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June ~ July 2007 Volume 58 Number 3

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Guy Westgate and Paul Barker take a farewell flight in their DG-400s — familiar from Guy's Travels with my toothbrush series — before buying a Ventus 2cm together. For Guy's explanation of what he means by wonderflug, see page 34 (Photo: Peter Atkinson)

# Salplane Giding

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It may be an old friend with its roots in motorgliding history, says **Jochen Ewald**, but the SF-25C has some new features and much to recommend it

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Slope soaring in The Netherlands – it's a joke, isn't it? Well, in fact, it's an historic tradition kept alive by a handful of hardy souls in wooden sailplanes. One of them, Jan de Jong, explains

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Richard H (Dick) Johnson flight tests the Sinha wing performanceenhancing deturbulators, which he says may be the most significant aerodynamic advance since the laminar aerofoil was invented

#### 36 On show at AERO 2007



Probably the best gliding exhibition in the world – in Europe's biggest General Aviation fair – is held every other year in Germany.

Helen Evans reports

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Member of the Royal Aero Club and the Fédération Aéronautique Internationale





THE new BGA National Coach has been appointed after the role was advertised in late 2006. The successful candidate is Mike Fox, 31, a member at Wolds GC, Pocklington, in Yorkshire. An established gliding instructor examiner, a successful competition pilot and cross-country coach, Mike will be working full time for the BGA and, therefore, its member clubs. For an introductory column from Mike, see p15.

A COMPETITION training course for Juniors is being held around the Junior Nationals (August 18-26) by the BGA National Coach, Mike Fox, and experienced volunteers. The deadline for applications is June 11 at 9am. A selection will be made by the end of June. Please apply ASAP to mike@gliding.co.uk.

DURING 2006 the Caroline Trust, the charity that supports young people and disabled people in gliding, awarded 23 bursaries to people under the age of 17 from 18 different clubs. It also gave two bursaries to disabled people. In addition, its Cadet of the Year, Sam Roddie from Wolds GC, was awarded £300-worth of flying. It is asking all club webmasters to link to www.carolinetrust.org.uk and adds: "We'd like to remind everyone we are the only registered charity exclusively dedicated to your sport. Please don't forget how we support you when you raise money or make charitable donations or bequests".

THREE sites (Moscow, Russia: Odense, Denmark, and Turin, Italy) will make presentations on June 1 to try to host the World Air Games 2009. In March, the team preparing a UK bid withdrew (www.lai.org)

A TECHNICAL update has been published on the BGA website relating to DG-500/505 (all models including self-launching sallplanes). Some aircraft are fitted with rear seat headrests either as original equipment or optional modification (TN843-6 & TN348-5). If rear seat head rests are fitted, the restraining cords to the seat back support must be fitted to prevent the head rest falling forward, possibly causing a control stick restriction if flown solo. For more information visit www.gliding.co.uk/bgainfo/technical/news.htm

WE are sorry to report the death in March of Sir Arthur Marshall (1903–2007), a benefactor of gliding. Elected an honorary member of CUGC in 1949, he was an honorary member of its successor, the Cambridge GC, at his death. Anthony Edwards adds: "Both clubs have every reason to be grateful to him for his interest and generosity, without which the first would never have survived to give birth to the second".

THE Competitions and Awards Committee of the BGA has changed the recipient for the BGA's Volk trophy to lan Ashdown for his 515km actual (526.0km handicapped) out-and-return Parham-Tuxford Power Station-Parham on July 11, 2006 in an ASW20F. The change is due to the identification of lan's logger error.

WE have received two corrections to the club map contact details printed on p33-36 of the last S&G. The correct telephone number for Shalbourne Soaring Society is 01264 731204, while the secretary of Suffolk Soaring Society is Richard Maisonpierre. He can be contacted at secretary@suffolksoaring.co.uk or on 07974 132313. Our apologies for the errors to the two clubs involved.

#### Award for FLARM team

The team that developed the FLARM anti-collision device - whose worldwide sales have now passed 9,000 - were presented at AERO 2007 with the FAI's Prince Alvaro de Orleans Borbon Prize for technical innovation in air sports. The members of the team, from Switzerland, that developed FLARM - Urban Mader, Urs Rothacher (pictured right) and Andrea Schlapaback - were recognised by the Trustees of the Prize Fund as having made "a great contribution to the improvement of safety in air sport". Meanwhile in the UK, despite the unclear regulatory situation, more than 100 units have been sold, with particular interest from clubs such as Lasham, and ridge sites like Yorkshire GC and the Scottish GC. S&G is planning to run an update on the UK situation later this year (Photo: Helen Evans)



## Glider owners – watch this space

F YOU own or operate gliders in the UK, make sure you don't miss the next issue of S&G (August-September 2007): it's going to contain important information about the new airworthiness arrangements for gliders, still being developed with the Civil Aviation Authority (CAA). This is in anticipation of a 12-month transition period from BGA Certificates of Airworthiness to European Aviation Safety Agency (EASA) Cs of A. starting at the end of September 2007. Watch this space - and www.gliding.co.uk - for more. When EASA was established in 2003 its airworthiness regulations stated that gliders would need EASA Cs of A by March 29, 2007, to continue to fly legally. The CAA confirms that gliders with BGA Cs of A, CAAissued Cs of A, or approvals to fly granted by the Air Cadets can continue to fly during the transition. But it understands that some UK gliders - maybe around 20 - do not fall into the above categories but are nonetheless subject to European regulations. Unless the owners of these few gliders either comply with the new regulations or obtain a C of A from the BGA, they can no longer legally fly. If this applies to you, contact the CAA now.

### The CAA's latest views on the Mode S question

IN APRIL, the UK Civil Aviation Authority (CAA) published a summary of the key issues arising from last year's consultation on airspace interoperability, and the CAA response. "A significant level of concern about the proposals was raised by sporting and recreational flyers," it says, "particularly in the sailplane community." It noted an unprecedented level of response to its Partial RIA – 80% of that from glider pilots.

The CAA anticipates a phased approach for the introduction of Mode S; proposals are being developed for formal CAA Board consideration. It adds informal and formal consultation on those will be conducted in due course and further details, including timescales, will be announced. Some detail is available from www.caa.co.uk/modes

The BGA is continuing to discuss this extremely significant subject with the CAA's Directorate of Airspace Policy. For a more detailed assessment from the BGA Chairman, Patrick Naegeli, about ours – and other air sports' – negotiations with the CAA over the past few months, please turn to the BGA Executive News column on p10



The Dan Smith Memorial Trophy (Sports Class) and the overall winner's Gold medal went in 2007 to first-timer Jon Gowdy. Guy Westgate, Jon's mentor, took Silver, and Jan Rolinek got Bronze. Other glider aerobatic contests for 2007 are: June 7-10, Nationals, Saltby; September 7-8, Saltby Open; October 5-7, Gliders vs Power Team Match, Lasham



In February 2007, the first DG-1000 Club, based on the DG-1000s and aimed at the basic training market, flew. This has a fixed undercarriage, which can be changed for a retractable one if required. For more news from DG, see p36

### Don't be a 2007 statistic

HIS SUMMER, make sure you don't infringe airspace - brief yourself before you fly. Every year, a number of RAF Red Arrows displays, says the Civil Aviation Authority, are infringed by other aircraft.

The CAA has published an Aeronautical Information Circular (AIC) detailing Red Arrows displays, and resulting temporary airspace restrictions, throughout the UK.

The Royal International Air Tattoo is another event to look out for: it takes place from July 11-16, 2007 at Fairford. Watch out for the notification of the temporary restricted airspace - now known as Restricted Airspace (Temporary), or RA(T) - and be aware of the level of RIAT traffic around those dates.

As well as referring to AICs (available free of charge at www.ais.org.uk) there are other ways to get a pre-flight briefing on RA(T)s.

One of the easiest is the Aeronautical Information Services (AIS) information line on 0500 354 802.

You can check NOTAMs on the AIS website or contact the NOTAM Office on 020 8745 3451 / 3450 (24-hour facility).

Or check Pre-Flight Information Bulletins (PIBs) on the AIS website. PIBs can also be accessed through www.nats.co.uk.

TRAs most likely to affect gliding are listed at www.gliding.co.uk/bgainfo/airspace/ introduction.htm#AICS. This is not definitive: regularly check the AIS website or 0500 354802 to ensure you are aware of airspace changes that might affect you in addition to checking NOTAMs before every flight.

While on the subject of airspace, if you're looking for BGA Letters of Agreement that relate to specific airspace, they're posted at www.gliding.co.uk/bgainfo/airspace/loas.htm

Finally, you might like to note that the Heathrow Flight Briefing Unit has moved and therefore has new contact numbers.

They have been promulgated by NOTAM and are as follows: 020 8750 2615 / 2616 (was 020 8745 3111 / 3163). Their fax number is now 020 8750 2617 / 2618 was (020 8745 3491 / 3492).

We believe that the old numbers may be re-routed, but using the new numbers is the most reliable contact method.

GOOD LUCK to the British Gliding Team members representing us this summer. The Junior World Championships take place in Rieti, Italy in July-August and the British team will consist of: Standard Class: Andy May (2005 Bronze medalist), Tom Smith, Shaun McLaughlin; Club Class: Mark Holden, Simon Barker, Mike Collett. The Women's World Championships take place in Romarantin, France in July. The British team will be: Sarah Kelman, Gill Spreckley, Kay Draper, Rose Johnson, Liz Sparrow and Lucy Withall. There are two sets of European Championships. The team going to Issoudun, France will be: Open Class: Pete Harvey (defending his title), Kim Tipple, Steve Jones; 18-Metre Class: Russell Cheetham, Phil Jones; 15-Metre Class: Tim Scott, Leigh Wells. The team going to Lithuania will be: Standard Class: Gary Stingemore, Derren Francis; Club Class: Dave Draper, Kenneth Barker.

IS IT climate change? April 2007 in the UK was an exceptionally warm month, with all climate districts and regions setting new April records for maximum and mean temperatures (based on records going back to 1914). Maximum temperature anomalies were more than 5°C above the 1961-1990 average across much of southern England and parts of eastern Scotland. And rainfall was generally well below average, with many places over South-East England and East Anglia recording less than 3mm. Sunshine was well above average across most of the UK, with some areas having their sunniest April on record.

WINCHING and club marketing forums have now been launched on www.gliding.co.uk. If you are responsible for the winch at your club or indeed for promoting your club, have not already received an invitation and want to join the relevant discussion group, please contact Andy Holmes or Alison Randle (andyh418@yahoo.co.uk or alison@gliding.co.uk) for the winching forum or, for the club marketing one, Keith Auchterlonie (keith@gliding.co.uk).

A change to BGA Op Reg 1.9 was approved at the AGM to the effect that all gliders must have BGAapproved identification markings displayed as large as practicable on each side of the fin and/or rudder (if not possible, on the fuselage) in a substantially vertical plane. All BGA certified gliders must have the BGA certification number displayed on at least one side of the aircraft. The number should be on the fin or fuselage in 20mm high characters in a contrasting colour. The preferred format is BGA 9999.

THE CAA has confirmed that an EASA Permit to Fly is not required for BGA gliders flying in France under exemption E1116 (ORS4-628).

A team of air traffic controllers from Newcastle Airport and an aerodrome manager from Northumberland were declared in early May joint winners of the Civil Aviation Authority (CAA) General Aviation Safety Awards 2006. Dominic Underdown, a helicopter instructor from Lancing, West Sussex, was runner-up.

THE winner of the BGA 1000 Club Lottery for March 2007 was RJ Harding (£29.75), with runners-up KC Ellis and Dr RP Saundby (each £14.87). The April winner was Bernie Morris (£30.25), with runners-up GH Chamberlain and F Tucket (£15.12).

### Get a racing start on the summer

Bidford Regionals	Bidford	16/6-24/6	Open Class Nationals	Lasham	4/8-12/8
15-Metre Class Nationals	Tibenham	23/6-1/7	Club Class Nationals	Lasham	4/8-12/8
Eastern Regionals	Tibenham	23/6-1/7	Midland Regionals	Husbands Bosworth	4/8-12/8
Competition Enterprise*	Sutton Bank	7/7-14/7	Northern Regionals	Sutton Bank	4/8-12/8
18-Metre Nationals	Husbands Bosworth	7/7-15/7	Inter Services	RAF Honington	4/8-12/8
Sabina Glide (pre-worlds)	Rieti, Italy	8/7-15/7	Cotswold Regionals	Aston Down	4/8-12/8
Royal Internat'l Air Tattoo	Fairford	11/7-16/7	Booker Regionals	Booker	11/8-19/8
Women's Worlds	Romarantin, France	10/7-22/7	Junior Nationals	Tibenham	18/8-26/8
Western Regionals	Nympsfield	21/7-29/7	Lasham Regionals	Lasham	18/8-26/8
Bicester Regionals	Bicester	21/7-29/7	Dunstable Regionals	Dunstable	18/8-26/8
Standard Class Nationals	Pocklington	21/7-29/7	Gransden Regionals	Gransden Lodge	18/8-26/8
Inter University Task Week	*Aston Down	28/7-5/8	2-seater competition*	Pocklington	19/8-26/8
Junior Worlds	Rieti, Italy	28/7-11/8	Mountain Soaring Comp*	Aboyne	2/9-8/9
Europeans (Club/Std)	Pociunai, Lithuania	28/7-12/8			
Europeans (15/18m/Open	Issoudun, France	2/8-19/8		* Not a BGA-rated	d Competition

### Development News

## Visits, projects and funding



Alison Randle, Roger Coote and Annette Purcell report on the BGA development team's recent activities

N EASTER Saturday I drove from Cornwall to Lasham, choosing to drop in at my old club, Dartmoor, on the way. Whilst differences between the two clubs are obvious, what struck me were the many similarities that there were from a club development point of view.

Both clubs are keen to move with the times to meet the changing needs of their members. The attitudes of the members that I met were strikingly similar. Both clubs are using non-committee members to research and find potential funding for projects. These were driven and motivated individuals. However, both also had members who have been working hard for several years. These people can see the huge potential of their club but are now running low on energy. Of all the possibilities available to both clubs the biggest threat to success is lack of support from their members. Committing to delivering a project includes carrying out an accurate assessment of its viability. This applies equally to time and energy as it does to money and materials.

Dartmoor has built an excellent working relationship with the local sports development officer during the last couple of years and has raised its profile on the local sports development scene. It has written a club development plan and has been included in the local sports development plan. This work is now paying dividends as it has access to preferential rates for printing of publicity material at the local council and inclusion in local council sports publicity material for the local press. Doors have been opened for funding. Having succeeded with some smaller-scale projects; having learned from experiencing a couple of non-starters; and realising the full potential available from their local sports development scene, it is in the process of working out new, more visionary projects that should now be



Alison Randle (left) and (above) her photograph of Dartmoor GC, with St. Michael de Rupe church on Brentor

achievable. Lasham Gliding Society has a specific capital project to fund and is in the process of building the sort of local networking relationships that the smaller club is benefiting from. Being a much larger club, it has a wider range of resources, such as expertise from within the club membership, to call on.

Comparing these two clubs from opposite ends of the spectrum demonstrates the importance of building good local relations – regardless of the size of club or project.

Alison Randle BGA Development Officer alison@gliding.co.uk

#### **BGA Planning & Environment Fund**

Many UK gliding clubs appear to be unaware of the existence of this fund or of the benefits that it has to offer.

The Fund was founded in 1995, largely as the result of work done by Chris Nicholas. An annual subscription of £2 per head was approved at the 1995 AGM in order to establish a reserve from which to assist clubs facing planning appeals and, in particular, to combat the threat of the AEF (Airfield Environment Federation) which at that time was causing serious problems to airfields used for General Aviation (GA) and gliding.

Although primarily intended to help clubs to cover the professional fees involved in going to appeal, the purposes of the fund have subsequently been extended to cover the costs incurred in making planning applications for gliding sites and for aerodrome safeguarding.

To date, the Planning and Environment Fund (PEF) has collected some £107,000 from the membership and has spent some £57,000 for the benefit of member clubs. This has taken the form of contributions from

the BGA to the GAAC (General Aviation Awareness Council), which campaigns on behalf of general aviation to protect airfields, and significant help to individual clubs facing planning appeals or professional costs in connection with planning. Examples of PEF assistance include:

(i) Essex & Suffolk GC: successful planning appeal at Wormingford.
(ii) North Wales GC: planning appeal for their new site at Llantisilio.
(iii) Essex GC: successful planning appeal against building restrictions at Ridgewell.
(iv) The Dukeries: planning costs connected with the club's new site at Darlton.

If your club is facing professional costs for planning or safeguarding purposes, then please contact BGA Chief Executive Pete Stratten, requesting assistance from the PEF.

Provided that a good business case is made by the club and more particularly if success would create a precedent for the benefit of other clubs or for gliding in general, then the PEF will usually agree to a contribution in the region of 50 per cent of the actual costs incurred.

Roger Coote BGA Development Officer

#### Seminar at the BGA weekend

Having taken over the role of treasurer at Shenington GC at the end of January this year, I found the invitation to attend the club development seminar at the BGA conference very welcome.

Prior to the conference, attendees were issued with a spreadsheet, dubiously dubbed 'homework', into which we could enter our own club accounts or budgeted figures,

I elected to work on projected data. With

a little thought the spreadsheet was relatively easy to complete, building up final figures from types of launch, number of launches, average income per launch and membership subscriptions.

Costs were entered into categories of fixed and variable expenditure, with the final result ending up (hopefully) in line with the accounts.

The seminar started with a brief discussion of what the BGA development team could offer to our clubs and the purpose of the seminar. We were then asked to re-input our already assimilated data into a seemingly identical spreadsheet.

The new sheet linked into a series of graphs designed to measure an individual club's performance against certain parameters, including site security, ability to cover fixed costs, sensitivity to membership fluctuations and operational mix.

The final graph produced a comparison of the individual club's position against an ideal ("The Lowrie Factor" after its author).

With some trepidation, everyone who was present agreed to share this information anonymously and awaited the results of individual data entries.

The results clearly demonstrated that all the participating clubs were experiencing similar problems to a greater or lesser extent. The author, Craig Lowrie, had expended a great deal of time and thought on the content and presentation of the spreadsheet, producing a very useful tool to help in the thought process of club development.

The spreadsheet can also be used to explore "what if" scenarios, enabling clubs to foresee and react to changing levels of membership or activity (if only it could predict the weather as well!).

We are all very aware of the problems besetting the gliding movement and the opportunity to share views and experiences in a confidential forum proved invaluable.

a confidential forum proved invaluable.

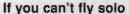
How will my club use this information?

As a committee, we were already in the process of addressing some of the issues identified during the seminar, with monthly management accounts and cashflow forecasts now being regularly produced as a management tool to assist with decision making. We are also preparing a five-year business plan with supporting budgets to establish targets and measure achievements.

What did we gain from the presentation? Craig's analysis has helped to outline areas of strengths and weakness relative to our own club and has provided a useful indicator of where we need to focus our efforts for the future in order to maintain our position and achieve growth. The graphs also provides an effective way of communicating information to our members.

A very worthwhile two hours. Thanks to Craig and the development team for sharing this exercise with us.

Annette Purcell Shenington GC



I GUESS my club is similar to many, in that we have some capable pilots who are not able to fly solo for various reasons. I wonder if there would be any mileage in having a secondary badge scheme running parallel to the existing one for those pilots who would have loved to get that Bronze, Silver or better, but just need a safety pilot? Generally, these people put a considerable amount into their clubs: it could give them realistic goals and hopefully inspire them to continue flying. Any ideas anyone?

Compleat Aviators rig their gliders

Dave King, Rattlesden GC

I AGREE that hangars can save time, but I'm not entirely convinced that "rigging is super time wasting" as John McWilliam suggests (April-May 2007, Success story, p7).

For club gliders, leaving them rigged has its drawbacks. When it is necessary to take them apart in a field – after all, aren't we trying to encourage pilots to fly cross-country? – the glider is often awkward to dismantle, partly because the fittings are dried into position, but mostly because the people are out of practice, or may never have taken that glider apart or, more likely, not be familiar with the vagaries of that particular trailer.

The time saving can be a myth, too. By the time the hangar is unpacked, the covers removed and the glider cleaned, there is precious little to choose, time wise, between rigging and hangared gliders, especially with a modern glider with self-connecting controls and well designed fittings. In fact, I would suggest that a well-choreographed rigging can be quicker than extracting a glider from a crowded hangar. Regular rigging and derigging also gives you the chance to inspect all of those hard-to-get-at fittings, linkages and bearings, which otherwise would be hidden for months on end.

The damage question is a myth, too. Over the years, I have seen more gliders damaged by the euphemistically-named hangar rash than I have from rigging accidents, especially if the riggers are competent and in practice – see my earlier paragraph!

I would never even consider putting my own glider in a hangar, unless it was a real monster to rig – and, I concede, such things do exist. I would rather put my clean glider into its clean box, rather than have to worry about chips, scratches, dings, dents, dust and guano imparted to it by other residents, human, non-human and inanimate, of the hangar. At least if I damage my glider rigging it then it's my own fault, and I don't have to worry about some unknown person knocking my tailplane and not telling me.

Anyway, surely part of the fun of flying is getting to the field that bit earlier and putting the gliders together on a fresh summer's morning with your fellow pilots before the thermals get going? Isn't that just another part of becoming The Compleat Aviator?

Chris Pollard, IPSWICH, Suffolk

Winching in the good old days

PAGE 6 in the April-May 5&G shows a car winch. Looks more like a Rolls to me, which is what it was when based at Sutton Bank — not Portmoak. I suppose it is possible it was sold to Portmoak, but Sutton Bank also used to tow gliders with a horse. Thorburn, who took the picture, was a member of the Yorkshire GC (YGC) at Sutton Bank as well as of the Scottish Gliding Union (SGU) at Portmoak.

Mike Wood, via email

Bruce Marshall of Yorkshire GC adds: the photo that S&G used actually shows a Rolls Royce pressed into service as a winch at Sutton Bank, circa 1935-36, photographed by Andrew Thorburn when learning to glide there. The woman standing near the drum may be Amy Johnston. You may therefore get some flak from any YGC members who know their history. My photo (below) shows the real first SGU winch — maybe a Packard — on Bishop Hill in 1938, and as you will see, it exhibits all the safety characteristics the Rolls has! Andrew Thorburn is leaning on the spade

Safety questions

I WANT to take your time with two matters: gliding safety and, separately, transponders.

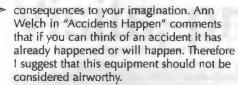
As far as safety is concerned, the excellent BGA publication Accidents to Gliders makes the point that 90 per cent of the stall/spin accident reports indicated the presence of something which might have distracted the pilot. I have flown two gliders fitted with sucker-mounted PDA holders, both have come off while on aerotow ground run so that the equipment fell between my knee and the stick. I leave the potential



The real Scottish Gliding Union car which, on Bishop Hill in 1938. See Winching in the good old days, above

### Your letters

### Women's Development



Regarding winch launch accidents, is any correlation made with the pilot's experience of real, not simulated, launch failures? I once gave a relatively experienced visitor a check flight. The cable broke and he did not react – after I had taken over and landed, he said he had never experienced a real cable break and had not realised anything was wrong. The quality of equipment these days is such that it is quite usual for some people not to experience real launch failures at all.

Moving on to transponders, one of the weaknesses of our case is that to the general public this is an esoteric matter concerning only general aviation — what they are not aware of is that the hidden agenda is to open the skies for commercial aviation everywhere so that any quiet piece of countryside will experience commercial flying at almost any level.

Neil Kelly, via email

With reference to the sucker-mounted PDA holders, the BGA view is that PDA mounts and similar equipment should be properly fitted and secured in the cockpit. With regard to "real" as opposed to simulated launch failures, it's an interesting question and I've forwarded it to the BGA Safety Initiative team (who can be reached at safetyinitiative@gliding.co.uk) – Editor

#### Members' car insurance

HOW many glider pilots, I wonder, are aware that their car is probably not insured while on their club's airfield? My insurance policy states: "We will not pay for any claims arising from... using a car in any area used by aircraft or for servicing aircraft."

My insurers confirm that, on a gliding club airfield where (perhaps unlike a non-gliding or commercial airfield) there is no particular demarcation between areas used by aircraft and areas used by cars, my car is totally uninsured from the minute I enter the gate. If, while I attend an evening meeting, when all the aircraft are safely tucked away, someone burgles or steals my car, or it catches fire, or I reverse into my clubmate's nice new Mercedes, I am not covered.

Apparently it is a fairly general exclusion. Has anyone tried to get it lifted, or found a reasonably-priced insurer which does not have such an exclusion? Could the BGA lobby the insurance industry to lift this exclusion? After all, a car is probably at less risk on a gliding airfield than in a modern farmyard, an industrial estate or even a multi-storey car park!

Stuart Edinborough, HEREFORD, Hereford & Worcester

Please send letters (marked "for publication") to the editor at editor@sailplaneandgliding.co.uk or the address on p3, including your full contact details. Deadline for the next issue is June 12



British Gliding Team members and other women pilots at the Nympsfield launchpoint in April for the women's development weekend. The British Team has secured sponsorship from the airline Easyjet. More support came at the weekend from Nympsfield pundits. who used their gliders and expertise to give some participants advanced cross-country

### Good outcome...

Liz Sparrow describes progress at this spring's British Team women's development weekend

RITISH Team members Rose Johnson, Sarah Kelman, Kay Draper and I led a skills development weekend at Nympsfield on April 14-15. Female pilots converged on Bristol & Gloucestershire GC from around the country to learn from the team and local pundits – Val Alexander coming all the way from Portmoak to set a new record for keenness – and, as with previous events, one or two partners were brave enough to attend.

