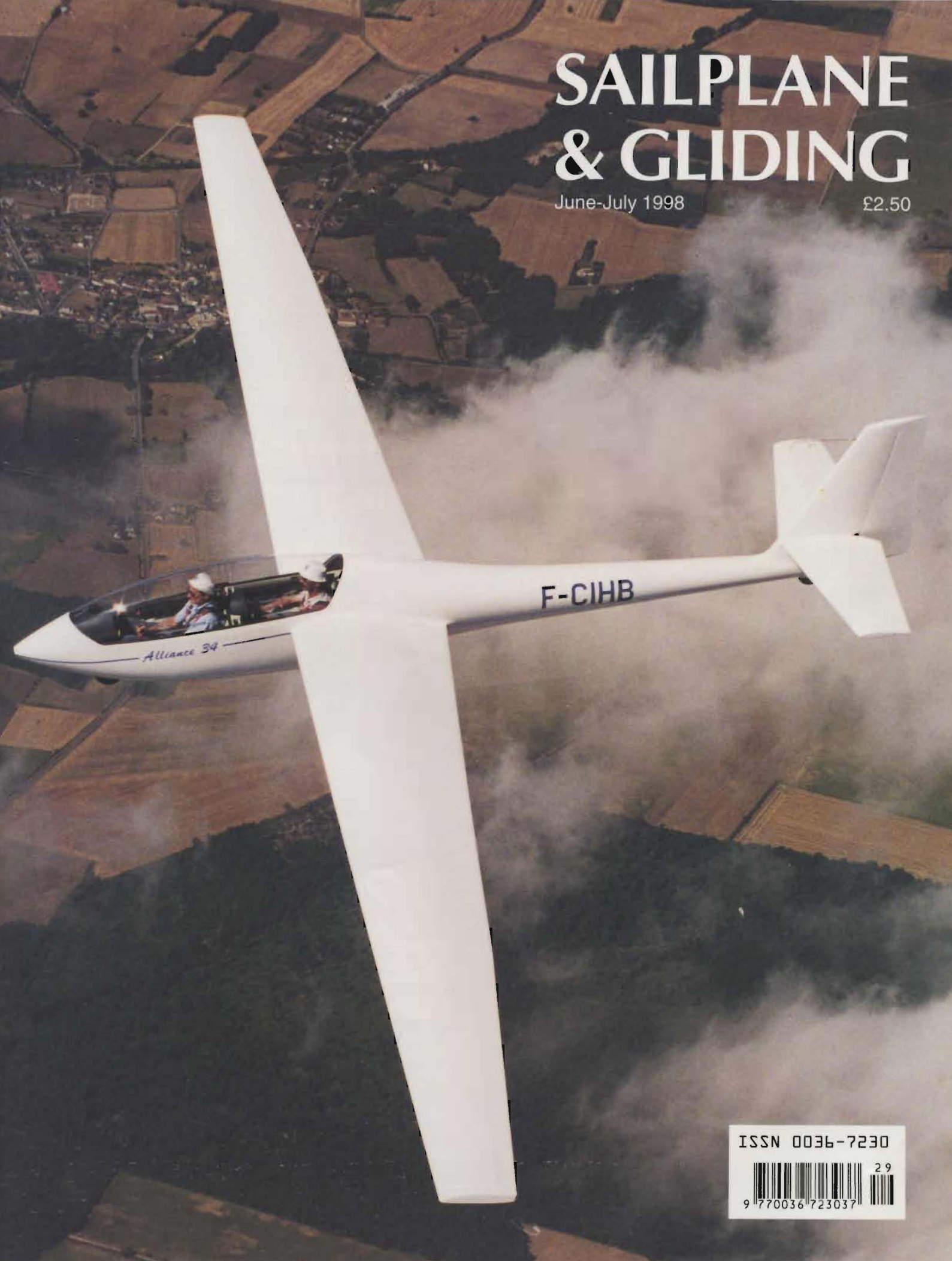
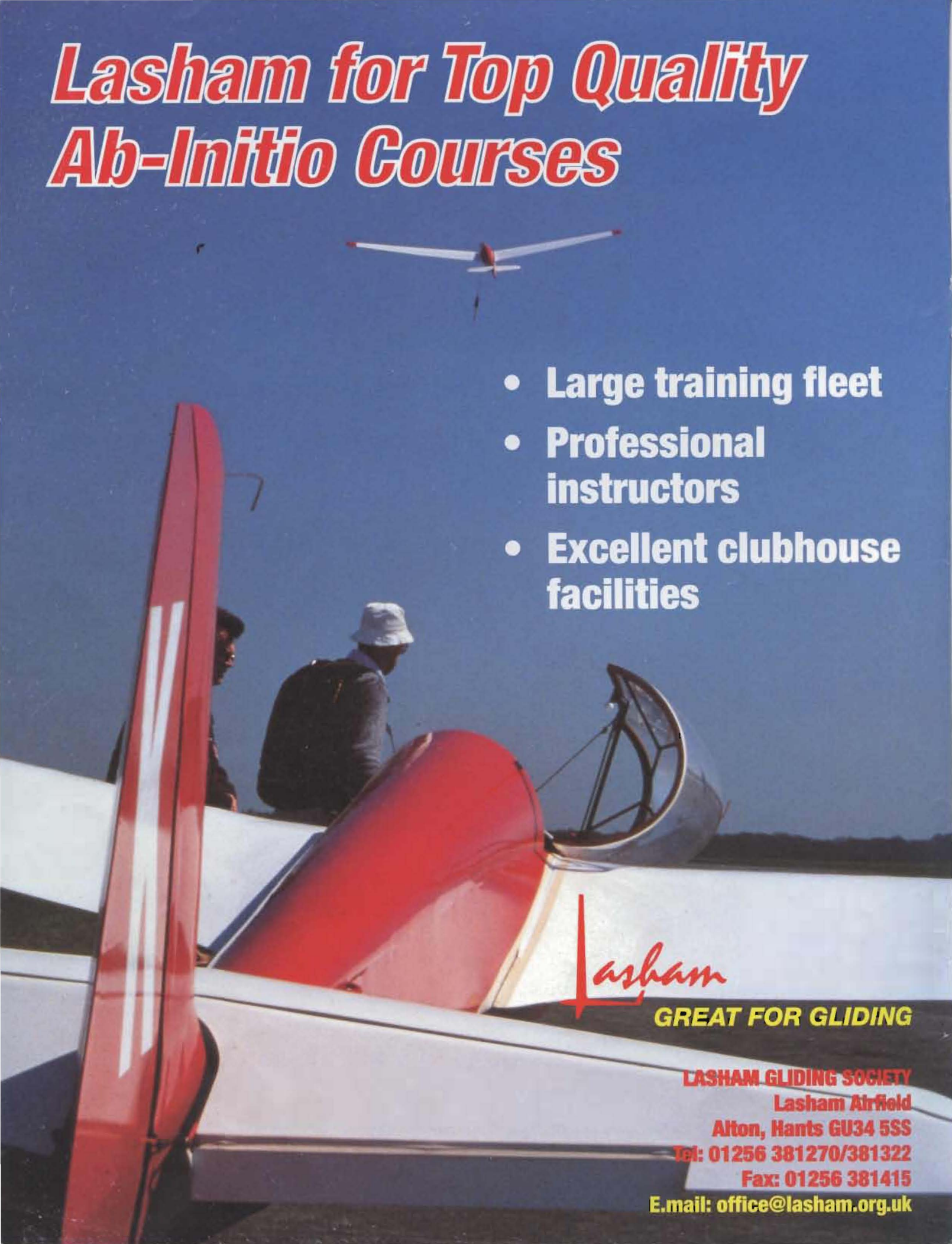


SAILPLANE & GLIDING

June-July 1998 £2.50

ISSN 0036-7230

Lasham for Top Quality Ab-Initio Courses



- Large training fleet
- Professional instructors
- Excellent clubhouse facilities

Lasham

GREAT FOR GLIDING

LASHAM GLIDING SOCIETY
Lasham Airfield
Alton, Hants GU34 5SS
Tel: 01256 381270/381322
Fax: 01256 381415
E.mail: office@lasham.org.uk

Magazine of the
British Gliding Association

June-July 1998
Volume XLIX No. 3

EDITOR
Gillian Bryce-Smith
281 Queen Edith's Way
Cambridge, CB1 4NH
Tel 01223 247725
Fax 01223 413793
E-mail gbs.sandg@virgin.net

ADVERTISING
Debbie Carr
BGA Office
Tel 0116 2531051
Fax 0116 2515939

SUBSCRIPTIONS
Bev Russell
BGA Office
Tel 0116 2531051
Fax 0116 2515939

E-mail Bgahq@aol.com
http://www.gliding.co.uk

MAGAZINE COMMITTEE CHAIRMAN
C. Pollard

Deadline dates – August - September. The main deadline is May 30 with club news and letters accepted up to June 9. The deadline for display advertisements is June 23 and July 3 for classifieds

***S&G* Annual Subscription:** Send £17.50 to the BGA.

PUBLISHER
British Gliding Association
(Barry Rolfe, BGA Administrator)
Kimberley House
Vaughan Way, Leicester, LE1 4SE
Tel 0116 2531051
Fax No 0116 2515939

TELEPHONE CALLS
Do make sure you have the correct number - a lot of you are wasting calls by 'phoning S&G when you want the BGA and vice versa.

New Editor. Please note that Le Forbes is taking over at the end of May and may be contacted *via* PO Box 2039, Pulborough, West Sussex, RH20 2FN, tel 01798 874831, e-mail: le@blot.co.uk



Cover: Our cover was sent to us by Centrair and shows their Alliance 34 being flown near Le Blanc.

SAILPLANE & GLIDING

133 YOUR LETTERS
M. Fairman, A. D. Piggott, P. M. Warren, J. Morris, A. W. F. Edwards, M. Simons, S. North (reply by A. J. Davis), H. G. Peters, J. Hickling

137 SAILPLANE NEWS

139 FLYING THE ALLIANCE 34
D. W. K. Allison

140 ADVENTURES WITH A DG-400 Part 2
G. Westgate

143 THE FUTURE OF BRITISH TEAM TRAINING
A. J. Davis

144 LUCK AND PERSPIRATION
J. L. Bridge

145 FURTHER GERIATRIC MEANDERINGS
T. Adams

146 TAIL FEATHERS
Platypus

147 FOR THE WANT OF A NAIL
M. Meagher

148 SHIFTING A PARADIGM
J. Bailey

149 BUNGY
K. S. Simmons

151 ORGANISATIONS ON LINE
J. G. Wright

152 MINDEN THE GHOSTLAYER
R. D. Bailey

153 VINTAGE NEWS
C. Wills

154 BLUE THERMAL DAYS
T. A. M. Bradbury

157 WAY BACK WORLDS
A. Welch

159 WAY OFF TRACK
Penguin

160 THE TRAVELLER'S QUESTION
T. J. Wills

162 LIES, DAMNED LIES AND STATISTICS
C. S. Baker

164 UNIVERSAL GPS MOUNT
I. W. Shattock

165 HOW DO WE GET AND KEEP MEMBERS?
J. Alcock

167 TREVOR – AN AIRFIELD CHARACTER
"Terror" Firma

168 BGA & GENERAL NEWS

169 OBITUARY –
Col E. G. Shephard by D. Scarfe

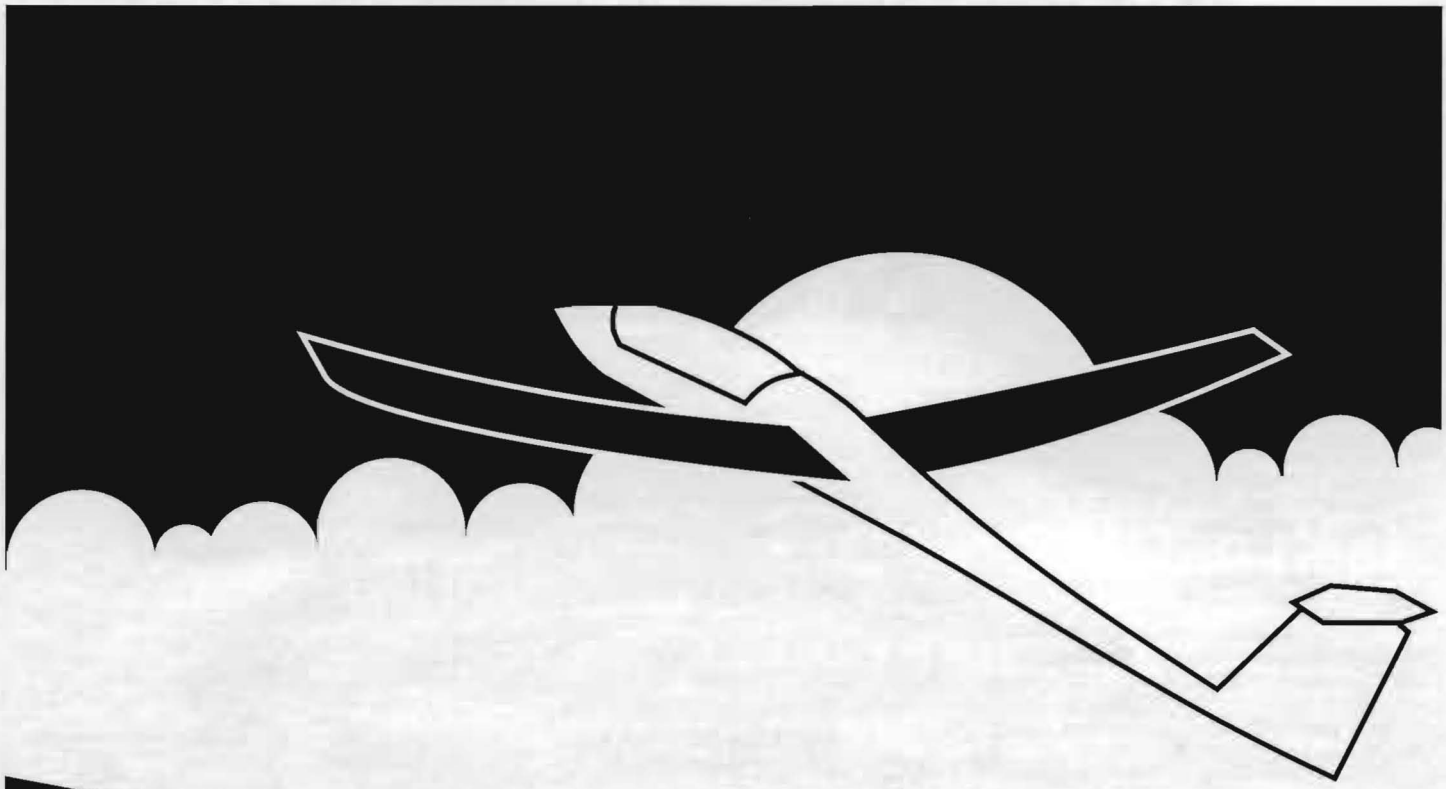
171 GLIDING CERTIFICATES
AIRSPACE UPDATE
C. L. Withall

172 CLUB NEWS

186 BGA ACCIDENT SUMMARY
D. A. Wright

Member of the
Royal Aero Club and the
Fédération Aéronautique
Internationale

GreenShires Creative Colour Ltd, Leicester.



A professional and Personalised Service.
Technical Expertise, second to none,
to give you the advice and service you want.

Insurance advisors to the British Gliding Association

Contact: Duncan Ellis on 0171-377 3359

Sedgwick

Sedgwick Limited

Sedgwick House, The Sedgwick Centre, London E1 8DX
Telephone 0171-377 3456. Telex 882131. Facsimile 0171-377 3077
A Lloyd's Broker. A member of the Sedgwick Group

The Best Gliders in the World

are now even better...



As UK agents for Schleicher in conjunction with JJ Associates, we provide a full sales, maintainance, spares and repair service for all Schleicher gliders

SALES • REPAIRS • MAINTAINANCE

London Sailplanes Ltd. Tring Road Dunstable Beds LU6 2JP
Tel: 01582 662068 Fax: 01582 606568 e-mail: lsl@gliding.powernet.co.uk
Web-site: http://www.powernet.co.uk/gliding/lsl.htm

LONDON SAILPLANES

THE PLACE TO BE!



- Modern single and two-seater fleet for hire
- Superb thermal-producing countryside
- Year-round hill soaring • Winch and Aerotow launching
- Our own weather forecasting every day
- Computerised cross-country flight planning
- Cross-country tasks and briefing every day in season
- Heated accommodation, caravan site, bar restaurant

INSTRUCTION COURSES FOR EVERY LEVEL:
Basic training holiday courses • AEI and instructor ratings • cross-country soaring • aerobatics • one-to-one training on any chosen aspect (book an instructor for a day). Call:

01582 663 419

Cobra Alarms Standard Nationals – 6th-14th June 1998
Regionals – 22nd-30th August 1998
For more information write or phone
London Gliding Club, Dunstable Downs, Tring Road, Beds. LU6 2JP
Fax: 01582 665744

LONDON GLIDING CLUB
– DUNSTABLE –

Anglo-Polish SAILPLANES LTD.

S.Z.D. 59 Acro

SZD-59 "Acro"

"The best of aerobatics and soaring performance at an affordable price."

The SZD-59 ACRO is a dual-purpose single-seat all-composite sailplane.

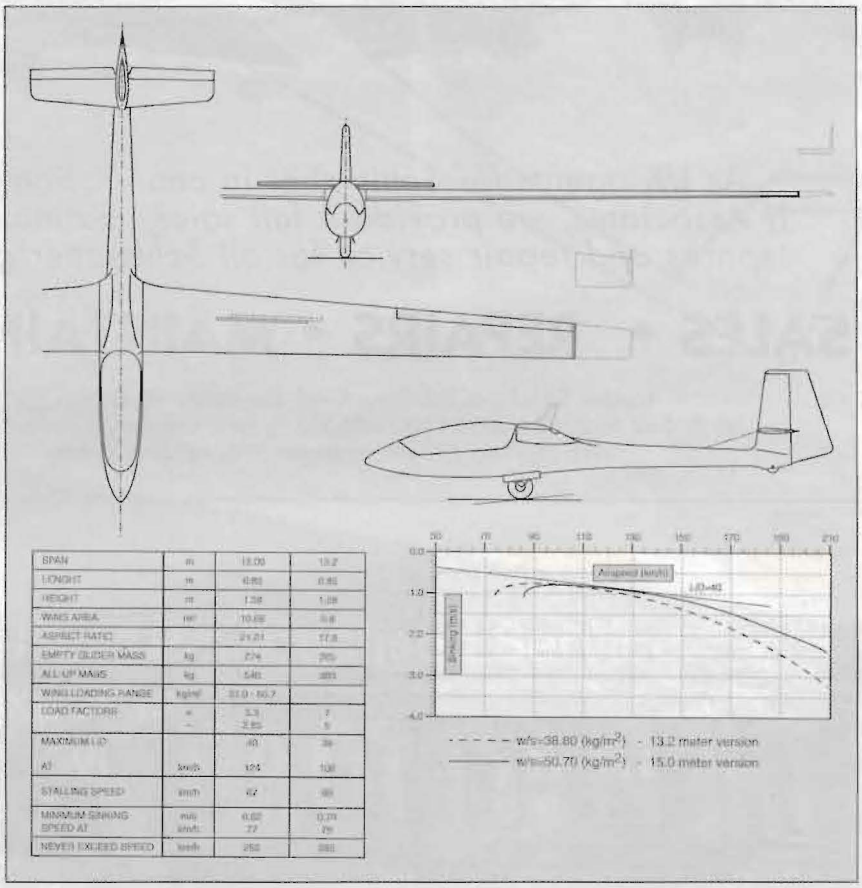
More and more glider pilots ore discovering the challenge and excitement of sailplane aerobatics, whether for competition or pure enjoyment. Until now, however, most sailplane designs were optimized for either soaring or aerobatic performance, but not both.

Now with the SZD-59 Acro, it is possible to have a virtually unlimited aerobatics glider and a 40:1 Standard Class sailplane in the same aircraft. The secret to this versatility is the Acro's Detachable wingtips. Also possible the optian with the winglets. In its full span configuration, the SZD-59 has the same excellent flying qualities and soaring performance as the legendary Standard Jantar, from which it was derived. With its 150 litre water tank capacity and 265 km/h top speed, the Acro rivals the best standard class sailplanes. But with the wingtips removed (a simple 2 minute task), the SZD-59 transforms into a 13.2 meter, fast-ralling, "unlimited" aerobatic glider, which can perform just about any manoeuvre you can imagine, up ta +7/–5 gs.

In either configuration, the SZD-59 is one of the smoothest, quietest and best balanced sailplanes ever produced. Of course it is JAR 22 certified (U/A category) and comes standard with such features as a five-point harness, in-flight adjustable rudder pedals, adjustable back rest, and fully automatic control connections.

Fly the SZD-59 Acro. It may be the best "two" sailplanes you've ever flown!

Factory warranty: 18 months.



SPAN	m	13.00	13.2
LONGHT	m	6.80	6.80
HEIGHT	m	1.58	1.58
WING AREA	m²	10.68	10.8
ASPECT RATIO		21.01	17.8
EMPTY GLIDER MASS	kg	274	265
ALL-UP MASS	kg	540	385
WING LOADING RANGE	kg/m²	33.0 - 50.7	
LOAD FACTORR	+	5.3	7
	–	2.65	5
MAXIMUM L/D		40	39
AT	km/h	124	130
STALLING SPEED	km/h	62	60
MINIMUM SINKING SPEED AT	m/s	0.62	0.79
	km/h	77	79
NEVER EXCEED SPEED	km/h	250	280

Price Ex-works $28,930 USD for Aerobatic Mode

SZD Acro demonstrator at Lasham!

Also available

SZD 55-1 High performance with exceptional climbing characteristics

SZD Junior, single seat club sailplane. Early solo to cross-country

SZD Puchacz, two seat trainer. Used on BGA courses

Puchacz demonstrator for sale fully equipped with instruments and AMF trailer

Sailplane Trailers Available

SK 94 parachute. Price £485. Exclusive of VAT

Finance available subject to status

For further information write to:

Anglo Polish Sailplanes, 22 Woodhurst South, Ray Mead Road, Maidenhead, Berks. SL6 8NZ

Tel/Fax 01628 39690 • Zenon Marczynski Tel/Fax no: 0181 893 4868/0181 755 4157

YOUR LETTERS

LET'S USE THE TECHNOLOGY

Dear Editor,

Last season, my best three cross-country days all started with great promise. Each time I set off full of confidence, only to run into an area of flat grey calm. Each time I penetrated a few miles in to confirm my suspicions, gave up and came back home.

Why didn't I press manfully on and, if necessary, land in a field? Well, for a start, they weren't competition days and secondly, I hate landing out. Field landings are the downside of gliding. One has only to look at the accident summaries to see how the BGA is (quite rightly) concerned to improve field selection training.

When the cross-country pilot selects his strange field, the very best he can hope for is several hours of severe boredom, but in competition flying he is forced to land there to prove how far he has travelled. Why should this be?

Now that data loggers are commonplace, why not use the facility on those frustrating but all too familiar British cut-off days, to turn back out of the clag and land somewhere friendly - or even return to base, happy in the knowledge that inspection of our course trace can be used to credit us with the distance actually achieved along the set route?

A rule allowing this wouldn't prevent the keen competitor from gliding the couple of extra miles into a field (although the points difference would be very few on those particular days). Personally, I prefer not having to be retrieved at all, if possible, and have this strange belief that competitions should try to maximise enjoyment.

A couple of objections immediately come to mind. The first is that the scorers have enough to do without the extra chore of inspecting everyone's trace. The second is that this would be unfair on the shrinking minority not possessing a data logger. I would suggest that they be allowed to photograph a recognisable ground feature as evidence of distance travelled.

Now we have the technology to make competitive gliding just a little more pleasant, let's use it.

MICHAEL FAIRMAN, *Welwyn Garden City, Herts*

DEREK COMMENTS ON REDUCED G

Dear Editor,

I would like to comment on the article on negative *g* in the February issue, p22.

I am still getting reports of fatal accidents from all over the world which are most probably associated with reduced *g* and I therefore welcome any article that draws attention to this very real problem. I know that there are many instructors in other countries totally unaware of the problems and would like to mention that the subject is well covered in my booklet "Sub-gravity Sensations and Gliding Accidents", from the BGA or me at £3.50, including p&p.

Chris Pullen makes the point that instructors become insensitive to low *g* sensations. One further worry caused by this insensitivity is that they often frighten their students when demonstrating it.

In my opinion first demonstrations of the sensation must be done very gently with an almost immeasurable degree of reduction to perhaps only +0.8 or +0.9*g*. This is best done immediately after demonstrating for the first time a stall and **on the same flight**. This is to prevent the risk of the student associating the feeling with stalling and thinking of it as a symptom. There is no sensation of stalling only symptoms.

Unless this is done, a sensitive student may go undetected for quite some time and they may react to any low *g* situation with dangerous results. I had quite an experienced pre-solo student push hard forward on a final approach when the glider flew through turbulence and we left our seats for a moment. Only quick reactions and pure luck prevented a bad crash. I know of a similar incident which resulted in a double fatality.

Of course, in addition to the early introduction, every student should be tested before flying solo and details of my suggested method are in the booklet. Even at this stage zero *g* is more than is necessary to test for the student's reactions and sensitivity.

If you have not yet met a student who is really badly affected, or believe this is just one of Derek's phony ideas, I would suggest you read the booklet carefully again. Almost every year, even in this country, there is at least one accident which may have been caused by this problem and they are usually fatal.

DEREK PIGGOTT, *London*

RATIONALISATION OF UK GLIDING

Dear Editor,

The time is long overdue for a rationalisation of the gliding movement in this country. Gliding is a minority activity. Overall, membership of gliding clubs is declining. Young people are not attracted to gliding in the way they used to be. Air-mindedness does not compete favourably with interests in other activities.

Children no longer want to be fighter pilots any more than they want to be train drivers. Anyway, it can all be experienced on a computer with a minimum of physical effort. This means we must harness our resources and focus on the best way to help the relatively few but keen future glider pilots, and enhance the image of gliding to attract new blood.

A start has been made in looking at BGA clubs providing training to solo standard for ATC cadets. This should provide a welcome boost to the clubs in terms of income and potential membership, and improve the likelihood of the youngsters continuing to glide instead of disappearing off the scene once they have soloed.

At a cost of something over £40 per launch to run ATC Gliding Schools compared with around £5 - £15 for a BGA club, there should be a welcome saving to the tax payer. If ATC gliders and ground equipment were to become available to BGA clubs at reasonable costs, many would be able to improve their own fleets and launching facilities.

This leaves the BGA clubs and the service clubs, principally the RAFGSA, in the frame. A major problem in getting the BGA and RAFGSA clubs operating together is the subsidised and artificially low cost of membership, launches and flight times enjoyed by the RAFGSA, (cheap gliders, tugs, winches, cheap fuel, no hangar fees, no charges for electricity, water, ground purchase or rental, etc). Rough comparisons are:

	Aerotow	Winch	Flight time
BGA	£15-£20	£4 - £5	15-30p/min
RAFGSA	£10	£1.50	10p/min

Membership: BGA £120 - £250: RAFGSA £50

Of course, somebody pays for these differences - the tax payer. When after the war servicemen started flying gliders captured from the Germans, the RAFGSA was formed to provide gliding for servicemen at a cost which the most lowly paid could afford. It worked extremely well and there are a range of RAFGSA clubs strategically placed throughout the UK. But with service recruitment at an all-time low there are very few air-minded servicemen who see the time and physical efforts required to take up gliding as being worthwhile.

Like BGA clubs their membership is ageing and there are more instructors than *ab-initios* to teach. Those who do glide regularly are no longer in the lowly paid category and could well afford to pay the going rate, as do members of BGA clubs. They enjoy the opportunity of flying very expensive, high performance gliders, at a minimal cost. It is almost understandable that they should selfishly want to keep these opportunities to themselves

There is also duplication of the gliding organisations with the RAFGSA having its own problems in that its clubs operate from RAF sites and are subject to a considerable extent to the requirement of the Service. All these factors ensure that the BGA and RAFGSA remain as separate organisations.

Wouldn't the subsidy which enables the RAFGSA to offer cheap gliding be better spent (if only part of it) in enabling the BGA clubs to ➡

CONVERT WITH US

SLMG to PPL COURSES from **£495**

SILVER 'C' COURSES from **£1320**

SLMG COURSES from **£1000**

(All prices inc VAT and landing fees)

THE REAL CONVERSION SPECIALISTS

STOP PRESS!

We can now offer RT courses

★ Aircraft hire: Falke £40PH; C152 £75PH; PA28 £80PH
★ SLMG Courses Available
★ Farmhouse accommodation can be arranged

TEL: TOM EAGLES AT PILOT FLIGHT TRAINING

Oxford Airport Tel. 01865 370814 or Hinton-in-the-Hedges Airfield, Nr Banbury Tel. Mobile 0836 787421 or 01295 812775

What goes up...



Almost invariably comes down, sometimes a little sooner than expected!

If your flight has turned out to be of somewhat shorter duration than anticipated, you could regret being insured with someone who thinks Tost hooks are for shark fishing.

It's always far easier to explain these things to another gliding type, which is exactly what you can do if you happen to be with Flight Insurance!

Contact Carol Taylor on Thirsk (01845) 522777 – 24hr Ansaphone Service
Or write to:

FLIGHT INSURANCE

48A Market Place, Thirsk, North Yorkshire YO7 1LH

In association with Lowndes Lambert Aviation Ltd

Fax: (01845) 526203

become more efficient and so make gliding more widely available and attractive to young people? Well equipped and financially viable BGA clubs can operate junior or cadet schemes to enable impecunious young people to get into gliding.

The following options need to be considered:
1. Wind up ATC Gliding Schools and RAFGSA clubs and allow BGA clubs to buy their equipment. This would be quasi state funding for the BGA and a saving to the tax payer. All gliding would be under the control of the BGA.
2. Leave the RAFGSA as a separate gliding organisation, but operating at charges commensurate with those of BGA clubs by charging for the services which at present the RAFGSA clubs get free or at reduced costs. This would remove the cost differential which at present inhibits the BGA and RAFGSA clubs from operating together and enable integration of membership.

PETER WARREN, *Stafford*

MOTOR GLIDER SAFETY TRAINING

Dear Editor,

I would like to thank Jack Alcock for his excellent and very timely letter in the last issue, p67, concerning motor glider safety training, but whilst not wishing to criticise the points he makes, all of which are extremely valid, there is an additional and highly relevant factor I would like to add.

SLMG training is carried out in Falkes, Ventures, Grob 109s and the like, all of which have a more or less co-incidental thrust/drag line and the application of power causes the nose to **rise and yaw**.

Reduction of power has the opposite effect, facts which are demonstrated during SLMG PPL training.

With the extended engine SLMG and pylon mounted propellers, however, the thrust/drag line is far from co-incident and the application of power will still cause the glider's nose to yaw, but the high thrust line will make the nose **drop instead of rise**, which is not the effect one would wish when turning low finals into a field and applying power to climb away. The reverse occurs when there is a reduction of power. The nose still yaws, but this time will rise - again not the effect one would wish on landing!

These effects are obviously dependent on the power applied and the horsepower of the engine, but are still significant factors that should be considered in conversion briefings.

JOHN MORRIS, *Thames Valley senior regional examiner*

BEST-SPEED-TO-FLY PENCIL

Dear Editor,

A search through *S&G* and its predecessor *Gliding* reveals the source of Chris Riddell's speed-to-fly pencil (see the last issue, p67) to be an article not by Philip Wills but by Tony Deane-Drummond (*Gliding*, Summer 1952, p62). Deane-Drummond adapted the "similar device suggested by John Neilan in 1947 for solving best gliding angles", which Neilan had evidently reinvented in ignorance of K. M. Chirgwin's 1938 version.

The photograph of an instrument panel in Philip Wills's **On Being a Bird** published in 1953 shows a device attached to the Cosim variometer, but the description refers simply to "cruise-speed charts" and the photograph is not sufficiently clear to tell what form these took.

ANTHONY EDWARDS, *The Arm-Chair Pilot, Cambridge*

Dear Editor,

I can make a couple of small points in amplification of questions raised by Anthony Edwards in the last issue.

First, the "speed-to-fly pencil" indicator. In *Sailplane and Glider*, August 1947, pp20 - 21, John C Neilan described, with diagrams, a speed-to-fly device for the Cosim variometer, which was very similar to K. M. Chirgwin's of 1938. The difference was that John Neilan had read the various articles on speeds-to-fly which had appeared in *S&G* in the months from March 1946. The authors chiefly concerned were A. Mirsky, Hans Neubroch and Gerry Smith, whose approach to the problem differed slightly.

From the time of Neilan's published letter, if not slightly earlier, members of the Derby & Lancs GC, in particular Gerry Smith and his syndicate with the Olympia "Kinderscout", were using the speed-to-fly pencil, with the hexagonal cross-section. The figures inscribed on the pencil embodied Gerry Smith's theory rather than Neubroch's, but the principle was established. They showed the device to everyone and other pilots quickly copied it using their own figures.

The second matter raised by Anthony in the April issue, p122, is the spelling and origin of "bungee". (See also Way off Track, p159.) When I was editing *Australian Gliding* some twenty years ago, I made inquiries. No-one seems to know where the word came from although in eighteenth century English it meant a flimsy scrap of cheap fabric. In connection with rubber, including erasers, it has a definite Asian feel about it but it is apparently not Malaysian or Burmese.

In old American aeronautical dictionaries "bungee" is the cord used for springing "airplane" undercarriages. *Bungee Cord* is the name of the American Vintage Gliding Association's magazine and the spelling "bungee jumping" seems now to be generally accepted. That was what I eventually decided on.

In the course of my researches I discovered several other interesting scraps of information. There is a town in Kashmir called Bunji (35.40 N,74.40E). And "bungy" in Scotland means having removed the bung from the bottle too often, "boonji" in the Urdu language, I am told, is a word for niece, and "bunjies" are labourers. ➡



ONE OF THESE IN THE WORKS?

Then you will be glad you have the backing of a reliable company. Let us worry about the nuts and bolts of your insurance policy!

Phone, fax or write to:
Stephen Hill

hill aviation insurance services ltd

Phone: 01765 690777 Fax: 01765 690544
Unit 1A Sycamore Grange Estate,
Copt Hewick, Ripon, North Yorkshire. HG4 5DF.

So, if there is a gliding club in Kashmir where female members enjoy their wine and plenty of labourers are available to pull the ropes, we have an intriguing possibility.

Anyone for a Bunji, bungy boonjie, bunjie bungee launch?

MARTIN SIMONS, *Stepney, South Australia*

CROSS-COUNTRY FLYING GUIDE

Dear Editor,

Not wishing to detract from Andy's excellent article on early cross-country flying in the last issue, p77, I thought it would be helpful to correct the quoted "Bradbury Rule" for estimating cloudbase. Tom's rule of thumb uses the difference between forecast temperature and the dew point (see the October 1995 issue, p269). I am sure that using max/min values would be misleading.

STUART NORTH, *Somerton, Somerset*

Andy Davis replies: Strictly speaking Stuart is absolutely correct. Tom Bradbury's rule of thumb for estimating likely cloudbase is 400ft/°C difference between dew point and forecast daytime maximum temperature.

Unfortunately, TV forecasts never mention dew point but do quote an overnight minimum temperature. Since on a reasonably clear night the temperature falls close to the dew point, it follows that overnight minimum may be substituted for dew point as a **practical** way to estimate the likely afternoon cloudbase.

The great man (Tom Bradbury) himself confirmed that the use of 400ft/°C difference between min and max temperatures is a valid way to **estimate** the likely cloudbase. In any case forecasting inaccuracies, terrain and local variations make any estimate just that - an estimate.

MORE ON WINCHES

Dear Editor,

In the last issue (p68) Mike Groves writes that one of the statements in my article, previous issue, p38, was incorrect. John Gibson concurred in a minor key (also April issue, p68) before explaining the differences between the two winches with his customary succinct clarity.

The owners of both winches are happy and confirm that a guidance system enables most club members to give high quality launches. Foreign manufacturers haven't cottoned on yet so we can all agree to buy British.

Both letters contained points which for me confirmed rather than refuted my alleged error. Of course the twin trim helps throughout the launch but in the established climb the drivers of the Skylaunch need to adjust to changes of windspeed. The drivers of Supacat do not.

This is best illustrated when the glider hits a thermal in a launch. What do pilot and driver do if the weak link survives the surge? The glider speed increases and the engine rate slows. On Supacat they both just hang on in there.

Why try to teach drivers to respond to a guess at the glider's speed? This is the only option for a petrol engined winch.

For me it is more logical for the driver to offer an optimum energy package. The pilot then performs as in free flight. Pull back to slow down and ease forward to speed up. With the ASI in the cockpit the pilot can hold min sink for the wing loading of the launch.

In other words robot launches are possible. Under supervision we have launched a glider with the driver only looking at the lower pulley to determine the phase of the launch. The CFI was unable to detect any difference between this launch and a conventional one.

GORDON PETERS, *Wellington, Somerset*

SKYLARK 1

Dear Editor,

To add to the Skylark story (see the February issue, p30), we flew the machine at the Mynd in September 1953, immediately after the Nationals, and also for a lengthy period in 1954, and were delighted with it. I was the guinea pig to have its first bungy launch (hope this spelling is OK?!). The Midland GC eventually decided to buy it but were beaten to it by Chris Riddell.

The first production Mk2 was ordered by my syndicate and proved to be a step up from the old Olympia, but fell short of the hopes raised by the Mk1.

We expected a 15m version of the original ply covered wing mounted on an improved fuselage, but alas this was not to be.

JOHN HICKLING, *London*

FOOTLAUNCH GLIDING! WITH SKY SYSTEMS

PARAGLIDING, PARAMOTORING AND HANG GLIDING

The UK's leading centre. Our team includes some of the UK's top instructors; all teaching is to British Association syllabus. Sky Systems are based on the South Downs near Brighton, open 7 days a week:
Call for an information pack, or visit our website!

Camelbak
Pokteen hands-free insulated drinks system.
1.5 litre capacity, easy to fix in cockpit. £27.95



GPS III & III-Pilot
Full moving-map functionality. NOW IN!

SKY SYSTEMS LTD
Edburton, Near Henfield, West Sussex BN5 9LL
Tel: Brighton (01273) 857700 • Fax: (01273) 857722
email: skyinfo@skysystems.co.uk • http://www.skysystems.co.uk/

BOOK REVIEW

German Air Attaché, The Story of Peter Riedel, by Martin Simons. Published by Airlife Publishing Ltd at £19.95.

Pioneer pilot on the Wasserkuppe in 1920, Peter Riedel built his own biplane glider and later competed in the American Nationals in 1937 and 1938. There he flew the world's longest goal flight of 365km in his Kranich.

He became a pilot of international renown but gliding in pre-war Germany was also an integral part of its efforts to recover from the shame of the Treaty of Versailles following WW1. Although it developed magnificently in its own right it was irrevocably linked with the rise of the Luftwaffe, many glider pilots becoming military test and fighter pilots in WW2.

The book covers the period 1938 - 1948 during which Peter Riedel flew gliders in Brazil and USA, was appointed Air Attaché in the German Embassy in Washington and married an American girl. After the German invasion of Russia the Embassy was closed and Peter was shipped back to Germany, where he spent the rest of the war failing to convince the Nazi top brass of the growing American air power. After the war ended he managed to escape to Venezuela.

This is not a "there I was" gliding book. It is a very readable story of the development of German aviation leading to WW2 and more interesting than the standard accounts on the subject, particularly concerning expansion of the American aircraft industry.

We welcome your letters but please keep them as concise as possible and include your full name, address and tel/fax number. We reserve the right to edit and select and point out that views expressed in letters and articles are not necessarily those held by the BGA.

Correction: We apologise for the poor typography on the Southern Sailplanes advertisement in the last issue. This was due to a technical problem at the printers.

SPORTAVIA SOARING CENTRE, TOCUMWAL

WORLD CLASS GLIDING – THE BEST!

✦ ***Now offering Power Flight Training up to Multi-Engine Instrument Training and Outback Tours*** ✦

Situated on the beautiful Murray River with large open spaces for safe X-country flights. Personal achievements are daily events and National & World records are regularly achieved. Over 25 modern, well maintained sailplanes to choose from. We also have available a Nimbus 4DM for X-country flying with Ingo Renner, 4 times World Champion. The on-field accommodation, restaurant and bar facilities surrounded by lawns, gardens and swimming pool complete the picture for a perfect gliding holiday with a friendly welcoming atmosphere.

