted Lysakowski scholarships for cross-country training this summer. We wish Nigel every success. Werner Leutfeld stepped down as CFI so that he could do his own flying as well as be a Regional Examiner. Thanks to Werner's efforts, the club has seen an increase in the instructor team and more members prepared to fly cross-country. Werner is still committed to training Welland pilots at cross-country and instructor level. Club instructors have given a series of Bronze lectures.  
**Jane Cooper**



Many clubs flew on New Year's Day 2000 but – as Bob Holroyd's picture of Andy Atherton proves – only Wolds has the right glider registration: Discus JAN

## Wolds (Pocklington)

FOR SIX weeks we moved *en masse* to Sutton Bank, who made members very welcome. BP Chemicals are busily laying pipework the full length of our own runway – and are picking up the costs of members' flying time at Yorkshire. Our manager Simon Parker did a good job negotiating this deal. Garreth Carruthers has soloed. Ian McCaig, wave soaring, was our first landout of the year. Glider owner and friend Dave Smith said that without familiar Pocklington pubs, Ian was totally disoriented. Anna Sheldon and Dave Tagg begin their instructors course in March. Maintenance work on the Supacat and the K-8 continues despite the upheaval. We plan expeditions to Portmoak and Aboyne.  
**Ged McCann**

## Wyvern (Upavon)

A TIMELY blizzard set an appropriate scene for our enjoyable Christmas party, though the short drive from the club to the pub was something of an experience. The snow-covered countryside was worth seeing from the air the next day. The New Year party also went well. The Cs of A on all our gliders are now done and the Motor Falke wings have new skins. After a complete engine overhaul, one of our Land Rovers is serviceable again. We don't just do maintenance though. We fly every weekend and Wednesday from our site on the edge of Salisbury Plain. Occasionally the danger area keeps us grounded, but Salisbury Ops (122.75) will tell you if we are operating and we always welcome visitors.  
**Gavin Deane**

## York Gliding Centre (Rufforth)

OUR PILOTS are looking forward to the newly-established Inter-club League for Yorkshire, and given good soaring weather should enjoy some competitive cross-country flying. There was a series of good wave flights in February, with several flights over 12,000ft and one to over 15,000ft. The DG-500 has been very well used this winter and given us some cross-country flying in wave.  
**Mike Cohler**

## Yorkshire (Sutton Bank)

THE FIRST flight of 2000 was won by Jim Hill at our Christmas bash. Jim and Dave Watson took off at 10.00hrs on Jan 1, swiftly followed by a large number of club members eager to get 1/1/00 in their logbooks! The first weekend of January also provided the first landout – David Ashby paid a visit to Bagby. Welcome to our Pocklington guests who are having work done on their airfield; we hope you are enjoying the flying and facilities. The Yorkshire Inter-Club League will start in May with members from five local clubs taking part. Course places are still available: for more information, contact Beryl at the club.  
**Marian Stanley**

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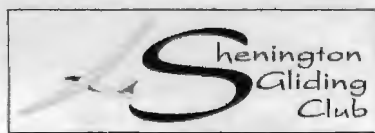
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# Obituaries

## Barry Amos – Booker GC

IT IS WITH a great sense of loss that we record the death, after a gallant battle with cancer, of Barry Amos (1946-2000).

He was at Booker for over 15 years, a member of the club and the BBC Group. Whether driving his much-prized Citroen DS, flying his equally-loved H301 flapped Libelle, or chatting on the trailer line, he was a character. A highly-skilled motor mechanic by trade – as many members will vouch – he was really an enquiring child at heart, with a huge natural curiosity.

Although it was an increasing struggle, his cheerfulness and enthusiasm for gliding remained undimmed; indeed, some of his most memorable flights were made in the last year.

Barry is survived by his wife Tricia and two young daughters, to whom we offer our heartfelt sympathy.

Roger Neal

## Lew Anderson – Mendip GC

WE LEARNT with great sadness of the death of Lew Anderson (1926-2000) after a long illness. Lew joined Mendip with his son Lawrence in 1986 when we were at Weston-super-Mare. He quickly became one of the club stalwarts, always willing to get involved if a job needed doing. When we moved to Halesland in 1988, his woodworking skills helped transform a run-down ex ATC shed into a very comfortable clubhouse. Lew was a real character and his dry sense of humour and rapier-like wit will be greatly missed. Our thoughts and condolences are with Joan and the family.

Barry Hogarth

**Brian Cooper – Burn/Derby & Lancs GCs**  
BRIAN Cooper (1937-1999) first developed a taste for flying during 12 years' service as an RAF electrical engineer. He took up gliding,

at Camphill, later transferring to Burn and buying a Pirat share. Despite suffering arthritis badly, he set his sights on Silver – which he achieved in 1999.