BGGC had rounded up a number of big two-seaters with pundit P1s offering advanced cross-country training - this was keenly appreciated by those who flew with them and the rest of us are rather jealous!

In view of the weather forecast, briefing on Saturday was followed by Sarah talking on her experience of flying in the blue and how to follow energy lines; Lemmy Tanner was eloquent on how the terrain and in particular wave affects the system. I summarised the airspace changes for this year and led a discussion about the practical impacts of airspace on task planning and flying. The morning's demanding schedule was followed by lunch from Giuseppe's renowned kitchen, rigging and a session on the finer points of grid squatting. Eventually Sarah got tired of waiting and launched to make it soarable; the rest duly followed.

Judging by the depressed transmissions on the radio, it appears that we were the only people who went cross-county that Saturday, and it was certainly a good opportunity to put into practice the morning's learning. Those who were not daft enough to go cross-country in the conditions spent time trying to understand the thermal systems. The 80km task was overset – nobody got round, regardless of span or physiological construction – although far be it from me to mention that

while both men and women landed out, it was only women who managed to soar home... But it proved that in very difficult conditions, cross-country flights are feasible. If you're a racing girlie, that is...

An excellent group dinner followed – we felt a bit mean about starting before BGGC CFI Tim Macfadyen was retrieved from his field, but not mean enough to wait...

Sunday briefings covered how to increase your cross-country speed, final glides, and the truth about eating and drinking in gliders. We followed this with a session on setting objectives: those who were at last year's event shared what they had planned and what they achieved – in particular, Louise Walker gave a splendid account of how setting proper objectives had transformed her flying through the year. The rest of us vowed to do the same this year! The weather again proved ticklish, a racing 50km task was set and some people got round this time.

We received a great welcome from the committee and members at Nympsfield, I would like to thank them all but in particular the club, Trevor Stuart and Barry Walker for making their gliders available, and Tim Macfadyen, Lemmy Tanner, Trevor Stuart and Richard Smith for flying them P1. BGGC are definitely on the list of good guys – go visit them for an equally warm welcome.

In summary, a good time was had by all, with people feeling it was a great learning opportunity and leaving fired up to put it all into practice. And we flew cross-country on days we wouldn't normally have bothered – good outcome!

Make sure you are signed up to the women's development alerts on the BGA website (www.gliding.co.uk) to ensure you hear of future events; the team are now busy practising for the Women's Worlds in July, but we will doubtless be organising something later in the year. Let us know how we can help you improve your flying, and we'll try to do it.

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### Mode S update - and medals

BGA Chairman Patrick Naegeli reports back on the continuing top-level negotiations with the Civil Aviation Authority on airspace interoperability – "Mode S" – then praises some of the well-qualified and dedicated volunteers whose hard work on regulatory issues, at home and abroad, helps us all

IND the gap – it's a useful warning if you're travelling on a train journey, but it can be equally valid if you're reading 5&G. That's because the demands of the magazine's production schedule mean you might reading words that had to be written before an event took place but were then published only after it happened.

That gap — when the magazine is at the printers — is one into which my column has fallen once already this year and, if you read on to the end of this article, you'll find it occurring again this time round.

The first event to slip through it this year was mentioned in my February-March column. Writing in early January, I told you that the BGA was preparing for meetings with the Civil Aviation Authority (CAA) on the subject of interoperability in UK airspace – or the "Mode S" issue, as it appears to be more commonly known.

Our first meeting was held at the end of January, shortly before S&G arrived on our doormats, and so you read about what was going to happen after it actually had. As a result, I can now report more fully on not one but two top-level negotiations about Mode S that the BGA has engaged in this year on your behalf.

January's meeting, the first face-to-face one with the CAA since the initial results of the consultation process were published, proved to be both interesting and useful. The British Gliding Association attended along with the British Microlight Aircraft Association (BMAA) and the Popular Flying Association (PFA), all of us under the very capable leadership of Sir John Allison.

It was a long – at times, tough – session and brought to the fore the critical issues that are underlying the need to enhance interoperability in UK airspace.

You may have read more about these issues in recent CAA news briefs (see p4) – unfortunately, space will not permit me to go into any detail here.

What was very clear at the end of the session was that the challenge for all UK aviation bodies – including the CAA, air sports, and commercial air transport operators – is to work out how to improve interoperability. Keeping things as they are is not an option. Equally clear, however, was that the CAA might be willing to consider variations to the blanket Mode S based option it had originally put forward.

Following the meeting, the BGA prepared a paper for the CAA on how much of UK airspace – vertically and horizontally – glider pilots do actually make use of. The BGA collected data, information and

analyses from various sources, including weather experts and club CFIs. Pete Stratten and Pete Harvey authored and edited the document. My thanks to all those who contributed. The paper further clarified the profile of gliding activity in the UK for the CAA and has made doubly sure that no one will assume that gliders generally fly only at relatively low levels over much of the country.

The second meeting with the CAA took place at the end of March. This session – similar to the January one in that it was long and occasionally tough – focused on an outline set of suggestions by the CAA for the phased introduction of interoperability measures.

Whilst aspects of the CAA ideas reflected elements of our earlier discussions, they still ultimately assumed the use of Mode S technology. It might feel like two steps forward, one step back. The CAA did, however, suggest that it understands the very particular issues that set gliding apart from many air sports and that it would be very

'Our volunteers are highly regarded by their counterparts in the authorities and impart a capability that is equally highly regarded, sometimes with envy, by other air sport organisations'

open to exploring specific measures that are more practical from our perspective.

There is, as a consequence, more work that we need to do in very short order. I will keep you posted as this progresses.

As I have said before, the fact that British gliding holds it own so effectively against the national and international regulatory bodies is a measure of two things.

Firstly, it is down to the very effective working relationships that the BGA has established, directly and indirectly, with all the main organisations – the CAA and the European Aviation Safety Agency (EASA) in particular. As far as the BGA is concerned, these relationships have been developed over many years. They are the product of co-operative and collaborative engagement on a range of technical matters.

In recent years, the authorities have been wrestling with the fundamental challenge of defining totally new regulatory frameworks. The task is made very complex by the fact that these have to work not just in a single country but across an entire continent.

Not surprisingly, differences of opinion

frequently arise as to how best this should be done and what the most practical options actually are among a myriad of possible mechanisms.

Where the implications of a course of action are potentially severe on any air sport community then the nature of the ensuing debate can quickly turn to one of a battle of wills and the perceived weight of rational argument and reason. When this occurs, an air sport critically depends on its ability to negotiate with the relevant authorities.

As you will appreciate, the degree of respect the regulatory authorities have for particular air sports organisations will significantly influence their view of the quality of the arguments being made.

Secondly, and equally importantly, British gliding is very fortunate to have a corps of very well qualified and utterly committed volunteers focusing much of their time to work on its behalf. They are highly regarded by their counterparts in the authorities and impart a capability to the BGA that is equally highly regarded – sometimes with envy – by other air sport organisations.

I have mentioned some of these people by name in previous columns. This time round, I want to express my appreciation to three in particular.

Firstly, Terry Slater has been at the centre of many of the BGA's negotiations with the CAA on licensing and operations matters. His mastery of his subject and determined but pragmatic approach have taken the BGA a long way towards the freedoms and delegated responsibilities we are looking for. Terry has decided to take a step back from his various front-line activities to focus more time on his business interests. I cannot easily express just how much of a debt of gratitude we owe him.

Secondly, we have long valued the expert input of Dr Peter Saundby as the BGA's medical advisor - just one of a myriad of activities that he undertakes on behalf of the General Aviation community - so I was delighted to be at the awards ceremony in April where his work was recognised by the presentation of a Royal Aero Club Silver Medal. Indeed, gliding was well represented on the day, with an RAeC Gold Medal for 18-Metre World Champion Phil Jones and another RAeC Silver Medal for Standard Class World Champion Leigh Wells. International competitive success such as theirs is well worth celebrating, and I was glad to see other worthwhile achievements at both ends of the experience spectrum also being recognised. The Ann Welch Memorial Award fittingly went to John Henry, a gliding

### Regulatory News

instructor whose "dual instructor rating" was awarded by Ann herself back in 1959, while the President's Rolex Trophy for youth achievement went to 17-year-old Chris Lawrence from Norfolk GC.

The citation praising not only Chris's flying progress but also his work for his club, as well as my recent attendance at my club's prizegiving to present its annual trophies, were encouraging reminders for me of the next generation of pilots and volunteers.

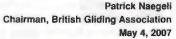
To end where I began, this is the point at which my column falls into the *S&G* timing gap. That is because the final key volunteer I want to mention is a man whose immensely valuable contribution to our sport is due to be recognised by the BGA on May 18 – after this issue goes to press but before it appears – with the presentation of our own Gold Medal. It's the highest honour we can bestow. Just four days after that, we understand, The Air League also plans to acknowledge his wider contribution to the aviation world with the award of its prestigious Jeffrey Quill Medal.

This volunteer is, of course, the former BGA Chairman, David Roberts. Certainly, every *S&G* reader must by now be aware of David's very significant contribution to gliding over many years – and and one that continues with his chairing of the BGA Regulatory Working Group. Following the award to him of our Gold Medal and the Jeffrey Quill Medal, we will say much more in the next *S&G* about his tremendous work.

In the meantime, I hope that, amidst all this talk of regulation, you are able to enjoy what gliding is really all about – taking to the air. Long may it stay that way.

Have fun, stay safe.

Patrick Nae





Left: a Silver Medal for Peter Saundby of Black Mountains GC, the BGA medical advisor, for his work on a scientific and practical approach to the medical requirements for flight crew licences in the UK and latterly across Europe. He established an approach based on statistical evidence that meant that pilot medical certificates, involving selfdeclaration and endorsed by GPs, were introduced with the UK NPPL and are now on the European agenda, enabling pilots who have been grounded by unnecessarily onerous

### Royal Aero Club award winners

The Ann Welch Memorial Award for instructing went In 2006 to a glider pilot, John Henry, a member of the Scottish Gliding Union. John (on the left in the photo) has been gliding for 58 years, instructed for 49 of those and flown 15 000 launches. An exceptional and dedicated instructor, he has trained more than 400 glider pilots at more than ten sites, and been CFI of three clubs as well as a tug pilot and PFA test pilot. He has instructed recently for Walking on Air, the charity for disabled pilots. His instructor rating was given in 1959 by Ann Welch herself at Portmoak





Recognising the pilots and volunteers of the future, Patrick Naegeli (far left) presents Lasham Gliding Society's Annabel Marriot with a club trophy for her progress as a pilot while HRH The Duke of York (right) presents Chris Lawrence with the RAeC President's Rolex Trophy. Above: Graham Ashworth of Norfolk GC and his wife Claire accompanied Chris to the ceremony

Lasham Gliding Society photo: www.flightbox.net RAeC photos: Belgrave & Portman Photography





## Record response to EASA

What's happening in Europe? David Roberts provides an update on attempts to create a more logical framework for light aircraft – a consultation that prompted the biggest response EASA has ever had

VERY TWO YEARS, in April, comes the opportunity to visit the AERO exhibition at Friedrichshafen to see the latest developments in light aircraft, including gliders. It is a stunning shop window for what is happening in the marketplace, and is probably the best General Aviation (GA) show outside the USA. The new designs of microlight aircraft coming from mainland Europe, and in particular from the Czech Republic, are impressive. Microlight gliders are included in this category (up to 300kg MTOM single seat, 450kg two-seat). But behind all this glamour lies a fundamental problem. Regulation, in particular for certification, in many EU countries is a barrier to these aircraft being certified, marketed and flown. Some 95 per cent of Czech-built microlights - nearly 600 last year - are exported to the USA where the Light Sport Aircraft (LSA) category, introduced in 2004, has provided a "light" regulatory framework using accepted industry standards, such as ASTM.

EASA has recognised this problem in Europe and has been addressing it through the working group MDM.032, of which Graham Newby (Popular Flying Association) and I are UK members on behalf of Europe Air Sports (EAS). There are five other EAS members, including Roland Stuck (France), who is President of the European Gliding Union. Since March 2006, MDM.032 has had nine meetings and has been working towards a comprehensive approach to "lighten" the regulatory framework for the lower-weight end of GA. Last summer we published an A-NPA (Advance-Notice of Proposed Amendment) for consultation, setting out our initial thoughts.

The response to this was extraordinary, with more than 3,000 replies to each of seven questions. These comments will be published in June together with proposals for a future European Light Aircraft (ELA) category of possibly up to 1,000kg MTOM. Conventional gliders are likely to be included in this ELA, but using the current CS22 (formerly JAR22) design code, which limits gliders to 850kg MTOM with an engine, or 750kg without an engine.

One of the key features of the proposed category will be the simplification of the process by which new, certified, designs can be accepted. It has been recognised that the



Above: EGU President Roland Stuck, photographed at St Auban in the French Alps, is one of seven Europe Air Sports members of MDM.032, an EASA group working towards lightening the regulatory framework for our kind of flying. The BGA's David Roberts is also a member, as is Graham Newby (PFA). The response to the group's proposals has been massive: "It's our number one," EASA's Elisabeth Schöffman confirmed at AERO 2007. "We've never had so much comment on an NPA or A-NPA," she added, "more than 3,000 emaits and more than 7,000 individual comments"

traditional "Design Organisation Approval" is costly, overly bureaucratic for light aircraft used non-commercially, and a barrier to economic development in European GA.

Patrick Goudou, the Executive Director of EASA, used his opening speech at AERO to outline this development, and signal a change in regulatory approach. In parallel, the European Commission has taken an interest in GA, publishing in February a very well-researched discussion paper followed by a forum in March in Brussels, where I outlined the case for and needs of air sports. This followed a successful EAS-Eurocontrol joint workshop in December in Brussels, when airspace issues were the focus.

Pilot licensing and operations

So we appear to have engaged key decision makers in Europe in a useful dialogue and something positive is emerging. But what of other regulatory aspects? The news is mostly good. Pilot licensing is now advancing with the creation of a new European "Leisure (Private) Pilots' Licence" which we hope will eventually be labelled as the "European Light Aircraft Licence". The Essential Requirements (EU law) for this has passed through the first reading of the European Parliament, and the second reading is expected in September. In the meantime, a sub group of MDM.032 has started work on drafting the Implementing Rules for the licence; the UK NPPL is likely to form a substantial basis for this. Roland Stuck sits on this, so gliding is well represented along

with other EAS experts for other air sports. Their work will become visible through an NPA around September and it is expected that the new licence will come into effect in late 2009 or early 2010. In the transition process the BGA will be ensuring that "grandfather rights" are negotiated for UK glider pilots – necessary because we have never had to have a State-issued glider pilots' licence in the UK, unlike all other EU countries. We have already been through the process of getting our gliders accepted for EASA Cs of A.

Recent discussions at EASA on Operations are encouraging. The Essential Requirements are running the same legislative course as those for licences, and I am optimistic that the Implementing Rules will be minimal and acceptable.

#### Glider maintenance

Lastly, maintenance – or the infamous EASA "Part M". This has been the most contentious aspect of EASA's proposals. Howard Torode, Chairman of the BGA Technical Committee, has been extremely busy since last summer chairing the EASA M.017 working group, analysing the responses (many from UK glider pilotsl) to the 2005 consultation on this subject. The Comment Response Document, the product of their work, has recently been published on the EASA website, and proposals for changes to Part M are scheduled to be published in June.

In parallel, and before this 5&G appears, a high-level delegation from EAS will have met with the EASA Rulemaking Director to press home our deep concerns about Part M as it is currently writ. In the meantime the BGA has been working with the UK CAA to flesh out the details of how Part M would be implemented in its current form. My own main concern is that should we achieve material "lightening" of Part M, then the BGA can adapt what has already been developed without undue further cost and disruption.

#### Conclusion

In summary, good progress on most fronts — leaving aside the longer-term implications of airspace matters in the EU — but still a lot of detailed work to do. The need to keep the changes, as they will affect UK glider pilots and owners, straightforward and at minimal cost, are foremost in my mind as well as the minds of other BGA volunteers and staff working hard on these issues.

David Roberts Chairman BGA Regulatory Working Group May 2007



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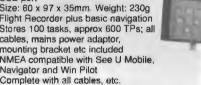
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## What instructing's all about

In his first column as the BGA's new National Coach, Mike Fox explains what his key priorities will be this year and beyond

HE worst thing about taking on my new job of BGA National Coach is finding a photo (below right) that's not too embarrassing for the introductory write-up in S&G. Hopefully, I've succeeded - but I guess those of you who already know me will let me have your comments...

I'm planning to bring you interesting news in this column fairly regularly about what's happening on the instructing and coaching side of BGA activities. I'm YOUR coach, so be sure to stay in touch by sending me your ideas, suggestions and feedback.

I'd like to start by describing a fun day's flying that made me glad to be part of our great sport - I'm sure you know the feeling:

It's a cold March weekend morning as I wake up and tug open the curtain. It reveals a sky with scudding low cloud and stratus shielding the sun: a grey start to the day. Not very inspiring. But the cold wind that seems to blow straight through us as we rig my LS4 at Pocklington, Yorkshire, should make one of our little ridges work well enough for us to have some fun. I take a winch launch and head for the hill. The slope works, and I'm soon back to 1,200ft. After a few beats in lift, a K-21 joins me with our DCFI - Alan - for some previously agreed formation flying and photos, before he dives back to give someone else a go. I munch a sandwich while cruising out to some likely-looking low clouds that soon

reveal a hint of wave. After several attempts I'm established and climbing well, past 9,000ft, through gaps in an ocean of cloud. Then a radio call breaks the silence. It's Chris Price, our CFI - he's landed out with my girlfriend, Kate. It's getting late, so I break off the climb to help with the retrieve and take part in the inevitable CFI-baiting. It seems like the whole club has turned up in the field as I roll up with some mates. Everyone enjoys goading Chris on the way back to the bar and to de-rig the LS4. Kate's happy, too - it's her first landout.

What a fantastic day. Everyone had fun and learned loads - including me. You never stop learning in this game.

Teaching, coaching and encouraging others to experience wonderful flying days like these is my job as BGA National Coach. After all, that's what instructing is all about.

With the minimum of administrative fuss, I'll be focusing on introducing a safe, pioneering, positive and fun attitude into

everyday gliding operations. So - what does that mean in practice?

I will be leading a review of post-solo pilot development in detail to "fill that gap" in students' training and help retain our members. With key responsibility to support instructor training, I will be helping to ensure that the instructor paperwork and manuals are up to date, concise and clear.

The BGA encourages and supports young pilots and my role includes the development and running of junior coaching sessions for all levels of experience - so keep a close eye on www.gliding.co.uk/juniors!

For a start, we'll again run competition training for luniors around the lunior Nationals (August 18-26), with help from volunteer P1s. The training, flying from the rear of the grid, will prepare you to fly a rated comp in 2008. The closing date for applications is 09.00hrs on June 11.

In due course I'd also like to extend the ethos of junior training to other (slightly older) members who would benefit from the methods that have served me - as a former Juniors pilot - so well over the years.

During 2007, one of my key priorities will be gathering useful information. I'll be visiting clubs to find out more about your existing good practice, bright ideas and recent experiences, as well as liaising with other sporting organisations to see what we can learn from what they do.

I'll then be putting that information to good use during 2008.

I really value your input, so do send me your comments at mike@gliding.co.uk

Mike Fox **BGA National Coach** mike@gliding.co.uk





#### Silence is Golden

I THINK IT IS FAIR to say that I have never had an easy relationship with the internal combustion engine, especially so far as aviation was concerned. A painful early example of this was when my parents, who were very hard up in the late 1940s, went to the huge expense of buying me an E.D. Bee 1.0cc diesel motor for my 14th birthday. Up till then I had stuck to free flight gliders and rubber-models. I think the E.D. Bee cost £2, and should have represented a coming of age for me and model-flying. I bolted it to a table in the kitchen - as one does - and with the help of an older boy finally got it going, making a tremendous din in that confined space. A lovely smell of ether and castor oil and some third, highly combustible ingredient filled the air. Then, to make even more noise and smell, I decided to adjust the throttle a smidgeon by putting my fingers, without much forethought, through the arc of the propellor.

This was a mistake, and explains why you have never heard me playing Rachmaninov's Third Piano Concerto in public. I vividly remember even now the clunkety-clunk noise the wooden prop made on my knuckles. The older boy said unfeelingly that I might have damaged the crankshaft or connecting-rod and should be more careful. I felt no sensation at all for about 15 seconds. That E.D. Bee ended up in the cellar and never got installed in any model. I stuck to nylon line and rubber from then on as a way of getting models into the air.

My next involvement with operating internal combustion motors in aviation was 50 years later (a decent interval) when I got my single-engined pilot's licence at Minden in 1998. At 10,000ft the little Cessna 152 needed the help of every thermal I could find, especially on hot days, and I wondered how people who were not glider pilots got anywhere in them at all. Of course they did it by scooting along a few hundred feet above the desert floor, with a few seconds between them and disaster if the engine stopped; no time to utter a Mayday or pick a moderately flat piece of ground.

I had no such confidence. For instance, I never quite understood about Carburettor

Icing, but it sounded scary, which is why I use capital letters. Engines could quit for a host of reasons, some of them pilot-inflicted and some not.

Back in the UK, when a long and happy relationship with my last glider, lasting 17 summers, recently came to an amicable end, the other syndicate partners went and bought a very fancy self-launching sailplane at some considerable expense. Somehow I suspect that they would not have made the suggestion of buying a self-launcher during the life of the previous syndicate (ie, while I was in it) since that would have entailed the partners trusting me not only to use the engine intelligently in flight but also to look after the engine on the ground caringly and conscientiously. With these unexpressed doubts I would wholeheartedly concur. Operating such a machine is an awesome responsibility that I do not want.

However – returning to my second childhood (we don't think you ever left your first. Ed.) and a joyous resumption of model

'I bought my grandchildren last Christmas a radio-controlled electric-powered plane. Of course I really bought it for me, but you look less of a dork if you have young children with you when playing with it'

flying. I bought my grandchildren last Christmas a radio-controlled electric-powered plane. Of course I really bought it for me, but you look less of a dork if you have young children with you when playing with it. Bliss! No noise, no smell (though I rather miss the burnt castor oil) and no throttle half an inch behind the prop, so I still have two intact sets of fingers. Even I can recharge it and fly it, and the children can too. It is so simple.

I really must take a hard look at the Antares...

#### Getting a free ride

This sharp piece of sarcasm appeared on the Weatherjack website 2 April 2007: Some of you will have missed the wonderful interview on Breakfast TV on Monday. The interviewee was being asked about the impact of aviation and she replied: "Aircraft can save fuel by slipstreaming." So now you know. Don't fly above or below

the tug on aerotow. Fly IN the slipstream. Your glider can save valuable fuel that way and minimise its carbon footprint.

My guess is that the hapless interviewee meant jet-streaming, which can add 100kt to groundspeed. (Or reduce it by 100kt if you are stubborn enough to butt headlong into it.) If she really did mean slipstreaming, then one could assess where the drag is highest or lowest on tow, by using a spring balance with a big circular dial on the towline (with some form of shock-absorption in it so that the reading did not fluctuate like a mad thing) to see what happens to the drag in various positions.

#### Fowls in formation

According to some observers, geese produce their lovely vee-formations by in effect slipstreaming, aligning their right wingtipvortices with those from the left wingtip of the goose in front, and vice versa, so as to neutralise the induced drag. Admittedly this benefits one wingtip only; I do wonder if a goose gets tired of favouring one wing the whole time and switches sides occasionally on the basis of a change being as good as a rest. Or is there a rigid hierarchy such that if you deviate from it you get nibbled to death? Do some geese therefore get lopsided after being stuck in a rut for years and develop highly muscular starboard wings and feeble port wings - or conversely - as a result of this enforced submission to the established pecking-order? I think we would notice if that happened, because the occasional lone goose would not just look funny but would imitate the famous oozlum bird by flying in ever-decreasing circles until the horrible, inevitable conclusion. On the other hand, that would explain why you so rarely if ever see a lone goose in flight.

Rather than suffer the awful fate of the oozlum-bird, a sensible unaccompanied goose, or gander, prefers to walk, while the pensioners among them go by public transport on a senior aviator's bus-pass, just like me. (Peter Fuller, my friend and cartoonist for 40 years, is sorely missed at this point.)

A lone goose seen flying straight as an arrow would obviously be a natural-born leader temporarily away from his or her flock. Someone has to be symmetrical up

there, or whole skeins of geese would never get anywhere. Though that could explain why the geese who throng the school playing-field in front of my study window hang around all year and don't fly south in the winter. We all thought it was Global Warming but the failure to get past Slough might be due to all the geese in the flock – including numero uno – being bent. (Watch it. Ed.)

The man who should know is the chap who brought up goslings straight out of the egg, imprinted with the conviction that he was their mother; when they were fully-fledged they eagerly formated on each side of his microlight wherever he flew. We could ask him the vital question: "Did the same geese always form up on the same side and in the same order from front to rear?" However, I suspect he might reply: "Damned if I know; all these stupid birds look the same to me!"

Going back to the Weatherjack quote above, airline pilots could learn from geese and formate on each other in vast echelons so as to reduce wasteful vortices. Maybe this is what that Breakfast TV interviewee really meant to say. It would look beautiful; the contrails would be spectacular, darkening entire countries for hours, depending on the humidity and the amount of water-vapour waiting to turn into ice-crystals at 40,000ft.