VERY ATTRACTIVE OFF SEASON PRICES FOR FLYING AND ACCOMMODATION

For further information please contact us

SPORTAVIA SOARING CENTRE
PO Box 78, TOCUMWAL 2714, NSW, Australia



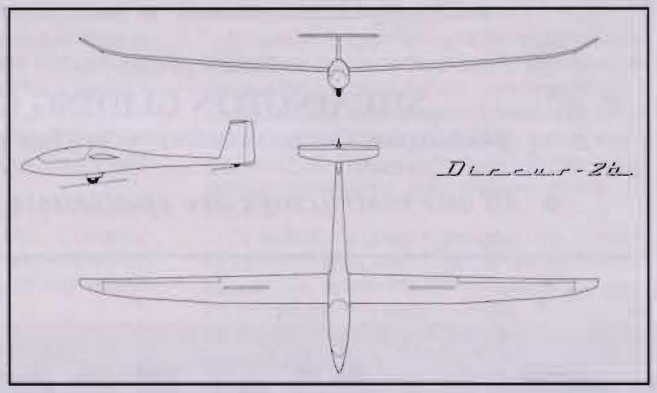
Phone 61 (03) 5874 2063
Fax 61 (03) 5874 2705
E-mail sprtavia@cobram.net.au
http://auswings.cobram.net.au

SAILPLANE NEWS

The new Discus 2 on the right will soon be flying in the UK and below is a version of a proven sailplane which was developed from students' experiments



Discus 2.



Above: The Discus 2, the latest to come from the Schempp-Hirth stable, had its maiden flight on April and will be flown by Andy Davis in the Standard Class Nationals at Dunstable from June 3. Steven Jones of Southern Sailplanes, the agents, says there are also plans for it to be entered in the Lasham Regionals in August and, in any case, will certainly be on the airfield during the competition.

Schempp-Hirth's managing director, Tilo Holighaus, on landing the Discus after the first flight was enthusiastic about its performance. He was particularly pleased with its manoeuvrability and harmony of controls.

Local pilots who later flew the Discus felt the design was a considerable leap forward. Performance characteristics couldn't be measured because of the turbulent weather and rain, but it is hoped to have comparision flights as soon as possible.

A limited batch of gliders will be built with the Discus going into full production later this year after type certification by the LBA in time for the World Championships in Bayreuth, Germany. Its predecessor, the Discus, will be built in Chocen, Czech Republic - there are already more than 800 being flown all over the world.

Below: Jochen Ewald photographed the DG-500MB and sent us a progress report of this new version of the DG-500. The flapped 22 metre DG-500 and DG-500M have been in production since 1897 and are now joined by the DG-500MB which has a 20 metre wingspan.

This latest sailplane evolved after students at the Akaflieg (Academic Flying Group) at Karlsruhe decided to make their DG-500 qualify for the 20 Metre Class by cutting a metre of each wing. They then fitted winglets to improve the performance and flying characteristics of the shorter glider. The result was so impressive DG's chief designer, Wilhelm Dirks, decided to modify the idea and put it into production. The DG-500MB has the new water cooled Solo 2625-2 engine, which is basically the same as the one used in the DG-800B. With a double carburettor this standard engine, now being used for most of the German retractable self-launchers, gives 65hp on take off.



• High quality workmanship at affordable prices.
• Full workshop facilities to cover all jobs big or small.
• C of A due? Phone for the best price.

SEVERN VALLEY SAILPLANES

Martin Carolan



Does your repairer make promises he can't keep?

Workshop phone or fax 01452 741463
Home 01453 544107 Mobile 0860 542028
Passage Farm, Arlingham, Glos GL2 7JR

SHENINGTON GLIDING CLUB

OPERATIONAL ALL YEAR – EXPERTS IN TRAINING

SOLO COURSES

- 5 day intensive course £200 to £325 (we guarantee 40 flights on 5 day course)
- 1 day course (8 flights) £80
- Your ambition achieved through personal tuition

POST SOLO COURSES

- One-2-one tuition • Winch/aerotow training
- Confidence building courses • Pre instructor training
- PPL conversion course
- Bronze and cross country endorsement courses
- Soaring courses
- Shenington is silver and gold country
- Talk to an instructor about your ambitions
- Club expeditions welcome • Accommodation facilities

Write - phone/fax

SHENINGTON GLIDING CLUB

Shenington, Oxon OX15 6NY • Tel/Fax 01295 680008

• ***All our instructors are specialists in training*** •

MINI VARIO

VISA/MASTERCARD ACCEPTED



$169 (£109) US Dollars only

World's Smallest Vario!

- Clips to cap, shoulder strap or glasses near pilot's ear
- 200 hours battery life
- 0-6m/sec range
- Fast response and very sensitive in light lift
- No tubing required
- 2 year guarantee
- Size 4cm x 4cm

MALLETTEC

PO Box 15756, Santa Ana, CA 92735
714-966-1240 • Fax 714-757-1610
E-mail: mmallett@aol.com

Call for a brochure!

McLEAN AVIATION

THE AERODROME, RUFFORTH, YORK YO23 3NA
Tel: 01904 738 653 • Fax: 01904 738 146
Mobile: 0802 674 498 • E-Mail: KMc266416@aol.com

Full repair and maintenance service for major repairs in GRP, carbon, kevlar and wood.
C of A renewals, re-finishing and general maintenance



FOR SALE

- ★ DG 400 – complete outfit
- ★ DG 300 – complete outfit
- ★ DG 800 – complete outfit

- ★ Neogene paints and dopes
- ★ Release hook exchange
- ★ Repair materials
- ★ Tyres and tubes
- ★ Canopy spare parts
- ★ Ex. military spare parts

Sole agents for DG Sailplanes and spares in UK and Eire

Please ask for details of the DG range of single and two seater sailplanes and self-launchers

FLYING THE ALLIANCE 34

David, Junior Champion in 1996, a member of the British team squad and an instructor at the European Soaring Club at Le Blanc last summer, gives his impressions of this compact club two-seater

During my time in France last summer I had the chance to look round the Centrair factory at Le Blanc. Centrair, who are best known for the ASW-20F and Pegasus, were busy turning out their latest project, the Alliance 34. This glider is an improved version of the SF-34 and is the fruit of collaboration between Scheibe (the original producers) and Centrair - hence its new name. I was pleased to accept the offer of a flight - that was before I was asked in exchange to write an article on it!

The concept of the Alliance is to provide a robust and capable two-seater glider that can be used for basic and advanced training. I haven't flown the original SF-34, so I can't comment from first hand experience on whether the changes have improved it. But there have been reports of problems with ground handling owing to limited fuselage clearance, an ergonomically poor cockpit and an indifferent climb performance.

At first sight the Alliance looks too small to be a two-seater, having a mere 15.8 metre wingspan and a fuselage shaped rather like a streamlined bathtub. Yet small size is advantageous when it comes to ground handling; for example the Alliance will fit into hangars with greater ease than will most two-seaters. The machine is also well balanced on its main wheel, rendering a tail dolly redundant.

The overall quality of manufacture is excellent and the glider's finish is absolutely on par with the best you see come out of Germany. The Alliance was wheeled out of the factory hangar prepared for my flight, so I'm unable to report on ease of rigging, but it does come with self-connecting controls, which to my mind is an essential requirement these days.

The cockpit interior is very smart and in the same style as the later Pegasus. Centrair have put a lot of effort into redesigning this, especially the seats, with the aim of providing a comfortable and practical interior durable enough to endure the demands of club life.

The rudder pedals have a large range of travel to accommodate tall pilots (I'm 6ft 2in and had no problem) yet rather disappointingly there are no seat-back adjusters. Centrair explained the controls have been repositioned, as well as having newly styled instrument panels which are faired into the cockpit interior. One of the Alliance's best features is the one-piece canopy, which is gas-strutted and side opening, thereby conferring superb all round visibility.

Now I come to the important part - the flying. I flew from the rear seat to get an instructor impression of the glider, with the Centrair test pilot in the front. There was very little wind on the nose for take off, yet as soon as we started to roll the controls came to life, with the ailerons working particularly well compared to other two-seaters.

Below 2000ft the tow was a bit bumpy due to the first thermals trying to form (it was 9am) and the glider gave the impression that it could cope very well with rough air, mainly because of the powerful ailerons. Once off tow at 4000ft, I set about exploring the Alliance. I found it to be well harmonised and stable.

The roll rate was sub 4secs and in my experience was second only to that of the Duo-Discus when considering two-seaters. The controls at normal speeds were pleasant and light with a discernible gradient of stick force with increasing *g*, thereby giving good feel cues to the pilot.

The trimmer is powerful, effective and easy to use; moreover, sufficient retrimming is required with changes of speed to facilitate instruction in the correct use of trim. The instructor is well able to observe the student's actions, as well as enjoying the superb external visibility. The cockpit is well sealed, providing a quiet environment, which again would aid instruction.

When stalled the glider very gently "mushed", with immediate recovery when unloaded. However, from the deep stall the glider spun very readily if provoked, but again recovery was instantaneous.

Good speed stability and a powerful and effective hydraulic wheelbrake

I felt that its stall/spin characteristics were excellent for training purposes as I personally like to be able to teach spinning in a glider that will spin!

Disappointingly I had no chance to soar, other than a few turns in zero that did nothing more than slow my descent, though I suspect it would be hard work in very weak thermals due to its higher than average wing loading. The Alliance has a proven cross-country performance, having achieved several flights of over 500kms. The manufacturer's glide angle of 1:35 just gives it the edge on rivals such as the K-21.

An accurate approach and landing were easily achieved thanks to the powerful airbrakes and precise longitudinal control, which gave good speed stability. The hydraulic wheelbrake, which comes as standard on all models, was powerful and effective. The undercarriage has been completely redesigned with modern shock absorbers.

To evaluate a glider thoroughly one needs to fly it several times and especially to soar as much as possible, so with my 25min flight, in non-soaring conditions, this wasn't possible. But my overall impression was of a robust, pleasant and capable machine.

So will the glider be a worthy part of a club fleet? I went away with the impression that it would be an excellent training glider, especially from the perspective of the instructor's clear view of the student's actions.

The handling would also make it simple for demonstration and practice of the classic pre-solo exercises. The Alliance is a strong machine and its size would be ideal for clubs with limited hangar space. Would it entice people to want to fly it again? Certainly. I would love to have had more time with it, or have the chance to see what it was like when being flown solo.

The hull price, at 285 000fr ex VAT is also competitive and would be attractive to UK buyers given the current strength of the pound. Time will tell of course if the Alliance is successful, but from talking with the club members at Chauvigny they are certainly delighted with theirs.

Derek Piggott, who flew the Alliance demonstrator on its visit to the UK in March, comments: This is an outstanding two-seater for its general handling and its stalling and spinning characteristics. Although it has a very docile straight stall, any excess of rudder in a gentle turn or at the stall results in a definite wing drop without any marked tendency to spin. In many ways this is like the K-13.

For general club use it would need a winch tow hook and a ballast scheme to reduce the minimum cockpit load for lighter pilots and solo flying. (We have just heard that the belly hook has been given JAR approval. Ed.)

The UK agent is Nevynn International.

Are you looking for a reliable pilot to tow the line

Aerotow pilot available for weekends and summer periods

- PPL. R/T. Night
- Bronze 'C' cert.
- Trained on Robin aircraft

Currently hour building for professional licence.

Contact: Justin on 01666 502411 (Evening)
01793 705522 (Day)



Wind turbines along the ridge south of Pamplona Airport. Photos by Guy.

GUY WESTGATE

ADVENTURES WITH A DG-400 - and a toothbrush

Part 2

Guy, who described his motor glider journey from Parham to Brive, France, in the last issue, p96, continues to Spain

Despite my decision to give up on the Pyrenees, I was still keen to get to Spain if the weather showed any sign of improvement, but I was paranoid about getting caught in bad weather in the mountains. I found the State Met service, "Meteo France", on the airfield at Brive where I introduced myself to the forecaster.

He seemed rather preoccupied with an unfeasibly large collection of charts and computer screens so I decided to keep my request simple. I asked if there would be any thunderstorms over the Pyrenees and after much poring over his maps he answered simply, "*Non!*" Apparently an upper level low was expected on Monday so I had perhaps two days to try to cross the big mountains for the last time.

The nearest temperature sounding, from Bordeaux, showed an inversion at 5000ft; very similar to the day before, but I noticed an unusual sheet of alto-cumulus over the airfield that persisted until mid morning. Did this indicate excessive moisture in the upper layers?

Cumulus started forming in the hills to the north from 1130hrs and an hour later I decided it was time to go. Cloudbase was initially 3500ft but, again, the air had a familiar wet feel about it and the cumulus were deeper than I expected. The going was slow but steady and initially I tracked due south and crossed over the Dordogne for the third time. The river valley was noticeably steeper here than my previous crossing points further to the west.

South of Agen there were some more organised cells of towering cumulus, reaching well above the inversion. They were like massive chimneys pumping moisture into the upper layers and my earlier fears now proved fully justified as I noticed this cloud was not dissolving, but causing great saucers of high level spread out. There was almost no convection under the higher cloud and I had to change down a gear and pick my way back past Nogaro very slowly.

As I continued south, cloudbase slipped down to 3000ft which was not nearly high enough to continue straight over the mountains. I therefore decided to turn west towards Biarritz to find a lower mountain crossing. The Met report for Biarritz gave more bad news as the air was coming off the sea and cloudbase was lower still. The mountains south of Biarritz drop to only 4000ft and I hoped that even if there were storms in the high Pyrenees, the clouds might be a little more manageable over the smaller mountains.

Once past Pau I filed another airborne flight plan and to avoid the inevitable confusion, I lied about my endurance and declared Pamplona my destination. The French controller appeared happy so I did not even volunteer to land. As I tracked towards the higher ground, the rolling hills became rolling mountains and disappeared into cloud. I had run out of soaring options, so to progress any further I had to make my second engine burn of the day. I was soon above the clouds at 7500ft but continued up to 10 000ft before I shut down the engine. As I crossed the mountains, the change in weather was incredible. Half way across, the lower cloud appeared to simply dissolve leaving completely clear air and a very dry looking land beneath. Spain!

After an 8hr flight, elated, I had made it to Spain

As the Nogaro instructors had promised, a strong northerly was blowing out of the mountains on the Spanish side and Pamplona had a crosswind, up to 25kts. A small ridge faced into wind just a few miles south of the field and the tower controller was quite happy for me to soar up and down it, even though it was well inside his zone. The ridge was fairly unique, for along

The arid moonscape of Spain.



Pena de Oroel, a very impressive mountain.





The Pyrenees north of Jaca.



Moses (far right) with his fire-bombing Ag-plane at Soria. Guy is on the left.



See the last issue, p96, for an enlarged map.

its entire length were 40 giant wind turbines.

Once I got down to windmill height, the lift was good enough to let me maintain 120kts and my only interruption for an hour and a half was the controller, who would check on my position before allowing his jet movements to or from the field. I landed before dusk after another eight hour flight, elated. I had made it to Spain!

Nobody in the airport's customs or security offices spoke English so with no other instructions, I pulled my glider up to the GA hangar which was firmly closed but offered some protection from the wind. It was late so after a vending machine dinner, I curled up under my wing for the night. My sleep was cut shorter than I would have liked as I was rudely awoken by a policeman's boot at about 1.30am.

The airfield was now apparently closed so I was trespassing. I was marched into the terminal but after half an hour of questioning I think they realised they had not caught a terrorist or the criminal of the century and, after taking my passport, they escorted me off the airfield. They then graciously allowed me to sleep in the car-park and I was told to stay there until the airfield re-opened at 6am. These people need to take a few lessons from the French!

The members of the Pamplona flying club offered a slightly friendlier face to Spanish aviation the next morning and apologised for the police. The ATC were not so helpful, however, and insisted I file a flight plan with them before I was allowed to leave. This caused some problems as I rather belligerently filled in every question accurately! (It's amazing what a little bruising and lack of sleep will do to your common sense.) In any case, I planned to cancel the plan as soon as I was airborne. ATC had other ideas! I called the tower as I was leaving the zone to request the cancellation, but as I was neither landing at destination nor *en route*, they refused. They then announced they were going off the air for lunch!

I could see no sign of over-development in the mountains so I chose to follow the main valley east out of Pamplona back towards the Pyrenees. I tiptoed east along the Leire ridge picking up tiny thermals as I went and opposite Lake Yesa I met a gaggle of hang gliders. They were thermalling but were way below the top of the ridge and much lower than I wanted to be. I needed to climb and eventually crossed the lake towards the only cumulus I could see forming on the lower hills to the south.

Despite the cumulus, there were only weak



Not really a typical view from a glider - Moses with his Ag-plane.

thermal climbs and I had push on to the first of two isolated peaks, south of Jaca, before getting my first good climb. From 7000ft I could reach the second peak, Pena de Oroel, an incredible mountain, its southern slopes bursting with yellow alpine flowers. It looked quite intimidating, rising almost 4000ft shear out of the valley floor. Unfortunately some punishing sink *en route* meant I would arrive well bellow the top, so I tracked south to the sunny side and was quickly storming up a rocky gully together with five vultures already bound for the heavens.

Now at 8000ft I had height to cross the Jaca valley safely to go and play in the big mountains. Past the town, I headed to the first of the rolling

Below left: Spanish storms near Soria. Right: My last goodbye to the DG and the mountains north of Madrid. ➡





green slopes of the Espata and to the east side of the Canfranc pass. Vultures helped me find thermals here too and once I was established, I pushed on further north to the slopes of Pena Nerva at 8870ft. Cloudbase seemed to be rising with the terrain, but the peaks around Balaitrous standing at 10 322ft to the north-east were still hidden in cloud. The Pyrenees are quite narrow at this point and looking north, into France, I could see the cloudbase was still much lower.

Above the rockier mountain tops the thermals got quite rough. I continued east over the Acumuer valley and my next climb was to 9300ft. The view was incredible; I could see Lake Babal to the north and the path of the Gallego river, south, all the way out of the mountains. I reached 10 000ft just before Tras Sorores, a solid wall of rock, but I noticed the high peak on its far end had slipped back into cloud.

As I turned south away from the wall, cloudbase started stepping down, to 9500ft. A safe route to Huesca was now apparent so I continued south, contouring the cloudbase as it dropped away from the highest peaks. I decided to leave the mountains with a flourish and entered the Huesca plain through the Salto del Roldan, the "gateway". Two giant red stone pillars stand at the mouth of a narrow pass, almost as if they are guarding the entrance and are an incredible sight.

Just before I landed at Monflorite, Huesca's Airfield, I managed to raise Zaragoza on the radio and cancel my flight plan. Senasa, the old State flying school, were operating from the field and there were also visiting glider pilots from France and Germany. The Germans complained that the thermals in the plain had been weak for several days and so they were interested to hear of the better conditions in the high mountains.

The next day did not start well! I picked up my first big hangar bill from the club, but to add insult to injury, my glider was stuck right at the back of the hangar until past 2pm. My impatience to get away had a cost and after an hour of difficult soaring I remembered my wheel was retractable!

After that things started to improve quietly and I planned a track to take me west of the Zaragoza zone. There were patchy cumulus but for some reason reading them to find lift was not easy. The vultures too were no help today and the visibility was again horrendous.

I spent a while climbing away from a low thermal with several raptors. A couple of eagles kept formation on my inside wingtip, only a couple of feet away, for about 5min. I even changed the direction of my turn and amazingly they stayed with me. I wonder what they thought of my big white bird?

In contrast, the *buitres* as the Spanish call the griffin vulture, appeared very casual about the whole process of thermalling. They seemed almost stupid and were not bothered by my presence, if they even noticed me at all. I also studied a new bird in this thermal, an *alimuche*, or Egyptian vulture. I had seen only one before, in the Pyrenees, and noticed it flew alone. It was a smart bird and flew much faster than the bigger *buitres*. This vulture also had a very clean looking planform and out-climbed everything. Later in the day I saw one tearing into my thermal 1000ft below, flat out. Within two minutes it had climbed past me. The ultimate soaring pilot!

Crossing the low wide valley west of Zaragoza proved quite a problem as it was very stable and I could find no usable lift. Once down to 1000ft I took a climb with the engine as I was getting uneasy about the high ground approaching and the visibility was almost non existent below the inversion. I used the opportunity to get above the haze and when I finally cleared the inversion I got quite a shock. To the right of track, the Moncaya mountains were triggering some fantastic lift. Unfortunately it was a little concentrated for my liking, as it was in the form of a cu-nim which all but blocked out the horizon.

To the south-west too, there were huge towering cumulus and on my left flank more cu-nims. In fact the only direction completely clear was the route I had just followed. What to do next?

There was an airfield marked on my map near Soria and I managed to dig out some GPS co-

Had to clear the nearby clouds now spewing torrential rain and lightning

ordinates. My soaring computer said I was 68km out, but I would need to skirt round the storm to get there. Considering the extreme instability around me, the thermals were very disappointing. With only very weak climbs I had to make several with the engine to get me clear of both terrain and the nearby clouds which were now spewing torrential rain and lightning.

At last I found Soria which was just clear of the storm. The strip looked pretty bleak, a dirt runway half cut out of the forest, one small hangar, a portacabin and an Ag-plane. I rolled up to the portacabin and two men jumped up from their game of cards with a start as my approach had been almost silent. One of the men, Moses, was the pilot of the Ag-plane.

It was used as a fire bomber and he was on constant alert with his assistant, ready to dump tonnes of water on any fire in the area. Within minutes my planned route, further to the south-west towards Fuentemilanos, looked blacker than I have ever seen a cloud before. A huge anvil loomed over us and it thundered all night and most of the next day - a complete wash out!

As the Iberian low began shifting away north, the forecast was for fewer storms but surprisingly it was almost midday before it became soarable. My new found friend promised to send me off properly and Moses took off in the Ag-plane just after I had launched. As I climbed out to the west, he came round just off my left wing, then dropped his full load; one and half tons of water! He must have been very bored but It was truly impressive!

Soria was dead for lift but there were good thermals on the mountains south of the airfield. As I was expecting, a reception committee was waiting for me at the start of the Guadarrama chain, another storm. I felt a little bit braver this time and pushed in towards the first black wall of rain, as close as I dared. Now at only 2000ft agl, a lightning bolt ripped through, only metres away. I reached the edge of the gust front and just as I was about to turn back, I hit 1500ft/min of smooth convergence lift and reached cloudbase at 5500ft in seconds. With no option now but to fly away from the storm, I pulled back at the edge of the convergence line and shot up the side of the cloud, still climbing at 600 to 700ft/min. My next step was not so obvious but while I was thinking what to do, I noticed there were vultures here too. We were all bathed in glorious sunshine but well above cloudbase, not a place I imagined I would see birds at all. Maybe they were wondering what to do next too?

At 9500ft, I had comfortable height for a glide to Santo Tome Airfield if only I could skirt the storm and avoid the mountains. I figured that the convergence lift should circle the entire storm but within minutes it felt like I was in freefall. The 7000ft Gredos mountains were only a few miles away so I was desperate to remain clear of cloud. The sink was as extreme as the lift had been and after 15km or so I was down to only 1500ft above the plain, but at last away from the storm.

The legacy of the storm was incredible. The sky looked lifeless, no hints of thermal lift for miles but, depressingly, the next storm line was already building on the horizon. I had to use the engine again and limped along until weak lift in the lee of the Guadarrama finally gave me glide height again for the field at Santo Tome. The next storm was not far away and some German students helped me into the hangar just before the next strike.

I had reached the mountains of Madrid - my Spanish goal. After talking to the pilots on the field I decided to make this stop my last as my original destination, Fuentemilanos Airfield, was already full to capacity.

My last day gave some of the best conditions I had experienced. Of the 12 or so gliders at Santo Tome, I was first away at midday and enjoyed a classic day, touring up and down the mountains. I found the beautiful town of Segovia with its Roman viaduct and the magnificent walled city of Avila. I also flew over Fuentemilanos Airfield which looked very quiet considering reports that 150 glider pilots were there that week. I counted at least 50 gliders on the ground.

I continued down the mountains south-west to Piedrahita, a flying Mecca known mainly to hang glider pilots, and then turned for home. I spent my last hour before sunset with the *buitres* high above the airfield in the mountains.

I had made it to Santo Tome just before my syndicate partner, Kev, who had arrived from England to fly the glider home. I said goodbye to the glider, a little sad to be parted after sharing so much together, and handed over the keys. I believe I had used our DG's flexibility to the best of my abilities and had a fantastic adventure! Despite some marginal weather I had flown 65hrs in two weeks but I had only used the engine for a total of 3hrs.

Well, that's the end of my story but just the start of Kev's. If you want to know how he got home, I'm sure he'll tell you if you've got time, but it'll probably cost you a beer in the bar!

THE FUTURE OF BRITISH TEAM TRAINING

The competition levy you pay to the BGA has been raised by 83p. Andy Davis, a British team squad coach and former World Champion, justifies the need for this increase

The recent BGA AGM approved a proposal to substantially increase the competition levy which provides funding for the British team squad and enables us to represent the UK in international competitions. Every club member in the UK indirectly contributes to this as a portion of the per capita BGA subscription payable by clubs to support the BGA organisation.

I know that many readers of *S&G* will question the benefit to the movement as a whole of this support for the British team. I personally believe that a successful British team is essential to the development and well-being of our sport.

- Overseas success brings media exposure. My own World Championships' win was followed by full page features in the heavyweight national press, radio interviews and regional and national TV appearances. All the coverage was more exciting, appealing and better informed than the usual "glider crashes in field" or "intrepid reporter defies gravity" type of press we normally see. Good media coverage has got to be beneficial to the movement.
- Success breeds success. People like to be involved with an active and successful sport.
- Participation in competitions is growing. In the UK more pilots take part in more competitions each year. We must recognise the trend and provide funding so that talented newcomers to our sport have the opportunity to reach the very top regardless of wealth or income. If we don't, this talent will be lost to other sports.
- International competition drives the development of new technology, better gliders, instruments and techniques. These developments eventually filter down to club level and benefit everybody. Many clubs now own glass-fibre single-seaters and even two-seaters with performance, handling and safety features undreamed of 25 years ago.

So how will the 83p increase in the competition levy help us achieve greater international success? The first point to realise is that although the 83p is a large increase per member, it is being received from a falling membership which clearly reduces the total percentage increase. Furthermore when the levy was first introduced it was intended to fund just the World Championships team and to a lesser extent our entry in the pre Worlds. Now the levy has to fund the Worlds, pre Worlds, Europeans, Junior Europeans, Women's Europeans, Club Class Europeans, World Air Games, Junior Nationals and **training**.

This increasing commitment occurs at a time when the Sports Council grant to our team budget is being systematically reduced. So clearly **a smaller pot is being stretched further and further**, hence the need for the competition levy increase. To ensure that the movement gets good value from the team squad for its investment, we now include training in the team budget.

Why do we need to train?

Increasing levels of professionalism can be seen in all sports today. Gliding is no exception and we see higher levels of organisation, commitment, skill and training at all international competitions.

We need to train to improve our own soaring skills, to gain experience in a wide variety of climate and terrain and to improve our team flying skills. It is likely that all future World Champions (under present rules) will come from a nation that team flies effectively.

The other major European nations have well established and long running coaching operations to bring promising pilots through to international level. Our goal must be to establish a programme of coaching excellence for our talented developing pilots that extends beyond the BGA's existing coaching operation.

Some three years ago the existing senior squad pilots realised that some formal training would be necessary to practise a basic standard of team flying that could then be employed and refined by our nominated team pilots at any particular competition. Several weekend training sessions were arranged with the established team pilots acting as coaches. By popular request this training programme was extended last year to include the Junior and Women's squads. Although generally well received, the training weekends were spoilt somewhat by poor (UK) weather and the inability of some squad members to get club/syndicate gliders at weekends.

During the winter the entire British team squads were asked to nominate their choice of coaches for a developing coaching operation. This resulted in four of the senior team pilots receiving a mandate to coach. The coaches decided that the best way forward would be to continue weekend coaching sessions and, funds permitting, to run an early season training camp in a favourable overseas climate when gliders would be readily available.

This year our training camp will be one week in Ontur in southern Spain with two two-seaters and six single-seaters for eight to ten developing pilots selected from the Junior and Women's squads by the coaches. In addition to the team squad coaches, the BGA have kindly agreed to let national coach Gee Dale assist as well as allowing the use of the BGA's gliders. We are very grateful to the BGA for this support.

Now that we have the necessary team funding increase to provide a training budget for the foreseeable future, we can look forward to developing and expanding our new training programme.

- To appoint and co-opt coaches with a record of international success.
- To establish a programme of coaching excellence for talented, developing pilots who gain entry to the programme through competition results or BGA coach/CFI recommendation. This will complement and extend the existing BGA coaching operation.
- To increase the number or duration of overseas training camps so that more pilots have access to the most effective part of the programme.
- To produce British Champions at every level of international competition.

We hope the programme will become self funding

This is a long term project which would not be possible without funding from the competition levy. I should like to extend my sincere thanks on behalf of the entire British team squad to all those club representatives who voted to support the proposal to raise the competition levy. We hope future success will attract commercial sponsorship so that the training programme becomes self funding.

Although not quite over the hill yet and determined to fly in one or two more World Championships, I would be delighted if one or more of the participants in our programme race away and win the World Championships or any other major competition. I would be the first to celebrate by throwing a few backward somersaults!

Oxfordshire Sportflying Club
The Premier
Motor-gliding School

- ★ Intensive Courses, or by the hour for Self Launching Motor Glider PPL
- ★ Bronze C Cross Country Endorsement and field landing checks
- ★ BGA SLMG Instructor Courses
- ★ Convert your Bronze/Silver badge to a Self-launching Motor-Glider PPL
- ★ Bronze and Silver conversions at a special rate
- ★ Ab initio training
- ★ Trial lessons
- ★ Lessons from £48 per hour

OXFORDSHIRE SPORTFLYING CLUB
ENSTONE AERODROME

For details call on 01608 677208
Open seven days a week

LUCK AND PERSPIRATION



John, the National Ladder steward, is one of the breed of long distance pilots who cover thousands of kilometres each season. He describes a flight last summer in his LS-6 and explains how difficult it was to analysis as the details had become those of quality, not statistics

Round and round I went, the vario beeping and gurgling as I hunted for the core. I had been granted a reprieve in the form of a last minute save over the fields of north Cambridgeshire and now, with just another 40km to go, I gazed intently at the numbers on the averager, silently passing their messages in black on grey, half a knot here, zero there, sink, climb.

I sensed the feedback through the stick and pedals and listened to the changing sounds of air against glider as it was nudged from one small bubble of turbulence to the next. Still very low, I tried to understand what the glider was telling me while I searched for a pattern in the simmering air. I wondered whether the gusts I flew through were the upper reaches of a new thermal or merely the dying remains of an old one, whether this time I was to be lucky or unlucky.

Meanwhile, the string flickered slightly on the canopy, barely moving from its centre line as I balanced my need for an adequately low airspeed against a healthy fear of losing control. Accuracy is all, in this game.

Round and round the world rotated. I had finally convinced myself that this bubble was the top of a thermal that was still attached to the fields below. It just needed a trigger, an obstruction or an edge, anything to break its flow as it rolled slowly southwards. I had little choice anyway but to stay with it, drifting with the wind, 600ft over the crop, keeping hold of my precious altitude while trying to map the thermal in my head.

My circles tightened and relaxed as I tried to second-guess the distribution of the stronger gusts. I drifted slowly across the field, while to the west the sun lowered further, signalling the imminent end of another day. Patiently circling, waiting, watching and hoping, I knew that this was almost certain to be my last chance of getting home.

"Here we go!", I thought as the averager stayed positive all around the turn, a knot, a knot and a half. I glanced down and saw that a small wood had come to my rescue. Whether its border with the crop had acted as the trigger or the trees themselves had been giving the stronger thermal all along no longer mattered, but the episode was nevertheless filed away for future reference. My spirits soared and I began to take an increasingly close interest in the height required to finish.

As expected, the climb rate improved as I rose higher, strands of weaker thermals coalescing and feeding energy into my own, as I gained altitude. With only 500ft to go I found myself looking back at the field and at my lucky escape, remembering the events which had led up to the save, of other problems I had encountered during the flight.

I checked myself with a quick shake of the head as I realised that I was starting to relax. It had been a long flight but it was not over yet and I forced myself to concentrate on the task in hand, to keep climbing until I knew I was safe.

Another milestone was passed when all the numbers on the computer screen went positive. All I needed now was a comfortable circuit height. I judged that the sky ahead would be unlikely to offer much in the way of lift so I allowed myself a higher climb than normal, just in case I found excessive sink on the way home.

When the climb rate dropped I made the decision to go, the GPS and the computer collectively inspiring in me the confidence that I would now make it home.

Cautiously at first, I set sail at best glide, the air hissing smoothly past the cockpit. I switched on the radio again, now that there was no longer a need for such intense concentration, to learn that some had already got back, others had landed in fields. It had been a typically English soaring day.

I shared thermals with pilots I knew but had not seen in the flesh for months

With little to do now as the computer silently and impassionately ticked down the miles, I was finally able to reflect on the flight. The cool, early morning sunshine had brought anticipation and a flurry of rigging and ballasting. During a brief coffee break we had devised suitably challenging tasks and then re-joined the confusion at the launch point as everyone tried to get airborne in the same 30min slot.

After release I had found and explored my first thermal of the day, taking mental notes about its shape, how easy it was to use and the climb rate it offered. I remembered the first long run after my start, dolphining under closely spaced thermals to give me a better average speed than the low cloudbase and tight operating height band would have suggested.

I had passed by other clubs whose tugs had strained skywards to throw their own gliders into the air. I had shared thermals with gliders whose registrations I recognised, flown by pilots I knew but had not seen in the flesh for months. Only yards apart, we had relished these small battles in our long campaigns, each gleefully trying to outclimb the other, our circles shifting in unison as we tried to position ourselves in the best part of the lift. And then, at the top, a short call on the radio, an exchange of greetings, best wishes and farewells, our gliders had sped away from their close encounters.

The first TP had lain on the Welsh Borders, the sun warming the hills and throwing them into sharp relief. Cloudbase had increased on the second leg and so had my options. This cloud or that one? What climb rate would be acceptable? What cruising speed?

There had been trouble in the Peak District when I'd struck a slow patch and I wondered at the time whether that been down to me or to the conditions, whether it had been only a temporary blip or the sign of a more serious deterioration of the day.

At the second TP cloudbase had hit its maximum and with a 160km downwind leg to go I had been full of confidence, faced with glorious black and white streets marching southwards over the Yorkshire plains. Should I have slowed down earlier when I had approached the spread out, just before my last-gasp save? I looked back to learn which parts of the flight I could have improved upon, where I might have gone wrong. No real solid answers came - I had noticed many times before that even when I was doing well I was having great difficulty in deciding exactly what it was that I was doing right.

The numbers ticked inexorably downwards and soon I saw a line of trailers in the distance, neatly stacked in a row by the clubhouse. There was now no question of my failing to get home so I made a call to base and leaned forward, gently. The speed increased to 100kts, then 120kts and I scanned the sky for other aircraft. The glider was now trimmed well forward and the air screamed past as I concentrated on the finish. A final call to base, another scan for traffic and I planned my final run-in.

Late in the afternoon there was little activity; one K-13 had just launched and had started to wheel over the winch, both tugs were on the ground with no other gliders seen. Now with 140kts and 300ft I programmed these aerial chess pieces into my mind and selected my circuit, giving myself an alternative just in case. One hundred feet, 50, 20, I could feel the glider



Jacques Noel, director of the European Mountain Gliding Centre, Gap, Tallard, photographed John flying his LS-6 near the Pic de Bure from Sisteron, France.

stabilise in ground effect as it raced above the crop. Although I was aware that the CFI was off-site I also knew that, in a funny sort of a way, he was watching carefully too.

Inside the cockpit, a bubble of calm had descended, checking any temptation to act rashly - this was no time for distraction. The launch point, the car-park and the far boundary of the airfield hurtled past in slow motion, seeming to give me more time and space than elapsed seconds would appear to have shown. Still scanning the skies I gave a firm but ever so careful pull on the stick and the glider leapt upwards, sweeping gloriously back into the air in its trade of energy from kinetic to potential.

The airspeed diminished and I pushed forwards to join the circuit. The K-13 had still not yet started its downwind leg and with no other traffic seen I dropped the wheel and completed my landing, touching down for a satisfying roll towards the trailer park. The glider stopped and the wing settled. Brakes closed. Electrics off.

Peace. Silence. The one single moment to savour the most

Opening the cockpit allowed an intrusion of reality. I climbed out and pushed the glider off the field. "Where have you been?" I was asked. "Can't remember", I replied, my mind still coming down from its drug free rush. "What was the distance? How long did it take?". "Don't know, don't know...".

I apologised again, genuinely unable to extract any details from the tumble and confusion in my head. Although I was standing on the grass, part of me was still in another space, looking for a way to touch down and join the real world again. Like untangling a net, my thoughts took time to unwind, filling in the details of the flight of which at the time I had only been peripherally aware. And I found that the details had become those of quality, not statistics.

The memory of a seven-knotter on the second leg became that of a beautiful cloud glinting in the sunshine over sun drenched Worcester, the Yorkshire cloudstreet was now remembered less for its length and more for its glorious, silhouetted backdrop of brooding Pennine hills.

I cleaned the glider, fettled and de-rigged. The sun, now glowing a deep orange, slid behind the dark remains of spent cumulus. I thought about how flying changes people. Whilst I had been airborne there had been no past and no future, only the present, full of limitless possibilities.

Now that the day was done and the flight was over, the freedom of the moment had been lost, too. I also realised that today, amidst the usual hopes and anxieties, it had been luck and perspiration which had got me home. And yet if I had lost the game and landed out in that field in north Cambridgeshire, would that have been such a great disappointment?

Getting home is always exciting but lasts only seconds while the rest of flight remains in the mind forever, showing that in soaring, just as in life, the journey has greater value than the arrival.

Further Geriatric Meanderings with Toothbrush and Teddy

Another account by Tony Adams of a 500km under the rules of the Geriatric Pilots' Association (which allow you to spend the night at TPs), with a progress report on association membership



I was towed from Sleap under the downwind edge of the large cloud that covered the site, cutting off all lift; before I reached the sunshine I found lift and released.

The flight wasn't very easy as the only lift was on the downwind edge of large clouds. I decided to land at Bidford where I could get a tow and fly on the next day; I had packed my toothbrush and teddy, the maximum luggage allowed by my C of G limits.

Unfortunately I couldn't find Bidford, as it had not been put into my new GPS (Geriatric Pilots' Salvation). I went on towards Aston Down, but then landed at Nympsfield - this sort of flying certainly does teach you clear objectives and firm decision-making.

Good convection made the next day easier, and I flew *via* Husbands Bosworth to Gransden Lodge, where there was a cross-country course on, but next morning nobody was eager to launch into the moderate wind north of east, which looked a little weak on convection. However I was towed up, and found moderate lift to a low cloudbase. I planned to turn Bidford - now in my GPS - and then go north back to Sleap.

As I staggered westwards I heard a message on the radio: "The convection north of Bicester is poor. We will have to retask". It was one of those younger pilots I hear on the radio, whom I always picture as clear-eyed, clean-limbed youngsters covering enormous distances at the best speed-to-fly, but now they too were making the rules up as they went along - they just had better buzzwords. Very encouraging .

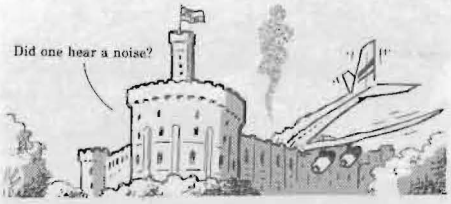
There was a banner of haze blowing off Birmingham, so I didn't dare turn north until I saw the hills south of Hereford. There was now fair convection to a higher cloudbase, but the easterly wind blew me into unfamiliar country in the Welsh foothills. Where was I? Could the GPS be lying?

Then I saw a familiar landmark: a stately home with a long lake. So the Mynd must be just there - and it was, with a two-seater circling in lift. I came in above him, the best climb of the day, up to a high cloudbase, so I was home and dry with a straight glide to Sleap.

Easy flying, good company at the other gliding clubs and their favourite pubs In the evening - definitely the way to fly; I must do more of it..

Oh, and the progress report of the Geriatric Pilots' Association? Membership is steady at one. I haven't heard of any other members, but as they are self-enrolling and self-regulating, this is not surprising.

TAIL FEATHERS



Plummeting into Windsore Castle.

BGA Weekend Triumph

Congratulations to Claire Thorne and Sylvia Bateman on running a massively successful BGA day, with visitors hanging from the rafters. The evening festivities were so heavily subscribed and the diners jam-packed so tight that I found I had been shovelling my food into Mike Jordy's mouth, which was just as well since he couldn't move either arm and would have starved to death.

