

Find out how G Dale took the title - twice and check out revised UK comp rules

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10 June

25 June

6 July



MEMBER OF THE ROYAL AERO CLUB AND THE FEDERATION AERONAUTIQUE INTERNATIONALE





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COVER STORY

G Dale went to Nitra with the British Team to get in some practice for the Worlds and took first place in the Club Class of two competitions (see p18). Turn to p50 for the 2010 UK comp rules. Our stunning cover picture shows water ballast being dumped during a UK comp. (www.cloudrider.uk)

DEADLINES

Aug/Sept 2010 Articles, Letters, Club News: Display advertisements: Classifieds:

Oct/Nov 2010

Articles, Letters, Club News: 5 August Display advertisements: 20 August Classifieds: 7 September

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> Wasserkuppe is to host the final of the 2010/2011 series of the Sailplane Grand Prix in July. The event coincides with the 100th anniversary of gliding at Wasserkuppe airfield, Germany. Ten qualifying GP races have been approved, with an expansion of the qualifying GP circuit into Switzerland, Romania, Spain and Finland showing how the popularity of this form of glider racing is spreading. The automatic qualifiers for the final will be pilots placing 1st and 2nd in each qualifying event.

> The CAA has issued a Flight Operations Communication (FODCOM 13/10) giving guidance to general aviation pilots on deciding whether and where to fly when volcanic ash may be present. The FODCOM, which is particularly relevant to operators of motorgliders and tugs, is available at www.caa.co.uk/docs/33/FOD201013.pdf

Recommended reading for all glider pilots is the review of 2009 gliding accidents published at www. gliding.co.uk/bgainfo/documents/accidentreview09web.pdf. By being aware of the nature and causes of the most common accidents, individual pilots may be able to anticipate and avoid them. The review offers advice in the hope that lessons can be learned from past accidents and that future accident levels can be reduced.

> Shot some stunning gliding footage? S&G is launching its own website later this year and we would like to offer you the opportunity to share that special flight with others. The top three videos – as selected by an S&G panel – will feature in the launch of the S&G website. Please send a link to your footage to editor@ sailplaneandgliding.co.uk

> We are happy to correctly attribute the stunning photograph of New Year at Camphill on p54 of the April/May 10 issue of S&G to Mike Armstrong.



Cambridge GC cadet Joshua Hope is the first recipient of the Neville Anderson Young Pilot bursary, presented by Anna-Marie Della Sala (right) and Neville's sister Delphine de Groot (Andrew Watson)

Award will help cadet meet 16th birthday solo goal

FIFTEEN-YEAR-OLD Joshua Hope has been awarded a commemorative bursary in a ceremony at the annual Cambridge Gliding Club open day on 9 May. Anna-Marie Della Sala and Delphine de Groot presented the Neville Anderson Young Pilot in memory of Anna-Marie's husband, who recently died, aged 53, after a short illness.

Joshua is a cadet member with 50 flights and 10 flying hours under his belt. He said: "It was exactly a year ago that I first visited Cambridge Gliding Club, at last year's open day.

"Having flown in a friend's light aeroplane, I already knew that I enjoyed flying and was very happy to be accepted on to Cambridge Gliding Club's cadet scheme. The award money will help me work towards my goal of going solo on my 16th birthday in April next year."

BATH GAP AGREEMENT 2010

SOME four years ago, a letter of agreement (LOA) between the BGA and National Air Traffic Services Bristol was drawn up to facilitate glider transits of what became known as the Bath Gap airspace, *writes Andy Davis*.

After feedback from both parties and the resulting consultation process, the LOA has been revised and new procedures put in place with effect from 1 April, 2010.

The revised LOA can be downloaded from the BGA website airspace section at: www.gliding.co.uk/bgainfo/airspace/bristol-loa.pdf

Note that a small section of Bristol CTA-6 to the west of the Cotswold escarpment, which was previously included in the Bath Gap under the old agreement, is now excluded. The revised agreement introduces the Bath Gap B, a wider area of airspace encompassing both the Bath Gap airspace and the adjacent airspace with base at 4,500ft, extending upwards to 5,000ft amsl.

The LOA allows for VFR crossings of the designated airspace by appropriately briefed pilots (self-study of the LOA or formal briefing) and gives assurances that glider pilots will not be unreasonably denied the airspace crossing.