Passengers would absolutely love it, I am sure; air travel is so dull otherwise.

#### The best and brightest: thoughts on meeting some young 21st century pilots

"News, Mum: I've fallen in love with a mechanical engineer!"

"Well, son, you know that as a paid-up Guardian subscriber I am absolutely non-judgmental about such lifestyle choices, though I was so looking forward to having grandchildren. Bring him around to tea some time, I'll be really nice, I promise."

"Mum, you don't understand, he is a woman."

"A female mechanical engineer?"

"Yes, of course."

"Hmmm, will she be able to fix my lawnmower?" I am quite pleased to have dealt so subtly with two ingrained ideas: first that all engineers are male, and secondly that even if they have degrees they are just grease-monkeys in suits.

### Will ye no come back again?

During recent months I have been considering how we should recruit more people into gliding clubs or at least stem the general outflow from the movement. Believe it or not, I was once a big cheese (un grand fromage, as the French say) in the magazine business - as opposed to being as I am now, chained to a lonely oar with a drum rhythmically pounding in my left ear the entire time, joined, the moment a deadline is passed, by Rottweilers sent by Madam Editor - I am no longer allowed to use the acronym I recently invented for the captain of this galley - baying in my right ear. (The baying my right ear Is from the Rottweilers, not from Madam Editor, by the way.)

During my big-cheesedom I learned an important law of marketing —

If you're chained to a lonely oar, doesn't that mean you just go round in circles, like those asymmetrical geese?

Gosh, you're right! That would explain the sense of déja vu l keep getting. However, when you have the attention-span of a goldfish it does not matter too much.

- which is that the easiest people to recruit as annual subscribers to a journal (or a service such as a health club) are, wait for it: those who have recently lapsed, say in the last two or three years.

You might retort: "That must be nonsense: surely those lapsed subscribers are deeply fed up and disillusioned? They have cast off the dust of your club from their feet, and having voted with those feet, never want to hear from you again!" Not so, I opine. The reason for dropping out might be quite minor: a temporary financial embarrassment (being skint is what he means. Ed), a momentary pressure on one's time from a family or business commitment, or a passing whim which for a while makes something else seem more interesting, such as windsurfing, sex, oboe-playing or having offspring.

I did a direct-mail test for an expensive magazine 10 years ago, making an identically-priced offer to two groups: (a) people who had never read the magazine before and (b) lapsed subscribers. By far the highest rate of subscriber-recruitment came from (b) the lapsed readers. It was about five times more cost-effective to mail these ex-subscribers than to go after totally new readers.

I would be prepared to bet the same is true with health clubs and gliding clubs. We need of course to study our drop-outs and listen to their reasons for quitting, just as company personnel directors do exit interviews with staff who hand in their notice. That may mean making some changes: the product may well need some

work, not just the promotion.

I don't claim this is an original thought; I believe someone else has said in the BGA's mighty organ (that's us) that the young-marrieds who drop out should be lured back after they have passed the nappy-changing stage and have stepped up in their careers. The point is that there is lot of residual goodwill out there, and it need not take a massive effort to persuade them back into the fold.

It would not cost a lot to try out. But it needs to be done scientifically, like a drugs trial, with control groups and rigorously-validated analytical methods. And no, I am not going to do it.

#### **Running repairs**

I saw this message very recently: "There have been a couple of occasions recently when the ASI did not work in flight, both times fiddling about with the fin probe seems to have fixed it. I have given the probe a blow through using a foot pump and hope that it has done the trick. One's immediate thought is, my, that was a neat operation! What height was the writer when he did it? Next time, he should send the P2 out; they're expendable. P2 should of course be wearing a 'chute just in case. (Yet again I miss Peter Fuller's vision: Platypus astride the tail boom of a two-seater at 5,000ft, struggling with a pump, a probe and several feet of rubber tubing...)

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## **British Gliding Association Duo Discus Hire 2007**

The Duo Discus G-DUOX is available during 2007 – see below. The pilot in command qualification requirement is – minimum – Silver Badge plus 200 hours and BGA National Coach approval.

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June ~ July 2007

## Scheibe Falke flies again

It may be an old friend with its roots in motorgliding history, says Jochen Ewald, but the SF-25C has some new features and much to recommend it

Falke produced by Scheibe Aircraft at Heubach on March 6, 2007, the new enterprise – founded last year – was also proudly celebrating three anniversaries which have had an important influence on the development of motorgliding.

The first of these, 70 years ago, was when the Munich Akaflieg (leading member Egon Scheibe) powered their high-performance glider Mü-13 Merle with a Kroeber 18hp two-stroke engine. It already had the main characteristics of Scheibe motorgliders: a front mounted engine for self-launching, a steel tube fuselage and the (at the time) high-performance Munich 'Mü-' aerofoil.

The second was when, 50 years ago, Egon Scheibe, now with his own company, Scheibe Flugzeugbau, powered his popular L-Spatz 55 club performance glider with an 18 hp Brändl engine. Now called the SF-24 Motorspatz, it went into serial production, followed by the B model with a 24/26hp Hirth two-stroke four-cylinder boxer engine. The first Motorspatz was certified as an aeroplane (D-EHUK), but then in 1960 motorglider certification was introduced, encouraging the spread of this new category.

The third and probably, for today's touring motorglider (TMG) scene, most important anniversary was the introduction of the SF-25B Falke in 1967. This was developed from the previous Bergfalke-based high-wing SF-25A Motorfalke two-seat side-by-side self-launcher. The low-wing Falke, equipped with the reliable 45hp Stamo four-stroke four-cylinder boxer engine, spread the motorglider movement worldwide. Being independent, self-launching and taxi-ing,



Despite the different registrations, these pictures show the same aircraft – the first SF-25C from the production line at the new Scheibe factory at Heubach. Jochen Ewald tried it there on German registration D-KSAH before it went as OE-9542 to AERO 2007, where the above picture was taken, in the livery of its Austrian owners. The other two photographs show it (below) at Heubach and (opposite) flown by Gerhard Nitsche along the Schwäbische Alb ridge

It proved ideal for supporting glider training, and enabled soaring without ground crew as well as cheap touring.

Its better-powered successor, the 60hp Limbach-engined SF-25C, then saw many further improvements, to engines, maximum weight and comfort, right up to today's Falke, which can even serve as a glider tug.

But never in its history (during which more than 1,500 have been built, including under license by Sportavia in Germany and Slingsby in the UK as the T-61 Venture) has the Falke lost its basic features: affordable price and docile flying characteristics united with a simple, compact, lightweight, strong and easy-to-maintain-and-repair design.

So, how up to date is the latest version?
At the new Scheibe Aircraft factory at
Heubach, about 50km east of Stuttgart,
I was invited to try their first production

Rotax-Falke before it went to AERO 2007, after which it was handed to its new owners, the Austrian Alpine Flying School at Zell am See. This aircraft featured almost everything you will get when you order a new Falke, and it was well equipped with a 100hp Rotax 912S engine, Mühlbauer fixed-pitch wooden propeller, low cockpit side, the new, big one-piece backwards-swinging canopy, and glider towing system.

In addition to a good set of instruments, (including radio and transponder, vacuum-operated gyro compass and artificial horizon), and a suction pump, the optional anti-collision and position lights were fitted.

Below the lid on the baggage shelf behind the seat which lets you rig the Falke and check the rear fuselage interior, there's a box to take papers and rigging tools; it's easy to remove by undoing two Camlock screws.

The manufacturing craftsmanship was excellent, and this resulted in a cockpit load of 194kg (427lb) for the well-equipped D-KSAH (which is now, incidentally, flying as OE-9542 with its new Austrian owners). This now allows two heavier pilots with a sensible amount of fuel in the tank to fly the glider. The experienced Heubach construction team, led by Hartmut Sammet and Gerhard Nitsche, has also found other places where weight can be saved – later production Falkes are expected to come with a payload of more than 200kg (441lb).

The new canopy with its improved aerodynamics is opened with the help of a handle on the left cockpit wall, which can be locked by key, and swung back using a handle on the outside the canopy frame.





Photos this page: Jochen Ewald



Left: new adjustable pedals make the Falke comfortable for pilots of almost all heights

Right: The Falke's new two-wheel taildragger undercarriage makes it easier to land than the old central wheel: it does not show the tendency to balloon like the old singlemainwheel version did, even if the stick is not kept fully back on touchdown

Photos: Jochen Ewald



It offers good room for comfortable entry, and there is no longer a risk of the canopy being blown closed, even by strong gusts. With the low cockpit wall, the built-in steps are no longer needed to enter the cockpit, and will soon be replaced by small step surfaces on the undercarriage legs.

Sitting down in the cockpit, I miss the former rear canopy frame to support my weight when sliding into the seat (which, now and then, led to damage of the rear Ptexiglas canopy part...). A handle above and between the two backrests, to take the pilot's weight, would be very helpful.

The stick is further back than on earlier models, coming out of the front of the seat pan, and this, together with the adjustable rudder pedals, means pilots of nearly any size can find a comfortable seating position.

Some minor changes to be made after this first aircraft was completed, which appear sensible to me, will be integrated into future production models. For example, the neutral stick position will be a bit more forwards, and the inner knob to swing the canopy closed will be replaced, because it might have been possible to trap your fingers between it and the airbrake lever when it is locked into parking position. The fresh air supply in the cockpit will also be improved by using sidewall NACA-intakes instead of the front window flaps. This should solve the well-known Falke problem of water entering the cockpit (and soaking instruments and



electronics) when flying through rain.

Last but not least, the choke lever will travel besides the throttle, and the engine cooling flap lever will change its operation sense to achieve a proper, logical engine operation philosophy, where full power equals everything pushed forwards!

Closing the canopy brings no risk of hurting your co-pilot as can often happen in an aircraft with a sliding canopy: it swings high enough above your heads. It is locked from inside by pushing the red button besides the central console. The instrument panel is large, and the farthest-right section is angled inwards to improve sight of the instruments there. It is perfectly laid out: on the left are the flying instruments, in the

centre are the avionics, on the right are the electric switches and fuses and on the outer right panel, the engine control instruments.

Taxi-ing out, I liked the good all-round visibility this canopy offers, and I found directional control with the new tailwheel very easy. The turning radius is larger than with the old system, but this is more than compensated for by the fact that unlocking the tailwheel and using differential braking by full rudder pedal deflection enables you to turn around one wheel.

The final inch of the airbrake lever's travel serves for "normal" braking, and swinging this lever's handle down locks the brakes (and airbrakes) safely for parking.

Bringing the new Falke into its element, I found no significant changes compared to its predecessors. The powerful engine lifts it off the ground with the stick held neutral after less than 100m (328ft) ground run, and, fully loaded, makes it climb at more than 4m/s (7.7kt). Some right rudder is needed to compensate for torque. The seating position is really comfortable now, and the low cockpit noise levels as well as the perfect canopy sealing give real comfort during long flights. The improved canopy aerodynamics result also mean a faster cruise speed. With the throttle reduced to 4,800rpm, the Falke travels at 165km/h (89kt), and full throttle brings it up to its VNE of 190km/h (102kt) at 5,300rpm - so there's no need to order an expensive

#### **TECHNICAL DATA**

Scheibe Aircraft SF-25C "Rotax-Falke" 100 PS / fixed prop

Length	7.60m (24ft 11in)				
Height	1.85m (6ft)				
Span	15.30m (50ft 2in)				
Wing area	18.2m <sup>2</sup> (c 196ft <sup>2</sup> )				
Empty weight	448kg (988lb)				
МТОМ	650kg (1,433lb)				
Payload	202kg (445lb)				
Max wing loading	33.5kg/m <sup>2</sup> (6.84lb per sq foot)				
VNE	190km/h (102kt)				
Cruise	165km/h (89kt)				
Stall speed	60km/h (33kt)				
Max climb rate	4-5.5m/s (7.8-10.7kt)				
Max towed glider wt	600kg (1,323lb)				
Best glide angle	1:23				
Min sink rate	1.15m/s (2.2kt)				
Fuel content	55 litre (optional 80)				
Range	> 600km (373 miles)				
Engine	Rotax 912 S, 81kW/100hp				
Propeller	Mühlbauer two-blade wooden,				
	fixed pitch				

#### Options:

80hp Rotax 912 or Limbach engine variable pitch propeller tricycle nosewheel undercarriage

Manufacturer: www.scheibe-aircraft.de



Above: a new factory and a new Scheibe company logo

Far left: The external canopy locking lever can be locked by key, and the handle besides the mirror makes it easy to open from outside. With the low cockpit side, the hole for a step in the fuselage side is no longer needed and it will be replaced by steps on the undercarriage legs



Left: The rear tip of the rudder is clipped to give clearance for the tow-rope even in extreme aerotowing positions

Right: The curved instrument panel on the right-hand side of the cockpit makes the engine instruments easier to read. Besides the throttle is the red canopy lock. In all, the new Fatke cockpit is roomy, comfortable and well designed with good visibility

variable-pitch propeller unless you want to increase slightly the maximum permitted weight of aerotowed gliders.

The engine camber is not yet optimal: when setting full throttle, the Falke's nose goes up and the trim has to be adjusted to prevent speed from dropping too low. Here, the trim tab is operated electrically, with its position indicated by a LED bar.

This is a fine solution for cruising: it allows easy and precise trimming, but for circuit training and towing I prefer the (optional) old lever-and-wire-operated mechanical trim, which offers more feel and is quicker to move into a new position.

Stalling the Falke demonstrates its familiar docile behaviour. After the controls start feeling mushy, increasing buffeting can be felt below 61km/h IAS (33kt), and at 58km/h (31kt) it enters a buffeting and slightly wallowing stall. Doing it at full throttle lets the nose point steeply up and lots of right rudder is required to keep it straight, while the ASI indication drops.

I measured a 45°-45° rollrate at 100km/h (54kt) of four seconds, and the control harmonisation at this speed is also fine. A good value, which makes also soaring the Falke easy and centring effective, although it still needs a lot of rudder input when thermalling slowly and the force needed because of the shorter stick is slightly higher than for the old Falke.

Of course, compared with modern gliders,



Right: Elegant and aerodynamically better: the new Falke canopy swings well back, leaving plenty of space to get in, although support from a handle between and above the two backrests would make entering easier. Two bolts at the back of the canopy slide into guidance holes - so no more rattling canopies

Above: the air intakes in the canopy are to be replaced



the soaring performance of the Falke is not very competitive, but nevertheless it climbs quite well in thermals and is fun, which you cannot always say about some of the heavier plastic motorgliders.

The simple, spring-retrieved-cable operated spoilers give a moderate braking effect. Nevertheless, they allow steep dives at high speed when returning from aerotow, but before coming close to the ground the speed should be reduced to the sensible approach speed of 90km/h (49kt) in still air to avoid

#### 'The Falke still is the cheap and universal solution for clubs looking for a reliable trainer suitable for power flying'

long floats on the cushion of air that forms underneath the low wing. Sideslipping is easy and effective. Fully held off, the Falke settles down softly in a perfect three-point attitude, and the two-wheel undercarriage does not show the tendency to balloon like the old single-mainwheel version did, even if the stick is not completely back when touching the ground.

The cable-operated drum wheelbrakes work well and are easy to control, permitting really short ground runs without significant risk of the Falke nosing down.

After 40 years of careful optimising, the Falke still is the cheap and universal solution for clubs looking for a reliable trainer suitable for power flying as well as soaring, which can act as a glider tug and light touring aircraft at the same time.

Several clubs already use the Falke as a trainer for the new NPPL, and even in the JAR-FCL license training a (CVFR-equipped) Falke is a very considerable option for those who want to offer affordable training. The Lasham Gliding Society Rotax Falke, for example, has flown 1,800 hours since they bought it three years ago - if you are interested, just ask there for information about a "hard working" Falke! I can also say that the craftmanship of the new Scheibe Aircraft Falkes is clearly better than that of the former Dachau-built ones - something that means long-term customer satisfaction as well as an increased value on the future secondhand market.

Last, but not least, a word from me about the European plans for a LSA (Light Sports Aircraft) category as the Americans have. A 'European LSA solution' is being discussed and will take more time to be implemented, while TMGs, offering similar performance and operational costs that future LSAs might have, are available now. There is already a good secondhand market, and they permit gliding and, with this, safer and easier field landing possibilities if you should have an engine failure. So why not go for an NPPL motorgliding now instead of waiting for 1 future LSAs to come?



## Dune running

Slope soaring in the Netherlands might sound like a joke but, as Jan de Jong explains, it's an historic tradition kept alive by a handful of hardy souls in wooden sailplanes



UNE RUNNING was the earliest form of gliding in the Netherlands - pilots bungy-launched from the top. In the early 1930s the first flights were made near Noordwijk, about ten miles north of my own club, one of the few to fly the dunes today. Then in 1937 the Dutch endurance record was set by Mr J Hoekstra at 24 hours and 3 minutes. He aerotowed in a Grunau Baby from Ypenburg airfield and soared the dunes between Scheveningen and Noordwijk - an amazing feat that will never be bettered.

After World War Two, though, most gliding activity moved to the east of the country, away from the coast. The art of dune running survived at only a handful of gliding clubs. I am a member of one of them, the KZC (Kennemer Zweefvlieg Club) at Langeveld.

Conditions are rarely suitable for dune running. Firstly, it is allowed only in winter: during summer the beaches are simply too crowded for safe landings. Secondly, the wind has to be west north west - in other words, to be pretty much perpendicular to the dunes. More than 30° off and the lift will become marginal. Thirdly, since the flight

ends with a landing on the beach, it is most important it is low tide. Otherwise there is no beach to land on... Finally, a numerous ground crew is required to ensure safe arrivals on the beach; they make sure that a landing area is kept clear of onlookers. The crew have to stay on the beach for many hours on end in cold, strong winds.

Do the statistics and it soon becomes clear that dune running is possible only on a couple of days each year. So when perfect conditions are promised the club is buzzing.

On the day, conditions at the beach are first of all checked. Is the tide as expected; is there enough wind from the right direction? The airspace is shared between sailplanes, para-gliders, hang-gliders, aeromodellers, kites and so on. A little chat with these pilots is always helpful so that we all understand each other's requirements and limitations.

Then frantic activity: the winch is set up, gliders are rigged, pilots prepare and we all put on another layer of clothes.

Our airfield is about two kilometres from the coast. The winch launch takes you to about 400m (1,300ft). Against wind force 5 in a straight line to the coast, you arrive at about 250m (820ft). No lift at 250m, the glider slowly sinks towards the surf...

Wait... Wait... When you reach about 80m (260ft) the variometer goes a little positive. The good thing is it is sure to stay there for the next few hours.

Now the fun starts. The view is awesome: sand, dunes, sea and excellent visibility. The pictures say more than a million words. After about 20 minutes of floating around and gazing out of the window, the need for speed takes over. On top of the dunes speeds of 130km/h (70kt) can be sustained. At the end of each track you turn towards

the sea - never landwards, since you will find yourself in strong turbulence and downdraughts behind the dunes.

After a while, hands and feet become so cold you cannot tell exactly where the glider ends and your limbs begin. Time to land.

Max altitude above the dunes is about 150m (500ft) and that's not enough to return to the field, so the flight ends with a crosswind landing on the beach - interesting enough in itself. Then the glider has to be derigged in strong winds and hauled up the dunes to the trailer. Thanks, ground crew.

But the work doesn't end there. Look at the picture (below left) of the K-7 touching down. You guessed it: a cup of sand evenly distributed throughout the fuselage and another pound in wheel bay and tail! But a vacuum cleaner, compressed air, brush and a lot of patience will take care of that.

In this corrosive environment a wooden glider is preferred, since all parts are easily accessible for cleaning and greasing. Looking forward to next winter...

For more details, in Dutch: see www.kzc.nl







Main photo: traffic (Jason Hatton). Inset, from top: low and fast (Joop Vring); chasing your shadow (Jan de Jong); high and slow with another glider below; the view inland; derig on the beach in wind force 5 (all by Joop Vring)

Opposite page, clockwise from top: K-6 soaring the dunes (Jason Hatton); unusual instrument readings – for five miles (Joop Vring); the only hills in sight (Dennis Schouten); the K-7 landing on the sand (Jason Hatton)

## Do you know what you know?

Don Puttock describes a model of how human beings learn that will be of interest to student glider pilots - as well as to their instructors

HEN you were learning to fly, did you ever wonder why you felt you were taking three steps forward and two back?

If you are an instructor you may have been occasionally surprised to see your star pupil in a depressed state, and asking if he will ever get the hang of some particular aspect of his training.

Have you ever been frustrated because you seem to be unable to explain how you do something?

This article presents a useful model for both pupils and instructors. It can also provide insights into why some more experienced pilots have accidents.

Why do expert pilots sometimes make basic errors with very serious consequences?

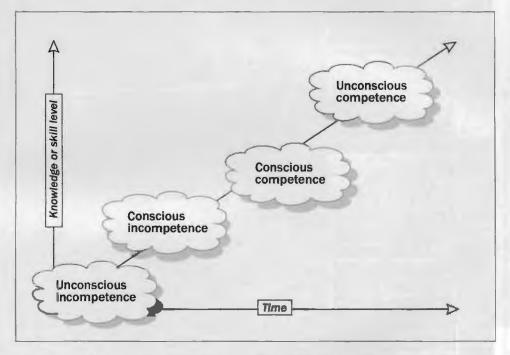
#### The consciously competent model

This model is often used by professional trainers to explain the frustrations inherent in the learning process. The creator of the model is unknown, but the model is in regular use. It describes four distinct stages of learning.

Imagine you have just started to learn to drive a car:

- (1) Initially we may underestimate the difficulties we will encounter; perhaps our friends have already learned and we see ourselves as equally competent. This phase is described as unconsciously incompetent - we don't know what we don't know.
- (2) As we crunch the gears we begin to

Student not ready to learn



The original model of Conscious Competence envisages four states of knowledge or skill level, as shown above

rest of the group

Student ready to teach,

instructor ready to teach

than originally envisaged. This phase is described as consciously incompetent - we know what we don't know.

- (3) Eventually we master the individual skill of "changing gear" but it requires all of our attention if we are to consistently do it well (listening to engine note, watching speed, timing our actions). This phase is described as consciously competent - we know what we know.
- 4) After a time we apply this skill without thinking, and we begin the more detailed actions required, as we internalise the new abilities. At this point in the learning continuum, the individual will be unable

the task. This phase is described as unconsciously competent - we don't know what we know.

The use of the word "incompetent" is not derogatory; it merely defines the state of knowledge acquisition. Here are the four stages summarised:

- 1. Unconscious incompetence (hasn't realised there is something to learn)
- 2. Conscious incompetence (becomes aware of the requirement to learn)
- 3. Conscious competence (acutely aware of the new-found skill or knowledge)
- 4. Unconscious competence (forgets he knows as the skills become internalised)

By the time we have the competence in gliding that is required to become an

consciously competent

Instructor not ready to teach

#### realise there is a little more skill required to explain to a beginner how to complete Unconscious incompetence Conscious incompetence Conscious competence Unconscious competence We don't know what we don't know We know we don't know We know we know We forget we know We see our pals learning to fly, and We realise there is more to it (aileron We have just acquired our new skill The skill or knowledge becomes secwant to join them (social needs) and rudder co-ordination), and knowledge, and are able to explain ond nature. We no longer need to become frustrated and concerned in fine detail (assists socialising, think about it. It is too easy to imagine we have some natural talent that our pals will assume we are reinforcement and meets ego not capable (ego needs) needs) (ego threat) The instructor raises awareness by The instructor will do well to stand The instructor MUST look closely The instructor is needed for moral introducing the new subject area support. You can do it, look what you back and allow (under gentle at how he achieves various tasks, have achieved already, everyone guidance) the pupil to explain to the and FORCE HIMSELF to become

goes through this stage

Student ready to learn

STAGRUL DEDATE

instructor, we will normally have become unconsciously competent. This means we will not make a good instructor until we are able to return to the consciously competent condition.

Much of the instructor training is directed at making new instructors consciously competent again.

We might consider how we change gears in a car. An experienced driver will probably have to consider long and hard before he can teach someone else. At the same time, the would-be driver has not quite realised how difficult it is. The instructor-pupil relationship can become frustrating because the instructor considers the skill to be obvious and natural, and the student has not yet realised it is more difficult than he imagined.

This principle works in flight training. The instructor must be aware of his own internalised skills, and accept the stages the student will go through. Students sometimes describe their progress as two steps forward and one back. This normally happens as the student realises there is yet another skill to be acquired on his training road.

If we have several trainees learning as a group, a very interesting situation can occur. The first student to grasp the new skill (consciously competent) is able to explain how he achieves it to his fellow trainees. Often the instructor can facilitate the trainee discussion and speed up the learning process for the remainder of the group.

The table on the left attempts to identify the four stages. Remember, for effective learning to take place, the instructor must be consciously competent and the pupil must be consciously incompetent.

Part of the instructors' role is to ensure he is familiar with how a task is performed, and create the environment for his pupil to learn. This often means the instructor spends hours trying to understand exactly how a task is completed, so that he can become an effective teacher.

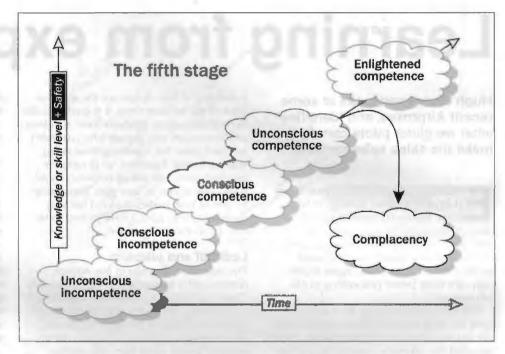
It is too easy, and unforgivable, for an instructor to assume his skill is some inherent talent that he was born with and cannot be taught. The warning signs are not being able to answer questions like; how did you know...? Or how do you...? If the instructor cannot answer the question, he is probably unconsciously competent, and has some thinking to do.