It was not generally realised that the difficulty of finding the men's lavatory at this grand event was deliberately engineered by the BGA secret police (the KGB, or Keep Gliding British) squad as an initiative test. Pilots were being watched for bladder capacity and for their ability to map-read their way to the loo without a GPS. The BGA KGB had even gone so far as to unscrew the



Map-read their way to the loo.

sign saying "Gentlemen" from the door. (It is a gross libel on our movement to suggest that the sign was removed because the word would have embarrassed and excluded a sizeable proportion of male glider pilots.)

When I arrived at a BGA conference in Harrogate some years ago, their secret video cameras were recording how well we coped with a technical conundrum. In my case, I had decided to save time by running the bath before I undressed. Instead I got the full blast of hundreds of needles of boiling water in the back of my neck and all over my best jacket.

"Interesting vocabulary" the observers jotted down in their notebooks "but does not respond well to stress, pain and unpleasant surprises. *Not* Chief Flying Instructor material. Easily confused by knobs and levers, indicating that he should never be let loose in any machine with flaps, retractable undercarriage or tail parachute". They knew whereof they spake.

This year the morning and afternoon guest speaker was Tom Knauff, whose talks were hugely popular. Nevertheless he was lucky that it was an overcast day outside. That meant there weren't wistful faces looking out of the window, wondering if we had not merely lost a nice day, but maybe lost the whole season. I'm told there was a season in 1997, but I missed it when a committee meeting overran.

It was part of my job to act as interpreter for Tom and Doris. Thus I was careful to say "faucet" rather than "tap" when relating the story of the Harrogate horror in my after-dinner oration.

Don't you think we should pay more attention to those little differences in our languages? For instance, when I fly on United Airlines, which I do because they have a great bonus miles system and take me where I want to go, you can easily tell which are the British passengers. When the captain says "We shall take off momentarily" the Americans relax, since they expect to be airborne *in* a moment, whereas the Brits are clutching the edge of their seats, because to them he is saying "We will be airborne *for* a moment".

The only thing that stops them screaming towards the exits is that they'd sooner die - literally - than make an embarrassing scene. After lifting off briefly from Heathrow, they envisage (envision) plummeting into Windsor Castle. What a dreadful prospect! I mean, just think of all the trouble the Queen has gone to getting that place fixed up.

Incidentally, I think the instructions airlines give to passengers are hilarious: for instance you are told that when the oxygen mask suddenly drops into your lap, you must "Put it on and breathe normally". The guy next to you has been sucked out of a jagged great hole made by a passing asteroid, and you are supposed to breathe normally?

The stewardess, another BGA spy, is on you like a flash. "Sir, you are hyperventilating contrary to regulations. Didn't you watch the safety video? Your below standard response to an unusual situation is being recorded on the black box, to the everlasting shame of your next of kin and your syndicate partners if we should fail to make it".

Forty years on

Turning from a frivolous topic, death, to a serious one, old age - somebody last week called me "spry" and meant it kindly. I was so livid I would have whacked him with my Zimmer frame but I had nothing to hang on to. But I am not getting any younger. (A daft expression, that: who *is* getting any younger?)

It is a stark fact that I have now been a member at Dunstable for 40 years. I remember vividly the moment I arrived on May 12, 1958. I was grabbed and immediately co-opted into the Works and Bricks Committee. Since work is my least favourite four-letter word, I really would like to have dodged the digging of latrines and uprooting of trees.

Perhaps I should have done. The BGA spies would have noted this and jotted down approvingly "Always willing to let others take the risks and do the dirty work, while he awaits an opportune moment to take advantage of their efforts: should make ace World Championships pilot..."

Nowadays the Works and Bricks Committee would be called the Environmental Amenity Study Group. "What's the chain gang down in that pit?" the BGA observer would ask. "Oh, that's a study group" the manager would reply. "You should have seen them when they were just a committee."

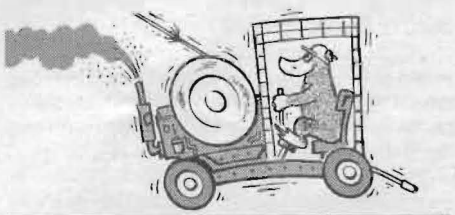


Immediately co-opted.

The question of whether members should be paid for dreary work (instructing is regarded as fun and doesn't count, for some reason unfathomable to me) is currently the subject of heated, but civilised, debate in our club. This is not the Australian parliament after all, where ministers call their opponents "scumbags" and "drongoes". It's not even the British parliament, where they call each other much worse things in private, but it always becomes public. It's much more gentlemanly at our club.

So far, anyway, I offered my services as a pollster to gauge members' opinions. The results should emerge while I am a safe distance away in Minden, Nevada. This is democracy in action. Some club committees take a different view: they believe democracy comes from the words *demos*, meaning *the people*, and *crass*, meaning *stupid*. In such clubs the chairman and committee know exactly what's right for the members and get on with it, while the members just say "Yessir!" I'm beginning to like the sound of that.

One of the better member-jobs back in 1958 was winch driving, unpaid of course. Indeed it was a privilege and an honour. It was made more exciting by the fact that rising ground obscured



One of the better member-jobs.

the launch point from the winch (and still does, but radio has taken the fun out of it) so that you did not know what aircraft would shoot up vertically over the horizon in full plan view, thrashing its tail like a hooked marlin. Or would occasionally creep into view on the point of the stall at 10ft, waggling its wings in a desperate plea for more speed, while the pilot tried to heed the injunction "Always keep your feet together as you go through the rollers!"

My first teacher in this art was female. I was required early one winter morning to go and knock up - sorry, Tom, arouse, sorry, that's even worse - awake this young woman. To describe the sight requires what at first looks like a digression, but bear with me. One of the greatest images created by Alfred Stieglitz in the late 19th century was of horses in the snow at a New York tram (streetcar, Tom) terminus in the days before electricity. Above each of these poor animals hung a great cloud of steam.

Well, at Dunstable on this January morn I entered the women's dormitory, where the blankets, being used less frequently than in the men's dorm, stored in heaps in unheated racks, were notoriously damp. In the half-light I could discern half a dozen sleeping forms - above each of which hung a great cloud of vapour.

For some time after that, the idea of a young woman in bed was associated in my mind not with anything erotic, but with sweating streetcar-hauling horses in old Manhattan. I can't remember the name of the streetcar, but it certainly wasn't Desire.



The day I lost my virginity.

At least that helped me concentrate my energies on becoming a glider pilot, till the day I lost my virginity after ruining a Prefect. (Tom, that's a *glider*. I don't want the rumour-mills working overtime.)

Whatever my feelings about gliding 40 years ago, sentimental nostalgia isn't one of them. Gliding is vastly more fun now than it was then. In the 1950s club members left in droves because of the endless frustration involved in putting a few hours in one's logbook, this being chiefly due to the vile, unspeakable performance of the aircraft and equipment - merely thinking about Dunstable's dreadful Tutors and feeble winch launches makes me shudder. If you persevered to a higher standard, nearly every cross-country ended in a laborious and costly retrieve.

Cross-country miles now cost a fraction of what they did in the 1950s when you take out inflation and retrieve costs. Good old days? Bah, humbug! Don't look back, look forward. Here's to the next 40 years of this noble sport.

A new era

Nor am I nostalgic about the *S&G* of those days, the pinched little item that was the BGA's organ, the victim of wartime and postwar austerity. Doc Slater (editor from 1933 - 1971, during which time the magazine changed its name and there was a break during the war years) did a superb job with limited resources, just as housewives created wonders with powdered egg and a ration book.

More prosperous years enabled Gillian Bryce-Smith, editor from 1973 to produce the large format, colourful magazine you see before you, starting February 1974. *Si monumentum requiris...* Few people recognise that, through Gillian's careful housekeeping, *S&G* makes a pot of money for the BGA. Readers may gripe to Gillian about the quantity of competition news - but that is due to the burgeoning growth of cross-country flying and evidence that the sport is healthy.

Gillian has put up with my tantrums and late copy so long that such forbearance and diplomacy has become part of the job description of *S&G*'s editor: always praise, placate and pacify Platypus.

(I inherited Platypus and I am sure readers will agree it has been worth all that effort writing, phoning, faxing and now e-mailing him as deadlines slipped away with still not an inch of his brilliant prose appearing. At least he has never minded working all hours and in far flung places to fill up his Tail Feather space with such wit. Many thanks Plat. May you go on for ever. Ed.)

A warm welcome to Le (pronounced Lee) Forbes, the incoming editor of *S&G*, currently working in tandem with Gillian. I understand that Le has for starters been set to work on Club News. What a clever assignment! That is the equivalent in publishing of a stint on the Works and Bricks Committee after doing five hours in an open cockpit in the rain. You can alienate more gliding folk more quickly by the way you handle the Club News than any other part of the book. Even screwing up Tail Feathers only alienates one person.

After boot camp, Le will put on the editor's green eyeshade and black sleeve covers (worn on ceremonial occasions only, so people can point and say in low, respectful whispers, "There goes the editor") and take the PI's seat of the world's finest gliding magazine.

My e-mail address is:
TailFeathers@compuserve.com

Simplification!

Posing the question, "Could this be simplified patter for instructors?", Jack Alcock sent us a copy of Andrew Palmer's letter in *The Times* on March 2. On his first and only flying lesson, Mr Palmer was told by his instructor that the joystick was "That's the houses lever. Push it forward and the houses get bigger; pull it back and they get smaller."

For The Want Of A Nail...

Only those with deep pockets can go gliding alone (in a turbo Ventus or an ASH-25E) - the rest of us need help. I need a lot of help, which I had when I landed out at RAF Benson on the first day of the Inter-Club League last summer. Three Shenington team-mates showed up with my trailer and a Mitsubishi Shogun; even the MoD Plod at Benson held a wingtip while I ran round like a demented wet hen and told everybody what to do. In no time we had Pegasus 987 boxed up and back on the road.

Next day Mark Stevens and Chris Kidd were persuaded to help me put my wings on. "I can manage now" I announced, once the main pins were in place. I'm not too feeble to pick up the tailplane, yet. But first, locate the long bolt to hold it on. Usually I put it carefully back in the side pocket. Not there. Not any where. The awful truth rose up like a monster from a swamp. The tail bolt and rigging tool were still reposing in the long grass by the runway at RAF Benson.

"You had better find somebody else to fly Pundit today" I told my team-mates, and admitted that I had left a vital bit behind at Benson. And then, inspiration struck.

My son-in-law, John Howkins, had spent £300 on a metal detector which my daughter could not see the use of at all. So far all he had turned up were old washers and some rusty nails.

John was just about to leave for work, but gave me a quick briefing, and the Officer of the Day at RAF Benson approved of my arrival with the mystic kit. We followed the bent grass wheel tracks to the long grass by the runway edge, and on the very first pass with the metal detector, there it was! Of course it was too late to fly the task, but I hastened back to Hinton, completed the assembly of the Pegasus, and let my crew John Whiting have a demo ride. So much for the Inter-Club: Shenington did not win.

Next week Julie Angell, CFI at Booker, rang me urgently. "I hear you have access to a metal detector" she pleaded. "I've dropped my car keys behind the blister hangar and the weeds are two feet tall'. John, whose credit at home had been entirely restored by the vindication of his gadget and its ability to retrieve precious metal, was more than willing, and again it did the trick in less than five minutes.

So, all you glider pilots out there, if you lose your bits in the long grass, give me a call! Better still, don't get rattled while derigging, no matter how much help you have!

SHIFTING A PARADIGM

I decided in the autumn of 1996 that I wanted to change my attitude to cross-country flying. This article explains the background and how I approached my goal. I hope it will encourage others who want to develop their cross-country skills

I started gliding in 1979 with the Kent GC, completed my Silver badge fairly quickly and made steady progress improving my flying skills. However, a lack of time and money prevented me doing a significant amount of gliding.

In the late 1980s I started to fly more often and occasionally go cross-country. Like many people I felt nervous about getting out of gliding range of the airfield, but didn't make any real effort to overcome this mindset.

I would soar locally for hours, only going cross-country if the weather was really good. A major achievement was a flight of 165km from the Kent GC to Lasham in 1989. With a lot of encouragement and support, I had a brief burst of confidence in 1990 and completed several cross-country flights including Diamond goal.

By autumn 1996 I felt I was missing out on something which might increase the amount of satisfaction I gained from the sport. After so many years I knew that my objective to fly more cross-countries was not going to be easy to achieve. I had set myself a significant challenge and would need to devote a lot of mental effort and time to meeting it.

I felt I needed a goal that would inspire me to develop the confidence and ability to fly cross-country, so entered the Lasham Regionals being hosted by my club. As it was in August there would be plenty of suitable fields to land in and I had plenty of time to prepare.

Preparation

During the winter of 1996/97, I started planning for the coming season, including:

- Booking a place on two soaring courses, one at Bicester with the BGA and one at Lasham.
- Organising a two week holiday prior to the competition to practise and put myself in the right frame of mind.
- Organising cross-country instructional flights in Lasham's Duo-Discus.
- Asking for advice from other pilots with more cross-country experience than me.
- Reading books and articles on cross-country flying, including **Cross-Country Soaring** by Helmut Reichmann, **Gliding Competitively** by John Delafield and *S&G* articles on various aspects of soaring and cross-country flying.

Some good weather early in 1997 gave the opportunity to do some cross-country pair flying. This gave a significant boost to my confidence and I looked forward to the BGA soaring course at Bicester in May.

The course, run by Gee Dale, BGA national coach, was excellent. However, on the best day of the week I landed out and picked a poor field - deep crop! Fortunately the glider was undamaged but the incident was a severe blow to my confidence, reinforcing the negative thoughts which I had accumulated over many years.

Gee was extremely supportive but the event set me back several weeks. After the course I did some local soaring at Lasham but did not feel inspired about setting off on a cross-country. However, I realised this was not helping me in achieving my goal and eventually did some field landing practice in the Motor Falke at Lasham.



John, a management development consultant, has 700hrs and shares a Discus B with his father at Lasham Gliding Society.

This helped to rebuild my confidence and once the field landing situation started to improve, I did some more cross-country flights.

The cross-country soaring course at Lasham was during the first of my two weeks holiday prior to the competition. It was run by Graham McAndrew and Clive Thomas and was very enjoyable. I learnt a great deal and completed some respectable tasks. This helped to build my confidence and I felt reasonably well prepared for the Lasham Regionals (although still more than a little apprehensive!).

The weather the following week was not good, although I was fortunate enough to be able to fly cross-country in a privately owned Duo-Discus on one day.

The 1997 Lasham Regionals

I flew a Discus B in Class A of the Regionals with 32 other gliders, including Nimbus and ASH-25s. The 158km O/R on Day 1 was a real struggle. Most of the flight was below 2000ft, often at the bottom on very busy gaggles and it took 2hrs to reach Bicester.

The 207.6km O/R the next day was reasonably straightforward and I completed the task at 67km/h - my first solo competition finish at Lasham, which was a significant event for me.

On Day 3, a 165.1km triangle, I managed a respectable 70.6km/h and was provisionally 18th, but despite a huge checklist, I had forgotten to put a film in my camera and therefore didn't get any points.

So the Regionals continued with enough satisfying flights to give me a degree of confidence, but it made me realise just how tiring it was to fly competitively. It was a steep learning curve but a significant achievement was a failed Diamond distance attempt of 456km after a 12.45pm start.

On the face of it, coming 31st wasn't impressive. However, I achieved my personal goal thanks mainly to an immense amount of encouragement and support.

Other important factors were:

- The huge amount I learnt from Gee Dale, Graham McAndrew and Clive Thomas.
- Having a crew available whenever I went cross-country (my father).
- Having confidence in my ability to stay airborne in difficult conditions.
- Receiving constructive feedback on my technique during dual flights throughout the season.
- Flying regularly and therefore being in practice and feeling completely at ease with my glider. Cross-country flying requires intense concentration, especially while waiting for the startline to open and when flying in busy gaggles during the task.
- Anticipating potentially difficult/demoralising situations and how I would deal with them, *eg* having to land for a relight or getting low and seeing others making better progress above and ahead of me.

I learnt this from an *S&G* article (see June 1987, p118) by Brian Spreckley written following his 15 Metre Class win in the 1987 World Championships at Benalla, Australia.

I will never forget 1997, particularly the support of all those who helped me to achieve my personal goal. I am extremely grateful to them.

I make no apology for reminding you on several pages of this issue that Le Forbes is taking over as editor. After this long run I quite think S&G mail will keep finding its way to Cambridge for a while. You will find Le's PO address, e-mail and tel No. on p129.



BUNGY

KEITH , who took this photo at the Long Mynd, says "OK now we know how to *spell it but how and where do you do it?

*See the last issue, p122.

KEITH SIMMONS

At one time it was the primary means of launching but nowadays very few pilots have the elusive "C" for catapult in their logbooks and that includes Instructors.

I did it at the Long Mynd. I was lucky. I had booked a week on one of the early season courses with the hope of a possible wave flight to Gold height, but a consistent 800ft cloudbase ruled out that idea. On the Thursday the wind started to blow in earnest and with a steady 25+kts it was time to bungy.

With winds of that strength, ground handling requires special attention with extra bodies to restrain the eager glider. All loading, unloading and pre-flight checks take place in the shelter of the hangar from where the glider is towed out to the launch point. The bungy consists of a length of shock cord with a series of knots at each end and a rope at the mid-point leading off to the usual rings. Three or four people pick up each of the knotted ends and walk away at an angle down the hill to take up slack. This produces a "Y" shape and ensures that the glider will pass between the launch crew as it takes off.

In the cockpit the wheel brakes are kept on as the "walk" command is given. Once the slack has gone the shout is "run" and the launch crew disappear at a canter down the hill. It is easy to see the reduction in diameter of the shock cord as the stretch is applied and, encouraged by a few creaks, the brakes are released. The glider becomes airborne almost immediately and the bungy back releases (from the winch hook).

All very civilised and smooth. Just time to double check the release, double check brakes closed and locked and wave thank you to your launch crew before turning left into guaranteed ridge lift.

If the wind strength reaches 45kts, flying is limited to dual in the K-21s and it gives the instructors the opportunity to perform their landing party trick. Turning on to finals well inside the airfield boundary at 1200ft, full airbrake is applied and 90kts maintained as the altimeter unwinds.

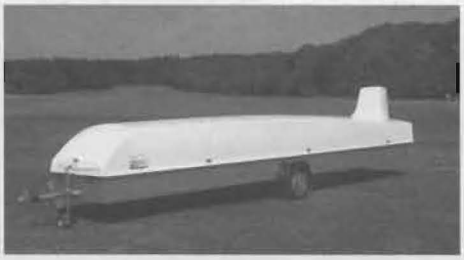
Once down to almost ground level the brakes are closed and the speed bled off with the glider finally coming to a halt just as it settles on the ground right outside the hangar. Then airbrakes out and wheelbrakes on until the ground crew arrive.

You may think that the bungy would be a cheap way of launching but the last cost of the shock cord I heard was over £800 and it has a very limited life even when well cared for. Add to that the labour intensive nature of the launch, not to mention the hard work racing up and down the hill, and it isn't surprising that bungy launches are a rarity. However, if you do get a chance of one, go for it; it really is the most civilised way to take off.



The pilot's shop

JARDINE AVIATION





The real thing...

...genuine Anschau Komet Glider Trailers



Sole UK Distributor and only Authorised UK Agent

Plus a huge range of pilot's essentials...



Cenfis Flight Computer



Camelbak Hydrate System



Garmin III Pilot



ICOM Transceivers



Wide range of Headsets

Sole UK agent for the Cenfis Flight Computer with unique centring vario

- Final approach computer with integral GPS
- Virtual display of the instruments can negate the need for conventional instruments
- Centring vario displays vertical climb rate and after a 360 degree turn will display a vector to the point of the best lift
- 6 Analogue functions simultaneously in one display
- All functions and displays are controlled by software and can easily be upgraded.

Latest Garmin II+, II and III Pilot, 12 and 12 XL and 89-plus other GPSs available at competitive prices. Demos always here - test drive before you buy!

Camelbak Hydrate systems: fly without dehydrating

ICOM transceivers: IC-A3, IC-A22E, King KX-99

Headsets: Communica, David Clark, ANA or Normal

Services to Pilots

- Brackets for GPSs, cameras and other small items can be made to order
- EW hire service: Weekly - £18.00, Weekend - £8.00, Daily - £3.00. *(Returnable deposit of £250 required.)*
- Secondhand/Pre-owned: Leave accessories and equipment with us with guide prices and we will display them in the shop, and also in the Pre-Owned section on our Web Site

We are based at Lasham, next to Southdown Aero Services • Open every day, including Saturdays & Sundays • Ring 01256 381001 for our illustrated catalogue, or simply check out what's new on our Web Site: www.jardineaviation.com

JARDINE AVIATION

Lasham Airfield • Alton • Hants GU34 5SR
Tel: 01256 381001 • Fax: 01256 381008

ORGANISATIONS ON LINE

Many aviation organisations have an Internet site which can be a useful source of information on many aspects of aviation. While ignoring the small club type of organisation, I've tried to cover a variety of different aviation interests

The Fédération Aéronautique Internationale can be found at www.fai.org There's news, info on what the FAI actually does, access to documents such as sporting codes, press releases, conference reports, member organisations (countries) and their national aero clubs (plus their Web sites), the individual FAI Commissions (the various sports, technical groups and committees) and their Web sites. And, of course, gliding, which links you to many national organisations. There's quite a lot of information hidden under the Commissions and Members headings, so have a good look.

How To Contact Us contains useful addresses, more links, some software, and access to the many mailing lists which will send you up to date news, reports and the latest world records. To join the free gliding mailing list, send e-mail with subscribe as the subject to igc-info-l-request@fai.org A recent addition to the FAI site is *Air Sports International*, and this magazine is now only available on-line.

The FAI also has a site for downloading various documents and software, at FTP://www.FAI.ORG. However the contents of the files available are not clearly explained in every case and you may have to experiment to find useful information.

The Royal Aeronautical Society can be accessed from the FAI site or directly at www.unet.com/icarus/royal.aero.club/aviation/ There's a brief introduction to the Club and its history, a directory of the various member organisations with addresses, telephone numbers and links to some of their sites (but some are out of date, and some organisations with a Web presence are not linked). At the time of writing, this site could do with updating. There's no e-mail address to the Society itself, so once you get here, you're back to snail mail and telephones. Smarten up your act, gentlemen!

The AAIB site at www.open.gov.uk/aaib/aaibhome.htm is a source of many official reports such as their Formal Reports (these contain facts, detailed analysis, causal factors and safety recommendations relating to specific accidents or serious incidents) and Bulletin Reports (factual accounts of accidents and serious incidents including recommendations), accident reporting procedures, the official Regulations in full, a history of the Board and there are links to aircraft manufacturers and other international aviation organisations publishing Air Safety related data.

This is a choice selection of important Web sites on air safety and should be compulsory reading for pilots everywhere.

Some of the documents from AAIB, which are expensive if bought in paper version, are freely available on-line. The Director of Operations of AAIB positively encourages you to download them. Many of the documents make interesting reading, and you can always save a file and read it off-line to save time and money.

The National Air Traffic Services's site at www.ais.org.uk/ is updated regularly to give the latest NOTAMS. There's aerodrome information where you can search large areas *via* a map, or by individual aerodromes. The Daily Navigation Warnings link takes you to another active map and to the Bulletin A8, Bulletin A1 (navigation aids warnings) or A6 Permanent NOTAMS.

Also available are Aeronautical Information supplements. While this is a very useful site, it is marred by a poor interface based on official code numbers for everything. But don't let that put you off if you have the technology to use it.

The ATC's activities are found on their Web site at www.open.gov.uk/atc/atc.htm The number of "wings", participants and annual first solos is very impressive. One improvement they might consider is to give the addresses of the "wings", rather than just telephone numbers.

Anyone interested in homebuilding should drop into the PFA's friendly looking site

If your club is like mine, there is likely to be several members building some sort of flying device. So they should be very interested in the PFA's site at www.pfa.org.uk/ This is friendly looking, easy to navigate, very nicely laid out, and anyone with an interest in homebuilding should drop in here.

There's also info on group ownership as an affordable means of flying, the permit system, engineering and a good set of links to other sites. The PFA are actively trying to encourage more people to take up flying and several of the pages focus on this, including their Flying Start, Young Eagles and Junior PFA pages.

These latter pages would form a good introduction to younger members of the family as they include details of a few competitions for youngsters, but check the closing dates as some had only a short time left to run. The PFA will continually update these particular pages. The closely related American EAA site at www.eaa.org/ covers similar topics.

Women In Aviation International at www.wiai.org/ was started in 1990 to encourage women in aviation. This is another nicely laid out, easy to navigate site. It offers exerpts from their magazine, pages on news, events, education and scholarships, info on their annual conference and other interesting stuff. While clearly of American origin, it's a good place to send a daughter with an interest in aviation.

With the growing interest in aerobatics, pilots with an unusual attitude problem might care to drop in on www.aerobatics.org.uk/ run by the BAeA. You can scare yourself silly by looking at the current approved sequences for a start! Plus events, results, a good set of links to other aerobatic sites, association info and so on. Go on, turn yourself upside down!

The Vintage Glider Club Web site at www.tally.co.uk/guests/vgc/ is friendly and easily navigated. It lists events, publications, and (under General Info) useful links including other vintage sites. The equivalent American Vintage Sailplane Association can be found at www.iac.net/~feguy/VSA/

With the recent interest in towing gliders with microlights, more pilots are looking at this form of aviation. The BMAA's Web site at www.avnet.co.uk/bmaa/bmaa.htm has much information for those interested in taking up this sport. Schools and clubs, events and articles feature a lot here. The Special Features section lists several "how to" guides including flying abroad, and some flight tests.

AOPA has been helping pilots for many years. Their UK site at www.aopa.co.uk/ has sections on political issues, technical info, useful info, AOPA, flying clubs, and links to sister organisations such as International AOPA (its American parent organisation) and other nations' AOPA sites including the American www.aopa.org/ and the General Aviation Awareness Council. I prefer their American site, with its many more articles and links to aviation pages and services.

America's FAA site at www.FAA.GOV/ is good but too big to discuss in any detail. Just explore it for yourself. It's massive. But there's one organisation you may have noticed more by its absence in this article. Yes, the CAA. Try as I might I couldn't find a site for it anywhere, although they do make use of the NATS site above.

There are many more aviation organisations on-line. If I've missed out one you are interested in, the following sites provide large lists to choose from:-

http://www.livenet.net/~eraueagle/orgsmenu.htm
http://www.avhome.com/club-com.html
http://www.landings.com/

MINDEN THE GHOSTLAYER

First published in Midland GC's newsletter.

Len Dent and Roland Bailey, two Midland GC members who for many years shared the journey from London to the Mynd, decided to try a somewhat longer trek to "those legendary thermal sources where bungy launches are unheard of and rain rarely reaches the ground". Words and drawings by Roland who says that while Len has a full Cat he is "far more ordinary - relatively low hours, rarely current and usually seeking an excuse to avoid flying, hence the title"

Take the whole package. Stay with the boss, Tony Sabino, in a patio home with an outside hot tub looking up at the awesome silhouette of the Sierra Nevada and let the wine convince you that tomorrow you too can do that 300, 500 or 850 like the Germans and the Japanese.

Well, to hell with that. As I said to Nick Heriz in a short but serious conversation over the porcelain, I was going there to lay a ghost. Not change the habits of a lifetime. Len, however, was clearly going for it as was evident from some serious initialising of his GPS on the road climb out of California.

It was amazing. Positive thinking only and a system that runs like an airshow, in more ways than one. Where else in the world do two very active gliding operations mix it in with Hercules fire bombers, executive jets, Mustangs and helicopters...and all this without a control tower? Just make sure you keep telling them your intentions because everyone else will be. The radio was rarely silent and often very entertaining.

The Tip Dance

"You feel the tip dance - you think, what's going on? I'm doing 60kts. How come the wing feels like it's going to stall?"

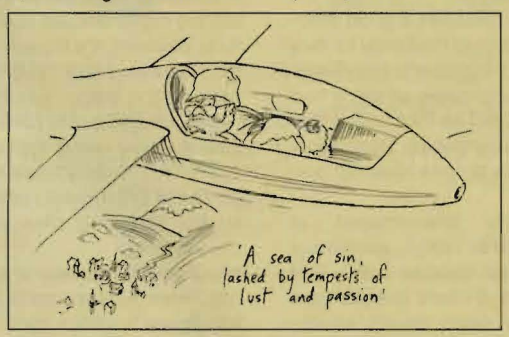
Andy McFall was talking, a sort of John Stuart (Midland GC's DCFI) equivalent but nut brown from the Nevada sun, even more laconic and better looking in a gypsyish way. He was explaining how to come to grips with the savage, narrow and ever-changing thermals and, in my case, the long tracts of ten down and worse.

Old hands do what all the books and articles describe (including the duck-billed celebrity) and tow straight to the Pine Nut mountains where the lift starts earlier and is often marked by a line of cumulus clouds at 16 000 or 17 000ft. For the less confident the early battles in the valley can send maps, water bottles, dentures and the GPS flying about the cockpit and will nicely entangle the oxygen line and hide the mask for you. The shear line, often at 11 000 or 12 000ft, changes the thermal yet again, just as you have checked the oxygen flow, got hat and glasses back on and are getting a bit ambitious.

"You have to fight them all the way to the top," said Andy, citing the 15kts he'd had on the averager of the Caproni just that morning. And it all begins with an understanding of the tip dance.

Cross-Countries and Frights

Len had landed at Bridgeport on one flight and turned Bodie on another, the old ghost town we had visited earlier which one despairing preacher had described as "A sea of sin, lashed by tempests of lust and passion." He will tell you about the aerotow back over Mount Patterson (Len not the preacher) if you can afford the round. Still, neither of us had got Gold or Diamond distance and Tony Sabino, ever concerned for good value for his customers, was getting a little impatient



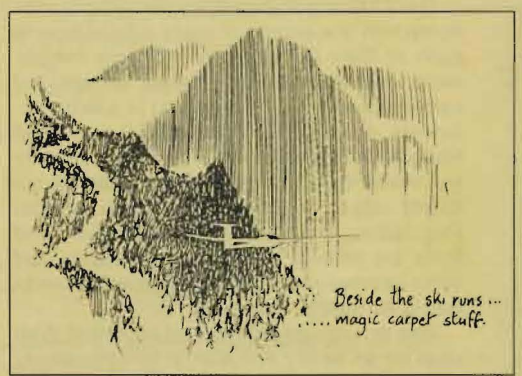
We were having to ride such comments as "Try not to be so English" and "Haven't either you two gone yet?" with reference to our endless flight preparations.

On this occasion, the morning of my 56th year, he slotted a flight recorder into the Mini Nimbus and said "Now go and do it."

I watched a dust devil drift by the nose and wonder why I didn't stick to angling. The dust devil changed course - I closed the canopy quickly - instant solar oven - 104°F outside - mustn't whine, this was my holiday - fine film over everything - desperate bleat for line crew to clean canopy. The lovely Mel obliged, probably unaware of the serious fantasy problems she was causing.

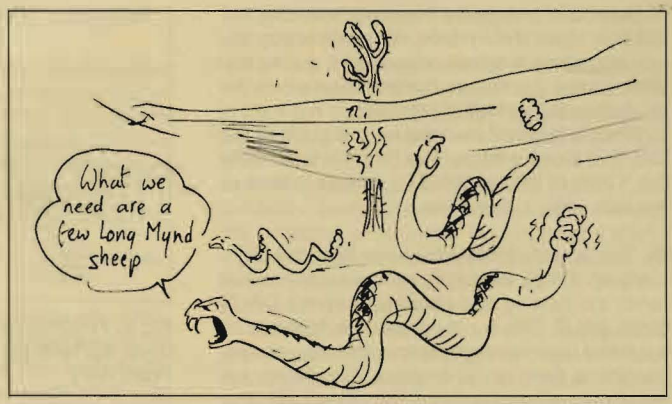
Five minutes later - on tow - the tug was suspiciously stable. Wait for it. Whoomp! The combination ran into its first ten knotter. Tug did an impression of a Pitts Special on methanol. This time I'd be clever - pull off on surge and turn on a wingtip. Haagh! Mini Nimbus was spat out to right (with full negative *g* thrown in) and then it took four or five heartbeats to start falling as fast as the sinking air on the other side. Some birthday present.

Meanwhile, Len was clocking up 800km with his various excursions, including our mutual flights. For me, a 180km on the last day was pretty good by my standards. My own favourite



Len makes another resolution to lose weight but still lands out at Rosachi. Photo by Roland.





moments were in the early evenings when the atmospheric turmoil had died down and you could creep along the Carson Valley rampart of the Sierras. (As with any happy current account you needed to be 13 000ft in credit - on the altimeter.)

Slipping by the ski runs, above the $9 000 000 homes on the shores of Lake Tahoe with the Cambridge turned off and the endless radio chatter turned down, you were right back with the Arabian Nights (yes I know it's corny).

Just a slight puff of a westerly would give a hint of the forces that the great wave generator could set off but it was little more than zero sink on those summer evenings. The Discus was indeed a magic carpet.

The Sheriff's Road Block

"Oh Gawd" said Len. "We've had it. How much have you had to drink?"

"Only two Buds. We must be all right, mustn't we?"

The sheriff had slung a road block. One car across one lane and another down the crown of the road meant that any driver had to run the gauntlet of this magnificent beefcake, hung with pistols, dark glasses and topped with a white tombstone hat. His deputies, graduates of the Clint Eastwood School of Reptilian Expressions, were as stone. I heard myself stutteringly ask: "Are we all right?"

The heavy, chewing jowls gave no clue. Seconds passed, then the face seemed to crack from the jaw cleft upwards into a macho smile. "Yeeeah! - Reckon yer awlright." We cringed on our way, so grateful not to be shot.

On another occasion we were stopped by a Minerals County sheriff near Hawthorne. He was very concerned. He'd heard from an off-roader that we'd come through Bodie Canyon without the right maps. He'd heard that we had no water. He knew where we could get accommodation, food and pastoral care. A real motherly sheriff in the Bilko mould (looked like him too). We came to the conclusion that when The Law wants a gossip it slings a road block. It's Nevada's Coronation Street.

Janie's Ranch and the Rattlesnakes

Advice from the bar was as crucial as that from the briefing rooms.

"See this strip here, just south of the mountains. That's Janie's Ranch. You can have a nice day there OK because it's a brothel and they make their living from the strip. What you've gotta know is that they won't let us aerotow out of there."

"If you're caught low at that point you can get back in ground effect but you'll need 140kts all the way. Stay below the mustangs but above the rattlesnakes...!"

Out and Return

And so it came to an end and we were going to be just tourists for the last week, wandering



through California to catch the homeward flight from Los Angeles.

Prior to that a final hot tub and a final party between the hangars with corncobs the size of marrows, Dylan raging and a pilot taxying late to the rave in a Pawnee. The walking birds, a peculiar kind of midget road runner that seem to make a living out of the airfield, flickered about on the edges of the light. A Sea Fury stood in the gloom. Maybe a ghost had been laid. (Little else was.)

"You guys have gotta come back - you hear?"

I reflected on 35hrs in the logbook, a great sense of relief at not having damaged anything and the realisation that I had booked the Discus for the same time next year. And guess who booked the LS-4?



The English designed 1930 Dickson Primary, restored and flown by Ray Ash over Gulgong, New South Wales, Australia.

Chris Wills, president of the Vintage Glider Club, gives an update on the work going on in the UK and abroad

UK. Three Grunau Babies, three EoN Olympias, a Sky, a 15m span K-2, a Willow Wren and a Dagling are being restored.

Germany. New examples of the Wolf Hirth Musterle, Rhönsperber and Reiher 3 are being built and will be flown.

The fourth of the four Horten 4s will soon be displayed at the Flugwerft museum at Oberschleissheim and a Weihe has been restored to original form at Münster.

Two Kranich 2s are being returned to flying condition and a third is now airworthy.

Switzerland. A Kranich 2 is being restored.

Holland. A team of elderly craftsmen are building a new Minimoa 36. The project was started by Bob Persyn. Drawings of the mass produced Minimoa have never been found.

France. Avias 11 and 152 have been restored, the 152 being airworthy. The Avia 11 was a 1930 primary and the Avia 152 a wartime improved Avia 15 from 1932. And the 1932 Avia 41P, France's great pre-war high performance sailplane based on Kronfeld's Wien, has been restored at Angers.

This is the last survivor of the five built and will be displayed on static exhibition in the Musée de l'Air et de l'Espace at Le Bourget.

Unfortunately the Angers-Auvillé Airfield is closed but the state has replaced it with the Angers-Marcé, further out from Angers.

Belgium. It may well be possible to restore a recently discovered 1935 Swiss Spalinger S15K.

Australia (NSW). Ray Ash has restored a 1930 Dickson primary designed by Derby & Lancs GC pilot Roger Dickson. (See photo above.)

More than 100 were built all over the world from plans and kits. In Britain they were produced by Cloudcraft Co of Southampton.

Ray has amassed 12hrs from 200 winch launches, which are from 1200 to 1500ft, and it and has had two 25min thermal flights. Despite the number built, not one exists in Britain.

International Rallies. The Rendez-Vous Rally is at Zbraslavice, Bohemia from July 14-28 and the International Rally at Nitra, Slovakia from July 29-August 7.

Membership. Chris says they are in need of more members, irrespective of whether you have a glider or not. For more details contact him on 01491 839245

BLUE THERMAL DAYS

Tom describes the situation on those blue summer days when the twinkle of a distant gaggle is a beacon of hope

The period reviewed was from 1995-1997. It is rare to get a totally cloudless day so this summary includes days when the blue sky had small amounts of cirrus. The winter months from November through to February were not included. There were some totally blue days during these months but winter thermals are rarely good enough for serious cross-country flying.

Table 1
Monthly Distribution of Blue Days 1995-1997

March	April	May	June	July	Aug	Sep	Oct
6	14	9	8	6	3	7	8

The exceptional number in April was due to an unusually anticyclonic month in 1997. The rest of that year was rather below average. August had very few blue days in any year.

A brief reminder of the tephigram

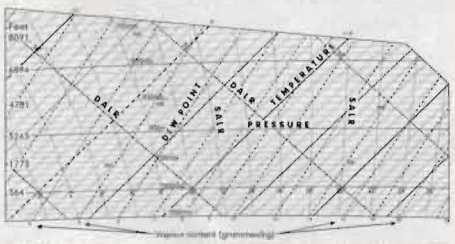


Fig 1. Section of a tephigram with principal lines labelled.

A tephigram is useful when explaining how cloud develops so here is a reminder of its rather complicated set of lines. Fig 1 shows a section of a tephigram with the important lines labelled. The change of temperature with height is called the lapse rate; there are three important sets of lines.

A). The Dry Adiabatic Lapse Rate (DALR)

In this context "dry" just means that the relative humidity is below 100%.

"Adiabatic" means that external heat does not enter or leave the system. Air is cooled by expansion when pressure decreases during ascent; warming is due to compression when the air descends into higher pressure.

When a thermal rises the air in it cools at the DALR until cloud forms. The DALR is a constant 9.8 °C/km or 3°C/1000ft. Dry air also warms at this rate when it descends.

B). The Saturated Adiabatic Lapse Rate (SALR)

When the air becomes saturated and cloud forms the cooling rate changes from the DALR to the SALR. This is not constant; it depends on the latent heat released when water vapour condenses to form cloud droplets. Condensation warms the air and reduces the lapse rate. The SALR is marked by a series of curves showing how the lapse rate varies with temperature and pressure. The difference between DALR and SALR is greatest in tropical air, which holds most water vapour. In frigid arctic air which holds very little water vapour the two lapse rates are almost the same.

C). Dew Point Lines

The dew point is the temperature at which dew starts to form on a cold surface or cloud droplets form in clear air.

The dew point lines show the amount of water vapour which can be contained in the air at different temperatures. The values are marked at the base of the tephigram in units of grammes of water per kg of air. The dew point lines can be used in combination with the DALR to work out the condensation level.

Finding condensation level and cloudbase

When a thermal rises it cools along a DALR until cloud forms. The dew point decreases at a much slower rate and the two lines converge with height. The lifted condensation level is where the DALR and dew point lines meet.

Fig 2 shows how to find the condensation level on a tephigram. Draw a DALR up from the surface temperature and a dew point line up from the surface dew point. The point of intersection is the condensation level (marked "CL"). Above this the rising air is saturated so it cools at the SALR.

The cloudbase is practically the same as the condensation level. Rising air needs a little extra lifting to produce enough droplets to form a cloud so the visible cloudbase should be slightly higher than the condensation level. However, in practice it is hard to measure the exact base when you climb into cloud. In some clouds it becomes misty a couple of hundred feet before one is totally enveloped by cloud.