Brian was a willing club helper, assisting with the upkeep of the winches, repairing radios and doing more than his fair share of winching duties.

A complete gentleman, he will be sorely missed by all those who came into contact with him.

He is survived by his wife Connie and sons Paul and Mark.

Danny McNeill

## Sir Arnold Hall – Imperial College GC

SIR ARNOLD Hall FRS (1915-2000) came to Imperial College in 1945 as Zaharoff Professor of Aviation. When we broke the club's Cadet in 1949 at Redhill, he was instrumental in persuading the College to provide us with a new T-21b – on condition that it could be used to explain the mechanics of flight to college students. I did most of the displaying. He then became chairman of the BGA Technical Committee.

The committee developed a difference of opinion with ARB, the UK airworthiness regulator, whose test pilot had declared the prototype Sky to be "laterally unstable" (after a couple of very unadventurous winch launches). It obviously wasn't, but the Test Group were struggling with officialdom. So we asked Prof Hall to talk to the understanding chaps at the top of ARB – and quite suddenly the lateral instability disappeared.

The Sky went on to Spain, where Philip Wills won the World Championships in it.

Prof Hall then became director of RAE Farnborough, incidentally resigning from the technical committee.

He subsequently had a most distinguished career as an engineer, scientist and administrator, becoming Sir Arnold Hall in 1954, and culminating in being Chairman and Managing Director of Hawker Siddeley Ltd.  
Frank Irving

## Roy Illidge – Derby & Lancs GC

Roy Illidge (1924-2000) began gliding, in Daglings, at Camphill in 1949. He got his Silver in 1956 by flying an Olympia from Camphill to Boston, Lincs, cloud climbing 5,000ft and emerging at 9,000ft with ice on the wings.

Roy instructed for many years from 1962, and most enjoyed introducing summer course members to his beloved sport. He gave me my



first flight when I was just four.

In 1957 he bought a share in a Gull 4, the first of a series of gliders which included a Skylark 3B, Libelle, Skylark 4 and finally the family LS-3 (50). He played a major

role in developing Camphill's facilities, for which he was made an honorary life flying member. Even when his health deteriorated, he continued to fly regularly with me in our K-7. If you have flown at Camphill in the last 25 years, spare a thought for Roy – you launched on one of the shock ropes he spliced.

Roy will be greatly missed – especially his welcoming smile and great sense of humour.  
John Illidge

*Dennis Dawson: our apologies for the typing error in the headline of his obituary, in the February-March 2000 issue of S&G*

## BGA Certificates

No	Pilot	Club	Date
<b>Diamond distance</b>			
1-809	Stotter, Ann	Soaring Ctr (Benalla)	2/12

<b>Diamond goal</b>			
2-2710	Starmer, Robert	Bidford	9/6

<b>Diamond height</b>			
3-1510	Stacey, Allen	Bannerdown (Aboynae)	29/10

<b>GOLD BADGE</b>			
2113	Hills, Robert	London (Sugarbush)	10/8

<b>Gold distance</b>			
	Starmer, Robert	Bidford	9/6

<b>Gold height</b>			
	Herkert, Bryce	Deeside	27/10
	Tusar, Elizabeth	Midland	28/10
	Wilson, Alastair	Scottish Gliding Ctr	6/11
	Rubb, Craig	Deeside	29/10
	Hills, Robert	London (Sugarbush)	10/8
	Smith, Barry	Cleavelands	3/1/00
	Bryning, Christopher	Seahawk (Dishforth)	26/12

UK CROSS-COUNTRY DIPLOMA				
No	Pilot	Part	Club	Date
554	Foster, Jonathan	Pt1	Lasham	1/6

<b>SILVER BADGE</b>			
No	Pilot	Club	Date
10698	Brickwood, Richard	Cambridge	22/9
10699	Wilson, Alastair	Scottish Gliding Ctr	6/11
10700	Cummings, Martin	Borders	30/7
10701	Aldridge, Sarah	Buckminster	28/8
10702	Southworth, Roger	European Soaring	14/12
10703	Morrow, John	Lasham	25/7
10704	Bennett, Simon	Borders	31/12

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## A true champion

It has been an honour to have been associated and to work with Bill. It has been a privilege to be able to say that he was my friend. We shall not see his like again. Gliding has lost a true champion – Bill Walker OBE, Vice President, BGA

Bill Scull was a giant – in stature, and in his influence on gliding over more than 40 years – David Roberts, Chairman, BGA