Radio-equipped gliders should use radio procedures for crossing Bath Gap airspace. There are subtle differences between Bath Gap and Bath Gap B procedures.

There are procedures for activating the Bath Gap for non-radio crossings that can be initiated by authorised persons at one of the local gliding clubs or BGA Competition Directors. This would activate the Bath Gap for VFR glider crossings for blocks of time in multiples of one hour.

Activation should only be requested for the time period that gliders are realistically likely to need use of the airspace. Once the Bath Gap is opened in this way, any appropriately briefed glider pilot may use the Bath Gap airspace during the notified time without further clearance.

Note that nothing in the agreement prevents any glider from requesting a Class D airspace crossing by radio from Bristol ATC on a tactical basis at any time through any part of their airspace.



MEMBERS of the British Gliding Team were among those whose gliding achievements were recognised at the 2010 Royal Aero Club Awards ceremony on 27 April.

Held in the midst of the historic collection at the RAF Museum, Hendon, awards were presented by the Club's President. HRH the Duke of York.

The British Gliding Team received the Prince of Wales Cup after winning the team trophy at the European Gliding

Championships and bringing home two individual gold medals - Russell Cheetham in the 18m class and Pete Harvey in the Open Class. The team is currently ranked number two in the world.

Bruce Tapson was awarded a Silver medal for his services to gliding. He has until recently held the very demanding volunteer role of BGA Senior SLMG Examiner, effectively managing SLMG



The British Gliding Team (above) received the Prince of Wales Cup from HRH the Duke of York, who also presented Bruce Tapson (below) with a Silver medal



standards. In his 50 years as a leading light, Bruce has flown 55,000 launches and sent an amazing 2,500 first solos.

Certificates of Merit were awarded to Roger Morrisroe of Nene Valley GC, who has recently achieved an incredible 50 years of experience as a gliding instructor, and to Helen Evans, who was editor of *S&G* from 1999 until 2008, taking it over at a difficult period and rapidly elevating it back to its leading position.

DATES

NATIONALS, REGIONALS AND OTHERS

Tibenham

Competition Enterprise (not rated)	Lasham	3-10/7/10
Worlds (unflapped)	Prievidza (Slovaki	ia) 3-18/7/10
15m Class Nationals	Nympsfield	3-11/7/10
Club Class Nationals	Hus Bos	24/7-1/8/10
Worlds (flapped)	Szeged (Hungary)	24/7-8/8/10
VGC International Rally	Tibenham	31/7-8/8/10
Open Class Nationals	Aston Down	7-15/8/10
Standard Class Nationals	Aston Down	7-15/8/10
25th National 2-seater comp	Pocklington	22-29/8/10
18m Class Nationals	Lasham	21-29/8/10
Junior Championships	Bicester	21-29/8/10
UK Mountain Soaring comp	Aboyne	5-11/9/10

2010 glider aerobatic competitions:

Nationals		10-13/6/10
Saltby Open	Saltby	10-12/9/10

Booker 29/5 - 6/6/10 Bidford 19-27/6/10 19-27/6/10 Hus Bos 3-11/7/10 Shenington Dunstable 24/7 - 1/8/10 24/7 - 1/8/10 Sutton Bank 31/7 - 8/8/10 Lasham 21-29/8/10 21-29/8/10 Gransden

29/5 - 6/6/10

Flying for Youth bursary winners

THE Royal Aero Club Trust has announced its Flying for Youth bursary winners for 2010. Gliding bursaries were awarded to: Alex Saunders, 19, Kings Lynn; Ryan Berry, 18, Hemel Hempstead; Stefan Astley, 19, Luton; Luke Dale, 20, Dorset; James Gair-Stevens, 17, Sussex; Jonathan Phillips, 16, Hull; Siena Whiteside, 16, Oxford; and Antony Sales, 16, Morpeth.

Annually, the Trust offers several bursaries including the prestigious Peter Cruddas Foundation Scholarship worth up to £1,000, to enable young people from 16 years of age to progress in their air sport.

Details of how to apply for a 2011 bursary will be posted in September 2010 on *www.royalaeroclubtrust.org*

PILOTS ARE INVITED TO VIEW A MAJESTIC VISITOR TO AIRFIELD

THE Club Focus on Welland GC (April/May 10, p62) might perhaps have mentioned other reasons for visiting the area. I have never operated from Lyveden, but have flown over the site on a cross-country from Tibenham when I had hoped to share thermals with Red Kites. Although I was out of luck that day, Red Kites are well established following re-introduction towards the end of the last century.