Finding the base of cumulus from surface temps

A useful approximation is to take the difference in degrees C between surface temperature and dew point and multiply by 400. This gives the height in feet.

In Fig 2 the surface pressure is marked QFE. The temperature there is 20°C and the dew point 6.5°C, giving a difference of 13.5°C. This gives a cloudbase of about 5400ft. Above the condensation level a thermal cools at the SALR. This method does not work late in the day when the temperature starts to fall.

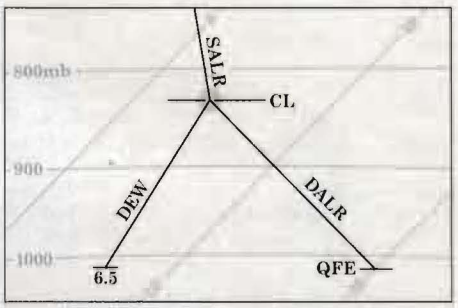


Fig 2. Finding the Condensation Level (CL) from surface air temperature (T) and Dew Point (DP).

The Environmental Lapse Rate (ELR)

This shows the actual change of temperature with height as measured by radiosonde or aircraft sounding. Routine soundings are made every six or twelve hours and the latest results need to be plotted before the tephigram is any use.

Using the ELR

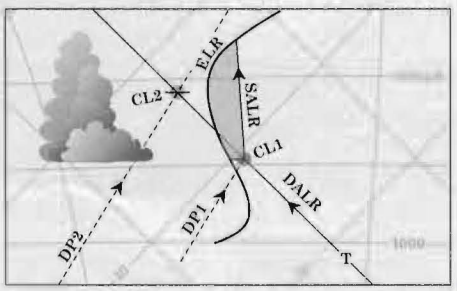


Fig 3. Effect of different dew points. The heavy black line is the Environmental Lapse Rate (ELR). Shaded area shows the extra energy of condensation when the dew point was DP1.

Fig 3 shows the ELR as a thick black line with inversions at the surface and also aloft near the 800mbar level. If sunshine raised the surface temperature to 20°C (marked T) a thermal could rise along the line marked DALR.

If the dew point (DP1) was 12°C the dew point line would meet the DALR at the condensation level (CL) which is about 3200ft. Above this the air would be saturated so the thermal would cool along the SALR. Ascent continues as long as the thermal (whether dry or saturated) remains warmer than the environment line.

Extra energy from release of latent heat

The shaded area between the SALR and ELR indicates the extra energy supplied by condensation. This zone would contain cumulus clouds. The bigger the shaded area the stronger the lift in cloud.

A lower dew point means a higher condensation level

If the air became drier so that the dew point lowered to DP2 the condensation level would be raised to CL2. This point is on the cold side of the ELR. Thermals lose their buoyancy when they become colder than their environment. In this case the thermal (rising along the DALR) would stop and sink back before reaching CL2 so no cumulus could form.

A cause of blue days

If the dew point falls the cloudbase will generally rise. Thermals are stopped when they reach a strong inversion, so if the inversion sinks below the condensation level cumulus are unable to form. Many blue days occur when dry air spreads in under a sinking inversion.

Lowering the inversion

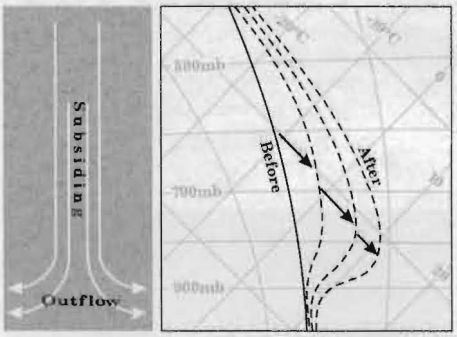


Fig 4. Formation of an inversion by subsidence. The thick black line shows the initial lapse rate (marked "before"). The pecked lines "after" show the change due to subsidence which warms the air aloft.

When pressure rises with the approach of a ridge or anticyclone the air aloft generally subsides. It may sink as much as 3000ft per day, which can warm the air by some 9°C. The subsiding air cannot sink through the ground so it tends to fan out horizontally near ground level. Thus most of the warming takes place well above the surface producing an inversion aloft.

The process is shown in Fig 4. Descent of air is drawn on the left. The development of the inversion is shown on the tephigram on the right by lines marked "Before" and "After".

Changes as a high approaches

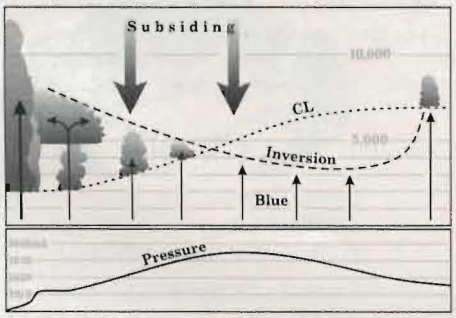


Fig 5. Time cross-section of the development and decay of a blue spell.

Fig 5 shows a cross-section of the changes with time. (Time runs from left to right.) At the foot of the diagram the msl pressure is shown rising to about 1032mbar as a high approaches. In the main diagram the anticyclonic subsidence produces an inversion which descends with time. Meanwhile the arrival of drier air near the surface lowers the dew point and lifts the condensation level. When the dashed line marking the inversion sinks below the dotted line marking the condensation level, then thermals no longer go high enough to form cumuli and the day becomes blue.

The first effect of subsidence is to suppress any showers. Then the larger cu begin to flatten out. This can be a critical period because if there is too much moisture trapped under the inversion the clouds may spread out and form a sheet of stratocumulus. This is a common problem when the air arrives after a long sea track. If the high becomes established nearby, the combination of drier air and low inversion produces the blue days of summer. A big rise of pressure makes blue days more likely. This is shown in Table 2 below.

Table 2
Distribution of MSL Pressure on Blue Days

Range in mbar	1039-35	1034-30	1029-25	1024-20	1019-15	<1015
%	8	20	43	20	8	1

71% of days had pressures of 1025mbar or above.

The absolute pressure is less important than the proximity of the anticyclone centre. The closer the centre of a summer anticyclone the more likely is a blue day. Table 3 below shows the difference in pressure between the blue area and the centre of the anticyclone. The less the difference the more likely is a blue day.

Table 3
Pressure difference between UK blue area and centre of anticyclone

Range (mbar)	0-3	4-6	7-9	10-12	13-15
%	43	38	8	7	4

On 81% of blue days the local pressure was within 6mbar of the anticyclone centre.

Importance of dry air aloft

The Relative Humidity (RH) of the air is quoted as a percentage ranging from 0% for totally dry air to 100% for saturated air. The radiosonde messages give the Dew Point Depression (DPD) instead of the humidity. The DPD is the difference between air temperature and dew point; the larger the difference the drier the air. The DPD is useful for finding the condensation level if the air is lifted. It can also show how far the air has descended if it started at cloudbase. In saturated air the dew point depression is zero, and when this occurs below an inversion there is an 8/8 layer of cloud. (Typical of spread out days.)

Mixing at an inversion

If you descend through an inversion the air often feels slightly turbulent. This is due to wind shear and/or strong thermals bumping into the inversion. When turbulence brings pockets of dry air down from aloft it makes holes in any cloud layer and may eventually disperse it. On blue days the DPD at 5000ft exceeded 10°C on 73% of occasions and on one in five days was more than 20°C. A DPD of 20°C means the air was 8000ft below its condensation level.

Low inversions give hotter days in summer

The rise of temperature on a sunny day depends on the depth of air to be heated up. With deep convection heat is carried up so high that the surface temperature does nor rise much. A low inversion prevents heat rising far; with only a shallow layer of air to be warmed up the day becomes much hotter. Thus a big rise of temperature can indicate a low inversion which is one factor in a blue day.

Dry air gives colder nights

Moist air acts like a blanket reducing nocturnal radiation and keeping the heat in. Dry air allows more heat to escape so the minimum temperature falls lower on a clear calm night.

Diurnal temperature range on blue days

Many blue days have a wide range of temperature between early morning minimum and mid-afternoon maximum. A wide spread between max and min temperatures suggests both dry air and a low inversion. Such conditions produce little or no cloud. Table 4 shows the temperature spread on blue days.

Table 4
Difference (°C) between Min and Max (MM) on blue days

MM	23-22	21-20	19-18	17-16	15-14	13-12	11-10
%	7	22	33	19	11	4	4

81% had a diurnal temperature range of 16°C or more.

Wind direction

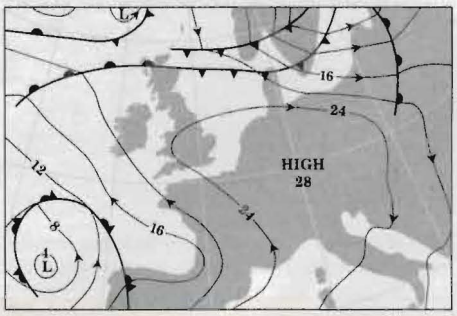


Fig 6. Midday chart for May 2, 1997, when south and central England was blue.

In summer the driest air reaches the UK from the continent. Provided the air does not spend too long over the North Sea it will still be fairly dry when it reaches our coast. Fig 6 shows a typical chart for a blue day over southern and central England.

Table 5
Wind Direction on Blue Days

N-NE	ENE-ESE	SE-S	SSW-W	WNW-NNW	Light Var
% 18	30	23	0	8	21

The light variable winds occurred when the anticyclone was centred very close by. More ➡

than half the blue days occurred with winds off the continent between ENE and south. Some of the NE winds had dried out while crossing the mountains of Scandinavia.

A few north or NW winds were dried by crossing the Highlands of Scotland or the Welsh mountains, but these peaks are usually too small to strain out enough moisture from the Atlantic winds. The sector from SSW to west was normally too moist to give a blue day over England in summer.

Location of anticyclones

On many blue days an anticyclone was centred over the British Isles. When the centre was over the North Sea or Germany we had dry winds off the continent. This direction may make soaring difficult, especially near the windward coasts. The east of Scotland may get sea fog or low stratus when the warm continental air spends too long over the cold North Sea.

On such days the coastal strip remained cold and stable but the infra-red satellite pictures showed the Central and Western Highlands became hot enough for thermals.

Dents in the inversion

On hot days some thermals hit the inversion so hard they made dents in it. Viewed through polarising glasses the dents show up as haze caps. Big dents used to be common when farmers were allowed to burn stubble but they still occur naturally. With luck one can ride such a thermal and climb (briefly) into the clear air above the main haze top. This gives one a much wider view which may sometimes reveal tiny cu puffs far away. These distant cu are often worth a diversion on a blue day; they may just mark a small lifting of the inversion but it can be the first sign of a break in the fine spell.

Breaking of inversion after a hot spell

Each successive hot day warms the lower air a little more and may raise the inversion gradually once subsidence has ended. After a few hot days little extra heat is needed to destroy the inversion completely. A gradual fall of pressure as the high weakens or recedes can give an early warning of the change. One may notice this when resetting the altimeter before take off.

Once the inversion has broken, little cumuli may appear at 8000-11 000ft even in England. Occasionally the inversion is whittled away so gradually that no one realises how flimsy the barrier has become between blue skies and a thunderstorm. There was an example of this on May 31, 1997, which was almost cloudless over most of England. The wind was from the east so the hottest weather was in the west (furthest from the North Sea coast).

During the afternoon an isolated thunderstorm broke out over the Lake District. This solitary cunim was the only cloud picked up by the satellite pictures. It was probably triggered by sea breezes converging on the hot Lakeland hills

A widespread change is more often heralded by the appearance of altocu castellanus or floccus at 10 000ft or more. These upper clouds have no thermals to connect them with the ground but they sometimes look soarable. Even experienced pilots have been deceived into searching vainly for thermals under them. Altocu castellanus are quite a reliable warning of thunder within 24hrs. They support the old saying: "English summer? Two hot days and a thunderstorm!"

Skating In The Hangar





Mick Wilshere has been busy welding metal again, this time making four tip-up platform skates for the London Gliding Club to use with their K-21 and K-23s in the hangar.

REFLECTIONS



Jim Hill took this photo sheltering under his K-6E's wing after landing out in Devon.

GarMax **Maximise your GARMIN™ 89,90,45,38,12xl,II,II+,III**

GarMax gives pilots the ability to easily upload airspace maps to their existing Garmins – providing a cost effective moving map display. The airspace data is derived from the "Specialist Systems" competition airspace checking program. Comprehensive Turnpoint lists are also provided.

The unique software and cable kit gives you:-

Airspace moving map display
- UK Competition Airspace
- UK Prohibited Airspace and parachute zones
- Class B gliding areas for wave flying
- User selected Airspace areas
- ***Airspace updates available***

Turnpoint functions
- Upload/Download/Edit Turnpoint lists
- BGA Turnpoints (1998)
- User definable Turnpoint areas
- European – France, Spain, Poland etc.
- Worldwide – South Africa, USA, Australia etc.

GarMax Software . . . £56.50 or **GarMax + PC cable kit** . . . £76.50 (+vat + Post)

CRABB

Crabb Computing
3 Salford Close
Welford, Northants, NN6 6JJ

Tel/Fax +44 (0) 1858 575665
e-mail:-
garmax@crabcom.demon.co.uk

WAY BACK WORLDS - ARGENTINA 1963

Ann was the British team manager for this eccentric contest

Argentina, in February 1963, was the first Southern Hemisphere Championships, which delighted us as heavy snow fell in Britain as we left at the end of January and was still deep when we arrived home again. It was also good that we had eleven days before the competition began. One hundred and sixty miles west of Buenos Aires (BA), Junin was a city that had started life with the coming of the railway engineers, which is probably why so many tall blond people were called Miguel and small swarthy ones MacTavish.

Our team of three pilots - Nick Goodhart, Tony Deane-Drummond and John Williamson, with their crews, arrived spasmodically by Argentinian Comet. At that time there were no direct flights so one crew could be overnighting in the heat of Dakar while others were held up by snow in Spain. The trailers had gone by sea.

Fortunately in BA we had great allies in the air attache Grp Capt George Lerwill and Joe Ortner of the Argentinian team. At nearby Merlo Airfield we found other teams and our trailers, were taken to supper at a waterside restaurant where it blew a gale and finally fell into bed 43 hours after getting up in snowy England.

Now we had to find cars as the ones ordered had not materialised. Shell lent us a pick up - 6 volt with our radios 12 volt - and Ford lent us two Falcons but said **no** towbars. Our trailers were covered in brine and small holes and the glider control cables hung in loops, but we were better off than teams whose trailers were still impounded by customs.

To get the gliders to Junin with one towcar Frank Irving and David Cretney set off with Nick's trailer and drove back the same day; a 300 mile round trip on interesting roads. Then as Shell found us another pick up we were able to get to Junin on February 2, leaving only John Furlong to bring Nick, Lorne Welch and Doc Slater who were still snowbound in Europe. In BA it was 100°F. Arriving at Junin we were given a great welcome but noticed with some alarm obvious shortcomings in preparations. Our accommodation was two small weekend chalets by the rapidly drying lake which belonged to Junin residents, but it was inadequate, so we joined the queue of team managers to ask for more.

All retrieving would be by aerotow using a wonderful collection of 50 pre war tugs with extrovert pilots, and to help them find gliders scattered over the pampas all competitors were issued with heliographs. We were still hilariously practising with these when we were called to the practice period opening in a parade through the town. This consisted of a procession of Citroen 2 CVs, each with a driver and the team manager and three pilots standing up through the roof and being driven round the city, several times, through a cheering crowd of 65 000 people. It went on for 2½hrs by which time our waving arms drooped from doing their queen act.

Next day we got a third chalet, Lorne and John Furlong went shopping - complicated with all the banks on strike - and after an incomprehensible briefing Nick and Tony flew the practice 300km O/ R. Other teams still had their gliders held by customs, but the Chilean team avoided any such problems by towing their Blaniks at 16 000ft over the Andes with two PA-18s.

On the next practice day John Willy completed the 328km goal task, but Nick landed 25 miles short to give us an insight of what to expect from outlandings. He first had to find someone to help push the glider out of a field of cattle (bifys) and, in no known language derig it, then go on a tractor by compass course to the property boundary, climb the fence, walk 5km to the nearest road, hitchhike to a village, find it had no telephone, and hitchike 35km in the opposite direction to find one. There he stayed in an excellent hotel and was retrieved next morning.



Like the opening ceremony, the closing parade was just as extraordinary.

Organisational hammering continued but everything fell into place apart from briefing which was still inaudible and incomprehensible.

Competition tasks finally started on February 11 with a 140km race to Mercedes. Nick and John Willy came 4th and 5th in the Open Class and Tony D-D 11th in the Standard, but next day with beautiful cumulus was declared a rest day because of large numbers of complaints and five damaged gliders.

Launching had gone well with all 63 gliders off in 25min but no one had said that although the goal was a grass field with grass runways, the space between the runways was now filled with 8ft high maize or sunflowers. Only at a late stage did pilots discover this and came in from every direction, some running off into the crops, while one Skylark pilot found that an ignorant crew had taped up his dive brakes! But this was nothing to the retrieving.

Tows took place from both ends of the main runway and from the short cross run, all being controlled by one man at the intersection waving a hat. John Willy's tug went over Tony D-Ds glider at ducking height. Gliders landed back at Junin to the light of flares with 20 left behind in the dark to be collected next morning. One of these was damaged by being towed off downwind and an Italian glider arrived home with a broken wingtip held together with sticky tape. The team manager complaints' queue was long.

Next day, February 13, brought poor weather and a goal at an airfield confusingly named 9th July. No one made the qualifying distance so pilots were soon home except John Willy who finally appeared at last light. A tug had, in fact, arrived at his field quite soon but was committed to another glider. Then a Stearman landed. The pilot shook his head at the hummocks and armadillo holes but agreed to try. They bounced out of the field but at 30ft the rope fell off the tug. John had to turn downwind and land in the next field. This was even rougher but the tug tried again - resulting in the rope falling off at a few feet and the tug flying away.

After a while another tug, a Thrush, landed in the next field. The pilot looked at the surface, sucked his teeth and flew away. Eventually yet another tug landed, the pilot looked discouraged after he finally stopped bouncing, but said he would try. So John produced his own short rope. (we had cut our spare rope into three so that each pilot would have something) and got airborne as light began to fade. Nick's tow home had been more successful as he had learnt from ➡

experience to lash the rope on to the tug.

The second contest day was not until the l4th with an O/R 177km north to Pergamino in weak weather. All of ours got back but the day was won by Makula, Poland, in his Zefir and Fritz, Austria, in the Std Austria.

In the better weather of February 15 a disappointingly small triangle was set, some pilots doing the task four times. Needless to say, the 308.8km triangle on the 16th was in less good weather with heavy rain over the 2nd TP (2½in in 2hrs). Pilots were landing in zero visibility, unable to see the TP. Everyone landed out and the fun began as the rain changed dirt roads to mud slides. Gliders sank into the sludge until immovable. The tugs could not search and many pilots spent the night in their gliders with all ventilators closed against mosquitos.

Dick Johnson, USA, was first back in his Sisu from the 322.7km triangle on the 19th at 100km/h though Poland's Popiel was faster in the Zefir. Our pilots returned but their times were not good. There was no doubt that the new gliders had speed a priority, like Sisu and the Zefir, while ours had not. At this point Henry, France, was overall 1st in the Open Class in his Breguet 901 followed by Makula and Popiel, with the Standard led by Heinz Huth in his beloved K-6.

Free distance turned up on February 20 with doubts about how the tugs would find pilots scattered across the pampas, but fortunately a strong southerly wind prevailed so the route would be north towards Uruguay. A map was produced marked with remote areas to be avoided. With full water bottles and food, pilots slowly disappeared and we sat down to wait.

By nightfall we knew that John Willy and many others had flown 400km, Nick 500 and Tony D-D almost. Thermals had been largely blue with the air so clear that Venus was visible at midday. Little more was heard until next day when news arrived that Dick Johnson and Makula were over 710km, making Makula almost certainly Open Class Champion.

Only Dick Schreder, USA, was still unaccounted for. Johnson and Makula arrived back with their gliders in a Bristol Freighter but soon the little tugs began to appear. Pearson, S Rhodesia, had been towed off in his K-6 nearly 500km distant to an airfield where another tug took over. This one set off south but got west of track and on overflying an EW road turned west. Pearson pulled off, landed in a field and when the tug landed told him he was going the wrong way. The pilot thanked him and they set off again arriving where intended for the night.

Next morning another tug took over and also diverged to the west (following the sun?) flying at 600ft and was clearly going to miss Junin by some 50km. Pearson's efforts to steer the tug back on course only resulted in friendly waves from its pilot. When the tug was 100km beyond Junin it ran out of petrol so Pearson released, and soared back to Junin to tell them where they would find their aeroplane.

Schreder arrived back two days later having landed in a swampy Zona Prohibidado. He stayed with an Indian family with roast dog for dinner. It took two horses to pull the glider to firmer ground and he was trying to repair the Indian's old car when a tug finally located him. It took the glider off from a narrow road with both wings overhanging water filled ditches.

So now there was just one more contest day; O/R 256.6km to Venado Tuerto on February 23. The forecast was thundery but cumulus stayed small and gliders streamed over the startline. Breunisson, Holland, in his Skylark was among them but diving much too fast. Suddenly a bang was heard and a broken winged Skylark fell out of the sky. There was a great cheer as a parachute opened followed by silence as the Skylark aimed for the launch point. It crashed on the tug landing zone between the two lines of gliders waiting to go - and damaged only itself.

Nick was the first glider home with the second fastest time for the day but, as expected, Makula became Open Class Champion and Heinz Huth Standard. Our best was John Willy, 8th in the Open Class.

It had been a hectic Championships, but despite the chaos a happy one with smiling organisers who just wanted us to enjoy ourselves with no dull moments! We had a great team with crews who could turn their hand to anything - and included New Zealander Warren Spence who attached himself to us, worked tirelessly for three weeks and then insisted on contributing to team funds.

Personal Accident Insurance

from Roger Lark and Sedgwick

A Special Insurance Policy for BGA Members

Cover for Glider Pilots and P2's from just

£9.95 per month!

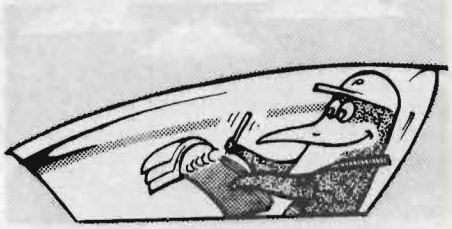
Call now for further details

0181 557 2322

Our range of special policies for Glider Pilots, P2's and air-experience pupils also includes:
Annual Travel Insurance – Single Trip Travel Insurance – Motor Insurance with Airside cover – A Breakdown Service from £24 per year plus £12.50 to include cover for your Glider Trailer.

Further details from:- **Affinity Select Ltd., Roger Lark and Sedgwick, FREEPOST, ANG 1410, Barking, IG11 9BR. Telephone (0181) 557 2322**

WAY OFF TRACK



Flasher's Roots

Noted dilettante and patron of the public arts I may be, but I'm rather worried about the Gateshead Flasher, *aka* the Angel of the North. Although, wings outspread, it appears remarkably like a Schweizer 1-26 in a tailslide and, from TV news footage, its site appears somewhat less commanding than the Angel's 175ft wingspan demands, my concern centres on whether sculptor Antony Gormley had a good stress-person on hand when he committed his grand vision to steel.

Though the feet are apparently secured by 56 three metre bolts - according to one of the public prints I read - it is the immense worst-case loadings on the Angel's wingroot fittings which worry me.

Some people manifested confidence when the Angel was erected on February 16 in winds which, locally, were gusting up to 70kt.

So far, so good, but what about the storms which inevitably will occur during the design life of 150 years when the wings may encounter winds gusting to 100kt or more - planform on?

Nothing in my comments must be construed as carping about the project itself. I have only seen it in model form and pictures and have yet to see it, so to speak, in the flesh.

But with Currock Hill still personally unflown and a younger son now resident in Berwickshire, Penguin has excuses to find himself in the near future driving north along the A1 as it approaches Tyneside.

And as for any patronising criticism emanating from our so-called "national" media, I would dismiss it out of hand. It is almost a point of honour, and certainly predictable, among them to dismiss as pretentious rubbish and a joke anything purporting to be art which originates north of St Albans. The day after, my edition of *The Times* - that well known paper of record - thought its erection worthy only of a cartoon.

Carry on, Gateshead, and enjoy the Angel looming over you. They'd all be be overjoyed if it was looming over Guildford or Redhill. Meanwhile, it will provide a distinctive and incontestable TP.

Bring back the cat

I'm surprised an academic like The Arm-Chair Pilot got his knickers in such a twist in the last issue (p122) over the spelling of *bungy*. I have always understood that, rather than being "coined" in the early days of the shock cord catapulting of gliders in Britain, as he suggests, it is simply the Hindi word for rubber. Certainly you hear rubber called *bungy* all over the Indo-Pakistan sub-continent, in a variety of languages.

When I've seen it written in English there it has been spelled *bunjee*, the version I always use rather than *bungy* on which the Ed admits she settled in consultation with the late Rika Harwood on the dubious grounds of brevity.

How quickly the inheritance of some 200 years of the British *raj* - which gave *this* country so much - seems to have been forgotten. It seems entirely likely to me that the word was first introduced to some breezy British ridge site in the early 1930s by a couple of stout sons of Empire, home on leave from hotter climes and using *bunjee* as they may have used *char, tiffin* and even *punkah wallah* in the Anglo-Indian argot of the times.

But to revert to the present day: why aren't there more bungy sites and a greater willingness, in this noise and pollution-sensitive age, to revive this sublime means of launching? It is at least 15 years since I was last at the Mynd on a suitable west wind day to be catapulted and my own club's last bungy was found to be perished years ago. (See also p149.)

LOGSTAR
Professional
COMPUTER LOGKEEPING
★ Glider or Power Pilot Versions
★ Simple to use (Computer beginners HELPLINE)
★ Very comprehensive, rapid and accurate logging
★ Super-Powerful Flight Analysis System
★ Many user defined reports. Graphs and Tables
★ Annual Returns/Cert of Exp. Etc. Etc.
★ Runs in Windows 3 or 95
LOGSTAR for Glider or Power
Order TODAY Use it TOMORROW
Phone or Fax Credit Card details to 01329 221992
Say GLIDER or POWER £25.00 each
or by post Turnpike Technics
73 Old Turnpike, Fareham, Hants, UK PO16 7HF
WEB: http://home.clara.net/~turnpike/ E-MAIL: turnpike@clara.net

XK10 "CLUB" VARIO SYSTEM
★ Over 400 units in use in the UK alone
★ Metric export model available
from Cair Aviation Ltd.
"You can bank on us"
XK10 "CLUB" VARIOMETER
• Audio codes climb rate
• No Flask Required
• AVC on Down Tone • Gust Filtering
£249
DEDICATED AVERAGER OPTION
• Battery Volts
• Three Averager Modes
• Thermal Total Average
• Speed to Fly
• Climb/Cruise Mode
• Auto Shut Down Overnight
• High Sink Rate Alert
• 0 – 5kts Wave Mode
£149
REPEATER METER OPTION
• 60mm Mounting • No Mods Required
• Loom Included
• Metric Version 0–5m/sec
£89
Prices shown exclude VAT and carriage
✦ New Instruments: PZL Expanded Scale ASI's. 1.5 Turns 0-140kts £109, 1.75 Turns 0-200kts £119, PZL Vario with zero reset, Flask and Ring, 80mm £189, 57mm £219, PZL T.E. Unit £19.90, PZL 12V Mini T/S £249, 12V Mini T/S £211, Sensitive Altimeters £149-£156, Mini Accelerometer £159, IFR Pedestal Compass £59, Airpath C2300 Panel Compass £59, LC3 Panel Compass £49.90, Vertical Card Compass £139, T/S 28V Converter £19.90 ✦ Surplus Tested Instruments: Horizons with new Solid State Inverter, Ferranti Mk6 £299, Ferranti Mk14 (Coloured Display) £319, 80mm Glider Rate Turn/Slip £89, Mini American 12v Glider Turn and Slip £249, 80mm Altimeters from £89, Miniature Accelerometers £89 ✦ Radios: ICOM IC-A3E £255, IC-A22E £290, Delcom 960 £219.90, Delcom 960 80mm Panel Mounted Version with Speaker/Mike £247.90, Serviced PYE MX290 Compact Mobile/Base TX/RX, All gliding channels £150, Mobile Magnetic Mount Aerials £26 ✦ Glider Battery Chargers £24.50 ✦ Parachutes: SK94, Type Certified, State of the Art, Rapid opening, low descent rate, Steerable, Comfortable, Lumbar Support, Bag. £485 ✦ "Ottfur" Releases: Manufacturers Exchange Service incorporating the latest modifications £89, New "Ottfur" Releases £169
COLIN D. STREET, 7 Sharpthorne Close, Ifield, Crawley, Sussex, RH11 0LU, England Tel 01293 543832 • Fax 01293 513819

THE TRAVELLER'S QUESTION

Justin ponders on the fate of gliding, wonders if there will be a new form of atmospheric energy to exploit, is confident vast underdeveloped areas of the world will soon be explored by sailplanes and feels the future of the sport lies in technology

"Is there anybody there?" said the Traveller,
Knocking on the moonlit door.
(Walter de la Mare)

After twenty five years Gillian Bryce-Smith is retiring as editor of *Sailplane & Gliding*. Even more remarkable is that she is only the third major editor of the magazine since its inception over 65 years ago. What is it about gliding that inspires such passion and devotion? Clearly it must be something deep seated and enduring. And what will gliding be like when the new editor, based on the current average, retires in 2020?

People are shaped by the philosophies and events of their times. Successful human aviation first emerged towards the end of the eighteenth century, sometimes called the Age of Reason. Yet this is something of a misnomer because although the contemporary philosophers adopted the scientific principles of Galileo and Newton and set out to prove by logical argument the reality of human perceptions and the existence of God, they failed.

David Hume, who from all reports and his portrait seems to have been the nicest of men (surely Wesley got it wrong; it should be "kindliness is next to godliness"), showed that reality cannot be proven, and belief in God has to be an act of faith. Subsequent advances in scientific thought have confirmed this: Einstein observed that there are no absolutes, only relativities, that energy and mass, time and space, are interrelated. Heisenberg's uncertainty principle added to our feeling of insecurity regarding the nature of reality.

> *"This may be due to inner feelings of disquiet..."*

Where science and philosophy cannot provide an answer to the Traveller's question, religion might do so. But for those without an innate faith the formal religions have been losing their following (at least in the western world) at an accelerating rate over the last three hundred years. This may be due to inner feelings of disquiet at the intolerance exhibited by so many religious movements towards the creeds of others. People may wish to regard religion as a combined search by science, philosophy and faith for another dimension which, when the pressures of modern civilisation permit time for reflection, we instinctively know exists and which could provide a sense of reality and destiny.

The writings of *S&G*'s first great editor, Doc Slater, exhibit an extraordinary scientific enthusiasm and curiosity. His remarkable powers of observation and analysis covered not only technical advances and pilot techniques, but also the political background and the personalities behind events, and this interest in people was echoed by his associate editor, Rika Harwood. What other journal would have faithfully reported Lord Brabazon of Tara telling the pilots at the 1961 Nationals' prizegiving "Anyone who is any good is slightly crackers"?

> *"Anyone who is any good is slightly crackers"*

Yet it is a splendid phrase, redolent of the times and the man who uttered it, and expresses an enormously important feature of British gliding: it attracts original thinkers of remarkable diversity, ranging from those who believe mildly that weekends are for something more than just polishing the car and recharging their batteries for the commercial fray on Monday, to those who are downright eccentric.

In Britain it seems often the case that advances in the arts and the sciences have been made by unorthodox individuals tapping round the obscurer parts of the cave of knowledge and suddenly breaking through into a whole new chamber beyond. Such explorers are often intrinsically lonely, acutely aware of their slim chances of success, yet driven by their curiosity and their desire to contribute to progress.



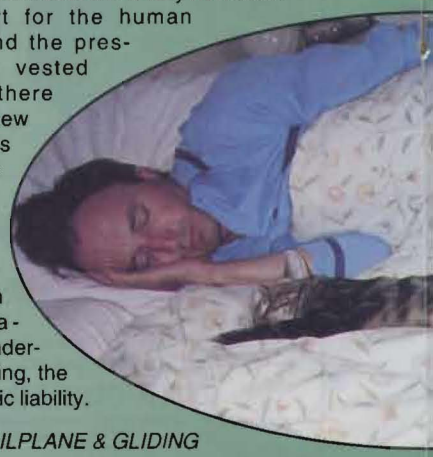
Gliding seems to attract such people, and in doing so enhances their lives, the gliding community and society at large. Chronicling and cajoling articles from these unusual individuals has been a hallmark of Gillian's editorship; it must have been a fascinating, though at times frustrating, occupation.

As in the past, gliding in the future will be moulded by the people attracted to it. By any historical perspective gliding is still in a pioneering phase; whilst aircraft performance may only improve gradually, the use of GPS is still in its infancy and its potential, when linked to the power of the microchip, is only just starting to be realised. This will greatly enhance pilot capability generally, as well as enabling exploration of new forms of atmospheric energy such as jet streams and wind shears within frontal systems. We may find that days hitherto regarded as unsuitable for soaring are quite the reverse.



In addition, assuming continued growth in transport systems and the travel industry, there are vast areas of the world waiting to be explored by sailplanes: I look forward to reading accounts of expeditions to the Atlas mountains of Morocco, the Anatolian plains of Turkey, the central steppes of Asia, the Himalayas and the Andes.

To realise these prospects requires a healthy dynamic gliding movement, which is currently facing an overriding challenge - airspace. In the 1960s and 1970s *S&G* recorded the remarkably successful efforts of the BGA to obtain a logical approach to controlled airspace in the UK. Now, twenty five years later, the position is much bleaker. In addition to the continuing emotional attitude of the public and the media towards air safety (based perhaps on the fact that aviation is still a very new form of transport for the human species) and the pressures from vested interests, there are the new catch phrases "known traffic environment", "ICAO conformity", "European harmonisation", and, underlying everything, the dread of public liability.



Justin
top phot
wife Gi



Undoubtedly the BGA must continue its policy of using logical rational argument to counter the growth of controlled airspace which far exceeds the underlying growth of traffic volumes. Gliding's position may be helped by the new awareness of aboriginal rights to communal assets: if we expect those who pollute air or water in the course of commercial activities to compensate the community, it is reasonable to expect those who seek exclusive use of such assets to similarly compensate those denied access. However, the position remains intrinsically weak because it is unavoidably defensive. Thus my hopes for the future lie in technology, whose only limitations seem to be those imposed by our own imagination.



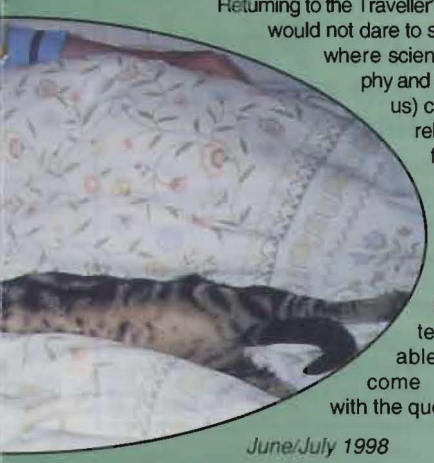
I am optimistic because the present system of controllers sitting in darkened rooms watching two dimensional screens representing thousands of cubic miles of three dimensional airspace is increasingly failing to work, as evidenced by the large number of incidents regularly occurring in controlled airspace.

The present system requires large separations leading to the well publicised flight delays during holiday periods, and has obvious public liability potential, as does the compression of increasing amounts of VFR traffic into smaller areas of uncontrolled airspace.

If I could bestow one wish on the future of gliding it would be that outside the areas immediately surrounding major airports the problem of air traffic separation would be transferred back to the cockpits through the provision of on board computers communicating with other aircraft nearby. The resultant more efficient use of airspace, whose vastness is confirmed every time we fly, would provide gliding with the essential freedom it requires.

with,
to, his
illian

Returning to the Traveller's question: I would not dare to suggest that where science, philosophy and (for many of us) conventional religion have failed gliding can provide an answer, but I do believe it has the potential to enable us to come to terms with the question.



Justin's flight on July 22, 1997, revels in that magical, elusive quality of gliding

We had spent the previous night with Tom and June Zealley in the lime washed mill house that has been in their family for generations. The next morning we watched a pair of large sea trout below the weir pool finning themselves in the early sunlight before taking our leave and driving up the winding Devon lanes to North Hill. The club was launching from the western end into a light easterly breeze, past the magnificent clump of beech trees that stand proudly on the airfield. We rigged the LS-6 for the first time in 10 months, and it was like shaking hands with an old friend. I do very few winch launches, and I could feel the reproachful eyes of the winch driver as I released at 900ft, and began climbing in a weak thermal. Four hundred feet higher I searched for something better, and found 3kts up to cloudbase at 3500ft.

A slight haze was giving a brownish tinge

It was a typical late July day with a slight haze giving the base of the cumulus a brownish tinge. I set off westwards and was soon passing north of Exeter Airport, wryly noting the absence of activity compared with the bustle of North Hill, and recalling Exeter's application for an enlarged control zone. After crossing the Exe valley the land began to rise towards the eastern flanks of Dartmoor. My course took me over Moreton Hampstead where generations of my ancestors lie in the churchyard.

Towards Plymouth cloud cover was more extensive so I kept to the sunny areas between Okehampton and Princeton with its mast reaching to 2400ft. Ahead over the Tamar valley the clouds seemed to be building, so I switched on the T&S and circled into the base of a promising turret. My cloud flying was rather rusty and the LS-6 protested once or twice before I remembered to let her fly herself. At 8000ft the outside temperature was down to 0°C, so I straightened up and experienced that magic transition from the monochrome misty interior of the cloud to the technicolour brilliance outside. I reflected that British glider pilots are almost unique in having retained their right to do this.

Westwards lay a line of cloud tops reaching little higher than my present altitude, and as Cornwall slid past far below I took three further climbs, the last being near Truro. Ahead the sky was now blue with both coasts clearly visible. To the south lay the Falmouth estuary where the high tide seemed to be lapping at the roots of the ancient stunted oaks that grow on the surrounding gentle slopes. To my right the north Cornish coast offered an interesting contrast, with its high cliffs, beaches of white sand and brilliant clear blue sea.

The view was as lovely as any I had witnessed during the recent World Championships in the French Alps, but the character of this flight was entirely different. For years I avoided major contests until I realised that, far from being my adversaries, having other pilots engaged on the same task was enormously helpful in developing my understanding of the medium and my skills. However, the knowledge that the only performance I can set out to exceed is my own makes competition flying for me a lonely, introspective experience, requiring enormous concentration to remain receptive to relevant factors whilst ruthlessly ignoring others.

Now I rejoiced in my freedom to indulge any fancy. Approaching St Michael's Mount I searched out the small sloping field where I had landed twenty six years earlier at the end of my first 500km flight which had begun at Swanton Morley. Next I noticed how low the land lay between the two coasts south of Hayle, and wondered whether some enterprising Cornishman would accelerate the work of the sea with a JCB, declare the resultant island of Penzance independent, and make fortunes from postage stamps, banking licences and EEC grants.

Descending below 5000ft I flew over the final piece of rough high ground leading to Land's End noting the tiny fields surrounded by stone walls. I remembered with awe the accounts in *S&G* of Olympia pilots scraping over this area as they tried desperately to reach their goal of St Just Airfield, above which I now turned in sight of the lighthouse.

Heading east I found weak lift over Camborne which put me in easy range of the clouds ahead, but then I saw Perranporth and gliders parked at the launch point. I had never been there, and the temptation proved too great. Whilst letting down I noticed the windsock showed a light northerly and found I could just maintain height 500ft above the cliff tops. This gave me an excellent view of the platform built to recover gold bullion from the wreck of the sailing ship Hanover which, according to the article I had read two days before, sank here in 1763.

"I tried to imagine the scene of the shipwreck..."

From my vantage point looking into the clear calm water I could see no sign of any remains, but I suspected from the proximity to the shore that Cornishmen would have stripped the seabed of anything valuable long ago. I tried to imagine the scene of the shipwreck, with the vessel lost and driven by great winds and waves, the crew soaking wet, shivering and terrified, and then the sudden dreadful appearance of the merciless great cliffs above them.

Five minutes later I was sitting at the launch ➡

point drinking a cup of tea. The club was running a public course to raise money, and was full of local news and interest in my flight. I wanted to stay longer but it was now 4pm, so I took a launch southwards towards a ragged cloud where I managed to climb half in and half out of its southern flank from its base at 1800ft up to 3500ft.