Sometimes the pupil will appear to stop learning for a time. This often happens to more mature students because they assume they know what they need to do and temporarily stop listening to the instructor.

This is an example of unconscious incompetence, and the instructor needs to be patient as the pupil comes to terms with the situation.

#### The fifth stage

Academics are realising that the four-stage model can be developed further. This new thinking can provide an interesting new perspective on accidents and complacency.



Enlightened competence is a state where the individual has developed a heightened understanding of the particular skill, and is able to express it to others. Complacency is a state where no further learning takes place beyond unconscious incompetence (Diagrams enhanced by Steve Longland)

With high skill levels, we would normally expect a particular activity to become inherently safer. This isn't always the case: relatively straightforward tasks (turning final, or recovery from a winch launch failure) can be undertaken incorrectly by fully trained and experienced pilots.

Academics argue convincingly that stage five is either a state of "enlightened competence" or "complacency" – a kind of fork in the road,

Enlightened competence is a state where the individual has developed a heightened understanding of the particular skill, and is able to express it to others.

Complacency is a state where no further learning takes place beyond unconscious incompetence.

These ideas can be applied to flight training and "primacy". For example: recovery from cable breaks.

We are taught to follow a procedure: lower nose, regain approach speed and check ASI, decide if landing ahead is a safe option, and so on.

I believe that experienced pilots add to this by further learning; they learn how an aircraft feels when it is in normal flight (kinaesthetic learning).

Unfortunately this additional learning is sometimes flawed. Seasoned instructors (enlightened competent) know that airspeeds can be dangerously low during the pushover after a launch failure and yet the aircraft will appear to respond normally to control inputs. In this instance the stall speeds are temporarily reduced by significant margins because g loadings are below normal 1g levels.

The complacent pilot will interpret this normal feeling as the aircraft is not stalled.

I believe what happens is that pilots allow their own new learning to override the taught procedure. The consequences are serious, and may explain why experts get it wrong.

Check flights are important because they ensure the pilot is following the procedure and not his senses.

Another example: failure to release when a wing goes down during the aerotow ground run.

We normally learn to aerotow using two-seat trainers and a nose hook. We are taught to release immediately if a wing goes down despite the use of aileron.

We soon also learn unconsciously that steerage is provided by the pull of the tug, and this opposes the tendency to ground-loop. Other learning adds to a developing belief that the wing can always be picked up (eventually) with aileron. We see people take off with wings on the ground, we watch people successfully pick up a wing during take-off. This additional learning is flawed because the pilot fails to understand how differing conditions affect aircraft handling. Hook position, wind conditions, surfaces, aircraft type, will all affect the ability of the pilot to pick up the wing.

Pilot skill is not normally a factor.

The situation becomes dangerous when something fundamental changes. The pilot transfers to an aircraft with a belly hook, and takes all his experience into a new situation that he does not fully understand. This time a wing goes down — a crosswind and aft hook position conspire to catch him out. In this case the pilot has allowed his experience to persuade him that he can handle any situation, and he then overrides his basic training.

## Learning from experience

Hugh Woodsend looks at some recent Airproxes, and identifies what we glider pilots can do to make the skies safer for us all

VERY half year the UK Airprox Board publishes its latest findings in book form. You can download copies of these publications by going on to our website at <a href="https://www.airproxboard.org.uk">www.airproxboard.org.uk</a> and selecting "Publications" from the panel on the left. You will need to agree to the copyright rules before proceeding to the sub-menus.

This article is addressing the subject from the other point of view, in other words, the lessons identified for glider pilots. I have included the reference numbers so you can easily find the relevant Airprox report.

The good news is that, in general, the number of gliding-related Airprox is falling (note that the table below shows only up to the last fully-assessed year, that is, 2005). However, there are a few important things we can all do to reduce the number of incidents and thereby the risk. There are a number of very specific types of incident that come up time and time again.

One word of warning on risk. The risk used in the assessment of Airprox is only designed to categorise the likelihood of the two participants colliding; it is therefore not

a measure of how dangerous the activities prior to the incident were. It is quite possible to have A category incidents (near accidents) which involved two aircraft who just didn't see each other but were otherwise doing nothing wrong. Equally, C or D category incidents (very low risk of collision) could have come about by very poor airmanship by one or both parties. As I did last year (June-July 2006, p26), I have picked some specific themes to consider.

#### Lookout and visibility

The main consideration in any Airprox debate until a few years ago was lookout in Class G airspace. It is now well understood by everyone that gliders are difficult to see and that we have to get better at keeping gliders and powered aircraft apart, not to mention gliders apart from one another. However, there is still a need to keep looking out; the newer scan cycle now taught is far better. When travelling either down a wave bar or flying between thermals, try to move the glider enough to present different angles to other aircraft. Often the flashing of the polished surface is the best indicator to other pilots in sunlight. Again, please avoid flying just below cloud as much as possible as you are then in a reduced visibility situation. We are all aware of the debate regarding electronic visibility. Unfortunately current technology is not at all suited to unpowered flight and we must

hope that better technical alternatives will be available in the future. In the meantime, do all you can to make your glider as visible as possible.

#### Winch and site-related incidents

By far and away the largest numbers of incidents are those involving aircraft transiting gliding sites. Quite apart from the high density of gliders, one of the most dangerous things an aircraft can do is to fly over a winch site below the height of the cable launch. The closing speeds can be large so it becomes both difficult to see the other traffic and extremely difficult for gliders to move out of the way. Gliding sites do not have a zone around them; they are standard class G airspace, and the only protection they enjoy is an entry in the AIP and other related publications and a symbol in rather small typeface but now thankfully showing the maximum height above sea level (QNH) instead of above ground. There are two things we can all do: note the type of aircraft that fly over the site, and tell all your friends and acquaintances who fly other aircraft all about winches and what to avoid. In the former, do especially note any aircraft or helicopters flying over regularly as we can probably trace and then educate them. I am continuing to give slide and video shows and it is interesting how many people, even those in professional aviation, express surprise when gliding operations are shown to them. (Reference numbers 127/05, 199/05, 208/05, 007/06, 016/06)

#### IFR non-airways

Airspace in the UK is quite complex. We do have a lot of instrument traffic (ie, not flying to visual rules) - military and Civil - flying between different airfields which have no airway between them. ADRs (advisory routes, a sort of modern drovers' path) are well-trodden routes that do not enjoy full airway status - these you can cross with care - but aircraft can also be using unmarked routes. In the main they are monitored and advised by radar controllers who may not be able to see you. The bulk of this traffic tends to be above FL50, unpressurised aircraft up to FL120 and pressurised aircraft above that. In good thermal conditions, pilots of these aircraft will often route above cloudbase to keep in the smooth air, but when the cloudbase is very high this may become impractical. Last year we had several days with cloudbases of close to 10,000 ft. Glider pilots should be aware that with high cloudbases or in wave conditions, they are likely to meet this type of traffic and the aircraft will tend to be considerably faster and therefore you'll have less time to see them. (Reference numbers 186/05, 191/05)

#### UK glider-related Airproxes, military and civilian, 2000-2005

All Connect Autorio (CA) date	2000	2004	****	0000	0004	9705		T
All General Aviation (GA): risk	2000	2001	2002	2003	2004	2005	5yr avg	Total
A	19	24	9	10	13	16	15	75
В	33	27	58	38	42	41	40	198
С	54	60	57	70	71	75	62	312
D	2	1	3	0	4	1	20	10
Total	108	112	127	118	130	133	119	595
As of total	18%	21%	7%	8%	10%	12%	13%	
Bs of total	31%	24%	46%	32%	32%	31%	34%	
Cs of total	50%	54%	45%	59%	55%	58%	52%	
ALL GA: Gliders	2000	2001	2002	2003	2004	2005	5yr avg	
Gliders (excluding paragliders)	22	17	24	17	21	29	20	
Total	108	112	127	118	130	133	119	
Gilders of total	20%	15%	19%	14%	16%	22%	17%	
Gliders 2000-2005: risk	A	В	C	D	Total			
Gliders (excluding paragliders)	26	48	56	1	130	UKAB assigns incidents to		
All GA (Inci gliders & paragliders)	91	239	387	11	728	one of four internationally		
Commercial Air Transport	9	55	419	14	497	agreed risk categories:		
	(A+B) Risk-bearing C		D	Total	A: risk of collision			
Gliders (excl paragliders)	73	58%	58	1	130	B: safety not assured		
All GA (incl gliders & paragliders)	330	45%	387	71	728	C: no risk of collision		
All GA except gliders	257	43%	331	10	598	D: risk not determined		
Commercial Air Transport	64	131	419	14	497			

The UK Airprox Board (UKAB) defines an airprox as a situation in which, in the opinion of a pilot or controller, the distance between aircraft, as well as their relative positions and speed, have been such that the safety of the aircraft was, or might have been, compromised

It publishes two comprehensive reports a year, assigning Airprox incidents to one of four internationally agreed risk categories:

- A: risk of collision
- B: safety not assured
- C: no risk of collision
- D: risk not determined

The latest was published in April 2007. In addition, the deliberations of the Board's monthly meetings have been published on its website at www.airproxboard.org.uk

The map, right, illustrates the general location of all 116 Airproxes between gliders and other aircraft, 1999-2004, as well as the 29 reports in 2005. The latter are indicated in red on the map and in the table opposite

S&G thanks Peter Hunt, Director of the UK Airprox Board (UKAB), for his assistance with this information



This article's author, Hugh Woodsend (above), is a Full Rated gliding instructor at Cotswold GC with shares in a Duo Discus, T-21 and Ventus 2c. He started gliding with the RAFGSA and has clocked up 3,500 gliding hours since the early 1960s. On top of that, he has more than 20,000 hours on 500-plus types, ranging from light aircraft to passenger jets, and is a freelance fast jet test pilot. A member of the BGA Airspace Committee, he co-ordinates a liaison programme, raising awareness of gliding among military pilots, and writes this article in his capacity as a member of the UK Airprox Board with responsibility for General Aviation

#### Airspace and wave

Last year I reported we were hoping to get agreement to trial new ways of co-ordinating wave flying, particularly with military highlevel traffic. Everyone is aware of the new box system for selected wave sites, but in addition I am pleased to announce a new initiative to explore how best to signal wave flying activities to military users. Just a small number of glider pilots will be involved and the trial will hopefully establish quite quickly what works best and resolve any issues.

#### **Airfield incidents**

We had one incident at Cambridge airfield,



where a competing glider left it far too late to decide to land out at Cambridge, didn't call them, carried out a poor circuit and conflicted with circuit traffic. If you are going to land at a non-gliding site, be much more aware of your responsibilities, try and call them on the radio and leave enough time to arrive safely without frightening the local users.

#### Understanding airspace

All the above presupposes that you are in Class G airspace. Carr Withall's excellent annual articles (see April-May 2004, p44 and April-May 2005, p45) are an essential

read. With the airspace changes and complexity it is also equally essential you all keep your GPS airspace maps up to date. It has been reported to me that some of the older GPS units are not as well supported as they were. Club chairman and CFIs should do their best to ensure all club pilots have up-to-date airspace files and that help is on hand to get them updated (as well as up-to-date maps, of course). Remember to leave enough margin at the boundaries of controlled airspace as some aircraft may use the full extent for operational reasons and you could get very close even if you are on your side of the line.











## Spanish skies: we're smiling

SOME of you, to judge by the emails that we're getting, have been having a lot of fun on holiday in Spain – and you haven't been wasting your time sunbathing on the Costa del Sol, either. Here, clockwise from above, is a taste of the fantastic pictures you've kindly sent to S&G.

Mike Greenwood took these two from Duo Discus 494 (based at the Long Mynd) on a syndicate trip to Jaca in February-March. This perfect soaring panorama – ridge, thermal and wave – shows a thermalling glider west of the Ordessa Gorge at 13,500ft. Also in 494 (right), the then Midland GC CFI Neal Clements is near the summit of Collarada on a day when 494 returned to site into a 50kt headwind and during its descent the wind changed by 180° on the ground. In later discussions none of the pilots airborne that day could agree the wind direction!

Left: okay, we admit this one's a bit of a ringer. Showing a glacier on the coast of South Georgia, it's a long way from the Iberian Peninsula. But never mind the geology and geography, just look at that lenticular, photographed by Ellen Packham and emailed to us by Tony Mountain. "There's no airfield on this spectacular Island located in the middle of nowhere in the South Atlantic Ocean," he says, "but the prevailing westerlies certainly produce dramatic clouds — if only glider pilots could get to them!"

Top left: an accessible lennie. Nick Hoare in LS8 42 on its feather edge, at 11,000ft over the Puymorens valley, on a London GC trip to Cerdanya, Spain (David White)

Centre: Ordessa Gorge from 19,500ft at 17.50hrs by Mike Greenwood and, thanks to John McWilliam, a closer view of Spain's inhospitable rocklaces



## Improving performance



Richard H Johnson reports on his evaluation of the Sinha wing performance enhancing deturbulators – which he says could be the most significant aerodynamic advance since the laminar aerofoil was invented

T IS EXTREMELY rare that one has an opportunity to take part in a completely new aerodynamic performance-enhancing technology. But that appeared to be the case when Dr Sumon Sinha, a fluid dynamics teaching staff professor at the University of Mississippi at Oxford, Mississippi, USA, considered that his patented deturbulator invention was ready for formal flight-testing on a sailplane at Caddo Mills. fim Hendrix, also from Oxford, had been assisting Dr Sinha for several years during developmental testing with various deturbulator configurations mounted on the wing surfaces of his 1970 Std Cirrus A 15-metre test-bed sailplane. Figure 1 (below) presents a three-view of Jim's Std Cirrus.

Just what is a wing surface deturbulator? Here, it is a full-length, spanwise-mounted, strip of very thin and flat, silvered Mylar hollow tubing that is about 50mm



Above: the deturbulator strips on the upper wing surface and, above left, Dr Sinha with his patented invention

(1.98 inches) wide. Mounted on the wing top surfaces at about .65 chord distance from the wing leading edge, it is designed to filter out small turbulence waves in the wing's boundary layer by a process called dynamic flow control.

In addition to the 50mm-wide silvered deturbulator strips, the wing forward leading edges were treated with a proprietary coating, designed to improve the wing airflow boundary layer characteristics. Somehow that, in addition to the well aft mounted deturbulator strip, aided the wing chordwise airflow in creating less skin friction drag; thus significantly improving glide performance.

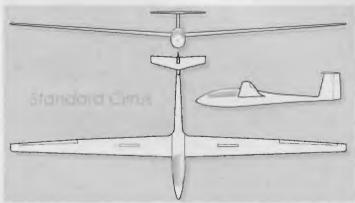
Its function is similar, but almost the opposite, of the well-known and often-used wing-mounted turbulator strip. There, its action is to transition the chordwise laminar airflow to an attached turbulent flow, just

Std Cirrus, ASI errors

before a high-drag separation bubble can form. When needed, we have successfully used drag-reducing turbulator strips on our sailplane wings for many years. Many of the modern sailplanes are equipped with them, usually on their wing bottom surfaces only.

#### Airspeed calibration

The Std Cirrus airspeed system uses a fuselage nose pitot tube that is located in the cockpit ventilation air inlet. Small vent holes on the fuselage sides below the wing serve as its static sources. First we checked the pitot and static system lines for leaks, and repaired a small one. Then, while inside the hangar and out of the wind, we calibrated the sailplane's Winter airspeed indicator by carefully comparing its readings to our calibrated reference ASI meter. The errors that we measured for the sailplane's Winter ASI were relatively low, less than about two

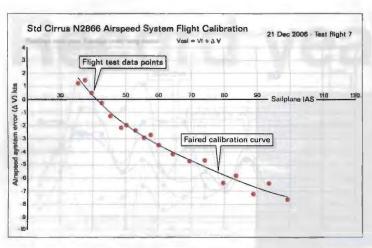


Error = True minus Indicated
True = indi

Above: Figure 1 - three-view of the Standard Cirrus as used in the flight tests

Figure 2 - ASI instrument error as measured before flying commenced

14 Dec 2006 - Ground test



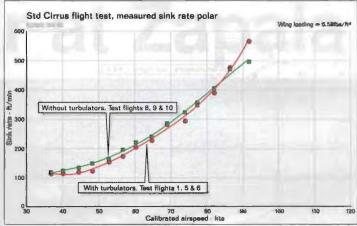


Figure 3 - flight-measured airspeed system errors - relatively small at low speeds

Figure 4 - averaged sink rates measured during the six deturbulated wing test flights

knots over our entire planned flight test range. Those measured airspeed indicator instrument error data are shown in Figure 2 (bottom of previous column).

I then made our airspeed system flight calibration while descending from an 11,000ft-high tow. For that the sailplane was equipped with a Kiel tube reference pitot temporarily taped to one side of the canopy, and a trailing bomb static reference, deployed in flight after tow release. The flight test calibration was then steadily flown at indicated airspeeds between 35 and 100kts, comparing our master reference indicated airspeeds to those of the sailplane's. Those test data were then used to compute the Std Cirrus's airspeed system errors versus indicated airspeed. Figure 3 (above) presents the flight measured Airspeed System errors. In that figure it is assumed that the airspeed indicator has no errors, and that the errors shown would be those using a perfect ASI.

The Std Cirrus's airspeed system measured errors were small at relatively low airspeeds, but increased almost linearly to about 7kts at 100kts indicated airspeed. Those airspeed system errors are almost identical to those I measured 31 years ago with a then-new

Std Cirrus B sailplane (Johnson, RH, A Flight Test Evaluation Of The Std Cirrus B Sailplane, Soaring – March 1976).

In general, our test data measurements show that the Std Cirrus is actually flying considerably slower than the indicated airspeed, but only when flying above 50kts.

While the under-wing fuselage side static pressure orifices provide a highly biased static pressure source, it is reliable and almost impossible to clog when flying in rain. That is a good point and it adds to flight safety. In the past, a number of sailplanes have had crashes when trying to land in rain with an inoperative airspeed indicator.

#### Sink rate test flights

The first six flight sink rate measurement tests were made with the full-span Sinha deturbulator tapes carefully mounted on the Std Cirrus's wing top surfaces. I made the first test flight during the morning of December 13. The atmosphere appeared to be relatively calm that day with little vertical air motion or horizontal wind shear at the flight test altitudes during my tow to 12,000ft. On the way down I measured the Std Cirrus sink rates at various airspeeds between 35 and 100kts indicated airspeed.

That afternoon, Jeff Baird and I alternately flew three more sink rate test flights. However, by then the test atmosphere was not as calm, and it had taken on a little bit of shear and turbulence. For that reason, we waited until the next day to complete our deturbulated-wing sink rate testing. Jeff and I each made a high tow that day, and the atmosphere appeared to be relatively still.

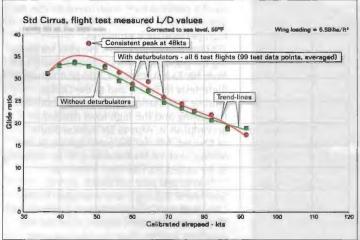
To determine how much benefit the deturbulators provided, it was necessary to re-test our Std Cirrus test-bed sailplane with the deturbulators removed. Therefore, three more high-tow sink rate test flights were made on December 23, with deturbulators removed. The weather appeared to be relatively calm that day.

With a total of nine sink rate and one airspeed calibration test flights in hand, it was now time to correct the sink-rate data to standard 59°F (15°C) sea level conditions, as is customary.

Figure 4 (above) shows the averaged sinkrates measured during the six deturbulatedwing test flights, and Figure 5 (bottom left) shows their corresponding L/D ratios.

Also shown are the similar test data for the three deturbulator-removed test flights.

Those test data indicate the deturbulators



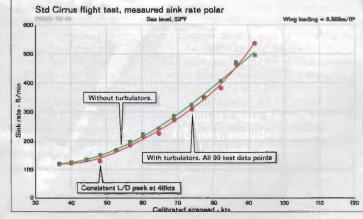
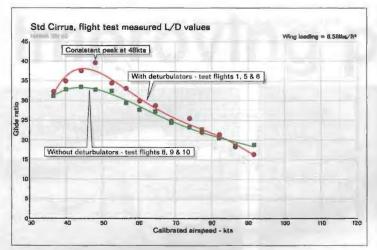


Figure 5 – The L/D ratios corresponding to the sink-rates measured and plotted in Figure 4. These data show a performance improvement of 5 to 6 per cent

Figure 6 — a re-analysis of the data to exclude flights in conditions that seemed less calm produces these results. See Figure 7 overleaf for what this means for the L/D



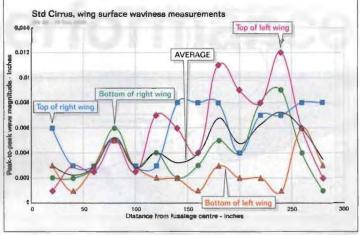


Figure 7 - The L/D ratios corresponding to the sink-rates measured, and plotted in Figure 6, showing an improvement of around 13 per cent to almost 38:1 at 46kts

Figure 8 - measurement of the waviness of the wings showed that the 36-year-old wings were in relatively good shape (all diagrams enhanced by Steve Longland)

improved the best glide performance from about 33.5:1 at 44kts to about 35.2:1 at 46kts, an improvement of about 5 or 6%.

These numbers are derived from a fourthorder trend-line drawn through the test data points. For some reason, the many-point averaged deturbulated wing test data at 48kts show a well-above trend-line L/D point of almost 38:1, an improvement of about 13%. Above 90kts the deturbulators showed a slightly higher drag than with the clean wings.

As stated earlier, the atmosphere appeared less calm during the afternoon when the deturbulated test flights two, three and four were flown. Therefore, I re-analysed the test data after eliminating those three flights, using only the test data from flights one, five and six. The deturbulated wing test data from those three test flights show considerably less data scatter than did flights two, three and four. Figure 6 (previous page, bottom right) shows the averaged sink-rates measured during the selected three deturbulated-wing test flights. Figure 7 (above) shows their corresponding L/D ratios. Also shown in both figures, for comparison, are the test data for the deturbulator-removed test flight data.

Those test data indicate that the deturbulators Improved the Std Cirrus best glide performance from about 33.5:1 at 44kts, to about 38:1 at 46kts; an improvement of about 13% in Max L/D. These numbers are again derived from a fourth-order trend-line drawn through the less-scattered test data points.

The many-point averaged deturbulated wing test data at 48kts still show a well-above trend-line L/D point of almost 40:1, an improvement of about 18% over that of the clean-wing data. The above-90kt data with the deturbulators still showed a slightly higher drag than with the clean wings.

#### Wing surface waviness

Using our standard two-inch long wave gauge, we made chordwise waviness

measurements of our test Std Cirrus's wing top and bottom surfaces at 14 spanwise stations along each wing panel. This showed that the magnitudes of the 36-year old wing's surface waves were quite nominal, averaging only about .0044 inches peak-to-peak. That is relatively good, especially considering the sailplane's age. Only on the outer wing panel did our measurements much exceed that value.

Those waviness measurements are for peak-to-peak magnitudes - from valleys to peaks. Those data are shown plotted in Figure 8 (above right).

#### Discussion

The reason for the unusually low drag indicated at 48kts with the deturbulated wing is open for discussion. Dr Sinha explained that he had purposely chosen to place the deturbulators on the Std Cirrus's

'It is amazing that such a thin strip can produce such significant improvements to a sailplane's performance'

wing where they would optimise their effectiveness at that airspeed. Would it then be possible to add a second deturbulator strip at another location, and thereby widen the very low drag airspeed range?

Maybe next year's testing can explore that on the Sparrow Hawk sailplane that is now entering the Phase 2 of this interesting

deturbulator flight testing.

I think I can explain the higher deturbulated wing drag at the highest airspeeds. At high descent rates the stretched Mylar cover film suffers from inadequate outside venting of the hollow cavity below the silvered Mylar film. Therefore, the rapidly increasing ambient air pressure forces the Mylar film down hard enough to prevent it from flexing and functioning properly at high sailplane sink rates. If that is the case, it should not be difficult to increase the deturbulator venting somewhat, and allow it to continue its good

work at higher speeds. Dr Sinha is currently working to improve the deturbulator cavityventing problem.

As best as I can measure, the thickness of the basic hollow uninflated deturbulator strip is only about .3mm (.012 inches) plus about .1mm (.004 inches) for the thin layer of adhesive that attaches it to the wing surface. That total thickness of .4mm (.0158 inches) is surprisingly thin, equal to the thickness of about four sheets of computer printing paper. It is amazing that such a thin strip can produce such significant improvements to a sallplane's performance!

For more information, go to Jim's and Sumon's websites at www.oxaero.com/ and www.sinhatech.com/

#### Summary

The new Sinha Deturbulator could be the first really significant drag-reducing aerodynamic invention since the development of the now-common laminar-flow aerofoils that were developed some 65 years ago. Its small size and light weight make it easy to apply on a sailplane wing.

However, its location on the wing is critical, and it will be interesting to see if similar performance improvements can be achieved with the current generation of high-performance sailplanes.

Many thanks go to Jim Hendrix for bring-ing his good Std Cirrus sailplane many miles from his East Arkansas Gliderport for our flight tests in Texas, and to the Dallas Gliding Association for providing both the hangaring and the high tows needed to accomplish it. Also to Dr Sumon Sinha of Oxford, MS, for his participation in the testing, and for his honouring us by agreeing to let us test his fine new invention.