The Forestry Commission's Fermyn Woodland Complex just to the south of the airfield is not only home to Red Kites but has a strong colony of a rare butterfly, the Purple Emperor, considered by many to be the most charismatic of all British butterflies. Fermyn is a place of pilgrimage for hundreds of butterfly enthusiasts in the first two weeks in July, the paths through the woods being thronged with enthusiasts chasing "His Majesty" as he is usually called. In Victorian times, they used nets; today it is cameras

The Purple Emperor, despite its magnificence, has been described as having "unsavoury tastes" – putrefying animal remains, for example. Collectors in the past, and now photographers, use a variety of baits such as rancid fish paste. The butterflies even land on shoes and trousers to take in the minerals and the preference for certain people often causes amusement.

There's a standing invitation to glider pilots in the first half of July. If you had hoped to fly, but it's a hot blue day with a low inversion, this should be ideal for Purple Emperor sightings.

Mornings are best until about midday. Go into the wood opposite the club and you are bound to meet a "nutter" with a camera. We are harmless. Just ask to be shown and someone will be delighted to oblige. His Majesty might of course decide not show up just when you expected him – about as unpredictable as the weather.

Jack Harrison



Just south of Welland airfield, the Fermyn Woodland Complex has a colony of the rare Purple Emperor butterfly (Jack Harrison)

■ The Club Focus on Welland contains some errors. Firstly, in contradiction with the text, Welland does not have concrete runways, we often wish we had given the soil is heavy clay, but we are often confused with neighbouring Deenethorpe which does have concrete runways.

Secondly, the published photo shows the village of Brigstock to the west, in line with our runway and Corby (mentioned in the main text) is well to the north but not in this picture.

John Strzebrakowski, Welland GC

A POTENTIAL EYE-OPENER

MICHAEL SISMEY's response (April/May 10, p7) to my original letter (Aug/Sep 09. p7) illustrates the size of the problem: Not only does Michael not have the answer, but, regrettably, he doesn't appear to even understand the question. Twenty-thousand temporary members in a year is, at best, I would guess, worth 20 new members for the movement (if that). Just as the parachute brigade see a massive throughput of thrill-seekers, so we see the same one-off experience for the General Public to have "done it" and ticked another box. They provide a nice cash flow and keep trainee instructors busy, but it's a treadmill, not an effective recruiting tool.

Yes, "people" have "heard of gliding", but do they know what it really means? Most non-pilots have no ability to begin to understand the joys of cross-country/wave/rock-polishing/cloudflying/aerobatics/or, early on, even the thrill of just being able to find your way back to the airfield safely.

My point is that we do not get the message across effectively to open the eyes of those who might be receptive to learning a new sport. We won't get the message across by writing articles intended for the converted to be seen only by members of the movement. This is clearly illustrated by the undisputable fact that even many (perhaps MOST) power-pilots don't even understand what we do. My original letter was inspired by the gross ignorance of two aspiring airline pilots at a busy GA airfield, and I can relate other examples to illustrate the solution:

Dragging my vintage Oly2 off the airfield one day I was joined by a stranger who came over to help. The conversation went something like this: "I want to learn to fly, but Coventry charge £150/hr. I tried a microlight club, but they charge £70/hr. Is gliding expensive?" When I told him that I had just had more than four hours at over 10,000ft off a winch launch costing less than

a tenner, in a glider that had cost me less than £500, his eyes nearly popped out and he joined ON THE SPOT. Tony's still with us 10 years on.

More recently, a power pilot visited the gliding club – with his young wife in tow and completely disengaged from the proceedings – to discuss a share in my light aircraft. Neither of them – members of a big GA club barely 15 miles away from us at Hus Bos, and after years of involvement in GA and microlighting – had much more than the faintest idea that Husbands Bosworth even existed, or that gliding could be such great fun. After a day at Hus Bos, they were back the following week to find out more and the young wife was – for the first time – starting to show real interest in aviating.

There is a great pool of potential members out there waiting to have their eyes opened. Some of them will be aviators – or aspiring aviators – already. Others are simply unaware of this great sport waiting for them, and simply need to have their eyes opened. We don't do it well, so don't let's kid ourselves.