This got me to a much better cloud above the lunar like china clay mines near St Austell. Here I reached 7000ft and set off confidently eastwards to find that each successive cloud I entered only yielded weak turbulence before I burst out of its far side.

Thus I descended steadily until I emerged below cloudbase south of Launceston. The spread out I had observed earlier near Plymouth had expanded up the Tamar valley and across Dartmoor with just a few holes through which the sun was shining like a celestial searchlight.

I flew on very slowly, finding wide areas of zero. Near Brent Tor I ran into drizzle so fine that I heard it on the airframe before I could see it on the canopy. To the north-east I could see tempting sunshine but it was well out of range as I searched patiently at 2500ft for lift, the outcome of the flight in a delicate balance.

"...leaving a glider stranded elegantly in a cut field..."

After fifteen minutes I spotted four gulls circling to my left. As I approached the variometer swung imperceptibly until it showed 2kts climb directly below them. Ten minutes later I set off towards the distant sunshine and near Winkleigh contacted an excellent cloud street which took me to Tiverton. My final glide was in calm air, the sea breeze having advanced up the Exe valley leaving a glider stranded elegantly in the centre of a cut field just short of North Hill.

We derigged in warm sunshine surrounded by lengthening shadows and then drove down to Ottery St Mary where John and Val Fielden live in a gingerbread house surrounded by a magic garden. We spent the evening celebrating our reunion and talking avidly about our respective families, gliding, music and John's latest electronic inventions.

It was dark by the time we tumbled into bed, but I could still detect the blooms of the azaleas and rhododendrons outside the window. As I drifted off to sleep, in that period when one's mind seems to hover above one's body, I was aware of an inner feeling of contentment, of harmony with my fellow creatures and the environment, followed by a sense of benign revelation that there *is* validity in existence and an inexplicable destiny.

While there may be no answer to the Traveller's question, his own reply may suffice:

"Tell them I came, and no one answered,
That I kept my word"...
And how the silence surged softly backward,
When the plunging hoofs were gone.

LIES, DAMNED LIES AND STATISTICS

Each year when the February issue of *S&G* arrives I turn eagerly to the annual statistics. Now that I have been reading them for twenty years it is high time I wrote up my conclusions

First an overview of how the British gliding movement has done over the last twenty years.

It is disappointing, but not a surprise, to see that full flying membership of the civilian clubs has declined by about 10%. From 8839 to 7972 full flying members. However, it is probably not quite as bad as that.

The 1977 statistics gave the membership of Lasham as 689. In addition there were 88 for Imperial College, 62 for the Polish club and 313 for Surrey & Hants, an implausibly high total of 1152 for the Lasham site. If we assume double counting in 1977 the decline from an adjusted 8376 is a more modest 5%.

The number of listed clubs is about the same at 79 as compared with 78, however, it is not clear to me how many separate sites that represented. In 1977 there was multiple occupation at least at Portmoak, Lanarkshire and South Wales as well as Lasham.

Equipment

There are now slightly more of all club aircraft, two-seaters, single-seaters and tugs, but the really spectacular rise is in private ownership. This has more than doubled from 789 to 1668 aircraft. My subjective impression is that the average size of syndicates has fallen so that there is very much more opportunity for soaring. That is borne out by the leap in flying hours.



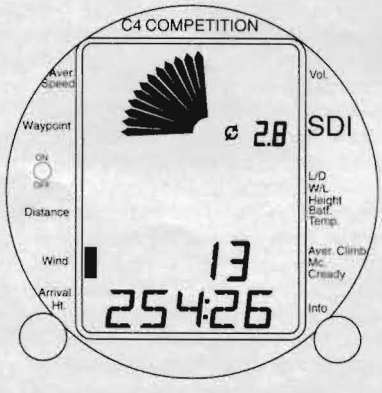
Charles, a full Cat for nine years, flies at Lasham and Talgarth.

Quality of information

At this stage it is worth pausing to think about the quality of the information. Some figures are more reliable than others. Hopefully every club knows how many club aircraft it has and also has a fairly firm list of full flying members. The number of launches should also be fairly reliable though the roundness of some of the figures suggests that the totals are not perfect.

From my own observation of how several clubs track the number of temporary members, I believe that there is a certain fuzziness about the numbers and some implausible returns. Can it really be right that London has two and a quarter times as many temporary members as Lasham, or that nearly a third of all their launches are by temporary members?

Imperial College probably has the highest average intelligence of any club and the least plausible statistics. Can 24 members really have done 5000 aerotows to achieve 10 000hrs in only three aircraft? Mind you, the previous year they



SDI Franz Pöschl

VARIOS/FLIGHT COMPUTERS FOR GLIDER PILOTS

Sales in UK

ERNST SPECHT Tel/Fax 01203 382190

FRANK STEVENS Tel. 0121 3532146

SPECIAL OFFER

C4 *COMPETITION with Garmin 12XL*

- wind calculation – direction/strength
- fast centring in thermals with tendency arrows
- GPS Interface as standard

AVAILABLE NOW! PRICE ON APPLICATION

also averaged over 1000 winch launches each! That is 22 per aircraft per day.

Generally the most unreliable figure has to be the cross-country distance. First, few clubs seem to have any systematic way of recording cross-country flying. Then there is the problem of definition. What exactly is a cross-country flight? To some going 30km from the site is an adventure worth recounting. To others 5hrs of casual sightseeing does not count because they had no declared task.

Cross-country flying

The annual statistics show a substantial jump in the amount of cross-country flying. And so they should. In total the statistics are a problem for the reasons already given, but the trend of an increase of 350% over twenty years feels about right. The badges, though, tell a different story. Table 1 shows the number of Silver and Gold badges awarded in each five year period. It will be seen that there has been no real change over the twenty years.

Table 1

	Silver	*Gold*
1977 - 1982	1412	267
1982 - 1987	1265	332
1987 - 1992	1436	408
1992 - 1997	1310	363

Astrologers might note that the number of Silver badges is cyclical with the same period as the sunspot cycle. Lies, damned lies and statistics indeed!

What is probably happening is that a relatively small number of people are using the better equipment to do a great deal more cross-country flying whilst the majority of members are still doing none at all.

What makes a good club

One of the more intriguing questions is why some clubs grow and prosper and others struggle. To try and provide a partial answer I compared the membership of individual clubs in 1993 with 1997. Only special circumstances can allow the very small clubs to exist and so I ignored clubs with less than 50 members. I also ignored the large clubs with 250 members or more. That left 43 clubs.

Next came the task of trying to identify the features which divided the growing from the declining. Number of club gliders, tug or no tug, hours or kms flown. Absolute level or on a per member basis. My computer would happily draw a graph and its trendline but none of these comparisons seemed convincing until I turned to launches per member.

Simple launches per member ignores the number of flights taken by temporary members and so the next stage was to try and adjust for the number of flights taken by temporary members. In fact it turns out that the plausible assumptions one can make about the average number of flights taken by temporary members changes the detail without changing the pattern. Useful conclusions can be drawn by going back to the crude average of total flights divided by the number of full flying members.

The next refinement was to discard those clubs whose membership had fallen by more than 30% over the four years. Such clubs must have encountered some special difficulty. Then those clubs whose membership had changed by less than 5% either way were also discarded.

Unfortunately one of the remaining clubs has most peculiar statistics with more two-seaters than normal for a club of that size, an astonishingly large number of launches and terrifyingly small hours per member, so I ignored that one too. That left 11 declining clubs and 19 growing clubs.

The critical factors

The growing clubs averaged 51 launches per member as compared with 32 for the declining. In fact 40 launches per member seems to be a critical number. Only one growing club managed with fewer but only two declining clubs did more.

There is an indication that flying time may be an influence with an average of 18hrs per member for the growing clubs but 12 for the declining. The pattern is less clear, though, with quite a wide range in both groups.

Other statistics

Roger Coote (February issue, p41) suggests a number of other statistics that clubs could use to monitor progress. For example the number of new instructors each year and participation in competitions. Unfortunately most clubs will have too few entries in either category to draw a meaningful conclusion. What might be practical is to list the total number of instructors at each club and perhaps the total points scored on the National Ladder as an additional method of measuring cross-country activity.

Conclusions

A casual glance at the annual statistics shows that clubs vary enormously. Closer study produces the clear conclusion that the number of launches is critical to the success of the club. Unless you can provide at least 40 launches per member you have no prospect of achieving worthwhile growth.

The likely explanation is that new members need enough flying to make reasonable progress otherwise they drop out through frustration. If you are not achieving 40 launches you need to think seriously about the limiting factor. Is it the equipment or the opening hours or another cause?

Even the one exception to the 40 launches rule (Yorkshire at Sutton Bank) supports my point because it has obvious geographical advantages and facilities to make up for its low launch rate.

It may also help to try and increase the amount of flying time by abolishing any "come back after an hour" rules and encouraging the instructors to soar with appropriate pupils.

A personal view is that it is madness to allow trial lessons on summer afternoons. If the weather is soarable it is the members who should be soaring. Even if there are no pupils left, sending an instructor for some solo soaring is a better use of the two-seater.

Finally, you may ask, what sort of dull person would trawl through all these figures? Well at least I am an accountant and not an actuary. After all an actuary is someone who found accountancy too exciting.

Don't forget that after this issue S&G has a new editor, Le Forbes. See p129 for Le's PO address and tel No.

ZULU GLASSTEK LTD

Sage (SCHUEMANN)

★ High quality repairs completed on time
★ General maintenance, wax polishing, hard sealing and instrument installation
★ **New 57mm Sage SV fast response torque band vario – £350+VAT introductory offer**

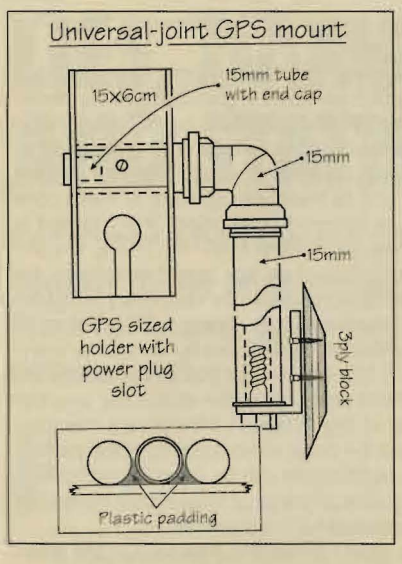


Pete Wells **Workshop 01844 208157**
Home & Fax 01844 201028 **Mobile 0831 273792**

VARIOMETERS – ***All models now in stock including new 57mm CV***

UNIVERSAL GPS MOUNT

Ivor suggests a GPS mount which will be suitable for small Garmins







Left: The mount with the wooden block showing velcro and the power slot. Right: The mount in place.

Not being acclaimed for my engineering skills I nevertheless decided I needed to make a simple plastic mount for my GPS after flying at Talgarth this February. Above the clouds in the sunlit winter sky I found the fixed mount left the GPS very difficult to read on some headings.

Removing the sunglasses did help but I felt if only I could twist the GPS in pitch and direction I'd be able to monitor it more easily. During the descent it was simpler (in cloud) zeroing in on the town side of the airfield, but using the MOB (man over board) facility in the strong sunlight it was a pain. Even so the GPS got several of us further up into the wave system.

Of course you could buy a mount from the manufacturers but it may not suit your particular needs. Most of the gliders I see have locally made mounts to suit the needs of the pilot/glider but I wanted mine to have tilt and direction angles which could be varied. My version also allows the GPS to be retracted to the side of the fuselage making room for up to size 11 shoes to slide past!

You will need the following:-

Speedfit 15mm elbow.	OBA bolt (1)
Small c/s woodscrews (2)	6BA bolt (1)
2mm plastic sheet (8x15cm)	
Epoxy resin 7 or plastic padding	
Small piece of plywood (1)	
L bracket in aluminium (1)	
Plus either:-: 2 lengths of plastic 15mm tube	
15mm plug ends (4)	
Or:- Speedfit tube inserts (2)	
Plug ends (2).	

All available at DIY shops.

From the diagram you will see that the tube is cut to length and the plug ends inserted at either end. The tubes are fitted in the elbow and held firmly by the non return collars and the rubber ring washers. The bracket, suitably shaped and drilled, can be screwed to the plywood block after it has been glued to your favourite glider, and secured to the upright tube with an OBA bolt into the resin therein.

I dipped the bolt into some beeswax first, allowing its removal when neccessary. The plastic tray can be formed by placing a heated metal rod along the angle to be bent. This prevents distortion of the sides to be bent up.

The tray is secured with a 6BA c/s screw and Araldite. To give a larger area of adhesion, I filled the curvature with plastic padding (liquid metal). A 15mm tube secured either side temporarily makes a neat job (see diagram).

Cover the bolt head to preserve the integrity of the GPS case. A 2cm slot or hole needs to be cut in the tray to take the power plug. Velcro at the top of the tray finishes the job.

Kena Me7

£14,450

inclusive of trailer and instruments – tax included

30 sold worldwide • Strengthened cockpit for club use
Easy rig, 32:1 glide • 130kg empty, auto connect controls
Extra 5cm legroom • Wing fairings



KENILWORTH INTERNATIONAL LTD

P.O. Box 3223, Dorset BH31 6FJ • Tel/Fax 01202 828886 • Mobile 0976 817626

HOW DO WE GET AND KEEP MEMBERS?

Jack, senior motor glider examiner and experienced at all levels of gliding, has also been giving some thought to the problem being faced by the BGA with an ageing membership



As a former CFI and chairman of several clubs, I have given a lot of thought to BGA membership levels and here are a few of my ideas. Obviously the list is long, but for a start I have divided it into two areas - how to attract new members and how to retain them.

Gaining new members

We need to advertise the joys, accessibility and benefits of our sport. While national advertising is very expensive, we can cut costs by interesting the media in what we have to offer. For example, free glider courses or flights.

- Blue Peter, a BBC flagship youth programme at peak viewing time with an audience of some six million, is worth targeting. Presenter Katie Hill thrives on adventurous challenges and her producer welcomes novel suggestions. A couple of years ago she flew five different RAF aircraft in one day which gave the RAF 12 minutes of prime time TV at negligible cost. Why not have one of our younger members challenge Katie to learn to fly a glider solo? If we succeed the cost to us should be no more than £1000 - and think of the spin off?
- Invite a national newspaper to run a competition for a free gliding course. Competition details would be repeated for several days with the strong possibility of a follow up article on how the winner got on. The prizes could be less costly at regional and local levels. But even one or a few glider flights would be cost-effective.
- Invite the local radio breakfast time presenter (this is a peak listening slot), or other radio personality, to record their reactions while in flight. Commercial radio, which is often run on a shoestring, is always keen to take up interesting free offers, particularly for weekend transmission when hard news is scant.
- Company sponsorship of individuals or groups could be explored, emphasising the character building benefits of gliding (courage, leadership, decision making, team work, responsibility and, above all, lots of fun).
- A similar pitch could be made to the national leaders of youth organisations, or local charity/social clubs, such as Rotary, emphasising that for many gliding had led to a well paid and enjoyable career in civil aviation.
- Clubs should be encouraged to be more proactive in "doorstepping" major employers in their area, encouraging them to include gliding literature and brochures on their noticeboards, and offering to give talks on our sport to a wide variety of local organisations and schools.
- No one can ignore the ultimate advertising tool to get your message across the world - the Internet. Clubs should be encouraged to use it.
- Above all, we should try to bring new members along. We all know someone who could be encouraged to give gliding a try. When I was CFI of a flying club I used the spur of free flying for those successful in introducing new members.
- The final stage of attracting newcomers is the air experience flight. Where potential membership is involved, I would be very cautious about using an AEI. I would try to have a more experienced instructor who would inspire the potential student with enthusiasm and confidence.

Retaining new members

It has often been said that for every ten who started to learn to glide only one would reach solo stage. Why do so many leave? Some just don't like flying but the majority leave for reasons which we can help to counter. Some examples are:

- Once they have joined, they are left to fend for themselves. Their launch rate is poor and they have to fly with a multitude of instructors, of varying abilities, often without adequate briefing so they make little progress and become discouraged. They are criticised for being unable to spend the whole day (or weekend!) at the club. There are inadequate facilities for families and at a minority of clubs some members are even frozen out because their faces don't fit.

How can we improve this?

Mainly, I think, through an expansion of the role of the instructor.

When I first joined the RAFGSA's Bicester Centre, on a good day we had five instructors and 50 students. Instructors were put in a two-seater and usually did not leave it until the end of the day. You did what you could but the students got little personal attention. The ratio has now changed and some days they have 50 instructors and five students! The way is, therefore, clear to expand the instructor's role but it will require a change in philosophy.

I would like each new student allocated to one instructor who is **responsible** to the CFI for guiding and training up to the Bronze badge and, ideally, the Silver. The instructor should be the mentor, getting to know the recruit as an individual, establishing a personal rapport and involving him in all the normal club activities.

Calendar time and flying hours to solo can be reduced by integrating motor gliders into the training syllabus. If an initial glider flight is followed by, say, 3hrs of training on a motor glider and then back to the glider, solo can be achieved much sooner at little or no additional expense.

For example, the USAF College at Colorado Springs sends around 2000 solo a year after 3hrs motor glider or light aircraft training and 11 aerotows. Those who don't solo on the 11th launch are considered to have failed the course! This method also significantly reduces launch line queues, keeping *ab-initios* happier.

Clubs should accept that members may have other calls on their free time and be satisfied if they come early to get the equipment out or stay until the end of the flying day to help put it away. Total involvement will follow later!

Clean toilets, a clubroom with TV and food all help to make the club attractive. You need to give families a warm feeling because if they won't come the enthusiast may well have to give up.

If clubs are to survive and prosper, they must be run on a sound financial basis. This means acquiring and retaining a full complement of members.

Obviously, safety must always be a first priority, but the next main aim must be for every member to say at the end of each day, "That was good, how soon can I come back again".

AIRBORNE COMPOSITES

C's of A, REPAIRS AND GLASSWORK

Purpose built glider workshop on a 500yd grass strip
2 nautical miles SW of Warminster

Currently maintaining over 15 motorgliders

Please fly in, call or write to:
Tim Dews, Airborne Composites, The Hangar, Wing Farm, Longbridge, Deverill, Warminster, Wilts BA12 7DD.
Tel: 01985 840981 (workshop) or 01985 841125 (home)
Fax: 01985 841126 • Mobile: 0378 963277 • E-Mail: TimothyDews@msn.com

JOINT AVIATION SERVICES LTD

The Only Insurance agent which offers the following.

1. **Unrivalled knowledge of our sport.**
2. **Access to more secure underwriters than any other independent agent.**
3. **FREE LOAN TWO SEAT AIRCRAFT TO ANY CLUB THAT INSURES THROUGH US AND LOSES ONE OF ITS TWO SEAT AIRCRAFT DUE TO CLAIM.***
   (Think how much you lose from a broken two seater in mid summer.)
4. **FREE LOAN SINGLE SEAT AIRCRAFT TO ANY CLIENT THAT LOSES THE USE OF HIS AIRCRAFT DUE TO A CLAIM.***

Not sure yet? Try us, to save money for individuals and clubs.

Telephone 01420 88664 • Facsimile 01420 542003 e.mail.joint.aviation@virgin.net

**Aircraft subject to availability and some small limitations*

CAMBRIDGE

The Best Variometer System just got Better

For the 98 Season CAMBRIDGE AERO Introduce the Following NEW Features in the LNAV Version 5.2

- High resolution Wind measurement shows airmass behaviour
- Wind Strength and Direction derived from GPS groundspeed & track
- Electronic fine tuning of TE compensation in flight
- Final Glide around a turn-point when coupled to Cambridge GPS/NAV
- Speed to Fly calculation now takes wind into account
- Required Glide Altitude can take into account the glider's total energy
- Automatic computation of Statistics to help making in-flight decisions

More Capability at Less Price

LNAV Version 5.2 complete with meter	£1497.02 + VAT = £1759.00
LNAV Upgrade to V 5.2 including recalibration	£ 80.00 + VAT = £ 94.00

Designed and Manufactured by:
Cambridge Aero Instruments
PO Box 100, Waitsfield
Vermont, USA 05673-1420

Tel: (802) 496 7755
Fax: (802) 496 6235

Represented by:
RD AVIATION Ltd
Unit 25, Bankside
Kidlington, Oxon OX5 1JE

Tel: (44) 01865 841441
Fax: (44) 01865 842495

CAMBRIDGE INSTRUMENTS - The choice of Champions - Leaders in innovative technology

TREVOR - AN AIRFIELD CHARACTER

As the years go by so memories accumulate of the sport's eccentrics and most pilots have a few stories to tell

Aviation attracts characters and gliding has its fair share of them. That Trevor is one there can be no doubt.

A thoroughly charming and likeable chap, it is only now that he has given up aviating his story can be told; it is simply too good for those of us who knew him to keep to ourselves.

I could see that Trevor was in trouble the first time I met him in 1963. Even a sprog like me could tell that you were not supposed to turn from downwind on to the approach in one continuous turn with the lower wing not 4ft from the ground the whole way round.

The way the entire field had come to a standstill and held its breath as the Prefect teetered around the turn gave another clue to the gravity of the situation, if one was needed. The way the duty instructor marched up to Trevor and dished out the ultimate penalty - grounding - left no room for further doubt.

The disgrace must have been too much for him for I didn't see him again for many years, although tales of his further exploits with the aero club filtered down the grapevine.

There was the story of how during his full spin checks with the CFI in the Auster his foot was jammed behind the rudder pedal. The hapless instructor had to undo his own harness and grovel around under the dash to free the offending foot before resuming control and recovering from the spin.

The years rolled by and I hardly gave Trevor another thought until after a decade abroad I walked into the clubhouse to find he had returned. Still his old affable self, Trevor nevertheless exuded the familiar air of supreme self-confidence which left one wondering after any conversation how one could have doubted him. A veritable ace, of course he knows what he is talking about..., or does he?

The answer came sooner than anyone expected. The club was updating the fleet and many of us were experiencing our first taste of glass. The second generation of glass ships was proving easy to fly and the problems were few.

Nevertheless for some pilots the anticipation of the quantum leap in performance, added to the unfamiliarity of a retractable undercart, was causing a certain amount of quiet concentration. I couldn't help noticing that Trevor's hands were trembling as he did up the harness in our gleaming new ASW-19. Still, he wasn't alone in this respect and a healthy concern for new experiences is no bad thing. However the launch went OK. Surely with our combined mental energy radiating from us Trevor wouldn't **dare** to bend it?

Anxious eyes willed the glider safely on to the downwind leg and a sigh went up as the wheel appeared at the appropriate moment. A few seconds later you could hear a pin drop as having turned finals the wheel went back up.

Anyone familiar with the cockpit layout of the ASW-19 will picture the rest. Just close your eyes and imagine, dear reader, the sweating pilot, eyes bulging like chapel hatpegs, hauling on the undercarriage retract lever (instead of the adjacent airbrake lever) wondering why the damned thing won't come down.

It plunged vertically into the ground at high speed, breaking into tiny pieces

Maintaining a steep approach, but without the benefit of airbrakes to slow him down, Trevor flashed past the launch point about 5ft up, accelerating in ground effect as he tried his utmost to get it down. Half a mile further down the field he touched a wingtip at about 90kt, and the craft swooped up sideways to about 100ft, then plunged vertically into the ground at high speed, cartwheeling and breaking into tiny pieces with a heart-rending crash.

It was a fortunate coincidence that an ambulance was parked alongside the airfield. There was a small crowd around what was left of the cockpit by the time I arrived. Quite certain that no one could have survived such a spectacular crash, I was surprised to find that Trevor was still alive and conscious as the ambulance crew and others stabilised him before removing him from the wreckage.

Not just conscious, it turned out, but quite chatty. "Have you ever been gliding?" he was heard to say to one of the paramedics as he was given an injection. "You must come along one day, I'll take you up."

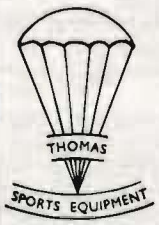
Certain the day would bring the news of Trevor's passing, it was a subdued group that resumed flying after the ambulance had departed. Can anyone imagine the shock of walking into the clubhouse barely two hours later only to find our hero cheerfully relating his adventure, nursing a bruised ankle but otherwise unhurt. The man clearly leads a charmed life.

Trevor was never seen gliding again, but he visited the site periodically, always leaving a tale to be told. Like the time he visited with three passengers in a Cherokee, then found himself unable to get airborne again without having to dump them one-by-one before flying home solo, leaving his party to return by taxi. This on an airfield not less than one and a half miles long, in the cool of evening at not much above sea level.

Some years later I met Trevor in church. He said he had given up aviating because the poverty he encountered during his church work sat heavily on his conscience.

He asked how I came to be on his patch. I explained that my daughter was playing viola in the school orchestra giving a charity concert in the nave as we spoke.

"Ah!" he exclaimed. "I used to play trombone when I was at school..." A wistful note crept into his voice, "...but I broke it."



Pop-Top Glider Pilots Parachute



- State of the art in emergency parachutes
- The Pop-Top. External seated pilotchute providing the fastest possible deployment.
- Fully encased risers resulting in a snag free parachute container system.
- Steerable parachutes in a range of sizes to suit all sizes of pilots.
- Soft, slim line design for the ultimate in comfort
- British built, quality assured to BS 5750
- Reliability, comfort and efficiency when it matters

THOMAS Sports Equipment Limited

Lofty's Loft • Pinfold Lane • Bridlington • North Humberside • YO16 5XS • Tel: 01262 678299

BGA & GENERAL NEWS



FROM THE BGA CHAIRMAN

Dick Dixon comments on the very successful BGA conference and dinner, announces changes at the top and reflects on the future

My thanks to Claire Thorne and Sylvia Bateman who once more did an excellent job of organising the BGA conference and dinner. The membership turned out in force to hear guest speaker Tom Knauff, whom we had invited over from America, give a witty and fascinating glimpse of his famous ridge soaring site in the Appalachians. The exhibition and trade stands were bigger and better, and a record 240 squeezed in for the dinner and musical happening! Planning is already in hand for the 1999 event, so look out for details.

As you will see on the opposite page, Chris Pullen has announced his intention to undertake a course to qualify as a commercial pilot. This means that he will not be able to continue as chairman of the Instructors' Committee and has handed over to Terry Slater. My grateful thanks to Chris for all his hard work and commitment during his all too brief period in office. He has established an efficient and comprehensive coaching programme, and laid a solid foundation for the future. I wish him every success in his new venture.

I am grateful to Terry for agreeing to take over the chairmanship of this committee at very short notice, and for the enthusiastic way in which he has already set about getting to grips with the many tasks which are involved in this important role. Terry will enjoy the full support of the Executive Committee, and I look forward to working with him in the future.

The 1998 AGM saw some changes to the membership of your Executive Committee. My thanks to Chris Hancock and Paul Rice, who leave us, for their past support and a warm welcome to Mike Jordy who joins us for the first time, and to Peter Saundby who is back for a second term, having previously served on the Executive some years ago.

Bearing in mind the changing times in which we operate, and the "Project 2000" strategic planning initiative currently being undertaken, there will be much to occupy your Executive Committee in the immediate future, with developments which are likely to be of interest and have implications for us all. In addition there is on-going activity in the areas of airspace, pilot licensing and winch operating, and we will continue to keep you informed as matters progress.

As I write, the soaring season is (hopefully) about to materialise. When one is submerged under a heap of paperwork it is sometimes difficult to remember that soaring is really what it is all about! I'm sure that most of us will have our own goals for the coming season, because that is the nature of our sport. Whatever your own particular objective, may I wish you every success and a safe and fulfilling season.

BGA AGM & CONFERENCE

Claire Thorne and Sylvia Bateman, the young glider pilots who last year resuscitated the BGA get-together, had another success. The conference buzzed with enthusiasm and there was a rush for rooms and dinner tickets with many disappointed.

Held again at the Hopcrofts Holt Hotel, near Kidlington, Oxford, the guest speaker was Tom Knauff, one of America's top pilots, who came with his wife Doris Grove. They run the Keystone Gliderport in Pennsylvanian and both hold an impressive clutch of records.

Tom gave two interesting presentations with an appealing, dry sense of humour.

Guy Westgate and Ian Tunstall described competing in the aerobatics competitions at the World Air Games.

Dick Dixon, BGA chairman, who conducted a lively, packed AGM, presented a BGA diploma to Howard Jarvis. For over 20 years Howard has dedicated himself to the Army Gliding Association and service gliding.

Infectiously enthusiastic, he has encouraged, organised and led many courses and competitions and held a series of AGA appointments from technical officer, competition secretary to vice-chairman. He has also been CFI of his club and represented the Army in Nationals and Regionals, all with typical modesty.

As vice-chairman Howard has, over many years, played a key and pivotal role, loyally and effectively holding the AGA together during some very difficult times.

Alan Middleton's diploma was accepted on his behalf. As a child he lived alongside Aberdeen Airport and used to climb over the fence to help out at the Aberdeen GC, being rewarded with training flights. He was a core member and instructor before it merged with Deeside GC at Aboyne in 1967. While at Aberdeen University he was a founder member of their gliding club and then worked for Elliots of Newbury.

In 1970 Alan returned to Aboyne with a Super Cub and Capstan, building up a repair and maintenance business as well as devoting himself to the development of the club with long stints as CFI. It was his initiative that has led to Aboyne being the wave soaring centre of today.

Mike Jordy, Keith Mansell, Chris Pullen, Peter Saundby and Terry Slater were elected on to the Executive Committee.

Chris Simpson, a past BGA chairman, auctioned the Comp No. 111, held by Martin Seth Smith and last used on his DG-400. Martin, who is giving up gliding after nearly 50 years, generously agreed to match the bid with the proceeds going to the Philip Wills Memorial Fund in memory of his brother, a test pilot killed in a flying accident in 1945.

With a skilful selling technique, Chris raised £510, the number going to Terry Joint.

Emphasising the turn round in this event, there were more exhibitors with a marquee for rigged gliders including the Alliance 34 (Centrair's two-seater, see p139).

Those lucky enough to have one of the coveted dinner tickets were treated to some classic Platypus as he fired off a volley of observations and comments on life and gliding.

The annual awards were presented by Mary Dixon, Dick's wife, as follows: - **Wakefield** (longest distance), **Seager** (longest two-seater flight) 770km in a DG-500 on September 8 and the **Enigma** (Open National Ladder) Neville Allcoat (Scottish Gliding Centre); **Furlong** (longest triangle) Peter Baker (Cambridge GC), 489.6km in a Discus on May 14; **California in England** (longest flight by a female) Jess Pennant (Glyndwr Soaring Centre) 491km in an LS-4 on August 18; **Volk** (longest O/R) 443.2km in an LS-6c on August 8 and the **Slingsby** (National Weekend Ladder runner-up) John Bridge (Cambridge GC); **Frank Foster** (fastest 500km) and **Manio** (fastest 300km) Martyn Wells (Lasham Gliding Society) 102km/h in an LS-8 on August 15; **Rex Pilcher** (earliest Diamond distance) Paul Rackham (London GC) 502km on August 15; **De Havilland** (maximum height) Geoffrey McVey (Lasham Gliding Society) 22 000ft; **Goldsborough** (highest placed pilot in the World Championships) Justin Wills (ASW-27); **Firth Vickers** (National Open Ladder runner-up) Mike Young (Cambridge GC) and the **L Du Garde Peach** (National Weekend Ladder) Ed Johnston (London GC).

It was good to experience such a vibrant weekend and Claire and Sylvia deserved their bouquets presented by Dick Dixon and the many thanks from us all.

AND IT'S GOODBYE FROM ME

This is a sad issue for me - my last after more than 25 years. It has been an incredibly happy time, made so by the help, courtesy and good natured attitude of the many thousands of readers who have contributed to *S&G*.

So many people have been involved in the magazine over the years it is impossible to give them a mention. However, they know how much they have been appreciated.

I have fond memories of Rika Harwood, who died in 1995. She worked on *S&G* during the Doc Slater years and was a great help to me, especially in the early days.

And there are two people I must particularly thank. Barry Rolfe, BGA secretary, has given great support, encouragement and sound advice. And my husband, Bryce, has always been willing to help, whether checking tables, reading technical copy and even mastering desk top publishing to teach me in the quieter moments between deadlines. He has also become an expert proof reader.

I am handing over to Le Forbes with great confidence. She has all the enthusiasm and energy needed to give *S&G* a facelift to take it into the next century.

DEVELOPMENT NEWS



Like others in this issue, Roger Coote, BGA development officer, writes about the concerns of falling membership and explains how seriously this is being taken by "Project 2000"

Falling membership numbers are of concern to the whole gliding movement. In the last issue, p104, and at the AGM, BGA chairman, Dick Dixon, outlined a number of initiatives being taken by the "Project 2000" task forces to identify the causes and to try to put things right.

The following table derived from BGA annual returns, gives some indication of the problem:-

	1990	*1994*	*1997*
Full flying members	10 586	9522	9225
First solos	1368	819	631
Bronze badges	471	414	319

Membership numbers have declined by 200 in the 12 months with progressively fewer first solos and early badges indicating the lack of newcomers to the sport. The problem, however, is not quite that simple. Recruitment of new members is only part of the story. Equally important is their retention and hanging on to them to solo stage and beyond.

A turnover or "churn-rate" of members recruited and members lapsed, representing 20-30% of the club membership, is not uncommon in many sporting organisation and gliding appears to be no exception.

"Project 2000" is undertaking a survey of BGA clubs in an attempt to establish the full extent of the problem and also to determine whether or not there is any statistical correlation between membership retention and the service or product offered by individual clubs. As a taster, Michael Bird designed a questionnaire which was distributed and completed at the AGM. It was analysed overnight and commented upon at a breakfast session the following morning.

One hundred delegates asked what they thought were the main reasons for the decline in membership over the last five years gave three favourite causes:-

Lack of commitment: people expect instant gratification 66%
Competition from other (non-gliding) sports and leisure activities 65%
We're not selling our sport well enough to the general public 65%

The assembled gathering felt overwhelmingly that lost membership was **not** due to frustration resulting from poor instruction or to lack of equipment, nor was it because gliding is no longer perceived as fun.

However, as Mike Bird pointed out above the clatter of breakfast cutlery, delegates at an AGM are hardly a representative sample, being made up mainly of private owners, instructors and experienced cross-country pilots with an average age of 53! Younger members might be expected to hold different views.

If this exercise is to be meaningful, we must have the opinions of a more representative sample of glider pilots. We are therefore preparing a similar questionnaire to go out to clubs to sound out the views of the full range of members. To be really objective, we need to question those who have already left the sport and we understand that some clubs can help as they have already pursued that line of investigation. We also want to know about facilities and charges so that we can identify best practices which can be compared with information from other sports in the UK and from gliding organisations in other countries. After all, we might be experiencing a general malaise as society becomes more sedentary and hooked on computers!

But this is not an academic exercise. Clearly, changes are necessary but there is no point in theorising about issues beyond our control. The questionnaires are aimed at self-help and will be structured to address problem areas which can be influenced and controlled by gliding clubs themselves.

Then, perhaps we shall stop the rot ? (See also Jack Alcock's article on p165.)

Publicity Campaign - help needed!

A central media pack is being developed to provide a source of suitable publicity material for those occasions when a club is asked to provide a presentation on gliding to a local organisation or to the local press. We need members' help in two ways:-

1. Good quality gliding photographs (see classified advertisements in this issue).
2. Evangelists. We need a personal point of contact at each club - someone who will attend a central publicity briefing on how to use the media pack and then go forth and spread the word. Club chairmen have been asked to nominate volunteers!

Finally I would like to thank Dick Dixon and members of the BGA Executive for their very kind gift, presented to me by Dick at the BGA dinner - a fine set of golf woods. Also, for putting my name up for the Royal Aero Club's silver medal which was awarded a few days later and will always be treasured.

But I hope to remain in contact with many of you. We are planning to launch a motor glider magazine later in the autumn.

SUB COMMITTEES

At their first meeting after the AGM the BGA Executive Committee appointed or re-appointed the chairmen of various sub committees for the ensuing year as follows:-.

Airspace - Carr Withall; Competitions - Graham McAndrew; Development - Max Bacon; Safety - Bill Scull and Technical - Mike Woollard. Chris Pullen announced that he was not available to stand for re-appointment to the Instructors' Committee owing to pressure of other activities. He was given a formal vote of thanks by the Executive for his work during the previous three years and it was decided to appoint Terry Slater as the new chairman of the Instructors' Committee.

Barry Rolfe, *BGA secretary*

OBITUARY



TED SHEPHARD - 1928 -1997

Much has been written elsewhere about the death of Colonel Edward Geoffrey Shephard, last winter. Quite rightly, for he was a man of many parts. Not only was he Deputy Lieutenant of the County of Oxfordshire, but also a respected pilot of the Army Air Corps, a forceful CO of the RAOC, official of the British Red Cross, of the Territorial Army and of the Army Air Corps Association. He was a kindly, gentle, happily married man whose exemplary life was ruled by an extraordinary will to serve for the benefit of others.

A passion for country activities and outdoor sports brought Ted into gliding, and he was in at the birth of Lasham and of the Army Gliding Association in the l950s. He worked his way through nearly every appointment in the AGA from secretary, to Flying Committee and chairman. He was in turn chairman of the clubs at Detmold and Odiham. He held two Diamonds, competed in National Championships and was Army Champion for many years. He became Inter-Service Champion in 1959.

In l981 he received the BGA diploma in recognition of his devoted service to our extraordinarily demanding sport. He was a generous instructor and delighted to see many of his pupils approaching his own high standards. On retirement he was appointed a vice-president of the AGA.

Ted's clear leadership, sound advice, warm friendship, infectious laughter and dapper appearance are going to be greatly missed by all who had the honour to know him and who so admired the love he shared with Cathy, to whom we extend our affection and condolences.

DONALD SCARFE

NATIONAL LADDER

The sharp-eyed amongst regular readers will have identified an extra Ladder, created for pilots aged 25 years or under on October 1, 1997. As expected at this stage of the season, height claims dominate many of the top ladder positions. However, following the Easter deluge, there were reports of thermals down south and I am certain that it is only a matter of time before Scotland's current dominance is seriously challenged.

Open Ladder

Pilot	*Club*	*Pts*	*Flts*
1. K. Hook	Scottish GC	3662	3
2. L. Blows	Southdown	3152	3
3. A. Brown	Scottish GC	2137	2
4. R. Allcoat	Scottish GC	1880	1

Weekend Ladder

Pilot	*Club*	*Pts*	*Flts*
1. R. Allcoat	Scottish GC	1880	1
2. E. Baker	Cambridge	1070	1
3. A. Jude	Cambridge	866	1
4. J. Wilton	Four Counties	812	3

Junior Ladder

Pilot	*Club*	*Pts*	*Flts*
1. A. Jude	Cambridge	866	1
2. J. Hood	Four Counties	25	1

John Bridge, *National Ladder steward*

AN AWARD FOR PETER

Peter Saundby was presented with the FAI Paul Tissandier diploma by his HRH The Duke of York, president of the Royal Aero Club, at the Club's annual awards ceremony in March at the Naval and Military Club.

It was in recognition of Peter's many years of dedicated work to bring about a more practical and scientific approach to the requirements for Flight Crew Licences, in particular for sport and recreational flying, and for his work as an alternate delegate to the FAI Medico-Physiological Commission.

BBC producer/narrator Dean Squire and cameraman Mark McCauley were also presented with the RAeC Nexus trophy for their half-hour *Masterclass* programme on learning to glide, which they made for the BBC's News 24 cable and satellite channel.

The trophy is awarded annually for the single media item which has done most in the preceding year to promote sporting and recreational aviation. Their film was shot at Ballarena last August and featured Ulster GC's Jeff Gouk's solo.

UK COMPETITION RULE CHANGES

A number of significant changes and modifications have been made to the rules for UK competitions by the BGA Competitions and Awards Committee. Detailed on this page are the major ones that will affect everyone that flies in Regionals or Nationals. I have only summarised major changes and you should refer to the 1998 Competitions Handbook for full and complete details of all contest rules.

Task postponement or cancellation: The director may delay the opening of the startline or cancel the task for safety or sporting reasons.

Turning point definition: A TP is now defined as the lat and long of a ground feature published by the organisers. If this does not correspond to the defined feature by more than 1km then the task will be scored as an alternative TP task.

TP shape: The shape of TPs is now common for all competitions and is the "thistle" shaped zone consisting of a ½km radius circle centred on the TP for GPS verification and a 90° sector (45° either side of the bisect) for photographic verification. There is the usual penalty zone of 45° either side of the sector that will attract a fixed penalty.

Landing point: A pilot landing in the same field as another glider in the same Class will be scored the same as the glider that landed farthest down the track in that field.