Also to test pilot Jeff Baird, and to Southwest Soaring's new manager, Paula Lara, and her Caddo Mills tow pilots, David Cheek and Howard Hughes, who did the excellent towing. They usually required only about 20 minutes to tow the Std Cirrus test-bed sailplane to 12,000ft AGL with the powerful Pawnee.

## Record year at Zapala

T WAS NOT easy to say goodbye to all my friends from San Martin de los Andes, my previous base for record attempts in the Andean wave systems. After seven years and hundreds of wonderful flights you feel a little bit homeless going away. On the other hand, though, there had been a lot of difficulties with flying at a controlled airport with gliders, many restrictions and bureaucratic obstacles. Not to mention the incoming fronts in the late afternoon, which often made it hard to get back.

After much research I decided to go to Zapala – a small town with a huge, uncontrolled airfield in the drier Pampa. Here, thermals are higher and start earlier. The best and fastest wave-alignments of the Cordilliera are just at the end of the runway. This speedway for gliders has four airports below, an important safety consideration given this rough and wild landscape. The locals are really nice and interested in our sport. But I could never have imagined that it would be so much better for record flights.

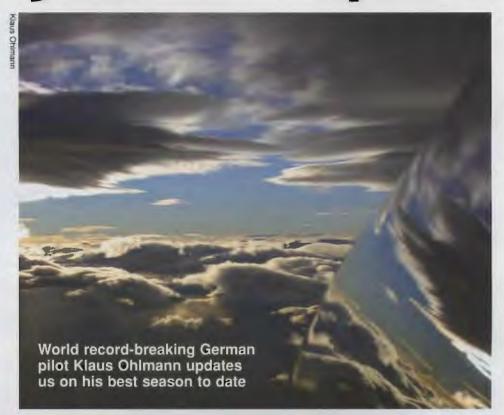
I was always convinced that big triangle speed records would remain the domain of thermal flights. I was wrong. Unbelievable wave conditions allow us to break nearly all the records formerly done in thermals. Of course, this was also the result of years of hard work. It was a real pleasure for me that even pilots who came to Argentina for the first time could realise many of their goals. The Australian David Jansen, after one week of coaching, took no fewer then 18 national records with a DG-400. Ghislaine Facon, a French lady, took eight national french records. Marc Sluszny and Jean Claude van Oosbeck achieved a Belgian altitude record in a Stemme S10 VT.

The fantastic conditions allowed me to claim 11 new world records, my highestever score in one season: from big triangles up to the fastest-ever flown speed - more than 306km/h (165kt) - on a 500km Q/R. This was only possible due to a new design of the Nimbus 4 DM ailerons, done by Schempp-Hirth and certified by the German LBA (the equivalent of the UK CAA). My thanks again to Karl Rabeder, my co-pilot in my record-breaking 3,000km flight, who managed to convince Tilo Holighaus of Schempp-Hirth to carry out this important modification, which allowed me to fly an IAS of an incredible 260km/h (140kt) - or 367km/h (198kt) TAS at 6,000m (c 19,700ft).

For three months, almost every day was flyable. Superb visibility – usually more than 200km – enabled us to enjoy the colourful and breathtaking scenery. The mix of active volcanos and beautiful lakes with incredible weather conditions won us over.

Zapala, we will return.

For the latest record claims, see www.fai.org







Peter Atkinson photographed Guy Westgate and Paul Barker on a farewell flight in their DG-400s before the two bought a Ventus 2CM. You'll recognise them from S&G's *Travels with my toothbrush* series... remember Mt Etna! "I'm lucky enough," says Guy, an airline pilot, "to have made flying my life. I stopped thinking about how to fly a long time ago, and sailplanes are just vehicles now. I no more think about how to handle a glider or tug than I do about driving my car. I fly aerobatics in the crispest-handling machines ever made: the MDM Fox and S-1 Swift. That's like doing a track day in a Lotus. It reminds your muscle memory about rapid, precise movement; it's a workout for your automatic reactions, and a fine-tune for hand-eye co-ordination. Long-distance adventure flying is another discipline again. I admit continuous frustration with heavy engine use, but it's often a choice of progress over purist satisfaction. Every other day the route will contact poor conditions – and good weather and good landing sites don't always coincide. My recreational flying is all about learning and exploration and a self-launcher is the perfect vehicle for that. My dream SLMG would be quiet, ground-manoeuvrable so that it can be flown out of any airstrip, airfield or airport, and have the relaxing handling qualities of its pure cousins. The true beauty of a self-launcher is it gives you control: you take off when you want, take the climb-out routing you want, climb as high as you want. It empowers the adventurous. The Europeans have a great phrase that captures my expectations for all my SLMG flying – wonderflug"









Top: ASG-29ɛ with designer Michael Greiner, the "G" in ASG. 40 ASG-29ɛ have been delivered. On the cockpit edge is the fuel tank, now removable, as shown (above right), so you can take it to the pump. There's a also a new, simpler engine operating control. The 29 comes (above centre) with NOAH safety system certified as an option and the paperwork is being done to certify it for the 29ɛ, too. Also on display were an ASH-26ɛ fuselage and one for the ASK-21 Mi (see p38). Present as a concept (above left) was the ASH 30 Mi, from the same stable as the ASH 25 (of which 265 have been sold since 1986). An Open Class two-seater utilising elements of the ASG-29 wing and a Diamond rotary engine, the ASH 30 will have 26.5m span, 17.4m² wing area and MTOM (for motorglider) of 850kg www.alexander-schielcher.de





As well as the new DG-808C, which first flew in November, the DG team brought the 101st DG-1000 (left and below) to AERO. Ten have been delivered in the UK; worldwide, 65 are on order and the new DG-1000 Club version has now flown (see p5). Also on show (above) was the LS10, due to start production in May, with DG's Head of Production and German champion Holger Back. There was also an LS8t (15 sold last year) www.dg-flugzeugbau.de



# **AERO 2007**



Probably the best gliding exhibition in the world – in Europe's biggest General Aviation fair – is organised every other April at Friedrichshafen. It's a great place to see brand-new toys. In 2007, EASA came along to reach out to our kind of flying

In this *S&G*, Helen Evans reports on the sailplane news

In the next issue: those aircraft *look* like gliders, but...



The new Stemme S6 is a touring motorglider with more standard components – like the prop (below) – to help maintenance. Delivery Is May 2008. More than 20 have been ordered, "at least one" In the UK www.stemme.de



photographs: Helen Evans





Brits that S&G bumped into at AERO included (from top): Luke Roberts; Bob and Karen McLean of DG agents McLean Aviation with (centre) DG's Karl-Friedrich Weber; Barrie Elliott; and Schleicher agent Pete Wells (right) of Zulu Glasstek with Alexander Schleicher's Ulrich Kremer



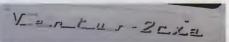






The Skylaunch team (above) on their stand at AERO after dropping off their latest delivery of a new winch to Terlet in the Netherlands. As well as re-engineering old winches recently for three British clubs, they've delivered new ones across the world — including to Colombia. Enquiries at the show came from everywhere from Finland to Japan. Seen from left are Mike Groves, Skylaunch's German agent, Tobias, and Peter Salisbury

As always. Schempp's stand (above) was an eye-catcher with, suspended on high this year, the first Ventus 2cxA - an 18-metre Ventus 2cx with a narrow ("A") fuselage for smaller pilots. WM is owned by (inset, right) Werner Meuser, who won the 15-Metre Worlds in 1997 and 2001 in a Ventus 2. More than 470 18m Ventuses have been sold: mostly 2c, more than 100 of them 2cx. Under WM is a Duo Discus xt, engine out. To-be-certified Duo cockpit improvements on comfort, space and safety are being made for 2008 delivery including, as General Manager Tilo Holighaus shows, a lifting front panel (right). The new rigging aid (inset, left) is his daughter Charlotte - doing a good job at the root. Her brother Felix was checking out the certified 18m Discus 2сн (я is for Streifeneder ballistic recovery system). Will Schempp design longer fuselages for (below) all the extra letters? www.schempp-hirth.com









LAK-20:



The new Open Class LAK-20t has flown and was on show with the single-seat 17at and 19at — now both certified. At 23m or 26m span, self-launch and turbo LAK-20s are planned, using Solo engines. It has had more than ten orders. Best L/D is put at 55 (23m) or 60 (26m). VNE is 275km/h (148kt) and empty weight 479kg0/1,054lb (23m) or 485/1070 (26m). Developing it cost a million Euros, a tenth of which was EU funded

### Perkow, Allstar PZL:



The direct successor of the SZD-50-3 Puchacz, the Perkow from Allstar PZL Glider Ltd, of Poland, has preliminary flight approval and a second prototype was on show, attracting interest from clubs and Services gliding organisations. The makers are going for the basic and cross-country training, and aerobatic markets. The glider has automatic control

connections, a TOST wheel with hydraulic brake and 17.5m or 20m span. It will be visiting Germany, Holland, Denmark and Norway this year, arriving in the UK in October www.szd.eu





### **ASK-21 Mi, Alexander Schleicher:**





The familiar ASK-21 — plus a self-launch 56hp rotary engine (dual controls in front and rear). With a 17m span and a best L/D at 90km/h (48kt) of 34:1, it's pitched as a trainer and as a two-seater you can use without infrastructure. Final certification is scheduled for summer 2007

www.alexander-schleicher.de



### PW-6U, SZD Jezow:



Seven PW-6s are on order from the new (since 2005) manufacturers, SZD Jezow in Poland. At 16m span and with best L/D of 34:1 at 95km/h (51kt), it is aimed at the basic and cross-country training and the aerobatic markets. It has EASA type certification and this glider is destined for the UK

www.azdjezow.com.pl







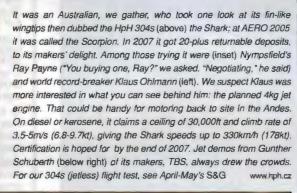
Above: Grazina Sleckute takes care of the new LAK 20T. For a closer look at more two-seaters see p38, opposite



EASA Executive Director Patrick Goudou opened AERO 2007 while EASA's team on its first-ever trade fair stand included (from left) Stefan Ronig, Elisabeth Schöffman and Paul van Dalen. "We're here because EASA has caused a lot of turbulence in GA," explained Elisabeth. "We see it and we want to address it, and we've had a lot of very positive feedback, especially from industry, for being here". For S&G's detailed EASA update, see p12



Antares 20e and 18s at AERO. Axei Lange tells us 36 have been delivered of 73 sold. Four are on order by UK pilots. One is for Justin Wills www.tanga-flugzeugbau.de









Another crowd-puller was the SCE Cirrus 05 glide simulator. Its two-axis motion (in roll and pitch) was so realistic that this chap

(right) tilted his head as he turned. The prototype, brainchild of Franz Hinterplattner (above) from Austria, is derived from a jet sim that was built with Red Bull sponsorship. Given five orders at 30-50,000 Euros (£20-34,000) each, the Cirrus could start production. With a 21in TFT screen (two more are possible), it uses MS FS on a standard PC: other software can be installed www.sce.co.at







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# 135 unforgettable minutes

Julian Foster was looking for an exciting ride in wave over the Pyrenees – and he got it

LAN BAKER calling, he'd just landed his Grob 109: "Turbulence down to t'ground," he says. Not given to overstatement, Alan. Familiar knot in the stomach. Tighten straps a notch more and watch the rope snake and tauten. Thumbs up

to the wingman...

Saturday, March 10, 2007. Day three of this, my tenth visit to Santa Cilia in Spain. At the morning meteo the lovely Ana, *la Jefa de Campo*, caused a frisson of excitement with the chart showing those narrow vertical isobars and the tephi with a wide Vee and wind arrows northerly – 15 to 25kts? – oops, those are thick bars, that's 55 to 65kts at height. Oh sure, I'd been in wave before, niminy-piminy girlie stuff, but this looked like the Big Yin, the red-blooded and hairy-chested day I'd been waiting for...

Carlos, el tuggie, had given a short briefing: "We tow through rotor" - and he waggled his hand energetically - "then I turn right in lift and you release quick. Okay?" Okay, Carlos. Two circuits gaining height over the green Aragon valley are lively enough, then we turn north towards the snow-covered Pyrenees and bang! Where the \*\*\*\* was the tug? Hell, down there. Follow it. Aargh, now up there. No, left, fool. Been in some rough stuff in Spain before, but this was factor times two. Desperately trying to keep somewhere behind this bucking, rearing, corkscrewing Robin and not let the rope loop - there's a back release on this Pegase. Once or twice think of giving up, but for the shame of having to go back again, and Jim Hudson coming through this lot just before me in his ancient wooden Foka, for heaven's sake. So grit teeth and absolute concentration... And, finally, after an 18-minute tow, smoothness, not unexpected, but still a sudden shock. Anguished call to pull off from Carlos jolted me alert, as he turned left to go back through the maelstrom again, the brave lad. Undercarriage up, then crikey, what's the screaming? By heck, it's the vario on its five-metre stop making a noise I've never heard from a vario before, and the giant bulk of Bisaurin is sliding downwards past the canopy, and the altimeter is winding round like a second hand: 2500m, 3000m and climbing...

Whoops, time to call a halt, no oxygen. I pull airbrake – try half, but we're still going up at 4 m/s, so full out, and the needle finally comes back to 0. Phew! Calculate height in feet and final glide – hey, 65km, even at 20:1 – to prove faculties okay. Getting chilly, zip up fleece and on gloves.



Reconnecting with the wave behind Collarada - back through the invisible barrier into that screaming lift again

Take a few big breaths and a good look around.

The panorama is quite simply stupendous. Glittering peaks seem to go on forever into the crystal blue distance. Towards Cerdanya in the east, there are Collarada, Aneto, Cotiela, those well-remembered landmarks from former flights. To the west, the Pyrenees taper down towards the Atlantic. Down sun straight ahead, behind the icy pyramid of Pic d'Anie, lies Pau in the greenness of France. Bliss indeed it is to be alive at that moment.

So, what to do with all this height? Float gently to the Ordessa Gorge 30km away and take a few photos? Why not? Crabbing gently over the Canfranc valley, airbrakes now closed and the vario needle level. Now going down. And down. And down. To the stop. Whoops, let's go back the way we came, to get to the lift. But it isn't there. And the altimeter winds down as quickly as it wound up. And the mountains get bigger and up there. Then it's rotor again and this is factor times three. Camera jumps out of storage pocket - stuff it under fleece. Undercarriage goes down and airbrakes open unasked. Desperate wrestling with this unseen opponent for ten, 15, maybe 20 minutes and I'm getting weary. A few hundred feet gained, then lost as quickly.

Okay, so there's always Plan B, to field land in the valley behind, but there's bound to be turbulence and the possibility of a stray rock, so it's not exactly enticing. Somewhere in the back of my mind is the memory of others connecting with wave behind Collarada, so struggling a kilometre

or so to the west and pushing forward as fast as I dare, gradually the downs get lesser and the ups get greater until we're back through the invisible barrier into that screaming lift again and the mighty bulk is sliding below. Phew again!

All thoughts of Ordessa over, it's crab back the way we came. But — oh no! — it's that down and that vario miserably groaning again. Please, please, give us a break, Mr Rotor. "Not on your nelly, chum, you wanted excitement, and excitement you've got."

At least this time I've a bit more notion how to deal with it, but it's still a mighty uncomfortable few minutes under the mighty Bisaurin in factor three until, with one final bang, we break free again.

By now the thought of having to go back to the airfield through all that rough stuff has lost its appeal, so we take the high road over the top of it, having to use full airbrake to avoid climbing to the stratosphere, and spiral down over the valley, which is still on the lively side. Calling ten minutes to landing, Jose Antonio warns of a 20kt crosswind and (guess what?) turbulence. Such was the sink that even allowing 400m at high key point was just enough for a no-airbrake approach.

Back in the hangar, that final bang from behind me turned out to be the battery coming loose from its mounting, in spite of a hefty webbing strap and friction buckle. Faithful Sierra Mike had a big pat on the nose for carrying us through the most testing flying I've ever experienced.

And the beer in the bar tasted extra good that evening.



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Mike Philpott took these photos while flying with Soaring Safaris at Bloemfontein (above) in January this year.
"I had a fantastic time at Dick Bradley's outfit," he says, "with 16.5 knots on the averager at one stage!"

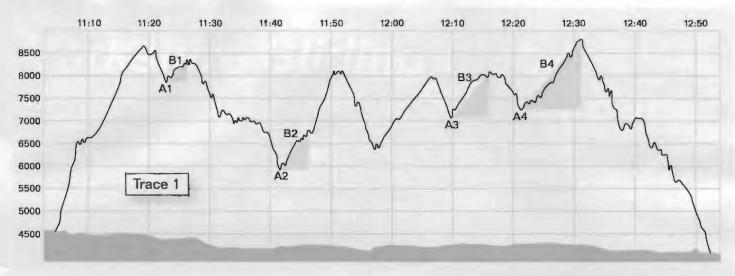
Reb Rebbeck takes a look at some flight traces to see how post-flight analysis can help you fly faster across country

S ANOTHER season finishes for us here at Bloemfontein in South Africa it would seem to be a good time to reflect on what has gone well – and not so well. We have entertained 66 pilots of varied abilities here, mostly in the sun. It has been great fun helping many of these pilots improve their cross-country skills.

A couple of seasons ago we started using See You software not only to set interesting tasks but also as for post-flight analysis. This has been really effective in showing pilots what they are doing right and where they are getting it wrong. As our understanding of See You has increased we have been able to interpret flights more accurately and to come up with ideas to help individual pilots improve their cross-country speeds.

So let's start at the beginning. I suppose we all know really that to go faster it is merely necessary to not go slower. Speed comes from not allowing ourselves to be trapped or lulled into time wasting: for example, sitting in a 2kt thermal when we know that 4kts is available, or circling for three or four turns in an attempt to use a thermal which refuses to be centred.

Pilots tend to be unreasonably optimistic about recent flights. They land safely and a



warm satisfied glow permeates their thinking. They remember the 10kt climbs and the 70km glides – and are proud of the low point from which they just escaped a field landing. This is where See You comes in:

"What do you think your average climb rate was?"

"Oh about 6kts. I didn't stop for less than 4." Wrong! See You shows that your average climb rate on task was 3.2kts.

"What was your average glide length?"
"Oh about 30kms – that final glide was fantastic."

Wrong! See You shows that despite your 85km final glide your average was 15.4kms.

"What was your lowest point?"

"Phew! I had the wheel down and was turning finals with my hand on the brakes at about 350ft when I got this surge."

Wrong! See You shows that your lowest point was 723ft above ground level.

### Hmmm!

Well, we all do it, so this is where See You can be used to good effect. Firstly to get the facts right and secondly to find out exactly

where we can make improvements. Let's look at some of the ways in which See You can be used to help us.

### Thermal centring

Most people who visit us do so in the belief that out here thermals are stronger and cloudbases are higher. This is true. But the downside is that because of their extra energy they can be difficult to centre. Especially near the ground where they can be very narrow. Let's look at a couple of typical altimeter traces.

**Trace 1** (above) shows how the pilot is struggling to find the thermal (A) and then is having great difficulty in attempting to stay with it (B).

Trace 2 (below) shows how I wish I did it. A clean pick up (A) and a beautifully centred climb (B).

The most common problem we get here is that pilots just don't bank steeply enough. It pays to practise thermal turns of 45°, or more, in smooth air so that when you hit that dust-devil at low level you can hang in there and get a great ride.

Thermals are not places for relaxing in.
They are where the hard work is done.
Remember – he who climbs best flies fastest,

### On glide

A very common problem with inexperienced cross-country pilots is that they just can't resist rising air. **Traces 3 and 4** (opposite) hardly need commenting on.

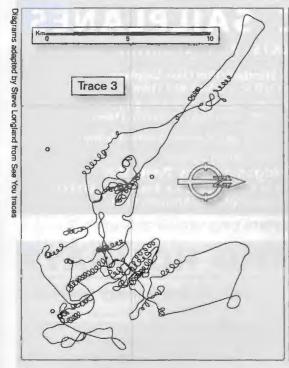
My rule of thumb for pilots who produce type 3 traces is this:

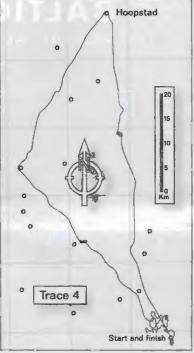
On leaving a thermal do not turn until you have travelled at least 10kms. Of course there are the usual caveats. If you are very low or the area ahead looks really dodgy or you run into ballistic lift or...

All I would say is that if you keep circling every time you can find an excuse then your cross-country speed will be negligible. So go for it, stop making excuses, and be surprised by how your cross-country speed dramatically increases, Try it – it works.

It has been pointed out to me that in England where cloudbases can often be down at 2,500ft or so then perhaps 10km glides are unrealistic. So, okay, try 5kms – anyway the principle is the same – the idea is to suppress the urge to grab lift whether you need it or not. In South Africa, with cloudbases often up at 10,000ft, we find pilots sensibly increasing the figure to







20 or 30kms. Ah me! How I love those 100km final glides.

### Thermal selection

See You gives us excellent stats on which thermals have been selected. If one is high and happy then there is no excuse for choosing a thermal that is weaker than you can expect to find. But we do it. If, like me, every now and then you catch yourself drifting gently upwards when there is 10kts around – grit your teeth – kick yourself up the backside – and push on!

### The thermal - take it or leave it

Often, when a thermal we hit gives a strong indication — a big surge or a wing lifting, and so on — then we convince ourselves that we must have it. After three miserable turns and a minute or so wasted then we get cross and resolve not to be beaten by this elusive object. Several minutes later having climbed pathetically few feet — we give up. So the thermal has beaten us after all.

What should we have done?

After turning about 45° and not getting a good result, the best plan is to tell yourself "This thermal does not exist" and move on to one that does. Just remember that, certainly in good conditions, we need to use only a very small elite subset of the available thermals.

If it doesn't want to play, throw it away!

### Thermalling - left or right?

See You statistics show that most people favour turning to the left. But it also shows that they find better thermals when turning to the right.

What are we to make of this? I think that we only turn in our less-favoured direction when the indications our so strong that we just can't avoid taking it. A strong surge and a right wing pushing up hard are compelling reasons for turning right.

Now, in general, we take far more thermals than we need. So I have a plan. Why not reject thermals even in our favoured direction unless they provide the strong indications that would have tempted us in our less favoured direction? This means that we would reject the less powerful thermals, which of course, are the ones where we waste our time. As above, remember that a thermal that you can't centre properly is of no use, effectively it is not a thermal – so leave it alone.

Looking at flights where pilots have taken this advice has been very encouraging. They certainly show a more balanced attitude to thermal selection. I think they go faster, too, but we need more statistics to confirm this.

### Water, water everywhere

Of course we all know that to travel faster we must carry water – or must we?

If the statistics output from See You show that we spend a large part of our time thermalling, shall we say more than about 35 per cent of it, then we will lose more time heaving that water uphill than we will gain by flying faster between thermals.

It is hard to convince people of this, I think because there is a great macho appeal to tearing through the finish line, showering the onlookers with good old

Hrmmi Freud would probably have had something to say about this.

But anyway first improve your flying skills so that with a combination of good thermal selection and thermalling technique, water becomes an asset and not just useless extra baggage. Maggot racing

It is of course useful comparing flights for a given pilot over a period of a week or so. This can usually show how the pilot is improving.

Last year, for example, we had a pilot progress from a best flight of less than 150km at 60km/h to more than 350km at 120km/h. Now that is an improvement worth having.

However, what is even better for the competitive pilot is the straight comparison with other pilots flying the same task.

We set tasks every day, though of course individual pilots may if they wish go where they like. When we get several like-minded pilots attempting the same task then the fun really begins.

Observing these in See You after the flights is not only very instructive ("Oh, so you went left of track there...") but usually a source of considerable hilarity. "You won — so you can buy the beers."

### Conclusions

We all waste time while flying cross-country, which is why, of course, not many of us are world champions. See You is really useful in showing us how we waste that time. We have used it to analyse more than a thousand cross-country flights by pilots varying in experience from world champion to early cross-country. See You cannot, alas, read the sky ahead of us, or indeed tell us in real time when we should turn left, turn right or just keep going. However, the mistakes or errors of judgment that we have made in recent flights can be analysed in detail and this should prevent us from repeating them. As - on a good day - a really average pilot, I find this analysis accurate to the stage of cruelty sometimes. Still, they say that if you don't want to look silly, don't go gliding.

Has it helped me? Well here we come to the "not so well" bit of my season.

I have landed out seven times this season. Six dirt fields and a salt-pan (a salt-pan? Yes, but that's another story). This is more than the total times I have landed out in South Africa in the previous eight years.

So what am I getting wrong?

My children, who are glider pilots, suggest that this is a good sign and that I am clearly adopting the "go for it" attitude, which has been so lacking in my flying of old.

I'm not totally convinced by this view, though I would like to believe they are right. I think that I'm beginning to understand how to glide faster now, but still, when I'm flying, my concentration is diminished by the sheer delight of being airborne. I just love it up there. Yes of course I'd like to fly faster, so I can travel further. And yes, deep down inside, I'd like to be world champion. But, nevertheless, sitting up there in my glider, I'm still the one with the smile on his face.

So if any of you guys and gals have enjoyed yourselves half as much as I have enjoyed trying to persuade you to fly better than I do, then next year — I'll "See You" in Bloemfontein.