Keith Nurcombe, Hus Bos

Please send letters (marked 'for publication') to the editor at editor@sailplaneandgliding.co.uk or the address on p3, including your full contact details. The deadline for the next issue is 9 June

NOT A PLEASANT EXPERIENCE

FIRSTLY, may I compliment Andy Holmes on a clear and concise article explaining the problem of uncontrolled and uncommanded over-rotation at the start of a winch launch. I have personally experienced this and can assure readers it is not pleasant, and definitely something I do not wish to repeat.

My incident happened on a holiday expedition. I took an evening launch on the first day in my then two-year-old modern 18m flapped glider. The ground run was normal with a pleasant and adequate acceleration but then, suddenly, just about as I was becoming airborne, I was surprised by a very sudden and very severe burst of excessive acceleration. Lots of forward stick controlled the situation so no real drama.

Next morning I lined up again in my own aircraft, this time ready for the surge I had experienced the evening before. The ground run was nice and progressive again, but again I got the massive burst of acceleration just as I became airborne. Being ready for it this time it was less alarming and the stick went forward as before but this time that did not control the tendency for the nose to rise and, all of a sudden, the normal sensations in the cockpit were totally replaced by a sensation that the aircraft was rotating around the mainspar with the tail moving vertically downwards. Almost

instantly, when the uncontrolled rotation ceased (Andy's article explains why), I found myself in a crazily nose-up attitude. I desperately wanted to pull the release (my hand was on it) but understood very clearly that there was no chance of recovery from this position to a controlled landing. A pile of exploding fibreglass was the only option if I released, so I had no choice but to hang on and hope.

Then the left wing started dropping. I now knew, because this is a type of accident I have thought long and hard about, that I was entering a spin/flick roll and would shortly be accelerated into the ground inverted by several hundred horsepower of winch at the other end of the cable. This would not be survivable. The pile of exploding fibreglass was now definitely the better option and the decision to release

took no time to make, forethought helps.

Luckily events overtook my reaction time and before my hand (still on the release) could react to the decision, the elevator (still fully down) began to work and the tail began to come up, (again Andy's article explains the mechanics of this). Instantly the left wing stopped dropping, I was back in control and the launch became normal. The decision to release was instantly over-ruled before my hand had reacted. I estimate the whole incident took well under two seconds,

probably little more than one second.

In my case there was no turbo, no water ballast, and the CofG was fully forward.

I believe that what I experienced was due to an involuntary downward gearchange on the winch (though there are other theories) just at the wrong moment as I was becoming airborne but the airspeed was inadequate to provide sufficient elevator authority to counteract the burst of acceleration that resulted.

Worryingly, I do not believe the winch was being driven unreasonably. It was being operated by experienced pilots to the best of their abilities and I do not attribute any blame to them. One of my few talents happens to be that I am a trained and qualified Rolls Royce chauffeur so I have thousands of miles experience driving a large V8 with an auto box. Those with similar experience driving automatics will know that, with experience, gear changes can be anticipated, triggered, or delayed by subtle use of the accelerator. Maybe experienced winch drivers can do the same, but I would suggest that the average club winch driver is unlikely to develop this degree of subtlety.

In this instance, the club made a 'small adjustment' to the winch driving and the problem went away. A problem that used to be associated with K-8s and the like now seems to have been transferred to modern gliders. BEWARE!

One question for Andy, on his last point, "Take extra care..." HOW?

John McIver, Dumfries

DIFFERENCE OF OPINION

TO KEEP old history on the straight and narrow, I offer a couple of corrections to remarks in the April/May 10 issue.

The Sigma sailplane chord extension (Nick Goodhart interview, pp18-19) bore no resemblance to Fowler flaps. The wide chord highly-cambered Wortmann high-lift aerofoil section morphed into its narrow chord high-speed section form by retracting its rear portion forwards within itself.

The problem of sealing the two parts adequately was never fully solved, I believe. Canadian Dave Marsden, an experienced glider pilot/designer and professor at Edmonton, spent a sabbatical summer at Cranfield modifying it to use ordinary single slotted flaps and took it back to Canada. He had proved such flaps on his own design Gemini two-seater sailplane, which despite

its eight pounds per square foot wing loading outsoared a Blanik in weak lift.