Start zones: For Nationals only, the start zone will consist of a semi-circle 6km diameter where the straight edge is aligned perpendicular to track. The depth of this start zone will be defined at briefing and will constitute the maximum start height. There is a penalty zone around and above this zone which will attract a fixed penalty and a valid start is given from the last logged point at or below the maximum start height within the zone. There are diagrams in the Competitions Handbook to assist the pilot to visualise the procedure but it is very straightforward. This system was used during the Worlds and worked very well.

Airspace penalties: Where an airspace infringement can be proved, either by logged evidence or other means, there is a sliding scale of penalties that will be applied. For vertical infringements there is a tolerance of 200ft to account for pressure variations and sticky instruments; a fixed 40pt penalty will apply above this with an additional 1pt penalty for every 5ft over 200ft. No tolerance will be allowed for horizontal infringements and penalties will be applied at 2pts/100m up to the first 1km inside airspace, and increased to 4pts/100m after that. Only one penalty will be applied per offence, whichever is the least, but the director may increase these penalties for serious or repeated infringements.

The rating system: We will not be adopting the new system for rating competitions this year. Due to problems experienced with the scoring system it was not possible to adopt a points based rating system as described by the Competitions and Awards Committee last year. An equally valid and effective system was produced using positions instead, still maintaining the assessment of actual pilot performance.

However, a majority of the Competitions Committee were uncomfortable with the prospect of adopting a system that was untried in an actual competition year, despite the extensive and encouraging trials using previous results. We have therefore decided not to adopt the new system until 1999 and use the time this year to prove the system in an actual competition season before adoption.

Places to the 1999 Nationals will be decided from this year's competitions using the current Priority and Promotions system and, all being well and unless otherwise informed, places for the 2000 Nationals will be determined using the new system.

My thanks to Ed Johnston, Paul Crabb and Henry Rebbeck who have selflessly devoted many hours' work painstakingly developing and improving what is a sound and effective solution to an arduous and convoluted problem. I hope they will forgive the hesitancy of the rest of the committee in not adopting their proposals immediately. It is, I know, due to an inability to comprehend its simplicity and suitability rather than any dissatisfaction with the method.

I hope the changes made to the rules benefit the smooth running and fairness for everyone concerned. If you have any comments, criticisms or complaints you can drop me a line at Lasham or make your point at one of the competitions forums during the season. Have a good one.

Graham McAndrew, *chairman of the BGA Competitions and Awards Committee*

BGA 1000 CLUB LOTTERY

The **March** draw results are: First prize - P. L. Bisgood (£48) with the runners up - Mrs E. Brockington, M. Davis, H. Maddams, S. Duerden and R. H. Dixon - each winning £9.60. **April**: First prize - G. J. Burton (£48.25) with the runners up - Dr D. Symon, J. Cliff, M. Pleasance, D. B. Eastwell and L. Walsh - each winning £9.65.

STRUCTURE OF THE BGA

The membership structure of the BGA is made up of 81 full members with affiliated clubs as follows:- Army Gliding Association, two clubs; RAF Gliding and Soaring Association, 13 clubs and the Royal Naval Gliding and Soaring Association, three clubs.

Operations. During the year ending 1997 (1996 figures in brackets) member clubs (civilian and service) flew 173 001 (173 619) hours and 1910 150 (2091 632) cross-country kilometres from 403 676 (468 459) launches from club sites. Club owned gliders total 512 (520) and privately owned gliders 1773 (1762).

Certificates were issued as follows:- A endorsements 631 (705), B endorsements 135 (127); Bronze badges 319 (306); Silver badges 186 (215); Gold badges 58 (84); Diamond goal 74 (92); Diamond height 78 (74) and Diamond distance 30 (32).

A certificates were applied for by 107 (115) holders of the ATC proficiency certificate.

INVOLVING WOMEN IN GLIDING

The first meeting of the British Women's team squad was held at Lasham on April 4. Due to limited space invitations were to Gold badge holders only, but through this piece we hope to reach all women involved in gliding. Our main aims are:

- To improve the standard of women's gliding.
- Raise the awareness of women in gliding through enhanced media publicity.
- To attract sponsorship for national squad training and competitions.

We discussed how to overcome the problem of ever decreasing government funds and how to find sponsorship for the Women's Europeans in Poland next summer. Advice on sponsorship was given by Judy Leden, the record breaking hang glider pilot.

We must increase the profile of gliding. By involving the press we give a prospective sponsor enough publicity to justify their investment and raise public awareness.

Obviously it is important to improve the standard of women's flying. There are many ways of doing this, but the determination of the individual ultimately achieves results. Women glider pilots have always had a low profile but this is changing thanks to the achievements of people such as Gill Spreckley.

To encourage women to be more involved and to have enthusiasm, there will be a National Records Breaking Week from July 5 - 12 when the emphasis will also be on achieving personal flying goals during the season

For more details write to me c/o of the BGA.
Jan McCoshim, *British women's squad co-ordinator*

Alps Defence Appeal: The following donations were received by the BGA from February 16:- K. Rowley, J. C. Dispaux, Portsmouth Naval GC, J. E. Nevill, B. Zijp, J. Ashcroft, M. Wells, Vectis GC, M. Cuming and Dr. J. Spencer.

GLIDING CERTIFICATES

ALL THREE DIAMONDS

No.	Pilot	Club	1997
543	Tanner, John	Deeside	9.12

DIAMOND DISTANCE

No.	Pilot	Club	1997
1/781	Tanner, John	Deeside	9.12
1/782	Binks, Alan	Kenya	6.12

DIAMOND GOAL

No.	Pilot	Club	1997
2/2593	Henderson, Robert	Deeside	10.12
2/2594	de Tourtoulon, Alan	Essex & Suffolk	20.11

DIAMOND HEIGHT

No.	Pilot	Club	1998
3/1431	Porteous, Dave	Deeside	13.2
3/1432	Stone, Howard	Oxford	5.10.97
3/1433	Mackay, Duncan	Deeside	13.2

GOLD BADGE

No.	Pilot	Club	1997
2019	Henderson, Robert	Deeside	10.12
2020	Stone, Howard	Oxford	5.10
2021	Binks, Alan	Kenya	24.11
2022	Watson, Simon	Staffordshire	12.10
2023	Wilton, John	Four Counties	13.2.98
2024	Wells, Anna	Shenington	26.12
2025	de Tourtoulon, Alan	Essex & Suffolk	20.11
2026	Tietema, Rolf	The Soaring Centre	8.2.98

GOLD DISTANCE

Pilot	Club	1997
Henderson, Robert	Deeside	10.12
de Tourtoulon, Alan	Essex & Suffolk	20.11

GOLD HEIGHT

Pilot	Club	1998
Tomlinson, Michael	Black Mountains	25.1
Crosby, Dean	Yorkshire	13.2
Stone, Howard	Oxford	5.10.97
Binks, Alan	Kenya	24.11.97
Watson, Simon	Staffordshire	12.10.97
Wilton, John	Four Counties	13.2
Wells, Anna	Shenington	26.12.97
Palmer, Wendy	Booker	15.11.97
Tietema, Rolf	The Soaring Centre	8.2

Airspace Update - April 1998

Scotland. The new Letter of Agreement (LoA) allowing gliders to cross Airways B2 and B226 will be signed shortly and be effective from June 18, 1998. Full details will be sent to all clubs and pilots who are intending to fly across these airways or who may be attempting a flight to Scotland which may need to cross B2/B226 **must** have read this Agreement and signed the attached form to give to their CFI. The Scottish clubs will have copies of the Agreement and it will be part of their briefing to visiting pilots. It will become an annual requirement for pilots to read and sign as understanding the procedure.

The Scottish ATC authorities have been exceptionally helpful and the procedure is straightforward. As with Class D Airspace, pilots, when crossing the airway (Class A Airspace), will be in contact with an ATC controller. Please read, understand and obey the rules.

Wales. As reported in the last issue of *S&G* the higher level airway N862 has been extended south to the centre of the airway B39. This would have affected Diamond heights but the base of the new portion of the airway is FL195 from April 1 - September 30 and FL215 from October 1 - March 30. The base of the crossing airway, B39, has now been raised to FL215 permanently. These changes took place on April 23, 1998 and are **not** on the new 1/2 million maps. All clubs have been sent the CAA map of the new area.

LTMA. North of Luton in the area known as the Henlow box the base of Class A Airspace has been raised to 4500ft. The airspace from 3500ft - 4500ft is now re-classified as Class D. This requires a clearance from Luton but this should be a formality. This change will help all flights to and from Cambridge for clubs in the area and takes effect on June 18, 1998.

Luton. The extension to the west, over Aylesbury, of their Class D Airspace at 3500ft - FL55 takes place on June 18, 1998. RAF Halton and Dunstable will have LoAs and with a radio call to Luton all gliders will be able to use the alleviations granted to these clubs. The final agreement and map, not yet printed, will be sent to all clubs before June.

Camphill. A letter of Agreement for them to cross airway B1 with a similar procedure to Scotland is now being drawn up.

None of these changes will be on the new 1/2 million map but all clubs have been sent the CAA information maps and the changes will be in the **UK Air Pilot.**

There will be no more changes this summer but, as reported before, several areas of controlled airspace around the country which would benefit gliding and which I perceive could be given up, are being looked at by the CAA in co-operation with NATS (National Air Traffic Services).

Parachuting. Please try to avoid these sites and remember to fly well upwind of all parachuting areas if flying on the upwind side. You will not see a free fall parachutist.

Radio. The RACAL transponder has been further delayed with production possibly by September.

Carr Withall, *chairman of the BGA Airspace Committee*

SILVER BADGE

No.	Pilot	Club	1997
10 364	Garner, Edward	Booker	15.8



GLIDING AT PORTMOAK?

Just 2 miles from the airfield this cosy family run hotel offers REAL FOOD and REAL ALE at reasonable prices. All rooms are en suite

DINNER BED and BREAKFAST from £38.50

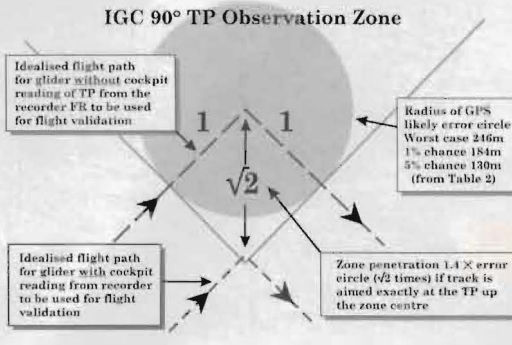
THE LOMOND COUNTRY INN

AA 2 STAR ROSETTE

Scottish Tourist Board COMMENDED

KINNESSWOOD BY LOCH LEVEN
PERTHSHIRE KY13 7HN
TELEPHONE 01592 840253 FACSIMILE 01592 840693

Correction: We have repeated this drawing from the article by Ian Strachan in the last issue, p102, because at the printing stage the first and not the second corrected disc was used. You will see the words underlined that should have been transposed.



CLUB NEWS



Dave Hinton (left) and Paul Hooke of Mendip GC. Photo: Keith Simmons.



Above: Henry Freeborn (Portsmouth Naval GC) soloed the day after his 16th birthday. He is photographed with instructor Tony World.

Copy and photographs for the August-September issue should be sent to Le Forbes, The Editor, PO Box 2039, Pulborough, West Sussex, RH20 2FN, tel 01798 874831, e-mail: le@blot.co.uk to arrive not later than June 9.

AQUILA (Hinton in the Hedges)
We are aerotowing every day of the week this summer with winch launching on Wednesdays. Our 180 Super Cub, funded by the Foundation for Sport and the Arts, has joined our Pawnee.

Renovation of the former club building and conversion into a briefing room adjacent to our new clubhouse, is almost complete, thanks to the band of hard working regulars.

Early season launches are well up with cross-countries in February. Visitors are very welcome - tel 01869 338432 so that we're expecting you.
M. P. E.

BANNERDOWN (RAF Keevil)
We are making a second twin drum winch to further improve our launch rate.

A club reunion and party are being organised for the weekend of June 20-21 at the airfield when we hope to entertain former colleagues. For more details please contact Robert Brain, tel 01225 742384.
D. C. F.

BLACK MOUNTAINS (Talgarth)
We actually bought our airfield and tug on April 9 and that evening 8 to 10in of rain fell on the Black Mountains. Talgarth was flooded as the river rose nearly 20ft. On Good Friday 3in of snow covered the airfield. What an inauspicious start for the new ownership! However, we flew on Easter Sunday and Monday.

Dave Unwin is the club manager in addition to being tug master and tuggie. To arrange visits and expeditions call Dave on 01874 711463 or e-mail: blackmountains.gc@ndirect.co.uk
J. C.

BOOKER (Wycombe Air Park)
We welcome full-time tuggies, Alex Smee and Tom Moutrie, and office manager Pat Bullen.

Despite promoting our cadet scheme more widely our new intake is still 9:1 to the boys.

The winter cross-country briefing sessions organised by Al Kay and Dave Watt were extremely well supported, and theory was turned into practice with two excellent soaring days at Easter with a good grid on both days.

Entry forms to our free Regionals can still be found on our Web site:http://homepages.nildram.co.uk/~bookergc/
R. N.

A "FLIGHT" OF FIRST SOLOS

BORDERS (Galewood)
We flew over 325hrs in October wave with excellent climbs to 15 000ft. From November to January we regularly soared in wave or hill lift, averaging 70hrs per month, weekends only.

Derek Piggott was the guest speaker at our annual dinner. He enjoyed good hill and early thermal soaring on the Saturday and finished his visit soaring in wave on the Sunday.

Our private fleet is growing with the addition of an old Capstan and a PIK 20b imported from Belgium, but we are rapidly running out of parking space in the enclosed compound.

Below: Left: Lasham GS's Kirsty Moss with instructor Tony Challans. Centre: Mathew Prowse with Dumfries & District GC's CFI, Neil Micklejohn. Right: Beverley Curran giving Derby & Lancs DCI, Ian Dunkley, a thank you hug for sending her solo on her 16th birthday.







Our Pawnee is expected back soon following an undercarriage repair.
R. C.

BRISTOL & GLOUCESTERSHIRE (Nympsfield)
The new team for courses is instructor John Dean, from Shenington, and local boy Theo Dee as launch assistant.

Chris Huxley is reviving our cadet scheme to encourage youngsters and with the same aim Bob Cunningham attracted lots of publicity for the club's fixed-price-to-solo scheme.

We're on the Web at bggc@demon.co.uk
B. F. R. S.

BURN (Burn Airfield)
Guy Westgate thrilled us with an excellent aerobatics course in, for once, perfect conditions.

Late winter and early spring brought a number of good thermic and wave days, giving us a few cross-countries and some respectable height gains. Martin Cooper has soloed.
S. J. K.

Obituary- Norman Lyons.
I am heartbroken to have to report the death of Norman Lyons, particularly as his illness seemed to be on the mend.

He took to gliding late in life and on retirement made Burn GC his second career. Always kind and cheerful, even at the end of his days, Norman put in a tremendous amount of work for the club.

An active committee member, he was always getting on with some chore or another, be it in the clubhouse, at the launch point or astride the lawn mower.

His particular forte was public relations and he introduced a great many people to the joys of our sport. His voice on the club answer phone was very much our trademark and he will be a hard act to follow. He enjoyed soaring his beloved K-6 and was the ideal syndicate partner.

I do not ever recall hearing a cross word from this truly gentle and good man.



Dave Hobson of Burn GC on final approach on his first solo.



Above: Oxford GC's cadets who have soloed, from left to right, Emma Cuthill, Rachel Brewin, John Mattingley and Tim Charlesworth.

Below: Left, Sandra (Sandy) Bailey of Norfolk GC with her instructor Mike Watson before her solo flight. Right: Andrew Dunn, aged 16, being congratulated by York GC's DCFI Mike Cohler. Poud father Graham, who recently soloed, looks on. ➡





Norman will be sorely missed by his family, his syndicate and the club.

May you rest in peace my southern friend.
Stan Kochanowski.

CAMBRIDGE (Gransden Lodge)
The airfield has been flooded and we didn't fly our new Puchacz until after Easter.

The private owner fleet has grown with two ASH-25s, an ASW-24, Ventus CT and a Ventus 2. We also have the use of the Scheibe 25c, thanks to Johnny Morris, Keith Sleigh and their syndicate.

Johnny has been busy with SLMG PPL conversions and MGIR ratings. For details of our summer courses for *ab-initio* and solo pilots, ring Roger at the club, tel 01767 677077.
A. N.

Cambridge University (Gransden Lodge)
It is almost two years since the student section separated from the Cambridge GC to form its own club. Our second year is on track to be even more successful than the first with launches up and four solos in one week in March. We plan to enter the Inter-University competition at Sutton Bank in August.

We have just bought our first glider, a beautifully maintained K-8B from Germany. Our thanks to all at the Cambridge GC for their help and continuing support without which this would not have been possible.
D. T.

CORNISH (Perranporth Airfield)
Sid Hillman has a SLMG PPL, John Shaw's first pupil. Dean Penny has gone solo and John Trick has a Bronze badge.

Nigel Climpson and helpers are converting our second K-7/13 to a three-wheeler (and no skids!) to match the one we did last year.

Thankfully, our Pawnee is back from its C of A. Courses and our seven day a week operation start on May 18. Visitors are welcome - combine that beach holiday with a few cliff soaring flights!
S. S.

CRANWELL (RAF Cranwell)
At long last our LS-8 (18m), the first LS-8 to be manufactured with big tips, has arrived.

At the other end of the scale, we are awaiting a K-8 to cope with our new solo pilots, the latest of which is Neil Atkins.

ROLEX WESTERN REGIONALS
NYMPSFIELD (Glos)
1 – 9 August 1998
When fields will be cut (and the sun will shine!)
Excellent prizes from our generous sponsors Rolex/Deacon & Son
To be run by our experienced team from our attractive site in the Cotswolds
Good Food, Bar and Clubhouse facilities
Tel/Fax Sue Gillett on 01285 656713

Mick Woods has completed 2000 gliding hours and celebrated by flying the first 2hrs of the year in early January. Mick Lee has over 1000hrs in motor gliders.
P. C.

DARTMOOR (Brentor)
The AGM reappointed John Bolt as chairman and the rest of the committee with the exception of vice-chairman Graham Lobb, who felt that his job was completed with Dartmoor becoming a limited company. Our thanks to Graham for all his hard work. We are also temporarily without a secretary as we failed to replace Susan Smith who kindly took over at very short notice.

Our first aircraft, a T-21, is to be sold to a syndicate within the club. A second K-8 will replace the club's second aircraft, a Swallow.
P. W. W.

DEESIDE (Aboyne Airfield)
Our congratulations to Alan Middleton on the richly deserved award of his BGA diploma. (See p168 and p177.)

A cracking February, including our first good thermal day on the 28th, and a good March, resulted in a trio of Diamond heights for club members Dave Porteous, Tim Davies and Colin Dewhurst, and solos for Jamie Hunter, shortly after his 16h birthday, and Dave Hammond.

We have a Grob 109B on site available to the club for training. Interest is growing in the UK Mountain Soaring Championships to be held at Aboyne in September.
J. D.

DERBY & LANCS (Camphill)
Dave Burton and Beverley Curran have gone solo, Beverley on her 16th birthday.

We have had wave flights to over 15 000ft with training flights up to the base of the airway.

Course bookings are up from last year. A Std Cirrus and DG-200 have arrived on site.

The old workshop has been demolished to give much needed space for the car-park.
W. T.

DEVON & SOMERSET (North Hill)
Our new DG-500 Orion is already a great success. The last two days of Easter gave us the first good soaring weather of 1998. We had local cross-country training and pilot conversions while Dave Reilly and Mike Fairclough, amongst others, completed O/Rs over snow covered Exmoor to the north Devon coast.

With our new fleet structure shaping up well many K-8 and K-6 pilots have converted to our Junior and Pegasus. We have to make a decision on our Lottery grant supported glider store. with a number of new options to be discussed.

Due to unforeseen problems at the host club, Competition Enterprise will be held at North Hill starting on Saturday, June 28, with John Fielden offering some interesting tasks. For more details contact the organiser, Sandy Harrup.
S. L

DUMFRIES & DISTRICT (Falgunzeon Airfield)
Winter has been a washout in southern Scotland with no flying from the end of November to the end of February. However the first good day produced good hill lift and everyone's spirits rallied.

Work is continuing to improve the airstrip and we have a membership drive. (If anyone out there has found the magic formula for gaining new members please let us know.)

We plan to replace our ageing L-Spatz with a more modern single-seater, such as an Open Cirrus. A second winch is coming, giving us a chance to overhaul our existing machine.

Mathew Prowse has gone solo.
S. A. C.

ENSTONE EAGLES (Enstone Airfield)
Tom Miller's Super Dimona aerotowed the club Twin Astir for the first time, with climb rates of 4kts. It will used this summer for aerotowing.

The Enstone Regionals, from July 4-12, will be directed by Steve Nash. We are also holding two task weeks, June 7-14 and August 16-23, to which visitors are very welcome.

We are now on a more secure financial footing after negotiations on the airfield lease and have plans to expand. Our thanks to Mike Weston and Pete Green for decorating our new task room. Tom Miller has handed over to Steve Nash as DCFI. We thank Tom for his work.
S. T.

ESSEX & SUFFOLK (Wormingford)
Our new hangar is due to be opened by HRH The Duke of Edinburgh on Wednesday, June 3. We will also have a ceremony to mark the club's acceptance of the flag of the USA, donated by Martin Lucash who flew from Wormingford with the 362nd Fighter Group during World War 2. There will be a contingent of 362nd FG veterans, a representative of the USA Embassy and the Mayor of Colchester, for the ceremony at the USAAF memorial on the airfield perimeter.

Peter Phillips and Steve Matthews have gone solo. New syndicate gliders on site include a Std Cirrus, an ASW-20L and a Ventus.

The club's Web site now has an interactive BGA TP search page and a cross-country task calculator page. Visit http://www.esgc.co.uk
A. S.

FOUR COUNTIES (RAF Syerston)
After many soggy weeks in March and early April the weather unexpectedly gave us magnificent soaring on Easter Sunday and Monday. There were several 200kms and Adrian Hatton and Richard Hood flew 300kms. John James gained Silver height with a climb to over 6000ft.

Our tug, VF, has had a major overhaul and been given a "new" engine.

The Easter weekend also saw the arrival of our usual intake of Air Cadet bursary students.
R. H.

FULMAR (RAF Kinloss)
Martin Pearce has a Bronze badge and Mike Hobbs gained a Bronze leg on his first flight in the K-18.

Concorde Day was somewhat of a washout and we only saw the beautiful aircraft for 5sec as it took off, but we had the planned barbecue.

We would like to reminder other BGA clubs that reciprocal membership would be welcome.
J. P.

Obituary - John Whitworth
I am extremely sad to report that after quite a long illness John Whitworth died earlier this year.

John, for long a stalwart in the gliding world, will be remembered by many. He started gliding at RAF Marham, where he became CFI.

He was still keen to fly (with a little help from his friends) until last autumn. John was well known and admired for his thought provoking comments on gliding practices throughout the years and will be greatly missed by us all.
Jacky Pratt

HEREFORDSHIRE (Shobdon Airfield)
Our Dunstable visitors in March had numerous long flights in wave and on the others days it was either thermic or the local hills were soarable.

Mike Dodd has become a full Cat instructor and DCFI. Alex Chappell has an AEI rating.
A. C.

IMPERIAL COLLEGE (Lasham Airfield)
A huge thank you to everyone involved with the C of A work over the winter, especially our president Frank Irving.

Our gliders should hardly be on the ground this season. We are taking all three to the Mynd at Easter; have a course in our Grob 103 at Lasham in the summer and our popular Grob 102 and ASW-24 have been booked for BGA courses and various competitions. We are thinking of upgrading our Grob 102 to something more modern such as a Pegasus or LS-4.

We have had a great response to our recent publicity drive and gained many new members just by bringing a glider into college and writing a letter in our student newspaper.

For more details about the club, you are welcome to e-mail me on andrew.holmes@ic.ac.uk or contact us at Lasham.
A.H.

KENT (Challock)
Our Pawnee has been refurbished and all the aircraft have had Cs of A by members, supervised by Bob Lloyd. Our seven day operation starts in early May.

At our AGM Cyril Whitbread, retiring chairman, was presented with a modern in appreciation of his work. Grahame Underwood has taken over with Stefan Bort remaining as secretary and Tim Gardiner as treasurer. The meeting decided, on a marginal vote, to buy a motor glider.

John Northen has an assistant Cat rating.
A. R. V.

LAKES (Walney Airfield)
We had some particularly good flying over Easter. With a stiff northerly keeping the sea breeze at bay, we had thermals up to 7000ft which is spectacular for Walney and unheard of in April. At the same time we had the usual wave and ridge lift. John Martindale retrieved the picture from Bowland Forest GC (Chipping) and Roger Copley made it there the next day.

Phil Storer gained Silver height and leads the club ladder - a fine achievement for an early solo pilot. Peter Seddon has his Bronze badge.

You will now find we have a Web site:- www.lakesgc.force9.co.uk.
A. D.

LASHAM (Lasham Airfield)
The clubhouse was full for the AGM. Paul Davis was re-appointed as vice-chairman, Jill Burry retired from the Committee of Management and Clive Davies was elected in her place.

This year the NE landing area has been extended, the northern airfield boundary re-fenced, a parking area for visitors set out, the briefing room re-decorated, the kitchen store extended and one winch re-engined.

There have been 93 cross-countries of over 300km. A "customer care" escort service for air experience pilots has proved of great benefit. The availability of single-seater gliders for early cross-country pilots is being considered. The cadet scheme, supervised by David Oliver, has 26 determined, talented pilots.

Wendy Durham has taken over as editor of our newsletter, "Rising Air".

Annual awards were presented to Gareth Bird, Annie Laylee, Peter Paterson, Steve Jones, Derek Piggott, Mike Miller-Smith, Matt Smith, Howard Jones, Richard Moyse, Alan Hardy and Nigel Stevenson.
A. M. S.

Surrey & Hants (Lasham Airfield)
Our AGM in March was well attended. Trophies went to Peter Patterson (first Diamond goal of 1997) and Peter Masson (for winning the Junior Nationals). Richard Brewer is now treasurer.

Some 25 have joined the unlimited flying scheme which offers membership and unlimited soaring in the K-8s and Group I or Group 2 gliders for a one-off, cost effective payment.

Logger barographs have been fitted to the Discuses, Ventus and DGs and new improved tow-out gear has been built for the fleet.
R. J. B.

MARCHINGTON (Tatenhill Airfield)
We still hope to move to our new site in October for which we have planning permission for a perimeter track. We have bought a Kawasaki mule for general work on the field.

The changes in East Midlands airspace affects us at Tatenhill and visitors by air should be aware of them and of the increased power traffic using the airfield.

We are doubling our cadet scheme, sponsoring four from local schools. The two cadets from 1997 have joined as student members and are near to soloing. Paul Juffs has a Bronze badge.
I. R.

Shenington Gliding Club

Shenington Gliding Club is now offering Individual Tuition with Bruno Brown. Specialising in:

CONFIDENCE BUILDING COURSES
INSTRUCTOR WORK UP TRAINING
GROUND STUDIES IN ALL GLIDING ASPECTS

All courses will be tailored to your own requirements but will include:

✓ STALL APPRECIATION AND SPIN AWARENESS
✓ LAUNCH FAILURE RECOVERY TRAINING
✓ UNDERSTANDING THE DANGERS OF LOW FLYING

"SAFETY THROUGH KNOWLEDGE" IS GOOD

SAFETY THROUGH UNDERSTANDING IS BETTER

Talk to Bruno on
01295 258700

MENDIP (Halesland Airfield)
At last it looks as though we will get planning permission for a building to house our winches and vehicles. We are most grateful to Roger Coote, BGA development officer, for all his help without which we would amost certainly be facing a costly rejection.

Local resident Alf Manning, on an AE flight, revealed that his last glider flight was in a Horsa as a member of the 1st Airborne Division. He had parachuted into Arnhem. He enjoyed the Bocian and commented on the smooth landing!

Dave Hinton and Paul Hooke have gone solo.
K. S.

NORFOLK (Tibenham Airfield)
At our annual dinner, awards were presented to Steve Bradford, John Goodfellow, Ray Hart, David Hill, Mark Panton, Nigel Riley, Edward Wood, and Roy Woodhouse. John Kinley won the "work cup".

Sandra Bailey, Mike Brookes and Aart-Jan Kerkhof have gone solo.

The new storage shed is happily housing our winch and associated large vehicles.

The first cross-countries of spring have been flown. John Herring, Dave Blyth and Bill Williams have a new ASW-15B. The entry list for the Eastern Regionals is full and our competitions Met man, Geoff Haworth, has been elected a Fellow of the Royal Meteorological Society.
B. W.

NORTHUMBRIA (Currock Hill)
Jim Martin, Police Air Support Unit, was the guest of honour at our wings and awards presentation evening in April. Among the trophy winners were Colin Saxton (for a 326km) and David Mands and Colin Neave (for 10 800ft in local wave).

John Hogbin is our new chairman, assisted by Martin Fellis (vice-chairman) and Don Welsh (secretary).

With the high winds and snow of Easter weekend nothing more than an unpleasant memory, we are once again enjoying the smiling season of soaring in the sunshine!
D. W. H.

NORTH WALES (Bryn Gwyn Bach Farm)
At our well attended AGM in March Roy Pittaway was elected secretary, taking over from Paul Cassidy. Steve Butler is the publicity officer.

Flying has been frustrating this wet spring but we have welcomed several new members and syndicates following the re-organisation of the Glyndwr Soaring Club.
D. C.

OXFORD (Weston on the Green)
Neil Turner and his many helpers toiled long hours over the winter to install a new 7.2 litre engine in the winch. Not only do we now have winch drivers who can hear but we can launch the Acro to 1700ft on no-wind days. ➡

ESC

Exciting Soaring Conditions in Spain, France and South Africa

★ *Ontur* – 250km SE Madrid – the area offers flatlands thermal, ridge, wave and sea breeze soaring. Resident instructor for dual flying and single seaters available. On site accommodation. Cheap flights and car hire from Alicante. June, September and October.

★ *Le Blanc* – Central France. Extend your cross country experience without airspace and weather restrictions and relax in rural France. July only.

★ *Mafikeng* – South African site of 2001 World Championships. Experience the exhilaration of soaring the big African skies. November-January 1999.

★ *Ferries & Travel Insurance* – large discount on brochure ferry prices and special 'glider pilot' travel insurance *also available to non member.*

At all our sites expert advice and tuition included.

EUROPEAN SOARING CLUB

Contact Elaine Townsend, 82 Bedford Road, East Finchley, London N2 9DA
Tel: 0181 444 6457 • Fax: 0181 883 8096 • Email 106163.1246@compuserve.com

IRVIN EB80 EMERGENCY 'CHUTE

. . . the investment of your life

A Parachute designed to provide a safe exit and low speed descent to even the heaviest of pilots yet occupying minimum cockpit space and providing long duration comfort.

PERFORMANCE DATA	
Max. operational height:	10,000ft
Max. deployment speed:	150 knots
Weight of assembly:	14lb
Rate of descent at 255lb:	17.7ft/s
Operational life:	15 years



Irvin Aerospace Limited
Icknield Way, Letchworth, Hertfordshire
Great Britain, SG6 1EU
Telephone: Letchworth 01462-482000
Facsimile: 01462-482007

HUNTING PLC

NORTH YORKSHIRE SAILPLANES

Tel 01845 577341 • Fax 01845 577646 • Mobile 0411 889245

nys



NEW MOBILE 0411 889245

REPAIRS
MODIFICATIONS
MAINTENANCE

Unit M, Alanbrooke Industrial Park, Topcliffe, Thirsk, North Yorkshire YO7 3SE

Four of our first cadets, Rachel Brewin, Tim Charlesworth, Emma Cuthill and John Mattingley, who started flying last April, have gone solo on or soon after their 16th birthdays.
S. M.

PETERBOROUGH AND SPALDING (Crowland Airfield)
At the well attended AGM Linda Hiron became secretary and Manuel Williamson vice-chairman. Our thanks to outgoing members for their work. Our annual dinner-dance was a great success. Trophies went to James Crowhurst, John Strebzerakowski, Peter Andrew and David Leggett with the wooden spoon going to Roger Gretton.

Stuart Thom and Michael Dawson have bought a Swallow, which was beautifully restored by Richard Kilham.

Peter Andrew, Alan Wiltshire and Alan Flintoft went solo on February 15, Alan Flintoft in our Husky tug. Our Pirat has been resprayed - many thanks to those involved.
D.R.L.

PORTSMOUTH NAVAL (Lee on Solent)
Last year we had a record number of launches, 7000 of the 8700 being by winch. Despite a wet January with large areas of the airfield waterlogged, we have continued our high launch rate. We now have two LPG twin drum winches with a further diesel single drum as a backup.

Gerry Holden, Richard Noyce and Brian Reid have AEI ratings. Our thanks to Roy Gaunt and Don Irvine for their coaching.

Atrocious weather delayed Henry Freeborn's 16th birthday solo until the next day.

Our thanks to the Deeside GC for their hospitality during our annual wave expedition.

Our future is still very uncertain, but we are hopeful of gaining at least a short extension to our lease and look forward to celebrating our club's 50th birthday in May 1999.
K. S.

SHALBOURNE (Rivar Hill)
The annual dinner in January was a great success with some 60 attending. Trophies went to Alan Wilkinson and John Day with, for the second year running, Richard Dann winning the award for the best dressed person on the field!

Thanks to equipment officer William Davis and his team, our petrol driven Chrysler winch has been given a major overhaul and will hopefully give improved launches, although in the right conditions our old Tost winch launched Dave Hill to our ceiling of 3000ft last November.

Jerry Pack, an experienced hang glider pilot, has gained his Bronze badge, 5hrs and Silver height within a short time of going solo. Kay Draper has Silver distance.

Our plans for a long term lease are nearing fruition and will enhance our prospects of Lottery funding to improve club facilities.
C. N. H.

SHENINGTON (Shenington Airfield)
Richard Day has gone solo; Paul Hann, Keith Marchant and Harry Phelps have Bronze badges; Dave Heath completed his cross- country endorsement and, with Damien Dyer, gained Silver duration on our ridge in February. Mark Fisher and Mike Miles have AEI ratrings.



Cambridge University GC's K-8 which they brought from Germany.

The club K-7 has been adapted for disabled pilots to fly. Our midweek operation is already busy and we welcome Gordon Burkert as our new course instructor. Expeditions from other clubs will be welcomed, so please contact our office if you are interested.

At our AGM, chairman Jacqui Miles and treasurer Colin Edmunds stood down after many years' hard work. Mark Stevens is now chairman and Mike Nelson, Mick Phelps and Andre Stokes join the committee.
T. G. W.



Above: Alan Middleton of Deeside GC who was awarded a BGA diploma. See p174. Below: Tom Miller's Super Dimona giving its first aerotow with Enstone Eagles GC's Twin Astir.

SOUTHDOWN (Parham Airfield)
Our AGM went smoothly. We thanked retiring treasurer, Peter Henderson, and Roger Coombs, who handed over as technical manager to Tim Brewer, for their work.

Learning to fly is difficult enough, but to go solo though profoundly deaf is an inspiration to us all. All credit then to Roger Moore and his Instructor Roger Coote.

Our ridge running season began commendably with long flights from Dick Dixon and Eddie Hahnefeld. Guy Westgate continues to dazzle us all by soaring the White Cliffs of Dover.
P. J. H..

SOUTH WALES (Usk)
Our new Skylaunch winch, which is giving excellent, reliable launches, a new tractor and a hangar extension are due to our Lottery grant.

The season started well with cross-country flights in February. Richard Slater has an AEI rating and Dave Jeffries is a full Cat. Many thanks to Cotswold GC for their welcome once again when our field was too wet to fly.
M. P. W.

STAFFORDSHIRE (Seighford)
Lara Davies completed her Bronze badge in record time before her 18th birthday to gain a Churchill Award from the BGA. At the opposite end of the spectrum, but no less of an achievement, Neville Cooper started his Bronze in 1958 and has completed it 40 years later. Is this some sort of record?

Lara and Dom Bayne organised a group of volunteers and made an excellent job of spring cleaning the area surrounding the clubhouse, while Lara's father, Ian, is conducting the Cs of A on the club aircraft.

➡



Cambridge Gliding Club offers you . . .

- A Discus, Pegasus, Astir, and two Juniors. And, choice of two seaters: K21, Grob 103, Puchacz, and, for fun, a T21.
- Three huge runways in the middle of great soaring country, with very few airspace restrictions.
- Personally tailored courses – call us and ask how we can help.
- Flying 7 days every week.

Located 10 miles SW of Cambridge, off the B1046, midway between Little Gransden and Longstowe. Phone 01767 677 077

SKYCRAFT
Telephone: 01763 852150
Facsimile: 01763 852593
ALBANY HOUSE, LITLINGTON
CAMBRIDGESHIRE, SG8 0QE

UK SERVICE STATION FOR
HOFFMANN PROPELLER
SKYCRAFT is the business name of Skycraft Services Limited

Summer Gliding Courses

Five-day gliding courses for beginners or those wishing to extend their experience up to solo standard and beyond.

Situated on the edge of the Cotswolds, with plenty of places to stay, Enstone Airfield is easily accessible from the M40.

- Unlimited flying.
- Large, safe airfield.
- Optional use of motor glider for circuit/landing practice.
- Friendly atmosphere.
- Course fee from £250



Come and enjoy yourself this summer at Oxfordshire's best gliding site

For more information call David Wardell on 01202 747176 or write to:

Enstone Eagles Gliding Club
Enstone Airfield, Church Enstone, Oxon OX7 4NP

NORFOLK GLIDING CLUB



Summer Courses

Winch and Aerotow Courses for Beginners
***NEW* Aerotow Solo Improvers Course**

FRIENDLY CLUB - LARGE SAFE AIRFIELD

For further info ring Claudia Herring 01263 734049
TIBENHAM AIRFIELD • THE HOME OF GLIDING IN NORFOLK

GLIDING HOLIDAYS

THE MIDLANDS NEAREST CLUB
(Easy M'way access from M40) (Junc. 15/A46 (4.5m only)

Visitors and new members are welcome • Trial lessons £25 •
5 day courses £225 May & June
£245 July & August

Phone for details 10am – 7pm 01926 429676

STRATFORD ON AVON GLIDING CLUB
Snitterfield, CV37 0EX

✦ *Lots to see and do on the ground or in the air* ✦

fleet includes:
Skylaunch winches
Pawnee tug
three K21s
two K23s
Discus
K13
K8

Call Janet Stuart for a brochure and details of 1998 holiday courses.
All our courses include all accommodation, food and flying fees.
01588 650206 longmynd@aol.com fax: 01588 650532



MIDLAND GLIDING CLUB

Long Mynd, Church Stretton, Shropshire SY6 6TA

http://members.aol.com/longmynd/mgc.htm

Professional winch drivers
Full time catering
Bar
Bunkhouses and private rooms
Caravan parking and camping

VISA

We are using our backup winch while our Tost has major repairs. We are expecting another Tost winch soon.

Few knew that Ted Barker (see the obituary in the last issue, p114) was a keen aeromodeller so we were delighted when his family presented the club with a beautiful one eighth scale (148in wingspan) K-8 airframe modelled by Ted. The airframe is complete but not covered. We have decided to assemble it as it is and display it in the clubhouse as a tribute to him.
C. J.

STRATFORD ON AVON (Snitterfield Airfield)
In spite of dreadful weather we have kept flying with our well proven twin winch retrieve system to protect the airfield surface. Part of the west end has been levelled and reseeded, improving the landing area for glass ships. We hope to continue the scheme as time and finance permit.

Gordon Graham, Fred Glanvill and Carl Sherwood have gone solo, Carl being our first solo student from NSGC. Lee Ingram has successfully completed an aerobatic training course at Lasham and Tony Palfreyman and Phil Pickett have full Cat ratings.

Dave Benton, CFI, has tales of fabulous thermals and long flights in Oz and Mary has returned to do our catering by popular demand.

Our summer courses and evening bookings are coming in very well with one Dutch family of five returning for the third year running - we must be doing something right.
H. G. W.

SURREY HILLS (Kenley Airfield)
As well as the usual crop of solos and Bronze badges, Mick Hughes has become a full Cat, Peter Farr an assistant instructor and Richard Fitch has an AEI rating.

Annual trophy winners included Dominic Finch, who soloed on his 16th birthday and gained a Bronze and cross-country endorsement within weeks, only missing his 5hrs by a few minutes. Dennis Henley's golden brick award was for making a new workshop door and securing it so well to the door frame that one of the K-7s was entombed for several days.

But the *prix d'or*, if we had one, would go to CFI, Peter Poole who, noting the strength of the pound, bought and collected a beautiful new K-8 from Germany at a bargain price. Eager pilots flew it immediately, still in its German colours, causing one local to observe that the last German registered aircraft to land at Kenley had been shot down while attempting to bomb the airfield during the Second World War!
P. E. B.