His great knowledge of operations in gliding, and his sense for human relations, made Bill one of our best. I am proud to have known this warm, friendly and yet modest man. Eternal soaring for Bill – he deserves it – Francois Van Haaff, EGU

I enjoyed working with Bill and always admired his organisation and the depth of his thought – John Williamson

Bill helped immeasurably with advice and support when we were attempting to secure a permanent gliding site. We shall not forget him; his spirit is welcome to ridge soar at Binevenagh in perpetuity – Bernard Silke, Ulster GC

Bill Scull was well known internationally for his pioneering work in instruction and flight safety, and for his enormous contributions to gliding as an author, instructor, organiser and administrator – Max Bishop, Secretary General, FAI

Those of us privileged to know him will recognise his imprint on the record of the Association's operational and international interface with those in authority. So although he will be severely missed, we shall often remember him by the legacy he left us in those relationships – Vic Carr

The world of gliding has lost a fine ambassador. Bill had a long and valuable association with the Directorate of Airspace Policy, in particular representing the BGA on the National Air Traffic Management Advisory Committee. Always courteous, he nevertheless got his message across whilst maintaining a level head through what at times were particularly knotty problems. We frequently found ourselves accepting his wise counsel on many diverse issues. As a host at gliding championships he was charming and attentive, while never missing an opportunity to promote gliding – although I am sure he would have much preferred to have been aloft. Bill was always a gentleman and widely respected; we are all the richer and privileged for having known him – Air Vice Marshal John Arscott, Director Airspace Policy, CAA

# Bill Scull

**F**OR thousands of past and present glider pilots, William Granville Scull FRAeS MRIN (1934-2000) represented a tireless proponent of the sport. A giant of a man – standing head and shoulders above most, at 6'6" – his enthusiasm for improving the sport and its safety continued until his death at 65.

Bill, the son of a police inspector, was drawn to gliding via aeromodelling at the age of 11. He became single-minded about flying and never looked back. He particularly enjoyed gliding, with its demands on pilot responsibility, and by 1964 was a professional gliding instructor at the Avro GC at Woodford, Cheshire. Within a year he was Chief Flying Instructor (CFI). Two years at the Yorkshire GC preceded a spell as an aeroplane instructor. In 1967 he moved to Lasham and became CFI.

In 1969, Bill was appointed BGA National Coach, developing the role to such an extent that a second coach was employed. In 1979 he became Director of Operations, a post that he held until his "retirement" in 1995, after 26 years serving the BGA.

Leading by example, Bill held Silver, Gold, and two Diamond qualifications, gained in the days before modern gliders made these easily attainable, and logged almost 5,000hrs in the air. He represented the BGA nationally and internationally, including establishing mandatory operational safety standards for gliding. This led to his creation and chairmanship of the Training and Safety Panel, a forum for international gliding coaches which was adopted by OSTIV, the international gliding research organisation. His regular, mature and sensible articles on flying procedures and safety were legend. He helped many new gliding clubs commence operations, guiding them through planning legislation and enquiries.

Bill's work as chairman of the BGA Safety Committee in recent years, and his onerous role as fatal gliding accident investigator brought his wealth of professional knowledge to a focus of making gliding safer and training more thorough. He represented the UK's gliding interests on JAR22 (Glider Design Requirements), Airspace and the Civil Aviation Control Advisory Committee since 1972, as well as the International Gliding Commission, the European Gliding Union, and several other international committees. He wrote several papers on gliding coaching, safety and techniques, and his book *Soaring Across Country* is still in use.



After retiring, he continued to chair the Association's safety committee and was its Chief Accident Investigator. He also chaired GASCO (General Aviation Safety Committee) and the General Aviation Navigation group at the Royal Institute of Navigation, until his death.

His work was recognised many times: in 1984 he was appointed a Fellow of the Royal Aeronautical Society and granted the Freedom of the City of London. In 1989, the Fédération Aéronautique Internationale (FAI) awarded him the *Diploma Paul Tissandier*. The Royal Aero Club presented him with the Silver Medal, for services to gliding, in 1999. He was recently presented by the Duke of Edinburgh with the 1998 Grand Master's Commendation from the Guild of Air Pilots and Air Navigators.

Bill will be remembered most for driving the sport forward on both grassroots and political levels, being a believer that the long hard slog for higher standards through national and international committees paid off.

Above all, Bill retained the human touch – his presence demanded attention, but he always had time to encourage glider pilots or acquaintances, sharing their triumphs and pushing them ever onwards. He revelled in seeing people gain in skill and confidence. Yet he was extremely modest, and continued to strive to learn new things, embracing computers and the internet in recent years.