ATC cadets in 1947 (A Family Affair, p68) would certainly have had an exciting time trying to perform a circuit from a 100 foot high hop, which is all that was needed to achieve the 30 seconds required for the straight glide of the old A certificate. In that year, circuits were indeed performed at the Turnhouse (Edinburgh) school, but only by instructors regarded with awe by us 17-year-olds for the seemingly massive launch heights needed to get round a full circuit. In later years, circuit experience was quite exciting enough from the 600 feet one was lucky to achieve from a winch launch in a Cadet fitted with only a nose hook.

John Gibson, Kendal

What's in a name?

IN RESPONSE to David Hill's letter about whether *Sailplane & Gliding* should change its name (April/May 10, p6), perhaps this extract from Philip Wills' *Where No Birds Fly* clarifies the

As for the terms 'glider' and 'sailplane', the first is a generic term embracing all motorless aircraft: thus the wartime troop-carrier was a glider just as much as is a Skylark 3. A sailplane is a refined glider, designed for soaring flight – continuous flight utilising atmospheric upcurrents in place of yulgar petrol.

Graham Winch, Essex & Suffolk GC



newcomer to gliding - having had my first flight only in 1987. I have, as a consequence, found it difficult to appreciate fully the stories I have been told of what life was like for glider flying in the decades immediately before the rapid growth of commercial air transport and the associated increase in controlled airspace.

For a few days in April, I developed a significantly better understanding, courtesy of a volcano in Iceland and the direct effect it had on all flight in UK controlled airspace. I recognise the fact that the disruption it caused led to inconvenience, misery and more for many thousands of people. It also, no doubt, cost the UK economy a lot because people could not get to work and goods could not flow easily.

Nevertheless, it meant that almost the only people in the air were general aviation pilots. Of that broad community, glider pilots have always been an especially "inventive" group. And so I was not overly surprised to hear of tasks that were set, and flown, with turning point sectors based on Gatwick Control Tower and Tower Bridge – it is clear that our resourcefulness was being exercised to take full advantage of the situation. I know that many air traffic controllers enjoyed the change in the nature of their traffic as much as we did.

Whilst I hope that there might not be future disruptions of this sort again, now we know what opportunities they afford perhaps we should plan on the off-chance. Send your ideas to me at the BGA – let's see how creative we really are. I might even send a list of the best ideas to NATS and the CAA.

HRH Prince Andrew, the President of the Royal Aero Club, referred to the "liberating effect on GA" of the Icelandic volcano during his address at the recent RAeC Awards Ceremony. He thought that it provided a rare opportunity to remind people of what aviation is really about. The Prince then went on to make a variety of awards to people from all areas of sport and general

aviation for their efforts and achievements.

Gliding folk featured prominently among those honoured and it was a tremendous pleasure to see each and every one receive their awards. Two things stuck in my mind while I watched proceedings – firstly, I cannot comprehend how anyone on earth could have been directly responsible for 2,500 first solos, even if that person is someone as committed and considerate as our own Bruce Tapson. Granted, and he won't mind me saying this, he did achieve that – among a lot of other things – over a good many years. But, even so, 2,500 first solos.

The second thing that I noted was that the British gliding team scrub up well when they have to – they all looked very smart in their suits as they received the Prince of Wales' trophy. Good show.

Prince Andrew's words about people reminding themselves as to what aviation is all about have, in one form or another, been front of mind for me at various times over the last two months.

I firmly believe, for example, that had Eurocontrol understood better just how broad the scope of aviation is in reality then they would not have issued the current draft rules on the Standardised European Rules of the Air for consultation.

The fact that their proposals were clearly drafted without any obvious understanding as to the nature and requirements of non-commercial aviation caused the BGA and many other air sport organisations great concern. We responded to their request for feedback in the strongest, yet most constructive, terms possible. We exchanged our thoughts with other aviation organisations in the UK and across Europe in the interests of ensuring the broadest potential response; and, for the first time since the Mode S/Interoperability episode some while back, we asked that individual glider pilots also made direct responses as well.

I very much hope that we left Eurocontrol in no doubt that they will have to do much better if they are to stand a chance of obtaining wide support and agreement for their ideas and proposals. We will know in relatively short order just what an impact our efforts have had. We can then form a view as to what we might need to do further.

As soon as we submitted our response to Eurocontrol, EASA published the results of their review of the input that they had received on their consultation on Flight Crew Licensing. We are working our way through the 1,000+ pages of output and expect to have completed our assessment by the middle of May. The BGA will be appraising the movement of its findings and proposed course of action at that time.