THE SOARING CENTRE (Husbands Bosworth)
Martin Chamberlain has taken over from Ron Beezer as CFI and has two DCFIs, Lyndsey Astle and Andy Parrish.

The private hangar has been finished and now houses a Stemme S10 and a club Bocian, until our Duo-Discus arrives at the end of the season.

The new shower block really is finished this time, thanks to a band of volunteers who worked throughout the winter. They have also refurbished individual bunkrooms.

Our annual task week has been moved to August 8-16, in an attempt to get some better weather. We still have spaces available and visitors are welcome.
T. W.

TRENT VALLEY (Kirton in Lindsey)
We have had exceptional soaring in January and February. Gordon Bowes, Simon Grant and Andy Macdonald went solo, Alan on his 16th birthday. Simon gained a Bronze leg on his second solo flight.

The Bronze badge winter lectures were well attended with Gordon Bowes winning the trophy for the best Bronze paper.

The AGM and annual dinner were in March. The dinner was a great success and our thanks to Brian and Chris Griffin and Wayne Dewick for organising it and other social events.

We have bought a dumper truck to retrieve and tow gliders on the field.

The double Indespension unit and wheels were stolen from our Puchacz trailer following tow hitch thefts last year. Glider owners beware.
S. R. W.

ULSTER (Bellarena)
A well attended on-site club meeting during our traditional Easter week endorsed a five-year development plan drafted largely by treasurer Ron Lapsley and secretary Tom Snoddy. Top priority is a second tug with upgrading of the two-seater fleet to follow next year or later.

Hail, some snow and gale force northerlies marred the week, which was well supported, as always, by Dubliners with several aircraft. The Arctic conditions were good for work-in-hand, however, and progress was made on fitting out the big workshop recently moved on site.

Another project is a fuel installation for tanker deliveries of Avgas to the site, anticipating the impending demise of forecourt four-star Mogas, our current tug fuel.
R. R. R.

VALE OF WHITE HORSE (Sandhill Farm)
Our web site, albeit without any photographs yet, is linked to the BGA club list.

Most of our solo pilots have tried the Me7 during the month the demonstrator was based here.

We are again taking part in the Inter-Club League with Chris Key as the new team captain.
G. N. T.

VECTIS (Bembridge Airfield)
February gave us more flying days than normal but the less said about March the better and it looks as if the task week planned for Easter won't be much better.

Paul Bateman, Dave Gray, Clive Lewis and Martin Parsons received awards at a well attended annual dinner and John Kenny is acting CFI during Neil Watts's absence in the USA.

The Lasham Motor Falke visited for some field landing and navigation exercises and Paul Bateman has his cross-country endorsement.
J. E. K.

YORK (Rufforth Airfield)
Our old clubhouse was finally dispatched in a celebratory bonfire and the grounds are being re-landscaped to prepare for a new parking area. An extension to the new clubhouse with its conservatory frontage is nearing completion and will provide excellent facilities.

Graham Dunn and his 16 year-old son Andrew have gone solo within a few weeks of each other, followed by Andrew managing to achieve a soaring flight of over 1hr on his third solo in thermic conditions in February. Rod Wellbourne also went solo a few weeks later and Richard Bamford has his second Bronze leg.

Our cross-country soaring courses are well under way. Colin Richardson is the first new tug pilot for some time, trained inhouse, which proves the usefulness of our two-seater tug.
M. D. C.

YORKSHIRE (Sutton Bank)
We experienced some wonderful wave and ridge days during February and March. Steve Rickets flew Diamond height and Dean Crosby Gold height. Steve Sanderson and Gavin Ward have gained Silver heights and Steve Silver distance.
C. L.

DERBYSHIRE & LANCASHIRE
Welcomes you to the spectacular Peak District

- Ridge
- Wave
- Thermal
- Open 7 days a week
- Fly our aircraft or bring your own
- Visitors most welcome
- Summer Holiday courses
- On-site accommodation, full catering and licensed bar
- Local attractions for all your family members

For further information please contact our
Club Manager, John McKenzie.
Tel: 01298 871270
http://ourworld.compuserve.com/homepages/MH1

KENT GLIDING CLUB

K·E·N·T GLIDING CLUB

Challock, Ashford, Kent TN25 4DR

Come to Kent for courses to suit all grades of pilots from beginners to cross country. Situated on North Downs thermal and ridge site. Meals and accommodation in comfortable fully licensed Clubhouse.

For details, write or phone:
01233 740274
Fax 01233 740811

CAA APPROVED COMPANY
AI/9182/89

Cotswold Gliders
http://www.cotswoldgliders.co.uk

HIGH QUALITY SPECIALIST WORK IN

Carbon, kevlar and glassfibre, wood and metal. Alloy airframe repairs a speciality.
All types of repair work undertaken, from minor trailer rash to large insurance claim.
Kestrel/Libelle rudder and aileron drive rebuilds, also NDT testing of rudder drive.
Motor glider engine approval. Machining facilities for wing pins, axles, etc. Tig welding.

If you require any of the above services, please contact
TONY COX
Tel: **Workshop 01993 779380** Office/Fax **01993 774892**
Email: **tony@cotswoldgliders.co.uk**
or **18 Stanton Harcourt Road, Witney, Oxon. OX8 6LD**

PAWNEE TUGS
Fully Rebuilt to Your Specification
For Early Delivery
PAWNEE AVIATION
01754 820316 Ph
01754 820329 Fax
(Note new numbers)

C OF A OVERHAULS
TO ALL TYPES OF SAILPLANES
FULL TIME SENIOR INSPECTOR
JOHN SMOKER
9 ANSON WAY
BICESTER, OXON
Tel: Bicester 01869 245422
WORKSHOP, NR. HINTON A/F
Portable 058 58 56 002

RESTORATIONS
and repairs to wooden gliders of all ages a speciality

SKIDS
Laminated ash skids for most of the popular gliders supplied from stock. Others made to order

TRAILERS
Aluminum sheeting on steel frame



Make rapid progress on a SUMMER COURSE at
Central England Soaring
Five day beginner's courses with launching by aerotow

- your training is tailored to your needs – only three students per instructor
- guaranteed launches and air time or a refund
- you'll find a real welcome at this friendly club – on site B&B
- Modest cost – to £395 including all launches, flying and instruction
- at Hinton Airfield. Brackley only minutes from M40 J11 within easy reach from anywhere between London and Birmingham

For a helpful chat and a brochure, phone 01869 338432

B O O K E R

- Open every day
- Benefits for annual club members include–
  Free single seater soaring October to March
  Free Bronze and Silver courses
  Free Aerobatics courses
  Free Field Landing courses
  Free 1/2 day course bookings for ab-initio pilots (max. 2 students per instructor)
- Range of gliders from Ka8 to Discus, from T21 to Duo Discus
- Efficient launch system – why wait?

And for next season's budding and current cross country pilots:

- *Free* cross country instruction available every day
- *Free* supply of EW barographs, batteries and equipment for all club single seaters
  GPS and cameras also available
- Gliders allocated daily, max soaring fee 2 hours any one flight
- Task setting and soaring forecast daily

Does your club offer all this?
For more details on courses and/or annual membership please contact the office where our experienced staff will be able to help you
01494 442501/529263
Booker Gliding Club, Wycombe Air Park, Marlow, Bucks SL7 3DP
(5 mins from M40, 15 mins from M4 & M25)
View our new web pages on **http://homepages.nildram.co.uk/-bookergc/**
E-Mail: office@bookergc.nildram.co.uk

Offering outstanding workmanship, efficiency and service in:

- ★ All glass, carbon, kevlar, wood and metal repairs
- ★ Modifications
- ★ Motor glider engine approval
- ★ C of A renewals and general maintenance
- ★ Weighings, including accurate in flight C of G positioning
- ★ Re-finishing in all types of gel coat and paint
- ★ Hard wax polishing
- ★ Competition sealing
- ★ BGA and PFA approved

ROGER TARGETT

ROGER TARGETT
Sailplane Services

Bristol & Gloucestershire Gliding Club
Nympsfield, Nr. Stonehouse
Gloucestershire GL10 3TX

Tel: Workshop (01453) 860861
Home (01453) 860447 (Portable (0850) 769060



For all your trailer requirements
Green Lane Farm
Lower Eggleton, Nr Ledbury
Herefordshire HR8 2UQ

The Trailer Builder

Shirenewton Sailplanes
Tel/Fax 01531 670522
Mobile 0860 313474

Fresh from the catwalks of PARIS & MILAN the BGA presents

THE PLATYPUS SUMMER COLLECTION

PLATYPUS GLIDING HAT & T-SHIRT HUMOROUS DESIGNS!!!

WHITE HAT WITH GREEN DESIGN – £5.00 (inc. p&p)

T-SHIRT – £8.00 (inc p&p) (black & royal blue with white design)

Sizes large and extra large

Special introductory offer –

BUY HAT & T-SHIRT FOR ONLY £12.00



BRITISH GLIDING ASSOCIATION

SALES DEPT., FREEPOST, LEICESTER LE1 7ZB
or ask us to send you our complete sales list

Telephone 0116 253 1051
(MASTERCARD/VISA accepted)

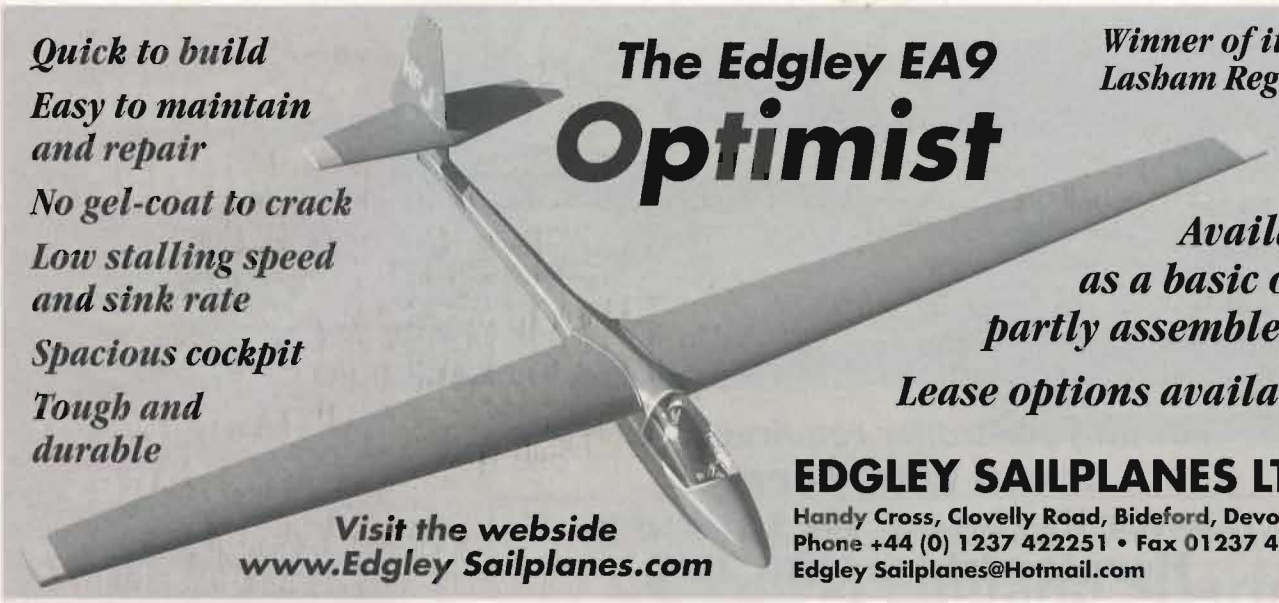
Quick to build
Easy to maintain and repair
No gel-coat to crack
Low stalling speed and sink rate
Spacious cockpit
Tough and durable

The Edgley EA9 Optimist

Winner of its class at Lasham Regionals 97

Available as a basic or partly assembled kit

Lease options available



Visit the webside
www.Edgley Sailplanes.com

EDGLEY SAILPLANES LTD
Handy Cross, Clovelly Road, Bideford, Devon, EX39 3EU
Phone +44 (0) 1237 422251 • Fax 01237 422253
Edgley Sailplanes@Hotmail.com

JAXIDA – condensation-free
ALL WEATHER COVER
for sailplanes and aircrafts

★ Protects against humidity and dust at the hangar, the trailer and in the open air
★ Self-polishing action in the wind
★ UV-coated

Design reg. 2062846

JAXIDA COVER
Verner Jaksland
Strandmøllevej 144
DK-4300 Holbæk
Tel. +4559440725,
Fax: +4559440609

e-mail: jaxida@jaxida.dk
internet: http://www.jaxida.dk

GLIDER INSTRUMENTS
(M. G. Hutchinson)

Repairs and overhauls carried out

P.Z.L. Sales and Service

Barograph Calibration centre

Write or phone:
'Tanfield'
Shobdon
Nr. Leominster
Herefordshire HR6 9LX
Tel: 01568 708 368
(answering machine)

For a real holiday...
...take a course with Cotswold

A Holiday Course at the Cotswold Gliding Club could well be the making of your soaring.

In just 5 days, improve your existing skills or start from scratch. Either way we'll happily tailor your learning to your needs, helping you to achieve your aims.

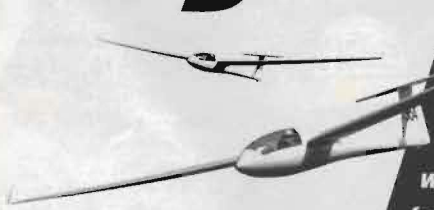
For more information, phone, fax or write to:

Cotswold Gliding Club
Aston Down Airfield
Minchinhampton
Stroud, Glos GL6 8HT
Tel/Fax 01285 760415



Try the BEST...

SEND FOR OUR FREE BROCHURE



We offer a professional approach to training, with a comprehensive range of courses from air experience onwards, at the friendliest club in the country.

- ***A Superb glass fleet of gliders***
- ***All year round, 7 days a week operation, with daily met and task briefing.***

PLUS - Intensive course to solo • Bronze C endorsement, field selection, navigation, training available • Book your club expedition now for 1998 ..... Just give us a call

The Soaring Centre
Husbands Bosworth Airfield, Lutterworth
Leicester LE17 6JJ
Fax: 01858 880869

For information please contact

Tel: 01858 880521

Ballast Water Tanks

- Fully Pressure Tested
- Custom/Stock
- Reinforced



Direct from the UK Manufacturer

stoWaway Air Cushion Ltd.
Unit 4SW Marchwood Industrial Park
Southampton SO40 4PB
Tel: 01703 870077 · Fax: 01703 870044

CANOPIES & SCREENS

✦

LARGE RANGE OF SHAPES AND SIZES FOR GLIDERS AND LIGHT AIRCRAFT

✦

EX-STOCK

✦

Bob Reece

REMATIC

School House
Norton
Nr Worcester WR5 2PT
Tel/Fax Worcester
(01905) 821334
Mobile Tel:
0589 786838

The Bristol and Gloucestershire Gliding Club

✦ ✦ ✦

Nympsfield – where the adventure begins

✦ ✦ ✦

Operational 365 days a year

FIXED PRICE TO SOLO –
all inclusive training to solo **£490.00**

POST SOLO TRAINING

Winch/aerotow
Soaring – all tasks individually tailored
Conversion to glass
Bronze and cross country endorsement
PPL conversion
Confidence building

Discuss your personal requirements with an instructor

Individuals and club expeditions welcome
Accommodation facilities

CLUB FLEET –
Ka13's SF34 DG505 Ka8's Grob 109 ASW 19

Write – phone/fax
THE BRISTOL AND GLOUCESTERSHIRE GLIDING CLUB
Nympsfield, Nr Stonehouse, Gloucestershire GL1 3TX
Tel: 01453 860342 • Fax 01453 860060
Web: www.bggc.demon.co.uk
E-mail: secretary@bggc.demon.co.uk

The Ultimate Self-Launch Two-Seater



First British S10-VT, flown in from Berlin over Easter, is all that was promised.

- Rotax 914 Turbo engine – 113.2 hp
- Impressive take-off and climb out improvements, even on wet grass
- Cruise across Europe at 130 knots with Range of 750 nautical miles
- Soaring power-off from Challock to North Weald – averager up to 7.5 kts
- Soaring and Handling enhanced by winglets and other aerodynamic fine-tuning – best glide ratio of 50:1

Second-hand S10 also available and in need of a good home.

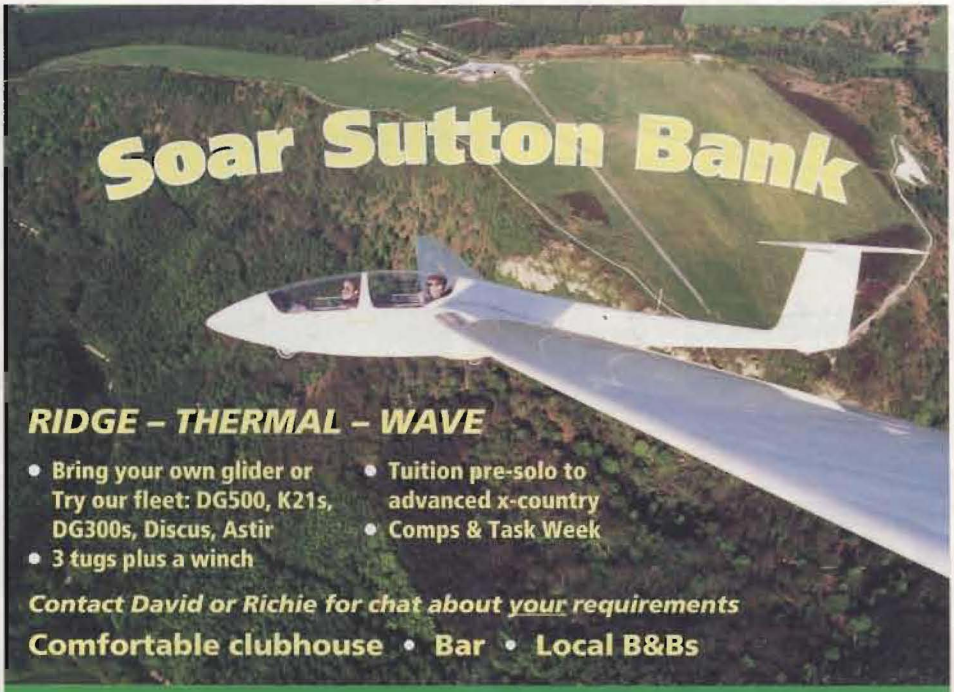
➤ Syndicate Partners Wanted ➤

For information please contact:
Mike Jefferyes,
Tanglewood, Fingrith Hall Road,
Blackmore, Nr. Ingatestone,
Essex CM4 0RU
Tel & Auto Fax: 01277 823066
MikeJefferyes@compuserve.com



SAILPLANE & GLIDING

You can buy the magazine from most Gliding Clubs in Gt. Britain, alternatively send **£17.50,** postage included, for an annual subscription to the British Gliding Association, Kimberley House, Vaughan Way, Leicester. Red leather-cloth binders specially designed to take copies of the magazine and gold-blocked with the title on the spine are only available from the BGA.
Price £5.50 including post and packing. USA and all other Countries. Payable in either Sterling £15.00 (or US$30.00) (or US $40.00 by Air Mail) direct to the British Gliding Association.



Yorkshire Gliding Club
Sutton Bank
Thirsk, North Yorks YO7 2EY
Phone: 01845 597237 • Fax: 01845 597307
E-mail: yglidingclub@compuserve.com
Web site: www.webmarketing.co.uk/ygc

GR 1000 IGC Flight Recorder

£535 inc.

NEW! . . . MASSIVE 24,000 fix standard logging capacity. Up to 33 hours at 5 second fix intervals; up to 200 hours at 30 seconds rate. Ideal for competitions, expeditions and freedom from the chore of downloading after every flight. Compare the competition – some recorders have very limited capacity, especially at faster logging rates. Best of all, the GR1000's fully integrated, all-inclusive approach is significantly cheaper than all IGC approved alternatives.
GREAT NEW flight planning software . . . TaskNAV for Windows 95 available now.



- Integrated 12 channel parallel GPS board. The latest and most accurate available today.
- Integrated electronic barograph to 11,000m
- Integrated GNSS logger – NEW! Standard capacity 24,000 fixes. NMEA interface.
- Integrated Engine Noise Level sensor
- Pre-loaded BGA UK TP list includes all 788 TPs from the 1998 list in WGS-84 coordinates
- Supports an additional 200 private TPs
- All CABLES are included in the base price
- Automatic switch to faster recording near task TPs and for pilot initiated marks on trace.
- Easy task programming using four keys, or, via the GR1000 PC software.
- Electronic task declarations.
- ACCESSORIES
  1. Optional small remote navigation display and control unit – £95
  2. Smart carrying case – £14.99
  3. NEW! TaskNAV for Windows 95 with built-in IGC, DAT and Garmin log analysis.
- 102 x 42 x 162mm and 500 grams.
- Power – 9v to 18v DC at 145mA
- GR1000 IGC software included in base price

The GR1000 is a maximum capability unit at the highly competitive price of £535 inclusive. For P&P UK inland add £8; elsewhere, POA. To order, or for further details, please contact the UK distributor:

D. J. Robertson, Elmstock House, 20 Duffield Lane, Stoke Poges, Bucks, SL2 4AB
Tel: 01753-643534 Fax: 01753-645218 Internet: 100327.2014@compuserve.com

Designed and manufactured by
Print-Technik Special-Electronic and Satellite-Navigation *A-1060 Vienna*
HTTP://WWW.GPS.AT

Nevynn international

Sole UK agents for S.N. Centrair gliders & Spare Parts *& stockists of over 700 other items*

The ever popular *PEGASE* 15mtr CLUB or PRIVATE GLIDER

Fixed or Retractable Undercarriage **SUPERBLY ENGINEERED & IMMACULATELY FINISHED**

A BARGAIN *at the current exchange rate*



❖ ❖ ❖

WE NOW HAVE AN Alliance 34 DEMONSTRATOR IN THE U.K.

❖ ❖ ❖

Please ask for a copy of our latest stock/price list, which contains many new products including: Instruments, ICOM Walkie Talkies *PLUS* HUGE REDUCTIONS ON SOME GPS's & CAMERAS

36 Southpark Avenue, Mansfield, Notts. NG18 4PL ▪ Tel/Fax 01623 634437



Choice soaring at Aboyne

COMPETITION

UK Mountain Soaring Championships – 6th - 12th September

Take this chance to extend your X-country experience in an organised and friendly atmosphere. Entry forms available

Autumn Wave

Slots still available for September and October. Call our Wave Booking Secretary now.

Summer Courses

We still have spaces on our courses, individually tailored to meet your needs. Phone Mike Law for details.

Make Aboyne your first choice - we'll help you get more out of your gliding.

For full details please contact

Deeside Gliding Club
Aboyne Airfield, Dinnet
Aberdeenshire AB34 5LB
Tel/Fax: 013398 85339

DEESIDE GLIDING CLUB

HARRY MENDELSSOHN
DISCOUNT
SALES

GLOBAL POSITIONING SYSTEMS

SKYFORCE SKYMAP II.....£ 850
SKYFORCE TRACKER II.....£ 595
SKYFORCE LOCATOR.....£ 125
SKYFORCE LOGGER.....£ 175

GARMIN GPS 38.....£ 109
GARMIN GPS 12.....£ 139
GARMIN GPS 12XL.....£ 185
GARMIN GPS 89.....£ 245
GARMIN GPS 90.....£ 325
GARMIN GPS 95AVD.....£ 299
GARMIN GPS 95XL.....£ 485
NEW – GARMIN GPSIII.....£ 329
NEW – GARMIN GPSIII PILOT.....£ 435
(all other **GARMIN** models & accessories available)

MAGELLAN MERIDIAN XL.....£ 155
MAGELLAN EC-10X with GPS.....£ 825

TRANSCEIVERS & RECEIVERS

NETSET PRO 63 receiver.....£ 109
NETSET PRO 60 receiver.....£ 139
ICOM IC-A3E transceiver.....£ 265
ICOM IC-A22E transceiver.....£ 308
ICOM A200 Panel Mount.....£ 649
NARCO COM 810+ Panel Mounted.....£ 979

TRANSPONDERS

GARMIN GTX 320 LIGHTWEIGHT & low power consumption TRANSPONDER....£ 699
NARCO AT150.....£ 775

HARRY MENDELSSOHN DISCOUNT SALES
49-51 COLINTON ROAD • EDINBURGH EH10 5DH
HOURS: MON-FRI 9.00am - 5.30pm
0131 447 7777
FAX LINE: 0131 452 9004
ADD £5.00 DELIVERY TO ALL ORDERS (U.K. MAINLAND ONLY)
NEXT DAY DELIVERY TO U.K. & EUROPE (available on request)
WE ACCEPT VISA, ACCESS, SWITCH, MASTERCARD & EUROCARD
VISA Access SWITCH MasterCard E
ADD 17½% VAT TO ALL PRICES

BGA ACCIDENT SUMMARY

Compiled by DAVID WRIGHT

Ref. No.	Glider Type	BGA No.	Damage	Date Time	Place	Age	Pilot/Crew Injury	P1-Hrs
101	ASW-20c	3462	Subst	12.7.97 1800	Nr Corby	31	None	460

While in a competition the pilot had to make a field landing. The final approach was flown very low across a drainage ditch. The glider hit the tall grass and a hidden barbed wire fence. The barbed wire rode over the nose and broke the canopy and the wing hit a post.

102	ASW-20F	4211	Minor	20.7.97 1700	Tibenham	50	None	149

After a good briefing the pilot made his first flight on type. After gaining directional control he realised he was holding the glider on the ground so eased back and the glider "jumped" into the air. He moved the stick forward and the glider hit the ground hard. He abandoned the launch and, after one more bounce, landed safely.

103	SZD Junior	3718	Minor	22.7.97 1930	Husbands Bosworth	27	Minor	7

On the pilot's first flight on type he approached at 60kts with 3/4 airbrake. The approach looked normal until the flare when he over rotated, causing the glider to balloon back into the air. He didn't close the airbrakes and the glider stalled at about 10ft and landed heavily.

104	Pirat		Minor	6.7.97 1639	Rattlesden	66	None	289

During the crosswind winch launch the airspeed increased rapidly to above the placard speed so the pilot lowered the nose. Before he could signal "too fast" the cable back released. He lowered the nose for a straight ahead landing but decided there was not enough room so turned into wind and landed in a crop field where the glider groundlooped.

105	K-21	2554	Subst	9.7.97 1445	Nr Nympsfield	77	Serious	10

The pilot released from the aerotow about two miles upwind of the airfield but hit strong sink so decided to make a field landing (his first). He chose a field with an upslope but undershot into a steep bank, injuring his back and substantially damaging the glider. A witness saw the brakes open throughout the approach.

106	Astir	2582	None	19.7.97 1600	Tibenham	66	None	35

The pilot became confused by other gliders in the circuit and landing. He allowed the glider to become too low for a normal landing and chose the long grass parallel to the runway. The glider groundlooped in the grass, fortunately, without damage.

107	Phoebus C	1570	Minor	9.7.97 1910	Bedford	45	None	69

While on an extended soaring flight the pilot found himself too low to return to his airfield so decided to land at Thurleigh Airfield. He flew a base leg then landed on the runway with the undercarriage still retracted. The pressure of an outlanding and inexperience on retractable gear types contributed to his missing the downwind checks.

108	Open Cirrus	3894	Minor	7.5.97 1500	Huntington		None	1247

On a cross-country flight the pilot's track was blocked by bad weather and he found himself down to 1500ft over a heavily cropped area with no clear fields. He selected a large cereal field and made a normal approach and flare into the crop. At roundout the glider's wing caught in the crop causing a groundloop.

109	Libelle	1876	Minor	24.6.97 1409	Portmoak	58	None	341

The pilot had decided to land short to keep clear of a previously landed power aircraft. He set up a full airbrake approach and failed to recognise that an undershoot was developing. He finally reduced airbrake but was too late to prevent the glider striking a boundary fence post before landing normally.

110	Libelle	1657	None	6.7.97 1500	Challock	64	None	900

The glider overran the winch cable as it moved forward then launched normally. After rapid initial acceleration to about 30ft the power appeared to fail and the pilot lowered the nose then released. After initial serious control problems he recovered and landed normally. The cable 'chute had caught on the left wing.

111	K-13	2234	Minor	29.7.97 1430	Challock	48 26	None None	324 0

P1 had already noted that the student tended to over-rotate in the flare and was ready for this, with his hand near the stick, during landing. After a normal approach the student rounded out a little late and then rather sharply. The tail struck the ground before P1 could take over. The keel tube broke in a rusty, previously damaged area.

112	IS-32A	3114	None	30.7.97	Talgarth	65 39	None None	2520 0

The experienced instructor was making a trial lesson flight in a glider he had not flown for six months. After hurried checks the launch was started with negative flap and locked airbrakes. During the ground run the pilot inadvertently opened the brakes rather than move the flaps. Unusually, the airbrake is the upper control on this type.

113	Sport Vega	2685	Minor	20.7.97 1215	Aylesbury	41	None	51

The pilot decided on an angled approach because another glider had landed on the right hand side of the strip. The glider became too low for the pilot to properly straighten before touchdown and it ran off the side of the strip into standing crop which caused a groundloop.

114	DG-500		Minor	9.5.97 1430	Camphill		None	1200

Towing the DG-500 to the launch point with a fixed bar attachment the glider became partially detached and the right aileron struck a diesel tank.

115	LS-6c	3936	Subst	19.7.97 1400	Camphill	69	None	936

The glider was being winch launched from a strip that sloped from left to right with a 5kt crosswind from the right. The tip holder ran with the wing then let it go as the speed increased. The wing dropped and the pilot could not recover before it caught in grass and spun the glider around, breaking the rear fuselage.

BENALLA FOR GLIDING?

YES!

Do you want records? Do you want competition? Do you want fun? Then we have got it all for you at BENALLA. From Novices to Experts, we can provide you with all your training needs, and if El Nino is again predicted, another top season with those distance badges to be gained. From 50kms to 1000kms – it's all here at BENALLA.

If your aim is to get from Bronze to Gold in just two weeks, then join one of our NovEx courses. We teach you all you need to know:

Thermal Soaring – Paddock Landings – Photo Techniques – Badge and Racing Tasks

Solo fleet comprises PW-5, Junior, Hornets, Mosquito and Nimbus 2C plus privately owned Nimbus 2, DG-200, St Jantar and Cirrus. We can also arrange access to a Nimbus 3D.

Inexpensive on-site accommodation or nearby motels available. Easy travel from Melbourne or Sydney.

For details contact our new Manager, Administration, Nigel Allom at:

Gliding Club of Victoria
PO Box 46, BENALLA, Vic 3672, Australia
Tel: +61 357 621058 • Fax +61 357 625599
Our Website:
www.home.aone.net.au/benalla_gliding
E-mail: vivdrew@msn.com

BENALLA –
SIMPLY THE BEST!

THE GUILD OF AVIATION ARTISTS

1998

AVIATION PAINTINGS OF THE YEAR EXHIBITION

JULY 21st – 31st ■ CARISBROOKE GALLERY
63, SEYMOUR STREET (MARBLE ARCH) LONDON



A painting by Charles J Thompson, G.Av.A.

OPEN EVERY DAY INCLUDING WEEKEND
11am – 7pm ■ 11am – 2pm (Last day)
Late Opening 9pm THURSDAYS
ADMISSION FREE ■ CATALOGUE £2.00

All enquiries:
The Secretary, The Guild of Aviation Artists,
71 Bondway, Vauxhall Cross, London SW8 1SQ
Tel/Fax: 0171-735 0634

116	K-7	1694	Minor	12.7.97 1356	Bellarena	58 19	None None	258 0

In variable winds conditions P1 found the wind direction had changed since take-off and set up his circuit accordingly. On turning finals he found it had changed again and he had to land downwind, diagonally across the airfield. At 100-150ft he turned parallel to the main strip. Levelling late he struck a wingtip and groundlooped.

117	Motor Falke	G-AYUR	Minor	26.7.97 1445	Strubby	53 50	None None	140

Whilst taxying the motor glider back to the hangar the left wingtip hit a bail of hay, stacked at the side of the peri track. The aircraft swung around and the prop was broken as it hit the bails of hay.

118	LS-8	4267	Minor	30.7.97 1600	Nr Worcester	66	None	780

On a 300km cross-country attempt the pilot became low and selected a good, into wind field, but badly underestimated the curlover from a nearby hill. As a result the glider landed heavily on the upsloping section of the undershoot field, damaging the undercarriage.

119	DG-400	G-BPXB	Minor	25.7.97 1845	Spain	36	None	184

While flying abroad the pilot soared the motor glider then, on the final glide to the airfield, decided to practise with the engine. The engine extended but would not start and he then found it would not retract either. A landing was made in a stony, uphill field which damaged the glider. An earlier very rough take-off run may have disturbed wiring.

120	Std Libelle	1768	Minor	27.7.97 1410	Shipton-U-Wychwood	54	None	244

The pilot climbed off launch to 4000ft and set off cross-country. No further lift was encountered so he started looking for a field. His choice was limited with many cut crop fields full of straw stacks. He saw another glider in a field so landed there. On roundout he found it was a high, green, barley crop that had fooled the other pilot as well.

121	YS-53	1897	Minor	10.8.97 1420	Husbands Bosworth	57 26	None None	1049 0

The experienced instructor was flying an unfamiliar type at a site he visited infrequently. After thermalling he flew back to the airfield and started a circuit with sufficient height. However, he soon realised that the approach was marginal due to the headwind, and the wing struck a small tree he had not seen on the boundary. He landed safely.

122	Ximango	G-JTPC	Minor	10.7.97 1900	Rufforth	56 68	None None	70

The pilot had recently bought the motor glider and was taking-off with a 30° 10kt crosswind. The aircraft weathercocked and the pilot failed to react quickly enough to prevent it turning into the crop alongside the runway, damaging the undercarriage.

123	K-8	3305	Minor	19.7.97 1402	Currock Hill	47	None	58

The pilot joined the circuit behind two other gliders which landed well up the runway to allow him space to land. He decided to land short and while a little low thought he would be OK. He too late realised that due to the sea breeze he was likely to land short. He only partially closed the brakes and landed short in gorse bushes.

124	Pegasus	3470	Subst	19.7.97 1420	Holker, Cumbria		None	1100

The pilot landed in a clear 300 yard long field with a flat, hard surface. With no wind, he had to use the wheel brake to slow down. However, the stop on the end of the brake cable slipped by about a half inch, causing the brake to fail completely. The glider ran into a wet ditch at low speed, breaking the fuselage and submerging the instruments.

125	Nimbus 2	2175	Minor	20.7.97 1700	Rattlesden	39	None	513

After a cross-country the pilot made a final glide and competition finish requiring a considerable turn to land after the pull up, after which he only had 200ft. He made a low turn and a hurried landing in a field of standing wheat. The glider groundlooped in the crop.

126	K-8B	2717	Minor	23.7.97 1732	Aston Down	24	None	2.75

The early solo pilot was being launched when, after he rotated into the climb, the winch appeared to lose power and so at about 20ft he released the cable. He pushed the stick forward too rigorously and the glider landed heavily on the nose, bouncing twice before the pilot regained control and landed safely.

127	Blanik	2066	Subs	10.8/97 1600	Talgarth	49 36	None None	273 13.7

After flying a slightly low circuit the student made a well controlled approach but with minimal airbrake. He failed to initiate the flare at the correct height and the glider bounced back into the air before P1 took control. On the second touchdown the undercarriage collapsed and the glider quickly came to rest.

128	Nimbus 2c	2645	Minor	5.7.97 1800	Nr Edgehill	53	None	1356

The experienced pilot had to make a field landing. After rejecting one field with a possible crop and powerlines (which later turned out to be OK), he found another that looked suitable but which was in shadow. In the flare he saw the surface was rutted and these caused the glider to groundloop, damaging the elevator.

129	Dart 17R	1266	Minor	6.7.97 1415	Nr Ledbury	45	None	40

On a cross-country task the pilot was searching for lift in an area of apparently good fields when a landing became necessary. A normal approach was made to the field which looked like cut silage until on the approach the pilot noticed it contained standing grass. During the ground roll a wingtip caught causing a groundloop.

130	DG-300	3708	Minor	4.8.97 1445	Nr Sutton Bank	64	Minor	750

The pilot decided to make a field landing in a stubble field that had a slight sideways slope. The approach speed was rather high and as a result the glider bounced, causing the lead ballast weights to move and hit the pilot's back. Distracted, the glider's wing was allowed to hit the sloping surface causing a groundloop.

131	Bellanca Scout G-BCSM		Minor	14.7.97 2015	Rufforth	61	None	1231

After landing the tug started to swing to the left. The pilot applied the right heel brake but his foot slipped off before he could straighten the aircraft. He re-applied the brake but locked up the wheel and the aircraft tipped up on to its nose, breaking the propeller. The recently purchased tug was known to tend to swing on landing.

132	Not known		Minor	20.7.97 1523	Walney	32	None	151

After a cross-country the pilot increased speed to 120kts for his final glide back to the airfield. He heard a very loud bang and the aircraft was severely jolted. He found he still had full control but the airbrakes had come open. He had not felt any turbulence prior to this, but may have hit the sea breeze front.

133	Open Cirrus	1864	Subst	15.8.97 1530	Horningsea	47	None	143

The pilot had to make a field landing and chose a good size, EW field. He approached from the east, as his club had been launching in that direction and he had also seen a light aircraft land at a nearby airfield that way. On the approach he found he was too high, due to a 5kt tailwind, and groundlooped in a crop field avoiding trees.

134	Puchacz	4157	None	7.8.97 1124	Nr Long Mynd	64 None	None 9	2023

P1 allowed his pupil to get too far out of position during the aerotow and as a result the rope broke at about 900ft above airfield level. He did not think he could make it back safely so after looking for local lift made a field landing. He flew the circuit rather too fast, expecting wind shear, and had to groundloop to avoid the far hedge.

135	Pegasus	4140	Minor	7.8.97 1515	Dunstable	54	Minor	25

During the landing after his second flight of the day the pilot underestimated the curlover effect of the 10-15kt wind coming off the local hill. On final approach the glider lost speed and the pilot was unable to recover before landing very heavily on the mainwheel. He suffered bruising and back pain.

136	K-23 & Tug	2998	Minor	18.8.97 1505	Dunstable	64	None	41

While returning to the airfield the tug pilot was in a descending left turn when he noticed a K-23 circling nearby. He tightened the turn and pushed forward to give vertical separation. In doing this the tow rope rings struck and cracked the glider's canopy, fuselage and wing. Both aircraft landed safely with no further damage.

137	K-18	R33	Minor	10.8.97 1345	Dishforth		None	1000

The glider was being winch launched from an area of uneven ground and long grass. The cable was snatched and the glider moved forward at 30° to the cable rather than turning on the expected run. It accelerated rapidly and became airborne as it hit a bump. The pilot released and landed sideways, damaging the fuselage.

138	Motor Falke G-BLZA		None	2.8.97 1200	Nr Halton	41	None None	1240

The motor glider was being used for field landing checks when on the final approach P1 terminated the exercise and opened the throttle to climb away. Despite full power and rpm the aircraft initially did not climb and then began to sink. P1 selected a crop field ahead and made a safe landing. Local area of sink exceeded the climb rate of the motor glider.

139	IS-29o	2030	Subst	9.8.97 1700	Lyveden	57	Minor	285

The pilot made his first flight on type on a hot, humid, nil wind day. The winch launch ground run was rather long and the glider was then rotated into a full climb. At about 200ft, as the pilot looked along the wing to assess the climb angle, the glider entered a spin from which the pilot was just able to recover before landing heavily in a field.

140	Sport Vega	2700	Minor	9.7.97 1430	Charing	62	None	215

The pilot made a successful outlanding in a field containing a low standing pea crop. The surface was a soft tilth that made pushing the glider out of the crop very difficult. The pilot could only find one helper, unfamiliar with the type, and during the "push out" it appears that they damaged the tailplane mounts.

REVIEW

The Greatest Paper Airplanes by KittyHawk Software, PO Box 64189, Tucson, AZ 85728, $29.95 plus $10.00 p&p.

This is one of those less serious bits of computer software. It shows how to have some serious fun making 50 paper planes, with step by step instructions, animations, and it can print out the folding sequences. GPA comes on CD-ROM and floppy disk with two pre-printed copies each of 25 designs to get you off the ground quickly, and a paper folding screensaver.

There are eight screens of information on flying, the parts of a plane, simple animations on how planes fly and questions on the history of flying pop up on the cover page. Other screens cover the history of paper and basic folding techniques, before moving on to making the models.