Bill was an accomplished musician, sportsman and active in supporting the local community and local Cheshire homes. He was one of life's gentlemen – a true gentle giant. The world of gliding could not have had a better representative. We mourn his loss.

He is survived by Yvonne, his wife for almost 40 years, and their daughter Wendy.

**Jonathan Mills & Ann Welch**



# Confidential incident reports for glider pilots

WHILE IT IS a legal requirement to report all accidents, the BGA also encourages the open reporting of incidents that could indicate a safety lapse or the potential to cause an accident.

Such reports are normally submitted through the club safety officer but may be sent directly to the BGA, where they are reviewed and acted upon.

Now there is an additional way that glider pilots can report safety issues (not accidents) involving human factors which they may feel unable to submit through normal channels.

The UK Confidential Human Factors Incident Reporting Programme – CHIRP – has been operating since 1982 for people in the air transport industry. Last year it was extended to general aviation – including gliding. This independent system permits safety information that may not otherwise be available to be reported, assessed and published for the benefit of others.

CHIRP invites reports on any safety-related incidents when:

- others could benefit from a lesson you learned;
- other reporting procedures are not appropriate or available;
- you are concerned to protect your identity (note: anonymous reports are not accepted);
- you have exhausted club and other reporting procedures without the issue having been addressed.

Do not report:

- incidents or events with no safety content;
- issues involving conflicts of personalities;
- industrial relations, legal or commercial problems.

Reports are validated and, after extracting relevant data, *all personal details are returned to the sender*. The reporter can get in touch for additional information using a reference number but CHIRP cannot contact them.

Depersonalised data is databased for analysis of key topics and trends and some is made available to other safety systems and professional bodies.

Where appropriate, the issues are discussed with relevant agencies to understand the safety issues and resolve the problem. A newsletter, *GA Feedback*, containing information relevant to light aircraft and leisure flying, is distributed.

CHIRP, FREEPOST (G13439) Building F131, Room 129, Farnborough GU14 6BR; secure phone: 0800 214645 / 01252 370768; secure fax: 01252 543860; email: confidential@chirp.co.uk

## We're only human

YOU'VE DONE it lots of times before and you 'know what you are doing'. That, in fact, is part of the problem. Just carrying out positive control checks is no guarantee of success. Distraction, complacency, the cold, a break in routine or simply failing to understand the limitations of we humans ... any of these can contribute to your missing some small but vital part of the process of rigging the average glider – with disastrous results.

Last year in the UK alone, five pilots managed to get airborne and nearly lost their lives having discovered – *after take-off* – that a control had not been connected or had disconnected in flight. This is despite a growing fleet of more modern gliders.

Why does it still happen? And what can we do to be fairly confident of preventing this stupid and entirely avoidable type of accident?

We all make mistakes – it's a human characteristic. If you can accept that you are not immune from making errors (ie, you have a pulse), you will be able to very quickly

answer the question why. Indeed, the more experienced or used to a task that you become, the more likely you are to suffer a lapse or a slip.

OK, so it's obvious how this relates to incorrectly rigging gliders, but what is the remedy? The answer is to adopt the same sort of discipline when connecting flying controls that is mandatory in the world of aircraft maintenance.

After rigging a glider, ALWAYS (not just when you had a problem, or somebody is conveniently close by) get another person who is familiar with the glider type to visually check all aspects of the rig – and get that person to sign for doing so in the glider DI book.

Signing for a task tends to concentrate the mind.

Then carry out a positive control check, carefully holding each individual flying control surface while applying a light pressure on the appropriate control in the cockpit.

If you think getting an independent check is too difficult, try landing without an elevator.

Pete Stratten

Chairman, BGA Safety Committee

## Accident/incident summaries

by Dave Wright

AIRCRAFT Ref Type	BGA No	Damage	DATE Time	Place	PILOT(S) Age	Injury	P1 Hours
009 Grob G109 motorglider	G-NDGC 1400	Minor	03/11/99	Challock	57	None None	2700 520

The two experienced pilots were visiting the glider site in a motorglider. During the take-off run the main wheels went through a rough soft area and the tail lifted slightly too high. As the prop had touched the ground the pilot abandoned the take-off. Both propeller tips were damaged.

010 Falke motorglider	G-AXEO	Minor	07/11/99 1130	Milfield 49	47 None	None 2	864
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During motorglider training the student was instructed to go-around from about 30ft on a normal approach. After a delay the student responded – closed the spoilers and opened the throttle. The engine faltered and so P1 told P2 to close the throttle and land ahead. The landing was not fully held off and the propeller tips hit the ground.