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# British Gliding Team - 'One Team, One Aim'

### **BRITISH GLIDING TEAM MANAGER**

The British Gliding Team Manager, Brian Spreckley, intends to 'retire' from this voluntary role during 2007.

If you feel that you are able to contribute to the ongoing success of the British Gliding Team in this voluntary leadership role by maintaining the focus on excellence and continuing to develop our strong competitive philosophy, we would really like to hear from you. Please forward a brief CV including covering letter headed 'Team's Manager' to;

### Russell Cheetham

Chairman of the BGA Competitions and Awards Committee BGA, Kimberley House, Vaughan Way, Leicester LE1 4SE

Or email do pete@gliding.co.uk

All applications will be treated in confidence

# BRITISH GLIDING TEAM SPONSORSHIP MANAGER

The British Gliding Team will shortly require the assistance of a Sponsorship Manager. If you have the appropriate experience, skills and time available to join the British Team in this important voluntary role, we would like to hear from you. Please forward a brief CV including covering letter headed 'Sponsorship Manager' to;

### Russell Cheetham

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# Moving

In the latest article in our series on instructing, Mike Thorne explains what motivated him to become a Deputy CFI – and how he's finding it, six months on

F YOU reflect on the many things that people do in gliding clubs, it can be hard to recognise that the reason they got into gliding was a desire to fly gliders. Ordinary people give their time, with varying degrees of enthusiasm, for all sorts of tasks and jobs to support and enhance our ability to do what we all came here for. You can see this from the top of the BGA to the bottom of the smallest affiliated club. Instructing is just one of those tasks, and in my experience the deeper I've got into it the more complex the justifications become.

I began gliding in 1982, as one those people who had "always wanted to glide" but was pretty typical in that I hadn't quite got around to it for the usual reasons of money, career, family, and real estate. When I was 32 my wife allowed a chink to show in her armour and encouraged (or was it permitted) me to take a trial flight at the Thruxton GC, near Andover in Hampshire. I'm still gliding! The reasons not to glide never went away of course, and I averaged only 30 to 40 hours a year until the early 1990s when I bought a share in an SHK17, releasing me from the tyranny of waiting for club gliders to fly but diminishing the available cash to fly as much as I wanted to. Luckily my career co-operated: an upgrade to a DG-300 followed and to a Discus BT in 2000 (thanks to the dotcom boom!).

During these years I kept my head down and was never challenged to become an instructor, preferring to glide for pleasure and do some committee work as my bit for the support of the operation. It was not, however, without some feeling of guilt when observing the work and commitment that instructors put into keeping the operation going.

In 1999, having transferred to the Bath, Wilts & North Dorset club at The Park, I was eventually approached by CFI Stuart North and agreed (with what I hoped was a decent show of enthusiasm) to undergo BI training, and into the net I went. To my surprise, BI flying was a lot of fun, and the training was real revelation. In place of those frenzied annual check flights, where you have to demonstrate your incomparable ability to fly an aircraft you almost never fly, under the critical gaze of an instructor, BI training and testing was a chance to develop skills and to weed out long-ingrained bad piloting habits.

After a few years, BI flying began to feel limiting as I wanted to fly with more advanced students, so in 2003 I spent the

# up the instructing ladder



New DCFI Mike Thome flies a Discus BT from The Park

money and went on an assistant rating course. Having, by then, taken an enforced early retirement from the telecoms world at what was now the end of the dotcom boom (swings and roundabouts!) I had a little more free time on my hands. The nine-day course was significantly more challenging and rewarding than the BI course, and money well spent. I found instructing as an assistant rated instructor much more rewarding, and enjoyed helping students to develop their own skills and work on problem areas. The impact on my solo hours was immediate, however, as was the change in my attitude to the way flying operations went at the airfield. When you take on the responsibility of instructing you start to see the potential for accidents more clearly, and part of the job is to do something about such situations.

Instructing necessarily means that you're not flying your own glider, of course, and that's something I've been aware of in my annual log summary, but I've been pleasantly surprised at the continuing kick I get out of helping others along the path to better flying, and that feeling's become stronger as I've grown into instructing. Particularly enjoyable were two ab initio courses I instructed on at RNAS Yeovilton, taking selected teenage beginners up to the point of solo in a week, watching the grey matter take it in as only young brains can.

It's also satisfying to be able to help fellow members sort out an issue with their flying, to analyse the problem with them and to try solutions until they get it right. Sometimes this requires more than Just the mechanics of repeating an exercise and needs a more analytical approach such as sorting through the information that they're processing at various phases of the flight.

In 2005 I did a full rating completion course, mainly because it seemed pointless not to take that small final step enabling me to supervise *ab initio* flying. I innocently thought I would then be safe from further pressure to climb the management structure.

If you have a management background

I guess it's inevitable that your skills will be apparent to others already managing the gliding club, and this became a reality, a challenge and an opportunity for me late in 2006 when Stuart North gave notice that he intended to stand down as CFI and Allan Milne agreed to take on the role. Anyone who's found themselves with a hand gently laid on their shoulder knows to expect a testing question, and sure enough it came, unsuspected, one afternoon! Would I be prepared to take on the Deputy CFI role? I immediately thought of all the reasons why others would be better equipped than I. I hadn't been instructing as long as Fred, Joe and Bill; I'd only been fully rated for a year; I'm pretty busy with things outside gliding at the moment; my wife might file for divorce!

But these were put aside, one by one, by someone who'd also been a manager before his recent retirement, and I eventually found myself agreeing to deputise for the new CFI. Stuart fortunately agreed to stay on as DCFI also, so the club now has a new CFI in post, a retiring one as DCFI, to give continuity from the previous years, and me as DCFI with a view to taking on the role at some future date. This looks like good succession planning to me, and the arrangement is

'Local soaring is no longer a good idea, as the urge to look down at the airfield and keep an eye on what's going on is now even stronger'

working well after the first six months.

Cathy has threatened divorce, by the way, but I don't think she means it, as she's looking forward to our 35th wedding anniversary this October! She's even booked (must check whether for one or two) a cruise to Venice and a train journey back on the Orient Express, so I guess I'm safe until then.

What does being a DCFI mean to me, to my selfish ambitions to fly gliders, and to the enjoyment I get out of the sport? Well, one consequence is that I'm learning that local soaring is no longer a good idea, as the urge to look down at the airfield and keep an eye on what's going on is now even stronger. A further consequence is the insidious development of the eagle eye and ready tongue that CFIs always seem to possess. It's not something you consciously develop, but there's nothing like feeling responsible to sharpen your senses for poor or good airmanship, trends in somebody's flying and potential safety issues. The change has necessarily demanded an extension of my focus to take in longer-term planning. There's a need to ensure that the club has a sufficient number of instructors, that pilot development is managed at all levels of club

flying, that we take account of trends in the patterns of membership in the type and number of gliders we operate. I'm aware that instructor training and standardisation will become an area to which I'll have to devote more energy and, of course, time.

One less-than-satisfactory consequence of ascending the instructor management ladder is that it becomes more difficult to turn up at your own club and fly your own glider for pleasure. The pressures come from without and within. I've already mentioned the selfinflicted feelings of responsibility, which distract from the pleasure. External pressures arise from those who want to buttonhole you to talk about incidents, make suggestions, discuss their own progress or plans, and the inevitable "events" which happen on airfields which could previously be viewed as an interested bystander but which now become things to take responsibility for. These are, of course, part of the job.

One antidote to this is to fly occasionally at other airfields where someone else is carrying the can and you're more free to participate without direct responsibility. This is a little sad, as one consequence is that your own club doesn't get the income from your activities, but perhaps it's unavoidable.

So, climbing the instructing ladder to the dizzy heights of DCFI has been a mixture of the good and less good so far. Six months in, I can say that I get a great kick out of flying with others and helping them to obtain more of the enjoyment I've always received from our wonderful sport. Being more involved in the management of club operations does give a buzz, but can be demanding and time consuming. My personal flying has dropped back by about 25 per cent since I became an instructor, but I'm planning to redress that balance with a couple of regionals and visits to other clubs this year, and by making efficient use of global warming at The Park!

These are personal and fairly candid views: we all have different circumstances, so I leave it to you to decide for yourself whether the gliding management ladder is one you wish to climb. Suffice to say that if we wish to keep the costs down in gliding we all need to bring a piece of whatever skill set we have to our gliding clubs and to the management of our sport, and not expect to just turn up and glide at the expense of others. One of the great strengths of gliding is the unstituting effort given by so many to keep it all going, so let's all do our bit to whatever extent we can.

Mike has been gliding since 1982. He has 1500 hours and 1600 launches, a Gold badge and two Diamonds — Diamond height remains elusive. He flies at the Bath, Wilts & North Dorset GC at The Park and has been serving on the committee and instructing there since 1999. He became a full-rated instructor in 2005





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### Contacts

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June - July 2007



# **BGA CLUB ANNUAL STATISTICS**

OCTOBER 1, 2005 TO SEPTEMBER 30, 2006

	ME	MBER	SHIP		FLEET					FLYING			NEW PILOTS			
	Full Flying Members (Adult)	Full Flying Members (Junior)	Temporary Members	Club Two-seat Gliders	Club Single-seat Gliders	Privately Owned Gliders	Club Owned Tugs	Privately Owned Tugs	Club Owned SLMG	Privately Owned SLMG	Total Launches	Number of Aerotows	Total Hours Flown	"A" Badge	Bronze Badge	Cross- Country Endorseme
Andreas Gliding Club	18	3	17	1	0	4	0	1	0	1	461	81	63	0	1	0
Angus Gliding Club	10	3	30	5	1	4	0	0	0	0	467	0	74	0	0	0
Aguila Gliding club	54	3	142	3	2	18	2	O	0	0	1352	1295	637	0	4	3
Bath Wilts & North Dorset Gliding Club	80	17	0	4	3	34	1	ő	0	1	2593	465	1175	2	1	1
Bidford Gliding Centre	84	7	485	3	3	27	1	1	n	0	2119	2100	1900	5	1	2
Black Mountains Gliding Club	74	4	474	4	2	25	1	i i		1	2050	2050	2611	3	2	0
Booker Gliding Club	187	10	1192	6	7	80	4	1	1	2	6532	6232	8000	10	6	6
	104		0	3	2	32	3	o	1	0	2567	2445	1344	9	6	1
Borders Gliding Club	1,000	12	509	3	4	32	0	0	,	0	4035	0	1636	3	0	1
Bowland Forest Gilding Club	128	6		3		75	2	0	ő	3	3865	2091	4322	1	3	6
Bristol & Gloucestershire Gliding Club	192	19	351	4	4		2	0	_				1823	1	3	4
Buckminster Gliding Club	75	2	251	3	2	26	]	1	2	2	3300	1899			_	1 1
Burn Gliding Club	97	13	306	4	3	34	1	0	1	1	3536	1093	3921	5	4	
Cairngorm Gliding Club	30	4	123	2	0	10	1	0	0	0	938	811	957	1	2	1
Cambridge Gliding Club	193	14	1291	4	5	70	2	0	1	0	9691	2416	5231	5	9	4
Carlton Moor Gliding Club	12		15	1	1	0	0	0	0	0	228	0	36	0	0	0
Channel Gliding Club 2002	32	7	291	2		3	0	0	0	3	1617	0	186	2	2	1
Connel Gliding Club	4		0	2	0	3	0	0	1	0	0	0	117	0	. 0	0
Cornish Gliding Club	15	0	30	2	1 1	2	0	1	1	2	198	1	64	0	0	0
Cotswold Gilding Club	155	30	433	4	5	56	0	1	0	4	6814	492	3532	9	4	3
Dartmoor Gliding Society	47	1	95	3	3	- 11	0	0	0	0	2269	0	406	4	5	0
Deeside Gliding Club	63	15	437	3	3	16	2	1	0	2	2548	2490	3031	1	1	2
Denbigh Gliding Centre	47	3	264	2	2	12	0	0	0	1	2818	88	686	3	1	2
Derby & Lancs Gliding Club	170	16	436	4	3	38	0	0	0	2	4443	0	1924	4	1	1
Devon & Somerset Gliding Club	129	9	190	4	2	35	1	0	0	1	6722	310	2454	3	5	6
Porset Gliding Club	40	4	154	2	1	16	1	0	0	1	1686	709	833	1	3	3
Dukeries Gliding Club	35	4	103	3	2	13					2064	0	472	1	1	0
Dumfries & District Gliding Club	9	Ó	0	1	1	3	0	2	0	0	182	0	50	0	0	0
East Sussex Gliding Club	100	11	618	3	4	25	1	ō	1	2	3136	974	1084	5	4	3
Essex & Suffolk	112	10	469	4	4	43	o	ő	o	0	5728	30	1840	4	1	3
Essex Gliding Club	63	3	235	4	2	19	1	ő	0	0	2246	663	640	3	2	1
Herefordshire Gliding Club	25	0	137	2	1	7	1	0	0	1	616	616	492	0	0	i
	44	6	111	4	1	15		1	0	1	1342	597	926	3	0	0
Highland Gliding Club	44	0	111			15		1			1342	397	920	3	v	0
mperial College Gliding Club (see Lasham)	153	22	677		0	05				2	5239	1287	806	11	6	5
Kent Gliding Club	1			4	2	35	1 1	1	0				370		0	0
akes Gliding Club	38	1	43	2	1	12	1	0	0	1	630	659		1	-	
asham Gliding Society	664	66	1352	13	8	200	8	2	1	2	22447	7547	7600	38	10	8
incolnshire Gliding Club	33	1	268	2	2	2	0	0	0	0	2202	9	286	2	2	0
London Gliding Club	271	27	1859	8	5	100	5	0	1	3	19000	9500	6782	10	8	8
Mendip Gliding Club	66	16	301	2	4	13	0	0	0	1	2589	212	699	1	2	9
Midland Gliding Club	159	17	432	4	3	42	1	0	0	1	7624	490	3290	5	4	3
Needwood Forest Gliding Club	39	6	201	3	2	6	0	0	0	0	1941	0	500	2	2	0
Nene Valley Gliding Club	44	1	337	2	2	20	0	0	0	1	2246	1	596	0	1	1
Newark & Notts Gliding Club	45	5	72	3	2	8	0	0	1	0	2115	155	585	4	2	5
Norfolk Gliding Club	106	6	264	3	3	22	2	0	1	2	3630	2290	1586	1	2	3
North Devon Gliding Club	9	2	96	2	1	8	2	0	0	1	393	393	550	1	0	1
North Wales Gliding Club	23	2	58	2	2	3	0		0		1222	0	166	1	1	2
Northumbria Gliding Club	59	15	223	3	1	10	1	0	0	1 1	1535	596	480	0	1	1

Totals	7,372	781	23,982	265	216	2,016	89	22	66	87	289,051	90,902	137,724	394	196	180
Wyvern Gliding Club (AGA)	67	7	68	3	3	8	0	1	1	0	6388	125	1409			
Wrekin Gliding Club (RAFGSA)	25	5	105	2	2		1	0	1	0	858	227	298			
Seahawk Gliding Club (RNGSA)	23	0	0	3	3	5	1		1		1873	1401	421			
RAF GSA Centre (RAFGSA)	151	5	330	5	5	11	2	0	2	1	5426	2425	2307			
Portsmouth Naval (RNGSA)	75	12	45	5	5	15	2	0	0	2	3802	1675	1034			
British Army (AGA)																
Kestrel Gliding Club (RAFGSA)	41	3	79	2	1	4	0	0	1	0	1113	35	172			
Heron Gliding Club (RNGSA)	33	8	36	2	2	6	1				882	763	436			
Fulmar Gliding Club (RAFGSA)	16	0	27	2	1	2	1	0	1	0	271	183	139			
Four Counties Gliding Club (RAFGSA)	36	6	0	3	3	10	1	0	1	0	3894	524	1840			
Fenland Gliding Club (RAFGSA)	87	19	42	2	2	6	0	0	1	0	2051	42	563			
Crusaders Gliding Club (RAFGSA)	36	0	1	3	1	1 1	0	0	1	0	2603	10	366			
Cranwell Gliding Club (RAFGSA)	71	12	263	3	4	15	1	0	1	1	4567	328	1290			
Clevelands Gliding Club (RAFGSA)	59	14	0	2	3	13	2	1	o	3	2180	1256	1405			
Bannerdown Gliding Club (RAFGSA)	98	2	352	3	3	23	1	0	1	2	3942	120	1673			
SERVICE CLUBS Anglia Gliding Club (AGA)	28	0	56	2	2	8	0	0	1	0	2466	47	815			
RAFGSA, AGA, RNGSA Combined														50	20	16
Air Cadets														78	3	0
Yorkshire Gliding Club	152	13	255	4	1	48	3	0	1	0	3810	2961	3137	9	3	4
York Gliding Centre	169	30	719	A	3	24	2		1	6	3886	3178	2266	4	2	5
Windrushers Gilding Club Wolds Gilding Club	153	33	618	4	2	41	2	0	1	0	8724	1355	3428	9	6	4
Windrushers Gliding Club	146	26	21	5	5	10	2	0	1		6944	1657	5040	8	4	3
Welland Gliding Club	43	12	176	3	3	18	0	1	0	0	2211	276	732	2	o l	0
Vale of White Horse Gliding Club Vectis Gliding Club	25	0	64	2	1	6	1	0	0	0	476	476	172	2	1	1
	34	1	123	2	1	11	1	0	0	2	919	919	672	1	0	0
Upward Bound Trust Gliding Club Vale of Neath Gliding Club	17	0	6	2	1	3	1	0	0	0	185	169	137	0	0	0
	22	2	33	2	1	19	0	0	0	0	962	0	201	1	1	0
Ulster Gliding Club	65	2	273	3	2	19	2	0	0	3	1781	1668	1430	5	0	1
The Soaring Centre Trent Valley Gliding Club	58	5	127	3	3	20	1	0	0	0	3369	648	1043	3	4	3
	304	17	837	5	5	103	3	4	1	1	9357	5549	5164	9	11	6
Surrey Hills Gliding Club The Motor Glider Centre	18	10	9	0	0	ó	0	0	2	0	300	0	253	o l	0	0
	59	10	312	4	3	7	0	0	1	0	3927	0	488	1	1	0
Suffolk Soaring Club Surrey & Hants Gliding Club (see Lasham)	15		U	U	U	0	,				150	130	230			J
Stratford On Avon Gliding Club	15	9	027	0	0	23 8	1	0	0	1	150	130	250	0	0	0
Staffordshire Gliding Club	56 95	9	627	3	4	23	0	0	0	0	5928	n/a	2208	5	1	3
Southdown Gliding Club	151	28	258	3	2	17	1	0	0	1	3800	643	649	5	1	3
South Wales		28	536	3	3	43	3	0	1	1	4963	4074	6064	4	3	5
Shropshire Soaring Group	17 65	1 6	185	3	4	28	1		28	3	2347	901	1360	3	5	0
Shenington Gliding Club	107	4	213 25	4	3	9	1			2	161	161	173	0	3	5
Shalbourne Soaring Society	78	6	400	3	2	25 40	0	0	0	0 2	3690 5690	526	1020 1500	3 2	1	0
Scottish Gliding Union	261	15	582	3	4	62	1 0	0	0	4	10600	1005	5979	13	9	11
Sackville Vintage Gliding Club	16	1	15	1	6	6	1	0	0	0	192	180	300	1	0	0
Rattlesden Gliding Club	65	5	170	3	2	19		1		2	2383	706	914	2	1	0
			1770	1				0	0		1572	1572	1062	2	1	0
Peterborough & Spalding Gliding Club	53	5	271	3	2	18	2			1	1570		1000	0		0

In addition to the figures listed above, there are a further 1,557 affiliated members of civilian and service gliding clubs. Of the Full Flying Members, 612 are women.

The British Gliding Association (established 1929) is the governing body for the sport in the United Kingdom, representing and furthering its interests in an increasingly competitive environment.

its mission statement is: "to provide effective leadership and continuity of gliding and soaring in the UK". You can find out more at: www.gliding.co.uk/bgainfo/aboutthebga.htm

A list of contact details for member clubs and a map of where they are based is in the April-May 2007 Sailplane & Gliding, available from the BGA shop at www.gliding.co.uk/shop.index.php or 0116 253 1051.

Alternatively, you can use the interactive map at www.gliding.co.uk/findaclub/ukmap.him to locate the ctub you require.











Club News photos just get better and better – many thanks to our contributors. See overleaf for their words

Clockwise from left, and inset: Cotswold's chair, Mike Weston, tries Rob Brown's Ventus 2cxt – If only there were a glider at the end of every rainbow (Rob Brown)

Matt Wright of Devon & Somerset after going solo

Sam Hepburn does Silver duration at Lee On Solent

A fabulous flying week at **Borders** — this was the sky on Easter Sunday. Skylark 4 BLA. originally owned by Frank Irving, now belongs to Graham White, who took this picture and whose syndicate partner, lain Russell, reached 12,500ft in the wave in it. Within the week lain also flew it on an 80-mile round trip, north to the Bass Rock in Scotland and back to its Milfield base

Bob Smith photographed the Junior in Henley's Market Square on March 10, when **Booker**'s marketing team surprised all the townspeople with an early morning rig

Loughborough University club chair Tim Pennock on its recent Portmoak expedition, hooking on for James Fitzmaurice's first solo -- one of two that week

Any chance of a tow? Eoin Cassels snapped one of the resident P-51 Mustangs together with a club K-13 at North Weald (former base of Essex GC) last winter

Lasham club members rallied round in force to carry a damaged Bocian off the landing area (Holly Davis)







# Club news

### Aguila (Hinton on the Hedges)

WE were all delighted when Chris Berry, our CFI, received the BGA Diploma from Pete Stratten. This was presented to Chris in our new clubhouse: no better way to christen our new premises. We have contacted wave and found some very good early spring thermals. We continue to share the airfield with parachuting colleagues and PFA friends, all working together to improve and maintain co-operation with regular communication, which allows us to carry out our activities safely. Do remember Hinton is a parachuting zone when transiting the area; and flights through the zone cause unnecessary friction. Should you wish to fly in or are in need of a relight you are most welcome, give us a call on 119.45 for advice. With two tugs fully operational there are no queues for launching at weekends and there are certainly no problems for those wishing to fly during the week.

Rod Watson

### Bannerdown (RAF Keevil)

OUR AGM was held in the clubhouse starting with flowers for Jo Geraghty, who has run the clubhouse so well. Notable trophies went to Glen Turpin for most progress, Pete Desmond, who not only runs the Fylde club but also has spent time with us running courses. The John Burn Cup went to Andy Milder for his vigilance to our safety and the Findlay Trophy and "Hog" to Oscar Constable for having 200 more launches than anyone else. Easter proved to be a truly soarable weekend with various badge flights — congratulations to Arran Armstrong, Steve Bosher, Brian Poulson and Paul McTurk. After adding a Skylark 3f to his vintage fleet — Al Stacey converted to it along with Nick Smith, Ian Harris, Ion Arnold and Tim Roberts. And we say a sad farewell to Engineering Memher Carl Peters who is moving to RAF Leuchars — we thank him and wish him and Kayt all the best.

### Derek Findlay/Debb Hackett

### Bath, Wilts & North Dorset (The Park)

FEBRUARY produced some weak wave days allowing lack Deeth



BGA Chief Executive Pete Stratten — and his son Matthew — were at Aquila to present CFI Chris Berry, right, with his BGA Diploma

to complete his Bronze leg. It also allowed some newer members to expenence good winter soaring. March produced a few cross-country days, mostly midweek but taken advantage of by those on site. At the end of March we had a well-attended Instructor meeting chaired by the CFI, Alan Milne, only ten days after a hip replacement. Well done, Alan. April brought out the pilots who had been in hibernation, filling the flying lists for check flights. During the fine weather over Easter, members saw Mark Raddice and Colin Field flying their newly Skylarks and Nick Mitchell flying his new Libelle. It was a welcome back to the Libelle, which had been in store since 1999. There were also some good cross-country flights over Easter.

### **Black Mountains (Taigarth)**

AFTER a cracking Easter that saw members and visitors scaring our ridges and doing the first cross-country tasks of the season, we have now been joined by our full time resident instructor, Bo Nillson from New Zealand. Bo will be with us for the whole season, running courses to suit all abilities for members and visitors. The AGM took place on April 7 and we welcome three new dynamic members to the committee: Tony Barton, Ken Basterfield and Gordon Dennis. After much discussion, we have purchased a K-21 to expand our horizons at Talgarth and it is proving very popular amongst the members. Jill Banks went solo during April and her smile had to be seen to be believed. Robbie Robertson

### Booker (Wycombe Air Park)

AFTER a very quiet and satisfactory AGM we move on to the year's real business of flying. Our regionals, starting August 11, are offering cash prizes probably for the first time - of at least £1,000 per class. Members' achievements include Bruce Cooper's ridge running: three laps of 272km each plus tops and tails, totalling 1002km. We congratulate new Full Cat Julian Saakwa-Mante, Graham Morfey and Michael Gill on solos and Jeff White and John Bonallack on Bronze progress. We welcome new tuggies James Cooling, Alan Veal, and Andras Burai from Hungary. The Easter weekend was busy with a mini comp, and the Easter Egg Cup aerobatic competition. Earlier we ran a promotional event in the Market Square at Henley-on-Thames, displaying one of the Junior gliders (see picture, p55). We sold a substantial number of introductory courses and earned excellent local press coverage. This year has started really well for Booker with launches for the first three months over 30% up and activity significantly ahead of budget. We also welcome back the BBC group's K-21 for the season.