The planes are grouped into ten types - darts, gliders, jets/bombers, SST/stealth, starships, flying wings, deltas, canards, fighters and research aircraft. Many are impressively complex, even exotic, designs, and all are way beyond the hastily folded models from my student days. Six books on paper planes are mentioned in the help file for further info.

So apart from being good fun, what use is this to a glider pilot? Well you could organise model Comps in the hangar or clubhouse for a rainy day, or a non flying day at a Comp where it would certainly relieve the boredom. On a club open day, you could present the visitors' kids with a few free models to build, let them experiment with the software, give them a copy of the free trial version, or even organise their own little flying contest (happy kids = happy visitors). They'll go away and tell their friends about their fun day out, they in turn telling their parents. Spread the word!

The animations on flying, while very simple, could be used on open days or with air experience students to assist in briefings.

You can download a trial version from KittiyHawk software's Web site at www.khs.com/khs/ or e-mail them for more info at info@khs.com.

JOHN WRIGHT

How Others See Us

Joan has written this appealing impression of gliding

Some years ago, when I was still lecturing at Chester College, I heard from one of the PE department that a group of students were being taken to the Long Mynd Gliding School for a course in gliding. As I live nearby at Church Stretton I offered to go up and take some cine shots of them in their gliders.

When I arrived at the shed which was the headquarters of the gliding station I went into the area which was a small cafe cum sitting area to find out where best to go for my cine shots. I was totally taken aback when Dave, who was in charge of the group, said casually: "Oh, I've arranged for you to take air to air shots from one of the gliders. An instructor will take you up. If you like, you can join the course as one of the students can't come."

I'd no idea that it would be assumed that I would want to take air to air shots. I had never felt any desire to glide and was quite terrified at the thought of it. However, as there were students around I realised it would not do to show what I really thought, so I expressed thanks for the arrangements made on my behalf and sat down to drink a cup of tea and consider whether or not I was enjoying my last moments.

I was not reassured when I was asked to sign a form absolving the club from any responsibility for what happened on the flight. I made light conversation and then someone came up with what looked like a parachute. It was a parachute. I was helped into it and told I was wearing it to weigh me down a bit as I wasn't heavy enough. Its role was not to waft me back to earth if I fell out of the glider.

Staggering a little under the weight, I walked out to await my turn. I had plenty of time to see what happened. I watched with a dry mouth and a sinking feeling that my turn was coming soon.

I staggered out to the plane and scrambled awkwardly into the back seat, clutching my cine camera, the cause of my perilous situation. Suddenly we lurched forward along the ground, then we began to rise higher and higher. Soon we were flying silently above the Long Mynd. I set my camera going and looked for other gliders to shoot. My pilot took me close to several and I concentrated on taking my pictures.

Then I sat back and looked around me and down below. It was fascinating seeing the hills and patterns of the fields. It was so quiet, only the sound of the wind in the wings. It reminded me of being in a small sailing boat and moving without the benefit of an engine. I loved it.

In fact, I enjoyed it so much that I took up the offer of joining the course.

Late News: There was a mid-air collision at Staffordshire GC on May 2 resulting in a double fatality. An LS-3A flown by George Askew and a K-18 flown by Ian Andrews were winch launched on successive cables. The K-18 was circling to the right in the downwind position of the circuit when the LS flew towards it as if to join the thermal.

The impact was between the leading edge of the LS's fin (about 4in below the tailplane) and the trailing edge of the K-18's right aileron (near the inboard end).

Having lost the tailplane the LS bunted and crashed and the pilot was killed on impact. The K-18 continued descending in a wide righthand turn having lost a portion of the wing (outboard of the aileron inboard end). The remains of the right wing hit the ground almost certainly in a spiral dive. The pilot died soon afterwards from his injuries.

Bill Scull, *chairman of the BGA Safety Committee*

CLASSIFIED SECTION

TO PLACE AN ADVERTISEMENT IN THE CLASSIFIED SECTION, please send your remittance together with a copy of your wording to Debbie Carr, BGA, Kimberley House, Vaughan Way, Leicester LE1 4SE (Tel 0116 2531051 or Fax 0116 2515939), before July 3rd for next publication. Any advertisements received after this date will be carried forward to the next edition of S&G. Rates 70p per word with a minimum of £14.00. Black & White photographs accepted £6.00 extra. Box No. £3.00 extra. Prices include VAT.

FOR SALE

FANCY A BIT ON THE SIDE? ASTIR/CS based Shalbourne. Well dressed and good looking. Young, intelligent, articulate and mobile (1500hrs, electronic vario, 760 radio and tow-out gear). Looking for additional 'escort(s)' for trips in countryside. Jerry 01672 861456

NIMBUS 3 TURBO. Complete outfit. Ideal cross country sailplane for UK; 57 to 1. Kept privately hangared, excellent condition and competition record. In region of £47 000. David Innes. Tel: 01420 88664 Fax: 01420 542003

STD CIRRUS, Good condition, good panel, Dittel 720, good trailer, new CofA. £11 500. Tel: Bob Fox 01482 846127

ASW15B. 1975. Good condition. Complete outfit including metal trailer, parachute, standard panel plus Averager/Director, ICOM 720, T&S, GPS. A/T and CG hooks. Docile handling, good performance and powerful airbrakes for field landings. View Dunstable. OIRO £11 000. Tel: David 01442 870873 or Paul 01462 896393

LS4 600 hrs. Glider and Trailer in good condition. Instruments including nearly new Borgelt B50 electronic vario and 720 radio. £24 000. Tel: 01327 261948

LS6C 18W. 15m/18m wingletted trips. Immaculate. 1992, c 700 hours/200 launches. Factory panel includes Becker 3201, Peschges VP3E Comp, RC Allen horizon. Oxygen system. Wells Aluminium trailer, all rigging aids and tow-out. Price: £45 000 complete. Tel: Nick 01789 766516

CAMBRIDGE MNAV. Mark 4 with 58mm vario. Revision 17. Requires flask. £850. Tel: 01494 864631

STD CIRRUS. Aluminium trailer, tow-out gear, full panel, Cambridge vario, Storcomm radio, barograph, oxygen, parachute, airbrake mod etc. CofA March 1999. Based at Lasham. £13 000. Tel: 01420 82767 or 01428 713285

SHK-1 Good condition with radio, basic instruments and electric vario. Sound wooden trailer. 38:1 for only £7000. Contact Ian 01884 841232

SLINGSBY SKY. Full restoration with new purpose built trailer. Tel: 01226 765173 or 01302 786360

SF27, 15M. 32:1. Cambridge vario, parachute, easy rig. CofA. Metal trailer. Based at Parham. £6000 ono. Tel: 01293 402908

LS-3. 1977, 800 hours, one sole owner past 15 years. Pirol LX1600 vario, 760 radio, large O2 installation, Komet trailer. Average gel-coat, otherwise good condition with new CofA. View Lasham. £14 500. Tel: Colin Appleyard 0118 9792340

DG100. Low hours, in very good condition with excellent finish. Basic instruments and closed trailer. For quick sale. Tel: 01256 381169

LIBELLE 301 in excellent condition and ready to go. Tow out gear, dust covers and F/B trailer. £11 750. Tel: 0121 455 7433

SF27A Just CofA'd. Metal trailer. Attached, side-opening canopy. usual instruments, 720 radio. £6750. Tel: 01255 430923

SLINGSBY VEGA (flapped). GRP trailer, tow-out gear, radio & oxygen, parachute and GPS. CofA April 1999. £10 250 ono. Based at Midland G.C. Contact R. Andrews or Bob Rice on 01588 650344 (daytime)

STANDARD CLASS SZD 55:1. Realistic 43:1 performance; water ballast, faster than a Discus. Fully competition equipped. Exceptionally light to rig. Excellent condition. Cobra-type trailer, tow-out gear, parachute. URGENT disposal. Tel/Fax: 0171 978 5312 Anytime.

LIBELLE 201B Very good condition, good panel, good trailer, ATR 720 radio, New CofA. £11 250. Tel: Box Fox 01482 846127

ASW20F recently refinished, new canopy and recent trailer. All basic instruments including electric ario and 720cx radio. Parachute and barograph if required. £17 000. Tel: 0181 444 6457 . E-mail 101355.2447@compuserve.com

DG400 – Low hours in excellent condition maintained by specialists – Guntert + Kohlmetz in Germany. All modifications. Integrated Head Up Display and Cambridge GPS and FDR. Cobra trailer and one man assembly gear. Registration actually British but willing to modify to customers requirements. Tel: + 33 6 0858 7566 for viewing.

PEGASE 101B. A series 90 machine built in 1992 featuring automatic control connections, full instrumentation and tail wheel modifications. In superb condition with less than 100 total hours. Price includes a Sabre trailer acquired from new less than a year ago. Also included are tow out gear, parachute, oxygen. Offers in the region of £25 000. Tel: 01295 780036

RALLEY COMMODORE 180hp MS 893A. 4 Seater. Super Gliding Tug. 1000 hours engine. 4 blade prop. £14 000. Tel: 0121 353 1993

SHK1. £7500. Excellent condition, radio, oxygen, barograph, electric vario, horizon, basic instruments, metal trailer. View Parham. Tel: 01903 742263 or 01962 863995

K7 – Basic instruments. CofA Feb. 1999. View / Fly Newark & Notts. £3250. Tel: 01636 704293

TRAILER for 15 metre sailplane currently used for Standard Cirrus. Galvanised steel box frame with plywood covering. New radial tyres including spare. Fully serviceable. Best offer in the region of £1500 accepted. Tel: 01462 711934

IS-AVIATION

Exclusive UK Distributor for IAR Brasov, Romania

IAR Aircraft:

IS28B2 Two Seat Glider 17M, Flapped, Retractable U/C

IS29D2 Single Seat 15M, as above

IS28M2/GR Two seat Motor Glider with Rotax engine

Probably the best value for money all-metal aircraft available, call for details

Also available Cobra 15 fully aerobatic 38:1 fully equipped and trailer, T31b Tandem Tutor, Bocian. All VGC – offers

SCOTT HOUSE, 5 WHITSOME VILLAGE, DUNS, BERWICKSHIRE, TD11 3NB
Tel/Fax +44 (0) 1890 870666 (24hrs) or +44 (0) 1661 832087
http://www.users.globalnet.co.uk/~prosys
E-mail: I.S. Aviation@prosys.globalnet.co.uk

Wanted: Good gliding photographs

for use in BGA Central Media Pack. Either landscape or portrait format covering range of gliding club activities – clubhouses and sites; types of glider; family and social involvement; methods of launching; instructional aspects; aerial views etc. Quality needs to be suitable for scanning to produce slides, power point presentations and press reproductions. Please send to BGA Promotions Officer, Kimberley House. Vaughan Way, Leicester LE1 4SE.

ASTIR CS in excellent condition, all mods completed. Trailer, tow out gear, radio, audio vario, CofA May 98. View Lasham. £11 000 ono. Tel: 01225 313678

LIBELLE 201B 15/17 Metre. Landing flap, excellent condition, CofA 4/99, full panel, 720 Dittel, oxygen, tow out, superb trailer. Based at Peterborough. £13 000 (shares possible). Tel: 01733 341076

K6E low hours, full years CofA, good panel, metal trailer. Nearly new parachute, Barograph. Available Now £6250. Tel/Fax: 0121 772 1328

GLASSFIBRE TRAILER FOR SALE. Fittings for LS8. £2500. Tel: 01509 890469

H36 DIMONA, built 1984, VOR, transponder, new prop, new CofA, always hangared, good condition, £26 000. Tel: 0049 171 5369823 (Germany)

PEGASUS 101A, LX1000, Bohli, Becker 720, EW Barograph, parachute, one man towout. Comet type lift top trailer, oxygen, built 1984, 1300 hours. £18 500 ono view Lasham. Tel: 01705 356146 or 01926 462063

JANTAR 2 Standard Class. Built 1981, competition sealed, jacking dolly and full tow out kit. Excellent value at £9950 for quick sale. Tel: 01295 788526

ASTIR CS. Tidy example with low hours and all metal clam shell trailer. Competition seals and zig zag performance tape. First £9000 offer takes the lot. Tel: 01295 788526

PAWNEE 235 SUPERTUG: Loadsagrunt! probably the best glider launching machine in the business. With GOMOZOLIG silencer and 4 blade prop can launch 12 gliders/hr to 2000 ft. Fueslage tank, runs on MOGAS or AVGAS. 11,900 airframe house, 740 engine hours since overhaul. 3 yr. CofA Sep. 1996. Becker 720 ch radio. £29 500 +VAT. Tel: 01244 325730

EX ATC VENTURE – MOTORFALKE: Superb condition with wings recovered by David Bullock 2 years ago. 4500 airframe hours, engine 450 hours since overhaul. Becker 720 ch. radio. £11 950 +VAT. Tel: 01244 325730



International Sailplane Services

STILL NEED A GOOD SAILPLANE FOR 1998 SEASON? JUST FOLLOW THESE STEPS FROM THE WORLD'S LARGEST SUPPLIER OF PRE OWNED SAILPLANES.

1. **Decide how much your budget is (remember insurance etc.** Joint Aviation can advise lowest quotes available) **or ask for our fully inclusive price.**
2. **Select types, Choose one or two.**
3. **Call International Sailplane Services as soon as possible.**
4. **Sit back and wait.** (Normally not longer than 28 days)
5. **Take delivery, Go flying.**

Simple as that, no travelling around sites, aircraft quality guaranteed full back up service.

Terry Joint, 3a & 3b Old Aylesfield Buildings, Froyle Road, Shalden, Alton, Hants GU34 4BY • joint.aviation@virgin.net

Telephone: +44 (0) 1420 88664 • Fax: +44 (0) 1420 542003

L23 SUPER BLANIK 1933 TT430 hrs, the GLIDER most Pilots enjoy flying. Price negotiable, make an offer, a bargain in excellent condition. AMF DROOP SNOOT trailer.

PETER CLIFFORD & CO.
15 Home Farm, Crowmarsh Gifford
Wallingford, Oxon. OX10 8EL
Phone/Fax 01491-839316

K13 1967. A superb example of this much sought after glider. 16,750 launches, 3690 hours. Instruments front & back. New CofA on purchase. See it at Lleweni Parc Wave Site. £11 250 +VAT. Tel: 01244 325730

Ka7 A very nice example of this excellent Club 2 Seater with sprung undercarriage. Priced for quick sale at £2250 +VAT. Tel: 01244 325730

TRAILER for 15 metre glider. Aluminium covered steel frame. Tows well. Needs refurbishment hence £300. Tel: 01252 795166

COLLECTION OF 67 COPIES S&G MAGAZINE April 1956 – May 1968. Most mint/good condition. Donating proceeds to RAFA Benevolent Fund. Generous offers please! Tel: 0115 9732014

PILATUS B4, 35:1 all metal glider. Excellent condition. Recently fitted new canopy and radio. New parachute. Trailer recently reconditioned. CofA to April 1999. £11 000 ono. Ring Trevor on 01257 792219 or Phil on 01995 640567

MOTORGLIDER SFS31-MILAN (like RF4D) 39 hp 4stroke, glide 1:29, cruse 170 km/h Dittel FSG71M, Fuel 5-7ltr/h, vario prop. End 600-700 km. New paint 96 so very best condition! Only private used! GRP trailer, 1 person ass. tools included. For more details contact L.M.S., Tel/Fax: +31 45 5319186

WINCH, dual cable drum. 230hp, 5.4Ltr – GM – engine. Contact: Airfield Krefeld-Egelsberg. Mr. Ansgar Heitkamp, pvt: – 49-2102-444830. Office: 49-203-5244121

USED GLIDER make SIREN. Type C30 S "EDELWEISS"; Year 1965; 1635 hours used. Standard instruments. VHF Jolliet ER5. 40 000 FF. On view at ABBEVILLE Flying Field. (50 miles from Boulogne on main road N1). Contact (France) 33 22 31 23 36 (evening)

ASTIR CS 1976, 2740 hours, 4306 launches. Good condition. Canopy and landing gear new 1997. Contact Christer Engdahl, Sweden. Tel: +46 46 323940 Fax: +46 418 75034

ASW 15A. Early glass with excellent performance – 38:1, and very good brakes for fields! Fair condition. Complete outfit (no parachute). Need to sell as have another sailplane! Hence low price of £7500. Tel: 01480 880238

NIMBUS 4 TURBO

1993 total time 500 hours. Perfect condition. Engine 2 hours only. Schroeder trailer. Peschges VP6 inc GPS. Bug Wipers. Covers. Tow out Gear. Complete outfit would cost over £100,000 at today's prices.

£85,950 OVNO View at Lasham

Call Terry Joint
+44 (0) 1420 88664 Days
+44 (0) 1420 544397 Eves
+44 (0) 802 708670 Mobile

ASH 25, Comp. No. 8. 30% share Dunstable midweek flying plus alternate nationals with Carr Withall 40%. Barry Flower 30% flies weekends. Winter Vario, Cambridge 'S' Nav, Horizon, Becker radio, Garmin 55 parachutes, winglets, tow out gear covers, Cobra trailer. Major running costs 1998 season paid. £18,995. Peter Sheard 01525 222887 or Carr Withall 01442 862577.

Discus A. Complete outfit including Winter Vario, Cambridge 'L' Nav/GPS/Logger Horizon, Becker radio, nose hook, fin tank, tail wheel, parachute, battery charger, tow out gear, Schofield trailer. Available 14th June after Dunstable Nationals. £32,995. Peter Sheard 01525 222887.

SKYLARK 4, GRP trailer, PZL and XK10 varios with averager, parachute. A/H, Barograph, TP camera, tow-out gear. £5000. Tel: Mike Lindsay on01508 550353 or Email mike@sailplane.demon.co.uk

ASTIR CS 77 Metal trailer, barograph, parachute, water ballast. Full panel including A/H and T&S etc., Tow-out gear. £10 500 Tel: 01229 869218

K6CR Good condition with metal trailer and good panel, radio, T&S etc. £6500. Tel: 01229 869219

BERGEFALKE MK 111 2 seater, K13 performance, very good condition, CofA, rigged in hangar for sale demo. Good twin axle trailer, will take most gliders. Insurance transferable if required. Quick sale £3500 ono. Tel: 01280 702269

OPEN CIRRUS (18m). Capable, long legged cross country machine. Excellent performance, good handling, comfortable cockpit and superb condition. New professional CofA. £12,950. Contact David 01252 370815

ASTIR CS 77. Half share. Lasham based. Available every weekend, most week days prior permission. Including trailer, parachute, barograph and Garmin GPS. £5900 ono. Contact Andy Todd 0385 394220

STD CIRRUS. Excellent condition, rigging aids, tail dolly and tow out. LX1000, Horizon, radio's, airbrake mod., Weidekin fittings fibreglass trailer. Bargain £12 500. Mansfield 01623 420453. Sheffield 01142 478638

ASW20FL 1981, excellent condition, full kit, 720 radio, full panel, oxygen, GPS55, good chute, tail wheel and fin ballast, covers, good trailer. View Bidford. Price £21 000. Tel: 01386 852201 or 0850 820158

STD CIRRUS. 1600h. Always privately flown with the Bath G.C. CofA to 99, parachute, comprehensive instrumentation, new Schofield trailer. All in excellent condition. Tel: Steve 01225 482549

STD CIRRUS. Full panel and 720 radio, VG closed trailer, plus CofA – £12 000 ono. **JEANS ASTIR**, Full panel, parachute, closed trailer, plus CofA – £8250 ono. Tel: 01295 261141

PARACHUTES. (4) Polish Legionowo, £200 each. Radios (6) TM61, £100 each. Tel: 0118 9582147

ASW20L. German built. 16.5M tips, excellent acrylic finish. Competition ready including GPS/EW logger. Recent Schofield trailer. £23 000 ono. Tel: 01455 619932

WASSAMER WA 22 SUPER JAVELOT. 15 Mtrs. V. good condition, electric vario, barograph, radio, parachute. Wooden trailer. CofA Sept 98. £3750 ono. Tel: 01623 514071

LIBELLE. Very good condition, oxygen, water ballast. Parachute, barograph, standard panel, metal trailer. £10 500 ono. Tel: Rob 0114 2301853

SKYLARK 4. BGA No. 1209, electronic vario with averager, radio, artificial horizon, turn & slip, oxygen system. Certificate of Airworthiness to Feb 1999. Clean road trailer with new tyres fitted end 1997. £5500 or vno. Tel: 0117 9584234 (day), 01934 838096 (eves). Fax: 0117 9657034 or Email : sales@koala-pub.demon.co.uk

EAST OF ENGLAND —SAILPLANES—

SENIOR INSPECTIONS
RESTORATIONS
REPAIRS & OVERHAULS

C of A for all wooden and fabric sailplanes
Trailers servicing and repairs

Telephone:
Market Deeping 01778 342435

Ferranti Mark 6 Artificial Horizon with Inverter. £195. Tel: 01953 483018

IS28 MOTOR GLIDER, VP Prop with new 5 year life. New annual on engine & A/F. 80 knots cruise at 2.5 g.p.h. Retractable u/c. £18 000. Tel: 01522 730784

ASW 19B. Glassfibre trailer. Standard panel plus audio vario, averager, radio. Tow-out gear, rigging trestles. VGC, new CofA. View Lasham, must sell! Tel: 01252 622297

OLYMPIA 463, 1964. CofA to 9/98, spar mod. completed. Aerodynamic canopy and wheel. Bantam radio, T&Slip, T.E. and audio varios, G-meter. Trailer needs some woodwork but 2 yrs ago new towbar, steel underchassis, suspension, autoreverse brakes, tyres and stabiliser. £3250. View Cambridge. Tel: 01920 467430 or 01707 320730

LS4. Instruments, director, 720 radio, GQ parachute, steel/Aluminium trailer. Excellent condition throughout. New CofA. £22 500. Tel: 01453 872740

STD CIRRUS. Glass fibre covered trailer, 720 radio, instruments, director, parachute. All in V.G.C. New CofA. £12 950. Tel: 01453 872740

WITTER

TOWBARS TO TRUST

- First choice for safety-conscious drivers with over 4 million towbars supplied.
- Safety testing to B.S. and I.S.O standards.
- Guaranteed for life

See Yellow Pages for your nearest specialist fitter or stockist.

WITTER TOWBARS, CHESTER CH1 3LL
Telephone: 01244 341166

Main St. Models

Scale Model Gliders hand-crafted from wooden resin, painted in your colours and mounted on a hardwood base.

Unfortunately prices will have to rise from 1st July to £50 + £3 p&p for 1/50 scale, £70 + £5 p&p 1/32 scale, £95 + £7 p&p for 1/25 scale.

SO ORDER NOW AND GET THEM AT OLD PRICES!

Please contact Pete Storey on (01302) 750472 (evenings) at Bienvenue, Main St., Styrrup, Doncaster, S Yorks. DN11 8NA.
Web Site: http://www.styrrup.force9.co.uk

AIR EST SERVICES *proposes his selection of gliders and motorgliders*

ONE SEATER

FAUVEL AV 361 (Flying Wing) 630 hrs, special trailer	**£4,000**
ASW 15 B, 1973, 1700 hrs, radio, O2, trailer	**£10,500**
SHK 1, 1966, 970 hrs, radio, trailer 2 axle	**£8,500**
LS 3 17m, 1981, 1962 hrs fully equipped, trailer	**£27,500**
ASTIR CS & JEANS	*from* **£8,500**
PHOEBUS C, 1970, 1001 hrs, radio, O2, trailer	**£8,950**
SILENT new light glider, glide ratio 32, as glider and self-launching	*from* **£15,000 to £23,480**

TWO SEATER

ASK 13, 1970, 3213 hrs, radio, trailer	**£13,200**
M200, 1966, radio, trailer	**£7,800**
MARIANNE, 1987, 1890 hrs, radio, no trailer	**£19,500**
SILENE, 1978, 1170 hrs, radio, trailer	**£10,900**

MOTOR GLIDER

SF 25 B, 1970, 2400 hrs, Stamo engine 45 hp, 800 hrs	**£12,800**
TAIFUN, 1985, 1232 hrs, Limbach engine, 1012 hrs	**£25,900**

Information and photo on request
Don't forget AIR EST SERVICES can find, for you, in France, Germany . . . the glider/motorglider of your dreams
Phone 00 33 3 87 50 39 66 • Fax 00 33 3 87 63 91 48

TUGS!

Urgently required for Two Seater Comp at Pocklington

Transit distance no problem

Call Simon Parker Manager, Wolds GC if you can help 01759 303579

NIMBUS 3/25.5M 1988, 1000 hours. Full competition panel inc. GPS and logger, tinted canopy, fin tank, brand new trailer, all tow-out gear. Complete outfit in immaculate condition, no accidents and NO LAND OUTS! View at Lasham. Tel: 01420 80527 anytime.

SF27A basic instruments, open trailer, full years CofA. £6000 ono. **Ka8B** basic instruments, current CofA. £3000 ono. Tel: Evenings 01924 256765

LS7 in excellent condition. Competition panel, trailer, parachute etc. For sale as complete kit, ready to fly, or will consider sale of Hull only, Hull and Trailer etc. Tel: Ron Bridges 01280 701103

NEW LAK 12 Hull & Trailer – Available Now. Superb performance Max L/D 48 & docile handling. Only £16 950 inc VAT. Delivered UK. Tel: Tony Pozerskis 01536 485552 (office) 01858 468820 (Home).

K6E. Splendid condition, excellent panel, 720 radio, CofA 4/99. Lightweight timber trailer. £6250. Tel: 01793 771699

ASW 20CL. Masak winglets, GPS, Bohli, Cambridge, Dittel 720, Horizon, Oxygen, Barograph, covers, tow-out gear, Cobra. Excellent. Tel: (W) 0171 423 4080 (H) 01440 785662

MINI NIMBUS low hours, full panel, 720 radio, Bohli, oxygen, trailer, tow-out gear. All well maintained and in excellent condition. £16 750. Tel: 0181 399 4126

PILATUS B4 AF Model + trailer, with Konig self sustainer engine at £12 000. Magellin Sky Star GPS £310.00. Tel: 01980 632401

Ka6E Near perfect condition. 1969. Always been hangared. Complete panel, including 720 radio, t/s, electric horizon, electronic +/- 5 m/s and Winter vario. Also Winter barograph. Parachute, covers etc. New CofA. Trailer. £7500 ono. Tel: 01780 480944

PUCHACZ. 1991. 1400 hrs, VGC basic panel, Puchacz AMF trailer. K7 1964 3500 hrs average condition, basic panel. Offers. Tel: 01705 345845

THE SCOTTISH GLIDING CENTRE

Portmoak

Invites you to join us on the

28th June 1998

for our

60th Anniversary Celebrations and Open Day

and

Launch of our flying for the Disabled

Walking on air

Vintage Glider Week 27th June to 4th July

Clubhouse accommodation caravan and camping space

Call Irene on 01592 840543
Scottish Gliding Centre
Portmoak Airfield, Scotlandwell KY13 7JL

Skywings

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

KOMET 3
GLIDER TRAILERS

GRP LIFT TOP ..... *Standard*
ALL FITTINGS ..... *Standard*
HIGHEST QUALITY ..... *Standard*
UNBEATABLE VALUE .. *Standard*

Any glider . . . Any configuration

RAPID DELIVERY – 3 TO 5 WEEKS

£4500 all in

INTERESTED?

Tel: 01284 827 166

GLIDERS SPECIAL
FOR THE WAVE SEASON

7 NIGHTS BED and BREAKFAST from £100pp

The Loch Kinord Hotel
(formerly Profeits Hotel) in Royal Deeside
Only 1.5 miles from the
DEESIDE GLIDING CLUB
Offering comfortable accommodation, good food, Real Ales and a fine selection of Malt Whisky to enjoy beside real log fires.(Daily rates available)

Telephone 013398 85229 for reservations

✦ Under new management ✦

GLIDER/AIRCRAFT INSURANCE?

Contact:
Tony Fidler

Glider pilot for 30+ years

35+ years insurance experience

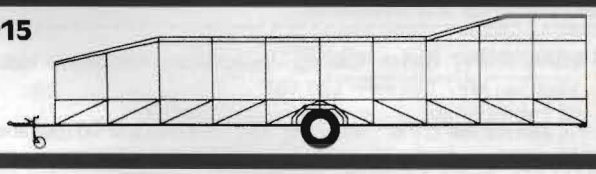
Telephone/fax/write to:

ANTHONY FIDLER & CO
27 High Street, Long Sutton
Spalding, Lincs PE12 9DB
Tel: 01406 362462
Fax: 01406 362124

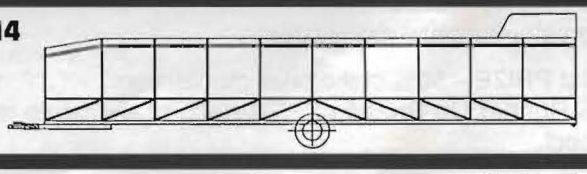
▼ SCHOFIELD AVIATION ▼

We can provide all your trailer requirements, giving you excellent choice throughout the range. Kits, spares and excellent service - phone today

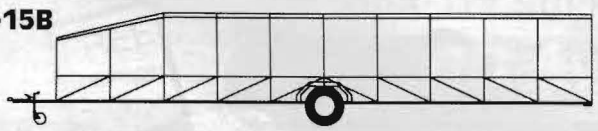
DS-15



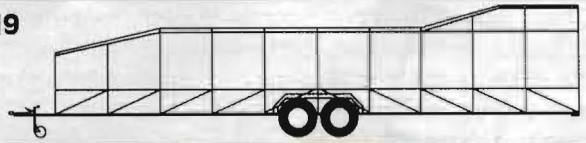
DS-14



DS-15B



DS-19



Lotmead Farm, Lower Wanborough, Swindon, Wilts, SN3 4AJ • Tel: 01793 790160, 01793 771699 or 0973 838695
Fax: 01793 790826 - Freephone Number: 0800 163 629 - web site: www.gd-ind.com/schofieldaviation - e-mail: schofieldaviation@gd-ind.com

ASW 15. 1971, refurbished 1993, GPR clad trailer A/T tow hooks. Full panel includes A/H, CAV 2 vario, radio and GPS. Parachute, T/P camera and oxygen system also included 12 months CofA. £10 750 ono. Contact Alan on 0191 2867593 or Malcolm on 01653 698045

VENTUS CT Fully instrumented, GPR trailer. £43 500. **DISCUS B** Fully instrumented, trailer. £27 500. **VENTUS C WINGLETS** as new £1000. Contact (Day) 01869 252493 (Eve) 01636 626883

SKYLARK 4 (the prototype). Metal trailer, 5 yrs old, 2 man rigging aids. Tow-out gear, CofG Hook. Basic panel, electronic vario, parachute, CofA to May 1999. £6000 ono. Tel (Daytime) 0385 993292 (Eve/Weekend) 0161 439 4009

CS ASTIR, superb condition, seldom dismantled, parachute and fitted glass trailer. Winter fast and slow varios, Westerborer Electro audio vario, Dittel radio, usual instruments. £8950. Tel: 0171 6020814

ASTIR CS 1/6 Share, based at Dunstable. A/H, two Icoms, parachute, oxygen and water ballast. Aluminium trailer, new covers, one man to out. £1300 ono, paid until 1999. Tel: Matt 0171 6038134

RC Allen A/H with integral inverter as new £925. STS 720 Handheld Transceiver £150. Ball 200 57mm triple range electric vario, no flask required £200. Tel: 01422 845436

SHK-1 Excellent condition – very good panel, audio vario, new canopy, tow-out gear, parachute, barograph, twin axle metal trailer, outfit rigged and hangared last 5 years. £8500 ono. Tel: 01473 658785 or 01767 315536

ASW 19B Excellent condition, includes trailer, radio, instruments, parachute, tow out gear. New CofA. Tel: 01244 372309

MISCELLANEOUS

AUSTRALIA – Ever thought of taking your own glider downunder for the winter? Space available in container leaving Sept. 98. Details from 01798 812499

WANTED

English Version of Instructions for Dittel LX2000. Tel: 01924 256765

ENGINES

ACRO ENGINES LTD. Specialists in SLMG engines since 1981. Limbach, Rollason, Rectimo etc. Tel: 01462 470322 Barry or Tim Smith

COMPETITION ENTERPRISE

has moved to

June 27th to July 5th

at

DEVON AND SOMERSET GLIDING CLUB

North Hill, Honiton, Devon

for its 25th Anniversary

Brochure and entry form available from:

Competition Secretary
28 Salisbury Road, Exmouth, Devon EX8 1SL
Tel: 01395 274186

Anniversary party at John Fielden's at the end!

COME GLIDING

THE CORNISH GLIDING CLUB

with the **CORNISH GLIDING CLUB** at **Perranporth, Cornwall**
5 day Aero-tow courses, £285.00
(1, 2 or 3-day courses **£58.00** per day)
BGA Instructors. Beginners and reciprocal members welcome.

MOTOR GLIDER COURSES including Silver 'C' conversion to SLMG **£45.00 hr**

MAY–SEPTEMBER

RUTH PHILLIPS, Boswens, Wheal Kitty, St. Agnes
Cornwall TR5 0RH • 01872 552430
If no reply please phone (01726) 842798

ADVERTISERS' INDEX

Affinity Select 158
Air Est Services 190
Airborne Composities .. 165
Anglo Polish Sailplanes . 132
Aquila GC 180
Benalla 187
Booker GC 180
Bristol & Gloucestershire GC. 174, 183
BGA 181
Bruno Brown 175
Cair Aviation 159
Cambridge Aero Instruments 166
Cambridge GC 178
Competition Enterprise . 192
Cornish GC 192
Cotswolds Gliders 180
Cotswold GC. 182
Crabb Computing 156
Derby & Lancs GC 179
Deeside GC 185
Edgley Sailplanes 182
Enstone Eagles GC 178
European Soaring Club . 176
Anthony Fidler 191
Flight Insurance 134
Glider Instruments 182
Guild of Aviation Artists 187
Hill Aviation 135
Irvin Aerospace Ltd 176
IS Aviation 189
Jardine Aviation 150
Jaxida Covers 182
Joint Air Services 166
Terry Joint 189
Kenilworth International 164
Kent GC. 179
Lasham GS ..... IFC
Loch Kinord Hotel 191
Lomond County Inn 171
London GC 131
London Sailplanes 131
McLean Aviation. 138
Mallettec 138
Harry Mendelssohn 186
Met Office 149
Midland GC 178
Nevynn International ... 185
Norfolk GC 178
North Yorkshire Sailplanes 176
Oxfordshire Sportflying . 143
Pawnee Tugs 180
Pilot Flight Training 133
RD Aviation ..... IBC
Rematic 183
S&G 184
Schofield Aviation 191
Scottish Gliding Centre . 191
Sedgwick Aviation 130
Severn Valley Sailplanes 137
Shenington GC 138
Shirenewton Sailplanes . 181
Skycraft Services 178
Sky Systems Ltd 136
Skywings 191
J.L.Smoker 180
Southern Sailplanes. ..... BC
Ernst Specht 162
Sportavia 136
Stemme Motor Glider .. 183
Stowaway Cushions. 183
Stratford on Avon GC... 178
Roger Targett 180
TaskNav 184
The Soaring Centre 182
Thomas Sports Equipment 167
Turnpike Technics 159
C.P.Witter 190
Wolds GC 191
Yorkshire GC 184
Zulu Glasstek 163

British Gliding Association

THE 1000 CLUB MONTHLY LOTTERY

A great chance to win substantial cash prizes and at the same time enable the Philip Wills Memorial Fund to make loans to clubs for site purchase and development.

1000 is the target number of members to participate in this monthly lottery which started in July 1992. When 1000 members subscribe £1.00 a month each then the monthly first cash prize will be £250.00.

HALF of the proceeds go to the Philip Wills Memorial Fund to help with its work in developing BGA clubs and the other HALF is distributed each month in the form of 6 CASH PRIZES. The more participants we have, the greater the prize money pool.

1st PRIZE – 50% of the prize money pool.
5 Runner Up Prizes of 10% each of the prize money pool.

Chances/numbers can only be bought from the BGA at £1.00 each. Those whose money has been received at the BGA by the end of each month will then participate in the draw on the first Wednesday of each following month. Tickets will not be issued in order to keep the administrative costs low but each member will purchase a "number" 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.

Barry Rolfe
Promoter

To: Barry Rolfe, British Gliding Association, Kimberley House, Vaughan Way, Leicester LE1 4SE

Please include me in the "1000 club" and I enclose £12.00 (payable to BGA) for twelve months of entries, or multiples thereof.

Name ..... Signed .....

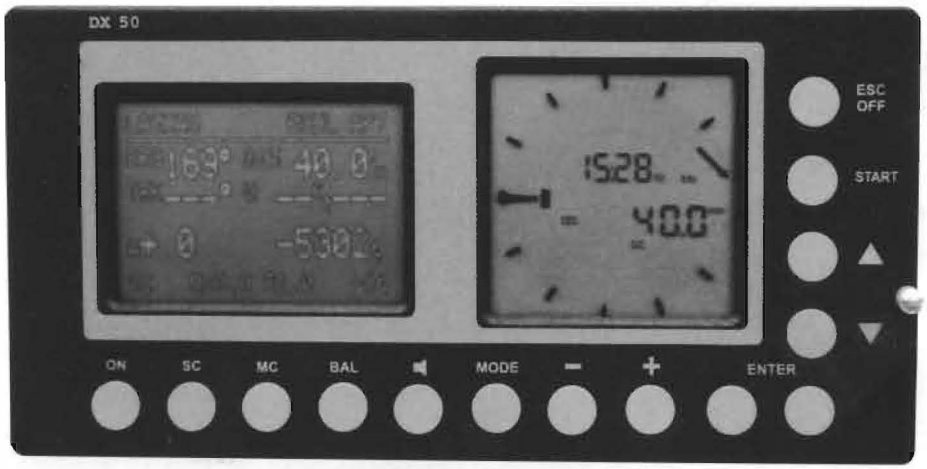
Address .....

.....

.....

RD AVIATION LIMITED

NEW from FILSER ELECTRONIC
DX50 INTEGRATED GPS VARIO SYSTEM



- European airspace
- Twin LCD screens
- 3000 airfields, 600 turn points, 100 tasks – all user configurable
- LCD vario display with 2 configurable "needles"
- Programmable averager
- Integral flight recorder
- Speed to fly
- Moving map
- Pneumatic or electronic total energy
- Final guide calculator
- Integral barograph
- Graphical representation of flight in FAI sector
- Vector windspeed calculation
- Size: 180 x 100 x 55mm deep – weight: 700 gms

Basic model (not IGC approved) £999 + VAT = £1173.83
with IGC approval for integral flight recorder £1272.34 + VAT = £1495

Also soon available

LX21 SECURE FLIGHT RECORDER

A "black box" SFR with full IGC approval

for only

£476.60 + VAT = £560

Connect antenna and power and forget

Both DX50 and LX21 undergoing IGC approval on 9 April 98 advert deadline

RD Aviation Ltd are UK distributors for Filser Electronic • Trade enquiries welcome

QUALITY SUPPLIES AND SERVICE

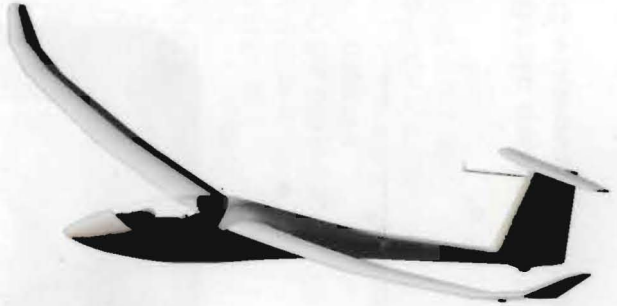
FREE 56-Page Catalogue

RD Aviation Ltd.
25 BANKSIDE, KIDLINGTON, OXON OX5 1JE, ENGLAND

FREE 56-Page Catalogue

Web Site: www.rdaviation.com * E-Mail: help@rdaviation.com
Tel: 01865 841441 * Fax: 01865 842495 * Shop Hours 0900–18.30 Mon-Fri, 10.00–12.30 Sat

Southern *Sailplanes*



see inside for further details...

Sole UK authorised dealer for genuine Schempp Hirth parts and sailplanes

Southern Sailplanes has been at the forefront of technology, repairing and inspecting gliders for over 25 years. So whether you need a straightforward Annual Inspection, or face complicated repair and insurance problems, let our unrivalled and comprehensive service, guarantee you have a trouble free flying season.

Membury Airfield,
Lambourn Woodlands,
Hungerford,
Berkshire RG17 7TJ

Tel: 01488 71774
Fax: 01488 72482
Evenings: 01488 682058 & 01488 668484
Mobiles: 0468 372806 & 0374 429404