011 ASW 19	4486	Substantial	10/11/99 1416	Kitson Field	69	None	279
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The pilot set up a normal circuit for a hangar landing then mistakenly operated the undercarriage lever instead of the airbrakes. The speed started building and the end of the airfield was approaching fast. A pilot-induced oscillation developed and the glider landed very fast, skidded to a halt sideways, breaking the fuselage.

012 K-13	1753	Minor	23/10/99 1529	Bowland Forest	54 –	None None	880 0
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After two successful simulated cable breaks a third was carried out, this time on a different cable. During the recovery the cable chute was seen directly overhead. P1 took control and turned to try and avoid the cable, which touched the wing before the glider landed safely. The binding on the cable was missing, allowing it to fully inflate and fly.

013 Discus BT self-sustainer		Minor	13/10/99 1052	Northumberland		None	579
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The self-sustainer was towed to 2,000ft in hill lift. Apparently the glider then drifted back over the hill so the pilot decided to extend the engine. During this process the canopy flew off – hitting the wing, engine and tailplane. Retaining control the pilot made a safe landing back at the airfield.

014 ASW 19	4518	Write off	25/09/99 1530	Portmoak	63	Minor	95
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While attempting to land short to avoid a congested aerotow launchpoint the pilot failed to fully round-out and landed heavily, bouncing high into the air. During the impact the harness may have come loose resulting in the pilot losing control. The glider dived to the right and into the ground and was written-off. The pilot suffered back injuries.

015 K-8B	1653	Minor	20/11/99 1820	Nynsfield	37	None	6
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The pilot was given a successful check flight and warned of the very cold conditions. Later in the day she flew an hour on the ridge before landing, cold and tired, at sundown. The glider was seen to fly a rather fast and high circuit through turbulence on an up-sloping part of the airfield. Flying the glider on resulted in a bounced, heavy landing.

016 ASW 19B	3719	Minor	29/11/99 1515	Aboyne		None	30
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On his downwind leg the pilot checked that there were no cattle on the runway as they had been cleared off it several times earlier in the day. It looked clear but as he turned finals he saw some had moved nearer so changed landing runway. He landed short to avoid more cattle but had to veer into rough ground off the runway to miss one in his path.

017 K-21	3825	Substantial	4/12/99 1440	Dunstable	55 45	None None	272 0
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At about 100-150ft on the aerotow a very slight bow developed in the rope which then broke as it became taut again. As options ahead were not good the pilot decided to turn back over lower land beside the airfield. Speed was lost during the turn and the glider stalled heavily on to the up-sloping field. The rope had failed near the ring splice.



# Classifieds

Please send the text of your advert, and your payment, to Debbie Carr at the BGA office (not to the editor). Please remember that, if you are emailing text, your advert may not appear unless we have received payment by the deadline. The deadline for classifieds to be included in the June-July issue of S&G is May 5 after which any adverts received will be published in the following issue.

Text: 50p/word, minimum twenty words (£16).  
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## FOR SALE

LS6c 15/17.5m 1993. All mod cons/des res/extras, will consider offers for Hull/Trailer/Instruments or total package. One owner, excellent nick. Contact Peter-Redshaw@man.com or 01229586856

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LS6C 15W/18W. Comp No. LS6. New in March 1995. 450 hrs. Full panel (Sage vario, C3, RC Allen horizon, Dittel radio, Garmin II) E.W., oxygen, tow out gear and Schofield trailer. Full kit for £40 000 or will split. Tel: Basil 0116 2770159 or 0797 7274488

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is the official monthly magazine of the British Hang Gliding and Paragliding Association. £27 per annum subscriptions from BHPA, The Old Schoolroom, Loughborough Road, Leicester, England LE4 5PJ. Tel: 0116 2611322 <http://test.ebrd.com/skywings/home.html>

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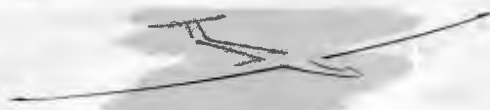
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# British Gliding Association

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which will go into the draw. It is hoped that members will purchase 12 months' worth of tickets at a time. Winners will receive their prizes direct from the BGA and a list of their names will be published in S&G.

Please complete the form below and return it to the BGA with your payment. Please note that only BGA members and their families may participate and that the BGA is registered under the Lotteries And Amusements Act 1976 with Leicester City Council.

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To: Barry Rolfe, British Gliding Association, Kimberley House, Vaughan Way, Leicester LE1 4SE

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**August 19<sup>th</sup> - 27<sup>th</sup>  
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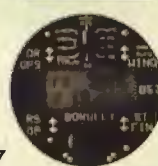
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