### Roger Neal

### **Borders (Milfield)**

CONGRATULATIONS to Keith Latty on becoming a DCFI here at Borders. We also have two new Bls in Iain Russell and Rich Abercrombie, with Mark Fielding and Mike Crews following towards the end of next month. Big thanks to Colin Sword and Helen Frazer for running the courses. The First of our flying weeks got off to a great start with Andy Bardgett reaching 22,500ft. One of our visitors, Andy Thornhill (Wolds GC) claimed a Diamond with 19,000ft; Bob Cassidy reached 17,500ft. You can see a photo of the wave on p55. We owe our thanks to the BGA and all involved for their help in securing the Northumbria TRA (G). The new "wave box" now allows us to penetrate upper airspace above FL195 up to FL240. This was the first time we had used the TRA (G) and the system worked very well.

Rich Abercrombie

### **Bowland Forest (Chipping)**

SADLY two members recently passed away due to ill health: Peter Cooper, who was a member when we operated from Samlesbury and helped found the present club, and Eric Chard, who when not flying could be found tolling away on some project or other around the club. Both will be sadly missed. At the AGM it was reported we are financially secure and our development plan is on schedule. Thanks went to all members who give up their valuable time to assist in various capacities thus keeping down the ever-increasing costs. Congratulations went to all the trophy winners and in particular, the height trophy that went to Yvonne Stott for her climb in "The Beast" to FL95 on August 13, 2006. In early March we had the opportunity to trial

the PW6 as a possible training aircraft; thanks to Roger Hurley who arranged the loan.

Phil Punt & Tracy Joseph

### **Bristol & Glos (Nympsfield)**

OUR first joint operation with Cotswold GC was an open day in May to benefit both clubs. Some excellent early season flying saw Dave Ascroft getting to 13,000ft in March and Richard Smith doing a 300km cross-country day four days later. Our dinner dance was a success, thanks to Gill Starling. Cups went to Barry Walker and Justin Wills; Tim Macfadyen; Russ Francis; Dan Welch; Gavin Wrigley and Alan Price; Ali Lees; Nigel Smith; James Metcalfe and Tom Rose. Martin Talbot and Dave Hallsworth did a massive tidy-up of the workshop and a hired vibrating roller ironed out many of our field bumps. On our new website we are trialling a calendar of events – thanks to Julia Dawson – and on the marketing side Jon Meyer is out to improve our leaflets and publicity. Our regionals are from July 21-29.

### Burn (Burn)

THE first of our Selby District Council cadets, Jonathon Morrow, has gone solo soon after his 16th birthday. We are looking forward to further first solo flights when birthdays permit. Congratulations to Jonathon, and also Gary Vaughan on his first solo flight. It seems that the Government has decided that the European Spallation Project should not now be sited on Burn Airfield but this decision does not make our future any more secure. Yorkshire Forward (the Regional Development Agency) is still keen on developing the airfield for industrial use.

George Goodenough

### Cambridge (Gransden)

CONGRATULATIONS go to Andrew Hulme for his award of a BGA diploma in recognition of his services to gliding. We also send our best wishes to Sarah Kelman as she competes in the Women's World Championships in France this tuly in pursuit of her third medal. Steve Woolcock has gained his Assistant Rating and Rod Ward, our CFI, has become a BGA Regional Examiner—congratulations to both. We continue to invest in infrastructure with the acquisition of another tractor and retrieve vehicle in addition to the second Supacat winch we bought last year. If you are quick you might just get into our regionals, from August 18. Paul Harvey

### Clevelands (Dishforth)

EASTER weekend turned out to be one of the best for many years. Friday and Saturday provided good thermal soaring; 4-6kt at 5,000ft, which is not bad at all for the frozen north. A change of airmass on Saturday evening killed off the thermals, but brought some superb wave. Paul Whitehead made his way across the Pennines in the club Ventus CT and did some sightseeing in



Andy Thomhill of Wolds after his Diamond height to 19,500ft in the Borders GC wave that you can admire on the previous page

the Lake District. A climb to 11,000ft over Coniston enabled a fast final glide with 165kt ground speed. Those pilots happy to stay local were breaking off from 4kt climbs at 12,000ft. Our 40th anniversary celebrations have been postponed until November 3. We are very keen to hear from past members and would particularly like to build up a chronology of CFIs. If you can share you memories of our club, or would like to come to the party, please contact us via www.clevelandsgliding.org.uk. We are looking forward to our new Discus, and our beloved tug G-AOTF, in its striking yellow and hlack livery, will be replaced. Polly Whitehead

### Cranwell (RAF Cranwell)

THE year has started off well with a number of us contacting wave during March. The most notable flight was by Bruce Ball and Tim Davies climbing to over 8,000ft from a winch launch, Our affiliates at Nottingham University went on expedition to Portmoak with some Cranwell members and returned with soloes and five-hour flights. Well done, too, to Tim Davies, who went solo in our motorgilder, this time with daughter Christine looking on (role reversal). The Easter break began with a number of Bronze legs, by Christine Davies and Daz Dene, as well a number of cross-country tasks ranging from 100-150km just to dust off the gliders, the exception being Angus Watson and Richard Brown, who completed the club's first 300km triangle this year. Thanks to Miriam Cillow for the Easter barbecue.

### Devon & Somerset (North Hill)

CHRIS Wool has stepped down and handed the arduous position of CFI to John Burrows. The club thanks Chris for the past three years. Congratulations to Matt Wright, who is normally found in the cockpit of a 747, for progressing to a higher level by going sold in a K-21. Our thanks get to the keen volunteers who spent a day favuilling out our field. In March, Mike Groves demonstrated a Supacat winch, which he had just converted to a Skylaunch winch with a Wilde engine. The winch, now known as the Wildcat, certainly impressed most members who drawn or were launched by it. Dave Minson, a former instructor, Chairman and now President of the club, celebrated his 80th birthday in April. His contribution to the club over many years was acknowledged by presenting him with life membership.

### Edensoaring

MARCH saw the initial acceptance of Edensoaring as an Associate member club of the BGA. Location, location, location, If it applies to gliding sites then we should be OK. Anyone travelling north on the M6 and looking to the right — to the east — around the Penrith-Carlisle section, could not miss what must be the Targest continuous ridge in England and possibly wonder what, in gliding terms, is going on in the area. Cliding has taken



place around that area for some time on an intermittent basis. either by local (non-8GA) gliding groups or on expeditions, but until now there has been no fIGA club with a permanent site. The gliding history of the area is an interesting one, touched on in Neil Molfat's story in the August-September 2006 S&G (A local history of pews, policemen and drystone walls, p.25). Now there are plans for such a site about eight miles east of Penrith, near Skirwith, and one mile from the foot of the ridge, close to Cross Fell (2,930ft). At the time of writing, negotiations with the local planners have started, with an initially warm reception. These follow successful trial flying weekends in November 2006. The plan is a winch-only site for environmental and future-proofing reasons and because of the proximity to the ridge, which is good for slope lift, thermals and wave. The Eden Valley is well placed for lee waves from most directions (see map) and is of course home to the famous Helm Wind system. Transition from the ridge to the Lake District hills, 12 miles away, and wice-versa, has become the norm during our expeditions. We shall be starting operations initially as a soaring group, extending a welcome to all Qualified pilots (a BGA term meaning pilots with at least Bronze Badge and Cross-country Endorsement). We aim to expand our operation to include ab initio training, perhaps next year if all goes to plan. The founding members are experienced cross-country pilots who have a shared passion for flying in the hills and mountains anywhere, but especially in Cumbria and the Northern Pennines. The ethos will be cross-country soaring. with "accessibility" a key element from day one. The founder members have links with a local adventure group for people with disability, and are making new ones with other such groups

Please send news to editor@sailplaneandgilding.co.uk or to Helen Evans, BGA, Kimberley House, Vaughan Way, Leicester LE1 4SE to arrive by June 12 for the next issue (later deadlines at www.gliding.co.uk)

Involved in flying. Interested glider pilots can use our website

- www.edensoaring.co.uk - to find out more about our progress
and arrangements for visiting the site, which has no public
access. Visits must be only by prior permission, otherwise our
relationship with the farmer could be damaged.

Pete Whitehead, Chairman, Edensoaring

### Essex & Suffolk (Wormingford)

THE Easter weekend saw some impressive cross-country efforts including a couple of brave 300km attempts, which didn't quite come off, and one by Rob Locket which did. Congratulations to Malcolm Bradford for his Silver height, which resulted from a 4,700ft climb on a quite indifferent day. A good deal of effort is being put into refining our faunching system and familiarising members with new methodology so as to maximise benefits of our retrieve winch and the use of synthetic rope. Our AGM was interesting in that we have spent a good deal of money over the past year and a five-year plan had already been put forward by the committee, who were all re-elected.

### Bob Godden

### Essex (Ridgewell)

BY the time you read this, we will be back at our Ridgewell site. We give our warmest thanks the Anglia Club for making us feel so welcome and appreciate the additional work their members did to make our winter so rewarding. We hope that some of you will come and fly with us at Ridgewell this summer. A new development here is an area, adjacent to the main runway, now being grazed by self-perambulating worlly jumpers, or to be technical, sheep! They will of course be escorted off the field when we are flying. Visiting pilots, who are most welcome, should be aware of this. Instructor Geoff Martin has now added "Occasional Shepherd" to all his other qualifications and we understand that it will not be obligatory to add "mint sauce" to downwind checks! Membership is healthy and with some likely new members we are looking forward to a super soaning season.

### Fenland (RAF Marham)

CONGRATULATIONS to Adrian Bramwell who flew the first hour of the year in March. We had a busy Easter with a visit from the Eastern Daily Press – John Doubleday catching the photographers' eye and making page 3 as pilot of the month. Pete Stafford Allen and Paul McLean have both done the first cross-country of the year, a 95km/h 215km un the Easter weekend. The other bonus of Easter was the Chipmunk's visit, allowing most members' aerotow check rides and Paul McLean to be checked out to self-auth on the aerotow. We welcome Logie to our little club and Amanda Gillard, who joins us after four months watching penguins and can't wait to get back into the air. It's good to see Olly Chubbock return from the Eastern Front.

Graham French



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Altimeter 0-35,000° (6 o'clock knob and test report) £110-£119, Mini Accelerometers £99. \* Radios: Dekom 960 Panel Mount £249, Dekom Hond Held £216,90, ICOM A3E £259, Glider Battery Charger £19.90, New Horizon Inverters 12v-115v/400hz, or 12v-24v DC, £119 \* BGA Approved "Ottfur" Releases: New Original OM Series £199, CW Series Lang Life Alternative for Modern Gliders – Aero Tow CW400 Series £179, C of G. CW300 Series £239, Exchange OM Series £119, CW Series £99, Spring kits available all series. "Ottfur" lounch safety weak link corrier. £9.50.

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# Club news



Lasham's Dave Greasley proposed in T-21 993 in the air then shared a post-landing bubbly with his fiancee

### Four Counties (RAF Wittering)

EASTER week was particularly good with many achievements. The Laughbarough University club torvelled up to Portmank along with several club members to join other University Clubs in their annual Easter flying week. Congratulations to Dayne Oldrovd and lames Fitzmaurice on their first solos and to lon. Loz and Rob, gaining several Bronze and cross-country legs between them. Everyone else enjoyed flying on the fantastic ndge. Back at Wittering the next weekend, the achievements continued. Danny Thorogood gained his full Silver in one flight to Gransden. Chris Armstrong Joined him there for his Silver distance. Jon Morris gained his Silver height, twice. The second time with a logger to prove the first wasn't a fluke. At the end of April the club held its ACM, and our thanks go to Hilly Davey for another excellent meal. We host the Inter-Club League on June 2-3, and look forward to seeing the other clubs from our region.

### The Gliding Centre (Husbands Bosworth)

CONGRATULATIONS to: Gary Care, who completed his five hours; Frank Roles, who flew his Gold distance and Diamond goal; and Chris Raynor and Fernando Locateu, who went solo. Alan Kangurs completed the first 100km of the season, and Ken Plyne did the first 300km. At our recent AGM we elected John Popika as our new vice-chairman, and Adam Gilmore as the committee secretary. Dave Booth, Ian Willows and Steven Pozeskis are also new committee members. Thanks to our outgoing committee members for all their hard work. Our course instructor this season is John Northern, and our course tue pilot Gabor. We are hosting the 18-Metre Nationals from July 7.

### Herefordshire (Shobdon)

THE winter wave season ended with cracking days in March, when Phil King and Les Kaye explored the Welsh Marches with distances of up to 300km. In February, Phil and Diana King gave a talk on wave flying, which was followed by a meal. The evening was well attended and we hope that this will be the first of an occasional series of talks on varied topics. Easter weekend marked the start of the thermal cross-country season for us and several people clocked up reasonable flights. The parts for the tug have arrived and we should be back to normal soon. Many thanks to Barry Walker, James Metcalfe and others from Hympsfield, Peter Walley, and the Midland, London and Booker Clubs for helping us out with tugs while ours has been out of action. The committee has been reviewing strategy and is trying some new projects, including a plan to reduce the number of Trial Lessons in order to give members more flying. Diana King

### Highland (Easterton)

WE have made significant charges to how we operate. There are now two, 90-minute slats where pre-sola members can book the training glider and an instructor. After 2pm is for advanced and instructor training. Trial lessons will be flown on the first Saturday and third Sunday of each month between March and October, all amotow. Congratulations to Steve Pybus and Peter Coodfellow, who have completed their Bronze Badges. Diena King and Ted Norman of the BGA Executive visited in February, giving us an interesting insight into the current work of the BGA. That same



Chris Ellis took this from the Upward Bound Trust T-31 Blue Brick. It and the Janus were visiting Midland GC

day Peter Goodfellow managed to do his five hours and Silver height. Our AGM was held in March and was well attended. Jim Marshall climbed to 12,800ft to claim Silver height earlier in the day. During the first week of April members had access to the Scottish Gliding Association ASH 25. It was another great wave week with off-the-clock lift from circuit height to well over 12,000ft on the Thursday.

John Thomson

### Imperial College (Lasham)

IT'S exam season again for ECGC pllots, so you might think we've stopped flying! Far from it, though: student Christian Morsbach was sent solo by student instructor Shaun Murdoch on April 21 in a Lasham K-13, and even managed a first soaring flight; Andy Cockerell became a SI; and many of us have applied to enter the junior Nationals. We've also been taking over the Lasham Saturday Evening Youth Flying Group, and doing lots of crosscountry flying. Next year's committee has been elected, and will take over the running of the club in August. Plans to elope to Finland with the gliders for July are almost sealed, as we all look forward to being free from college for a while.

Shaun Murdoch

### Kent (Challock)

AS the summer sparing season reaches its peak here in Kent, we're in full swing, with a daily full-time operation. Under the leadership of Pete Carpenter and Dave Shearer, our new course arrangement is proving to be a great success We continue to forge strong links with BA Highflight; giving disabled and disadvantaged young people from across the county the opportunity to fly, On behalf of the membership, I'd like to thank Stefan Bort, our recently outgoing chairman, for his term in office; and also our long-standing treasurer; Tim Gardiner, for his many years of dedicated service. Find us online at www.kent-gliding-club.co.uk or why not pop in and see us? Darren N Palmer

### Kestrel (Odiham)

A BUSY start to the season over the Easter weekend saw a number of re-solus as well as Bronze completion for our OIC Andy Lamb. Thanks to courses member Chris Hyde, our series of weekend short courses has helped to raise interest in the club from the station, attracting a number of new to gliding members as well as a number of returning to gliding re-recruits! After many years of faithful service our ageing launchpoint caravan has been put out of its misery, having been replaced with an ex-Air Training Copps control vehicle, and work is under way on investigating a replacement for our vintage Bessonneau tent hangur, which is now well past its sell by date. **Neil Armstrong** 

### Lasham Gliding Society (Lasham)

THE club fleet has expanded to 20 gliders with the amalgamation of the Surrey & Hants single-seaters and the Lasham two-seaters. The tugs are all back from their annual overhauls. The daily met and cross-country briefings are well attended. The packed safety meeting held in February raised the question of FLARM. The social committee has co-opted new members and on June 23 we have a joint celebration with ATC, our tenants, who are having an open day. For us it is the "Longest Day" with as many launches



Imperial College's Christian Morsbach was sent solo by Shaun Murdoch at Lasham in April - and soared

as possible from dawn to dusk, followed by a 1940s party. All are welcome, and there's a buffet and bar of course - phone 01256 384900 for more details. The following prizes were presented by BGA Chairman and former LGS Chairman Patrick Naeseli at our inaugural awards dinner, following our AGM: The Tina Render trophy, Kay Draper, The Thackrab Trophy, Miles Park; The Jeremy Brock Trophy, Paul Barnett; The Ted Lunn Trophy, Andrew Hall; The Tony Norrie Trophy, Bernie Morris and Derek Piggott; The Taskmaster Trophy, Andy Aveling; The Southdown Aero Services Trophy, Annabel Marriot: The Peter Davis Trophy, Phil Newman and Dave Bowtell; Chilbolton Hingerford Cup, Bob Thirkell; The Roy Wensley-Smith Trophy, John McCullagh; and Vintage to Chris Sterritt. The latter is our new vice-chairman. Edmund Mason

### London (Dunstable)

WE have had an influx of new members progressing in training. Our fuly Task Week is proving popular with almost full entry together with the Dunstable Regionals in August. Congratulations to Jan Gowdy, who won the Dan Smith Aerobatic Competition in March with 78% points. Over the Easter period a number of members have been visiting Cerdanya despite some gloomy days. A group of members visited Shobdon in March when some good height gains were made with cross-country flights over the mountains. Easter saw many members take advantage of the nice soaring conditions to achieve a number of excellent crosscountry flights. On account of this our bar sales hit a high during the evenings. A party of members will be visiting La Motte in June and doing the annual Talgarth trip later in the year.

### Loughborough SU (RAF Wittering)

WE have seen significant achievements within Loughborough Students' Union club. At the weekends, we have seen more solo development and type conversions to the K-18 and Discus CS. The Easter expedition to Portmoak, our first and supported by Four Counties GC, saw members James Fitzmaurice and Dayne Oldroyd successfully go solo - congratulations to them both! In addition, members Homer and Morris completed their Bronze duration flights along with members Fardoe and Lockwood, who completed their cross-country duration flights. All got to experience flying on the Bishop ridge, including our newly solo members. Our long-awaited returbished K-13 is finally returning to service, ready for the start of the summer term. Tim Pennock

### Midland (Long Mynd)

THOUGH we've missed a couple of entries in club news we are very much still here. Members enjoyed the revived annual dinner-dance and trophy presentation at the Longmynd Hotel. Many thanks to Neal Clements for all his work as CFI, and welcome to Simon Adlard as our new CFI. There was another successful club expedition to Jaca, Spain in the spring, Now that John Stuart and Dave Crowson are back from that they are running our courses as usual. We have welcomed many of our regular visitors over the winter, including our Outch friends for their annual camp (see p22 for the kind of winter souring they do at home). We enjoyed wave and ridge flying in the winter. and the cross-country season is well started.

# Club news



### Nene Valley (Upwood)

ANDREA Ciccone and Alex Clarke both went solo on the same day, well done. Andrea flew in Italy but only on aerotow, 130 in all, so he has resolved and got to grips with winch launching. Our K7/13 DOX is now back fiving, thanks to all who helped refurbish the wings. We had a Royal Visitor land at NVGC; HRH the Prince of Wales used our landing strip in a Royal Flight helicopter to visit a local Nature Reserve. As this was on a non-flying day it was pre-arranged so that member Brian Cracknell could unlock the site. This year's bowling contest with Welland was at Wellingborough, where NVGC once again won. Dave Mansfield

### Norfolk (Tibenham)

SIX weeks after having been taken off line our newly refurbished winch has been returned and was immediately a great success with pilots and drivers. Having used some parts from both our old winches it has been christened the Wildcat, John Roche-Kelly and Steve Flowitt-Hill are to attend a BI course in mid April. After the first leg at Rougham over the Easter weekend we are leading the East Anglia Inter-club League. The club is taking a major step forward by employing a full-time instructor therefore enabling us to operate a seven days a week to benefit members and visitors alike. Mike Hughes took up this position in mid-April; we welcome him and wish him every success at Tibenham Mark Wright

### North Wales (Llantysilio)

WINTER had not been hard on us and departed with some very good wave conditions. I'm sure like most clubs the fine weather over the Easter weekend kickstarted the new season. It was with regret that we heard of the premature death of our ex-chairman Dave Trotter, Though he had left our club and joined RNAS Culdrose, we will always appreciate his fireless efforts in dealing with the local council, who were in opposition to the new site for the club, Dave's boundless enthusiasm for everything he took onboard (including this S&G spot) will long be remembered. We are hoping that Dave Chapman will be able to find the time to make himself available to do the Basic instructors' course. Brian Williams

### Nottingham University (RAF Cranwell)

ALL change at NUGC; our ex-four Counties Acro IRW took to the air in February, and recently-donated Skylank II COS followed in March. All thanks to the charity of Sally Longstaff, the diplomacy of Ged McKnight, and the infinite patience and hard work of Stevie Benn. Buth gliders accompanied us on our success-ridden April expedition to Portmoak to pleasure to visit, as always); Congratulations to Chris Emerson, James Fowkes, Penny Mason (a Silver duration each) and Simon Atack (Silver duration and height).

Simon Taylor

### Peterborough & Spalding (Crowland)

FLYING continued this winter, mainly due to the additional drainage we put into the airfield. Big congratulations to our cades Ross Morris who went solo on his 16th birthday in March. This brings the total of new solo pilots for the past year to seven. Kev and Sheena Fear together with Dave and Glenice Crowhurst have just finished their gliding expedition in Oz. Although the days were short, they managed to fly a total of 3,538km. Our AGM



Left: Two new soloes on the same day at Nene Valley - seen from left to right are CFI Roger Morrisroe with Andrea Ciccone and Alex Clarke with his instructor, Martin Reynolds Above: Ross Morris soloed on his 16th birthday at Peterborough

was held on March 23. Rob Theil stood down as Chairman after three vestrs' service. Many thanks to Rob for his hard work. Paul Goulding now steps into his shoes and Adam Laws has taken on the role of club secretary. We welcome Paul and Adam to their new roles. Many members made good use of the fine Easter weather and many souring flights were achieved, together with a few brave enough to go off cross-country.

### Portsmouth Naval (Lee-On-Solent)

OUR AGM has become an exceedingly slick affair, incorporating multi-media presentations of past performance and plans for the year ahead. One change announced at the meeting concerns changing from a club to a centre. This change marks a closer relationship with the Navy, arising from our fight over the past year to remain at Lee. What it means for us is that we will take on additional roles involving adventure training for serving Navy personnel. The AGM also saw the redistribution of the club (centre?) silverware, of which I shall mention only that Tony World received the Richard Crantum award for finding a new and Imaginative way to park the tractor. Dave Murray has been busy in a corner of the hangar performing what started as a C of A on our Super Cub tug but now appears to be a major re-build. Despite appearances to the contrary he says all will be ready soon. Outside the hangar the weather gods smiled upon the Easter course with everybody getting lots of flying and most going solo. Sam Hephum, who soloed on his 16th birthday late last year, also took advantage of the good weather to claim his five hours. At the rate he is going I fully expect to report Diamond badge claims in the next edition... Steve Morgan

### Rattlesden (Rattlesden)

THE AGM was held in March, with Steve Kiddy and Paul Stepples standing down as chairman and treasurer, respectively. Many thanks for all their hard work. Geoff Lynch was welcomed as chairman and Geoff Avis as treasurer. Paul Roche has converted to the Cirrus. Bod Blanchard held the first two of his crosscountry talks on March 24 and April 7; these were the first in a series, continued into the flying week at the beginning of May. Rattlesden is shortly to take delivery of a Junior to replace the club Astir. Gren Croll flew 104km in March - the first cross-country of the year, interclub was held at Rougham on April 7-8; On Saturday Steve Wright came 2nd in Pundit class and Chris Reed came 4th in the intermediate class. On Sunday Steve Wright came 4th In the Pundit class, Bod Blanchard and Karen Wright came 4th in the intermediate class and Keith Goldsmith came 2nd in the Novice class.

Helen Page

### Scottish Gliding Centre (Portmoak)

WE took delivery of our Discus B at the end of March and a number of us - myself included - have been enjoying flying a new type. The last issue of S&G included a photo of car-winching operations - I got some details wrong; the vehicle was a Rolls Royce, the lady standing near the rotating drum was, we think, Amy Johnston and the "axe-man" was Andrew - and it was at Sutton Bank, not Portmoak. Apologies. Congratulations to: Andy Graham (first sulo); Scott Hardy, Vic Leitch, Donald Carmichael and Alistair Mutch (Bronze cross-country); Dave Reitter (Silver height); Alec Stevenson and Gordon Hunter (Gold height); Neil



George Rowden and Alex May are two new Basic Instructors at Yorkshire, pictured with their CFI, Richard Cole (Kelly Teagle)

Irvine (Diamond height), Visitors from university clubs (Loughborough, Nottingham and Oxford) were busy in the first week of April with a number of height claims and five-hour durations. Kevin Hook and John Williams have been battline for ladder points: Kevin has just completed 900km and John has proved it is possible to do more than 1,100km from Portmosk. lan Easson

### Shropshire Soaring (Sleap)

THE wave seems to have returned. At the annual dinner Al Gillson won the Mack trophy for his Diamond height. Since then Matt Woodiwiss exceeded 11,000ft in a four-hour flight-just short of Gold. The dinner revealed a few more stories; Vic Carr shared a few exciting moments from his career. Pre GPS aerotows in open cockpit gliders on positioning flights sounded more exciting than I would have liked to undertake. Another story came as the result of last year's open day. Certain persons, doubtlessly conversant with bottle to throttle times, decided that it would be great to see the sun rising over the Welsh mountains. Unfortunately there was a complaint a lady objected to their 4.30am take-off. The complaint lacked some of the edge it might otherwise have had when she admitted that she was cutting the lawn at the time. Sadly, Arthur Jones, our President for many years, has retired before his 90th birthday. Keith Field

### Southdown (Parham)

THE gods smiled on Southdown over the Easter week, with glorious sunshine augmented by powerful northerly winds. We camprobably thank the weather too, for the rising trend in club membership. The Cadet scheme is proving a great success, with around 20 youngsters joining before April this year. Geoff Rossers and Steve Butcher solved; Mike Hazlett flew his Silver distance while Paul Tickner amazed us all with a 300km Gold distance along the Downs. We are taking possession of a new DG-500 this week, and thus have a K-13 available for sale. Clubs interested in this fine two-seater trainer can find details on our website. Peter I Holloway

### Staffordshire (Seighford)

OUR course on Saturday mornings for early solo pilots is going well. The Falke is proving invaluable for training and navigation exercises. Thermals started early in March and the Early Bird trophy for the first 100km triangle was claimed by last year's winner Derek Heaton. The appearance of wave to the west of the airfield continues to surprise us, recently giving at least one climb to over 11,000ft. Contact height is about 3,500ft so no Gold height claims yet. At our AGM, the committee reported good progress in finances and flying; the upgrading of the club fleet to glass gliders is very popular and we hope to improve the fleet still further. On the membership front, we have kept our numbers at the same level for the last two years and we plan to work even harder this year to increase them. The first expedition of 2007 has just departed for Lieweni Park, hoping to bag a few Gold or even Diamond heights. Colin Ratcliffe

### Stratford on Avon (Snitterfield)

THE results of tremendous effort in improving the surface of the main drive and peri-track are now very apparent with a team led by Chris Bingham and Martin Greenwood. The diesel winch is



Wyvern's Andrew Leak (left) after his first glider solo

Oxford University past and present presidents (right) at OUGC's annual dinner were (from left, ladies): Anne Francis (née Mellor), Claire Chapman, and current president Philippa Roberts: With (from left, chaps): Dave Morgan, Sunay Shah, Philipp Schartau, and Dan Pitman (photo: Jamie Allen)



now back on line thanks to David Searle and his team. Well done to Stophen Pearce on first solo on New Year's Day and thanks to the instructors and ground crew who made it feasible. Both K-13s and the K-21 have new radios and improved electric varios courtesy of Barry Monstow. Barry Kerby and Martyn Davies. The traditional spring rocetting was affected by lower turnout due to no flying during the day but much cheered by improved statistics on almost every front with upbeat forecasts for the season by chairman lohn Dickinson.

Harry Williams

### Surrey Hills (Kenley)

I WOULD like to start by giving a warm welcome to Steve Codd, who has taken on the role of full-time staff instructor at the club. As part of the ongoing plan to improve facilities we have bought a second Grob Twin II, and plans are well under way to improve the clubhouse facilities. Our thanks go out to Ingram Gavan for his dealings with the planning office on this matter. There has been some local controversy with the MOD's plans to erect a four-foot fence around the perimeter track to prevent walkers from accidentally trespassing on the airfield. We await with interest the results from the local planning office. With all these changes, we are all looking forward to a fruitful season ahead.

### Trent Valley (Kirton in Lindsey)

MARCH was a great month for the Harkness family with father Rob doing his first sold and son Callum picking up the award for Best Ah Initio at our annual dinner-dance and awards evening. Amongst the many other prizewinners was 18-year-old Steve Nock, who won the magnificent new 'Dixe' Dean Trophy for the youngest person to complete a five-hour flight. Easter weekend proved to be a busy time for CFI Steve Wilkinson downloading loggers—with no fewer than five badge claims. Peter Bellham and I took trips to Pockington and back for Silver distance, Carl Hutson went round a 100km triangle twice and Callum Harkness picked up his two-hour Bronze leg after narrowly missing his five hours. Not bad for early April!

Alan Spencer

### Ulster (Bellarena)

THANKS to the hard work of Tom Snoddy in his efforts to get a grant from the National Lottery Fund, we have now taken delivery of our new K-21 with hand controls for rudder operation. Our Super Cub is back on site after a complete overhaul. Congratulations to Tom Snoddy for being awarded a BGA Diploma for his services to glidling; our club is forever in Tom's debt for all the hard work done over the years. The club safari for 2007 is once again Jaca in Spain, the road crew leave on May 18 for four weeks. Have fun boys and girls! Many thanks to the Walking on Air crew who came over to share their experiences on the do's and don'ts when dealing with people with disabilities in our sport of gliding. Congratulations to Bob Pye and Stefan Szuszkiewicz on going solo.

Finbarr Cochrane

### Welland (Lyveden)

UPWOOD had a brief moment of ever so slight worry in tetaining the inter-club bowling trophy. The airfield clay dried out this year for Easter. All four days were flown with nearly 400 launches, some reporting a 5,000ft cloud base, a spectacular start

to the season. Rob Marsh has converted to the K-8, to Cooper has his 8monze and Roger Tallowin after much searching has found a share of a Club Libelle to fit his off 3 in frame. With a widely syndicated Blanik due next week, mutual flying seems to be taking off. Our flying week is set for August 4.

Streeb

### Windrushers (Bicester)

ON Thursday, April 5 Alan Farmer (Alfar) lost his battle against cancer – his obituary will appear in the next S&G. Max and Sue Kirschner have returned to us from Benalla, Australia, and seven-day-a-week operations recommenced after Easter, with Friday night club flying returning in early May. Expeditions by OUCC have proved rewarding, Clive Daziell gained his Gold height at Lleweni Park, whilst the Easter expedition to Portmoak saw Rhian Thomas achieve her five hours, George T converted to the Junior and got all his Bronze and cross-country soaring legs, Sebastian Cassel did all his Bronze and Cross-country Endorsement soaring legs tall by his eighth solot) and Philippa Roberts completed her general flying test. The entry list for the Bicester Regionals is closed, however, anyone wishing to be put on the reserve list should contact the Director, Dickie Feakes. Dave Smith

### Wolds (Pocklington)

CONCRATULATIONS to Simon Richardson on re-soloing after a 20-year trip to the dark side (power flying), and well done to Karen Binney on getting two Bronze legs and two hours all in one day. Her husband, Dave, also got his two hours that day, completing his Bronze. John Tilson is a welcome addition to the instructing team. The annual dinner was a huge success with a packed clubhouse for its official opening. Thanks to John Norman for organising a series of Bronze lectures. Darren Lodge has taken over from Charlie Tagg as Inter-club League captain and will lead us to victory in 2007. We are now operating seven days a week and hosting several instructors' courses this year. Please contact us for details. Don't lorget the Standard Class Nationals and the Two Seater Comp — places for both are going fast!

### Wyvern (Upavon)

IT is with great sadness we report the passing away of John Appleford. John was for many years, along with Dennis Stangroom, a stalwart of winching and retrieving operations during courses. His windom, practical skills and attention to detail will be sorely missed. C of A inspections on the whole fleet have been finished and the first of seven weekday courses is complete. The DG-1000 has its self-sustainer and members have been training and getting qualified to use it. Many members took advantage of the Easter weekend of beautiful weather to advance their gliding. Congratulations to Matt Beasley and Mark (Robbo) Roberts on completing their Basic Instructor training, to Danny Carter and Alec Watt tachieving Bronze status on the same day after some good-natured competition during their progress), and to Andrew Leak on his first sale. Members can look forward to our "Longest Day" weekend (June 23-24): visiting gliders are invited; the Saturday evening entertainment will be a harn dance. Andy Gibson

### York (Rufforth)

THE season has started well with winter wave providing excellent

flights. Tom Stoker was fighting to regain the height gain trophy with a climb of nearly 12,000ft in March but this wasn't enough to beat Mark Shuttleworth, who gained over 16,500ft; nearly his second Diamond in as many months. Pam Shuttleworth managed 115km in the wave and many others had some very good flights. We are starting to wonder how the new Class C airspace is going to affect our flights over FL195; the experience of other clubs would be welcome? The new clubhouse is beginning to look rather stylish, thanks to the help of our volunteers. We hope they at least receive a drink on the house when the bar is finished. All it shaping up for a fantastic season.

Andrew Batty

### Yorkshire (Sutton Bank)

OUR annual dinner dance took place in April. Congratulations to all award winners, in particular Andy Wright for the Distance Gup (528km O/R), Rory O'Connor for the Harkness Trophy (17,000ft climb), an outstanding Silver Distance Award went to Reg Wasson (152km), and John Ellis picked up an Award, the one he donated himselff Llam Watts took the Novice Award and becomes our new and youngest tug pilot. John Russell collected our Distance Shield and well done to George Rowdem, who won our Club Ladder with just three flights. Also, having exchanged our DG-500 for the Wolds Puchacz, our pilots have been busy practising their spirming.

John Marsh

S&G's thanks to Debb Evans for editing this issue's Club News

# **BGA Badges**

No.	Pilot	Club (place of fligh	t) Date			
Diamon	d goal					
2-3152	Glen Turpin	Crusaders (New Tempe	18.1.07			
Diamon	d height					
3-1671	Simon Lucas	Cotswold (Portmoak)	4.1.07			
GOLD E	ADGE					
2429	Glenn Turpin	Crusaders (New Tempe	18.1.07			
2430	George Ross	SGU (New Tempe)	24.11.06			
Gold dia	stance					
Glen Tu	rpin	Crusaders (new Tempe	18.1.07			
Dave Be	ennett	London	24.7.06			
George	Ross	SGU (New Tempe)	24.11.06			
Gold he	eight					
lan She	pherd	Crusaders (Darling Downs)	26.11.08			
Alec Ste	venson	SGU 2.2.0				
Andrew	Cockerell	Lasham 4.1.07				
Mike Tr	jelove	Lasham (Aboyne) 28.9.0				
Trevor F	Resve	Lasham (Aboyne)	28.9.06			
SILVER	BADGE					
11738	lan Shepherd	Crusaders	26.11.06			

# With 20:20 hindsight...

Late field selection is a factor in many field landing accidents. And with hindsight, says our anonymous author, it's so easy to see what he should have done

OOD PROGRESS had been made over the previous week to ten days, including completion of requirements for my Bronze Badge and Cross-Country Endorsement. During the Members' Coaching Week, the day before the accident, a successful attempt had been made to achieve Silver height. A very senior instructor, who watched it, described the approach and landing from that flight, in a brisk westerly wind, as being "just right for the conditions".

On the morning of the accident, had I allowed my confidence level to become higher than that warranted by my true level of knowledge, skill and experience?

This may have led to my mental approach to the task for the day being: "I am going to complete a five hour flight for Silver Endurance". It is now obvious to me that I should have been looking at the task as only an attempt to complete a flight of five hours.

As the flight progressed, the conditions became more difficult. Areas of strong sink between thermals became common, and rain showers passed through the area. I should have decided to return to the launch site maybe 40 minutes earlier than I attempted to, say around the time the flight ceased to be "good fun" and became "hard work". Was the delay in making this decision caused by my mindset, as previously mentioned?

When caught in the rain and strong sink, I failed to appreciate just how little time I had left to pick a field in which to land. In these conditions, the glider was descending much more rapidly than I had previously been used to, and I should have been making decisions much earlier, in order not to become rushed close to the ground.

I rejected one large stubble field due to high-tension power lines on pylons across it. With better planning a safe circuit and landing into this field could have been achieved before reaching these lines, or completing the ground roll beneath them. A second set of similar power lines close to my eventual base leg also took too much of my attention during a critical phase of flight.

Healthy respect for these is obviously good, but maybe concerning myself too much with their proximity is distracting me from the primary task of flying the glider.

Having picked an into-wind grass field, I was flying right-hand downwind to it and having to "tighten" the circuit due to the abnormally high rate of descent of the glider. This was not then a good point at which to change to a longer field on my left, as I had neither fully inspected it, nor been judging my progress around it as I had been towards the first field. Hence the change of field at this point was a bad mistake and in this case "longer" was certainly not "better".

On final approach to my "longer" field, I realised that it had become marginal whether or not I would clear the hedge at the threshold end. The field before was small and contained standing crop. Nevertheless, I should have used the airbrakes and set down in this cornfield rather than trying to "stretch the glide" into the chosen grass field. I may have finished up in the bottom of the same piece of hedge as I did, but at considerably slower impact speed than the "stall-in" which I believe actually occurred.

It's just so easy to see what I should and should not have done when looking back with the benefit of "twenty-twenty hindsight".

## Accident/incident summaries by Douglas Every

AIRC	CRAFT	REGISTI	RATION		DATE		PILOT(S)	
Ref	Туре		Damage	Time	Place	Age	Injury	P1 Hours
12	ASK13	3787	Substantial	12-Nov-06	Aston Dov	vn a/f	Serious	

A K13 had landed approximately halfway along runway 21 hard and was being fitted with a wing dolly prior to being towed back to the launchpoint following a practice launch failure. The dropped cable was initially lying stationary roughly centrally to the runway, with the parachute and tackle having come to rest between the stationary glider and the launchpoint, when it suddenly started to be pulled quickly back to the winch. The cable was swept across the runway by a crosswind, passed under the left wing, the parachute hitting the leading edge of the left wing, causing significant damage and also knocking P1 off his feet and inflicting a severe laceration to his left foot. P2, who was assisting P1, also suffered a minor cut to his left hand and bruising to his leg.

15 Cub Tug G-BBOL Minor 19-Nov-06 Aston Down a/f None 14:00

The tug had just completed an airtow and was recovering to Aston Down. The pilot noticed that there was a suspicious lateral movement of the right undercarriage wheel and elected to make an engine-off landing on the grass adjacent to the main runway 210. He landed successfully on the left wheel, the aircraft settled onto both wheels then subsided on to the right wingtip as the pear collapsed.

24 ASK21 3673 Minor 27-Jan-07 Lasham a/1 55 None 204

Having prepared for a solo aerobatic flight and during the aerotow at approximately 300ft AGL, the rear canopy blew open and smashed. The pilot abandoned the launch, turned 180° and landed safely in the opposite direction to take off. The interlock system designed to prevent the front canopy being locked with the rear unlocked was found to be out of adjustment.

25 ASK13 3428 Minor 17-Feb-07 Denbigh GC 58 None 5

After a circuit flight of about five minutes the low-hours pilot flew at 55kts on finals and flared for landing. During the approach the pilot was observed to gradually close the airbrakes until fully closed. The initial touchdown, aithough reasonably gentle, was ballooned and a poor recovery resulted in a tail-first heavy landing.

26 ASK21 5078 Substantial 10-Feb-07 Lee on 52 None 0.75

The very inexperienced solo pilot on daily checks failed to round out on landing and the aircraft struck the ground nosewheel first. The nose of the aircraft recoiled upwards and the aircraft began to climb but almost simultaneously, the tail wheel struck the ground as the aircraft pitched nose up. The aircraft climbed to about 6ft, pitched nose down and came back into contact with the runway in a very marked nose-down attitude. This caused an even more violent recoil which caused the tail wheel to strike the ground hard as the aircraft bounced upwards again. The aircraft continued to perform a series of 'bunny hope' with heavy impacts on the nose followed by the tail until it finally came to rest on the grass next to the runway edge.

27 ASK21 3697 Minor 06-Feb-07 Lasham a/f None 35

Heavy landing, resulting in damage to the glider tallwheel.

28 DG303 Elan 5152 Minor 04-Feb-07 Burn a/f 60 None 212
After an uneventful flight and whilst at 900ft AGL the pilot attempted to lower the undercarriage in three distinct moves as briefed.
The lever hit a solid stop but was observed to have not reached full travel. Despite several attempts to move it further it remained

The lever hit a solid stop but was observed to have not reached full travel. Despite several attempts to move it further it remained against a solid stop. A fully held off landing was achieved but the wheel retracted on contact and the gilder belly grounded on the runway.

29 ASW27 4407 Minor 03-Mar-07 Derby & 53 None 43: 12:30 Lancs GC

The pilot was on his third flight on type and was observed to make his final turn at approximately 100ft AGL. Attempting to follow secondary references and ignoring circuit planning critically needed was compounded by flying fast and selecting landing flap at a low height. The net result was a lively aircraft near the ground. Landing too fast it bounced, lost speed and continued to pitch up and climb, and then pitch down and descend, accompanied by speeding up and slowing down until it stopped. The last touchdown, being too steep, caused damage to the undercarriage.

30 TWIN 3015 Minor 10-Mar-07 Bristol 43 None 51 ACRO 2 13:23 52 None 75

The flight was in good conditions and the second to reinforce a similar first axercise and the land ahead option of a cable break. P2 was flying the faunch without issue and with good control and awareness. After the cable was released at approximately 450ft P2 completed the necessary actions correctly for the cable break and for the normal approach and landing ahead option. During the round out stage of the approach P2 allowed the speed to decay and at the prompt of "speed" and simultaneous action to take control by P1, the speed had decayed too much and the heavy landing could not be prevented. Neither P1 nor P2 sustained any injury; however, some damage was done to the glider wheel support.

31 JANTAR 2745 Substantial 14-Mar-07 Ridge 21 None 47 STD 2 12:00 SW of Denbigh GC

The pilot was on his second flight of the day and returned to a ridge that was not working particularly well and allowed himself to get below the minimum safety height for the ridge. After spending about 15 minutes not losing or gaining height at 1,100ft above the airfield, he decided to try a slightly more into-wind edge of a bowl in the ridge. He encountered some sink, and did not turn

# AIRCRAFT REGISTRATION DATE PILOT(S) Ref Type Damage Time Place Age Injury P1 Hours

back in time to avoid landing on the hill, at 90° to the slope. The touchdown was fairly controlled and the glider skidded on its belly for about 20tt before the starboard wing stuck a tree near the tip, spinning the glider around to face down the hill, and bringing it to rest, causing substantial damage to the glider.

32 MISTRAL C 4529 None 13-Mar-07 Denbigh GC 78 Serious 14:41

The glider approached for landing at an estimated 65kts when 55kts would have been ideal and subsequently bounced 20ft. The pilot then closed the airbrakes and landed on grass to the right of runway 27. This was also a heavy landing with a poorty controlled arrival. The pilot suffered a fractured 8th vertebrae.

33 MISTRAL C 4803 Substantial 27-Mar-07 Talgarth a/f 42 None 72

The pilot, who was on an expedition to Talgarth, was cleared for a practice circuit and took a 2000ft aerotow. He called downwind at 800ft, turned finals at 350ft and set up for approach with 3/4 airbrake. It became clear that this was not enough for the conditions and he applied full airbrake. However his reference point was still too far into the field so he lowered the nose and accepted an increase in speed to 62kts. It now became obvious that he had too much speed so he forced the nose forward to land and tried to steer the glider through a gap into the overshoot area. He applied the wheel brake but the glider skidded in the direction of a fence. The pilot then made the decision to force a wing down and ground loop to avoid a head on impact. The glider ground looped and the tail struck a post, causing the failure of the rear fuselage and wing root damage.

34 ASK13 3366 Minor 10-Apr-07 Lasham a# 60 None 518 16;30 None

The student pilot was flying an approach in a slight crosswind, with some turbulence and wind shear. His speed control during approach was good and the round out started at the right height. However, just before touchdown he put the the stick forward and applied more airbrake, at which point the instructor took control just as the glider impacted the ground on the nose wheel.

35 ASTIR 4702 Write off 31-Mar-07 Kitson Field 21 Minor 3
CS JEANS 12:32

Following an unsuccessful attempt to establish himself on a ridge and finding himself in a significant amount of sink, the pilot elected to head back to the airfield. He then encountered even more sustained sink, increased his speed and continued towards the airfield. As the height reduced it became apparent that the glider would not quite reach the airfield and the pilot tried to use "ground effect" to stretch the glide. He successfully leapfrogged one field hedge and then realised he was not going to make the airfield and opened the airbrakes in an attempt to land in the undershoot field. He didn't succeed and the glider's right wing snagged a high tree branch in the penultimate hedgerow before the airfield boundary. The glider flipped over and landed on its back almost severing the starboard wing and the fuselage behind the cockpit.

36 ASW19B 4804 Minor 29-Mar-07 Denbigh GC 62 None 424

On returning from a short soaring flight, the pilot entered the circuit at 1,000ft QFE. The pilot operated the undercarriage lever and radioed landing directions. On landing the undercarriage immediately retracted and the glider ended up on its belly causing a small amount of gelcoat damage. Subsequent inspection of the undercarriage mechanism found no reason for the failure.

37 ASK21 3674 Substantial 07-Apr-07 Snitterfield 58 None 339

The ASK21 had just landed and the pilots had not disembarked. An ASK18 landed behind and to the right and ran into a deep rut causing loss of control and altering its course to the left. The ASK18's port wing tip hit the ASK 21's starboard wing tip, causing substantial damage.

38 LS4 3109 None 09-Apr-07 Seightord a/f 71 None 753

The aerotow take-off roll began normally but after 30ft, the LS4 glider yawed out of position and the right wing dropped. The pilot released immediately but the glider groundlooped clockwise through 270° and rolled backwards. Its main wheel came to rest against the left tip of a club Grob 103 located at the front of the winch launchpoint causing minor damage to the tip. On subsequent inspection it was found that the LS4 left alleron was disconnected.

39 ASK18 4143 Substantial 07-Apr-07 Snitterfield aff 49 None 15

On landing and during the ground run the ASK18 hit a deep rut on the airfield causing loss of control. The course of the glider altered to the left which put it on course to hit the wing tip of an ASK21 that had just landed. Substantial damage was caused to the main spar of the glider.

40 Mosquito B 2366 Minor 06-Apr-07 Santa Cilia 72 None 2775 16:30 de Jaca

After a 1.5-hour soaring flight at a Spanish site and faced with having to land in rain, the pilot, an experienced instructor, omitted to lower the undercarriage for the landing. Some minor damage was caused to the aircraft.

41 Kestrel 19 None 08-Apr-07 Incident Rpt None

The pilot rigged his glider, allowed himself to become distracted, and despite his own experience as an aircraft inspector and despite familiarity with type, ornitted firm positive control checks which would have detected the misrigging of the right aileron connection before flight. Having noticed a problem with controllability on the first winch launched flight, which ended with a wing drop and ground loop, he concentrated on his technique rather than questioning the serviceability of the aircraft, and took off again on the winch. He then noticed that the handling of the aircraft was definitely not coordinated, and suspecting this time that the problem lay with the airframe rather than with his own skill, recovered to the airfield safely.

# **AAIB** Update

In the latest of our regular series gleaned from the UK Air Accident Investigation Branch, we reproduce a much-shortened version of a report in AAIB Bulletin 3/2007 from the Department for Transport website

Aircraft: Slingsby T-51 Dart 15, BGA 1166

Year of Manufacture: 1964

Date & Time (UTC): 30 August 2006 at 17.50hrs

Location: Sutton Bank, near Thirsk, Yorkshire

Type of Flight: Private
Persons on Board: Crew - 1
Injuries: Crew - 1 (Fatal)

Nature of Damage: Aircraft destroyed

Commander's Licence: Silver Commander's Age: 54 years Commander's Flying Experience:

412 hours (of which 1:17 were on type)

-Last 90 days, 3:56 hours/23 flights

- Last 28 days, 1:04 hours/4 flights

Information Source:

AAIB Field Investigation, assisted by the BGA

### Synopsis

During a local flight from a hill-top gliding site, the glider descended in weak ridge lift until it was too low to land safely back at the airfield. However, the pilot appears to have made an attempt to do so and, whilst turning at low height and low speed, lost control of the glider. It crashed on the steep slope just below the ridge line, and the pilot sustained injuries from which he later died.

### Safety action

Although the local gliding club at Sutton Bank required a site check for visiting pilots, there was no requirement that such pilots be briefed or self-brief on the local procedures and guidance, such as was included in the 'Gliding at Sutton Bank' document. Prior to this accident the local club had produced a draft document containing Standard Operating Procedures (SOPs), which was subsequently issued in hard copy and also placed on the club's website. The SOPs contain rules and procedures pertaining to all aspects of flying operations at Sutton Bank, and detail the requirements for flying currency and check flying. In addition to specific daily and site briefings, all pilots at Sutton Bank are now required to sign as having read the SOPs on joining the club and annually at membership renewal.

### Safety Recommendations

For some years, the BGA has been encouraging its associated clubs to use documents such as SOPs as a means of passing essential information to their members and visitors. Despite this, there was no demonstrated requirement for ground briefing of visiting pilots In force at the Gliding Club at Sutton Bank at the time of the accident. The following safety recommendation is therefore made:

### Safety Recommendation 2007-001

The British Gliding Association should review the guidance it gives to its associated gliding clubs in respect of the briefing requirements for visiting pilots, with a view to ensuring that such pilots are adequately briefed on all aspects of site operations.

### Conclusion

The pilot continued to fly on the ridge line in conditions of reduced lift, despite earlier opportunities to land his glider safely. The accident occurred when the pilot attempted to turn his glider at low height and low attempted, probably in a late attempt to land. The glider's right wing stalled first, and the glider departed from controlled flight with insufficient height for the pilot to make a recovery.

For the full report, see www.aaib.gov.uk/publications



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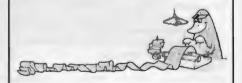
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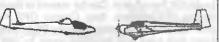
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