In the meantime, I have my fingers crossed that the gliding season will continue to provide the reasonably good weather that we enjoyed over much of the country during April, including a spell of three 750km days on the trot.

Parrica

Have fun, stay safe.

Patrick Naegeli Chairman, British Gliding Association May 2010





Andy DavisCompetition flying



Andy Miller SLMG



Howard Torode



John Marriott Tugging



Mike Fox Instructing



Dr Peter Saundby Medical



Andy HolmesWinch operating



Carr Withall Airspace



Alison Randle

Development

S&G is privileged to be able to call on the advice of some of gliding's leading experts. If you have a question for our experts on any of the subjects listed above, contact the editor (details p3).







FLYING ACTIVITIES:

LEARNING new stuff and making progress, often towards a goal, is fun. Have a look at some of the following suggestions:

- A poster for the notice board publicising the club trophies and achievements required to win them.
- Informal (or formal) morning briefings, including a concerted attempt to identify pilots who might need help to achieve something special during a soarable day.
- Informal (or formal) debriefings (perhaps in the bar) to discuss aspects of the day that pilots can learn from.
- A central point of contact at a club where a pilot can go to ask advice. Someone overseeing pilot progress. Could you recruit an enthusiastic pilot to organise such training?
- Flying weeks and task weeks, including aerobatic training, for those who like to see the world from a different 'perspective'!
- Is it easy to claim a badge? Are the club loggers prepped with batteries and new turnpoints? Does the club have enough Official Observers?
- Allow a club two-seater to fly cross-country on good days, instead of flying locally.

Why not write and tell us how your club promotes progression and enjoyable activities?

Mike Fox

BGA National Coach mike@gliding.co.uk

'Tis the season to be jolly - so enjoy!

WHEN I was casting around for something relevant to write about, I got the following response. "This issue will come out in early summer... are they all having fun? If we can't have fun in the summer I don't know when we can."

Often on the Development Committee we have to deal with the dull, but important, behind-the-scenes 'Stuff' that needs to be in place for your club to thrive. But the true value of the hard work by the management committee, technical, instructor and social teams is when it all gets drawn together with the focus firmly on flying and socialising. Now is also the time of year to let your club committee fly in peace – don't talk to them about The Stuff, instead get them flying and (if you have to) send an email during the week.

Flying

So how does your club support pilots to make progress and achieve? Presumably club pilots will have enjoyed some winter briefings and lectures and will be busy putting theory into practice. How does your club encourage people to get more from their flying? Are you organising minicompetitions, daily briefings, task setting and so on? Tasks can cover anything, including durations, local cat's cradles, height gains for the silvery-bronze and post-solo gang, with more wing-stretching

tasks for the pundits. All this should promote plenty of discussion after flying and everyone should be encouraged to post their flights on the ladder. This should be enough to get your clubhouse buzzing.

Publicity

What sort of members do you want to attract? Grandparents having a flight as a birthday treat or (relatively) young sportsmen and women?

There are three sorts of pages in your local press: news, features and sports. As a vibrant, active sports club, the club's primary focus needs to be on sporting achievements. Get to know the editorial and sports teams on the local papers, radio and TV. Invite them to fly. Be sure to inform them of flying achievements (Silver distance and Gold height are big deals); coverage of the inter-club league; club pundits at regional, national and international competitions. Don't ignore short-term National Ladder achievements such as top club or pilot this week - it could be a story that runs all season and culminates in a (national) trophy at the BGA Annual Dinner.

You have all worked for years to learn to fly gliders this well, why not celebrate it with your local community? Your gliding club is a community sports facility and it probably needs more members of the local community to use it.

There will be times when the more general news pages (visit of local scout group, grant funding etc) or the features section (reporter takes a flight) have greater relevance. Whatever the topic, the same principles apply and time spent planning and getting to understand how your local media works will never be wasted.

As a picture speaks a thousand words, make sure they include images of the sorts of people you want to attract. When you have the balance right, occasionally you can even sneak in a shot of someone's Granny having a lovely day out. (My children's granny can often be seen flying an LS6!)

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

GETTING THE MESSAGE ACROSS

YOUR local press will usually be happy to print well written, appropriate news stories. However, you can improve your chances of getting the right sort of publicity by following a few simple rules:

- Decide what sort of message you want to get across and prepare items that support this.
- Make contact with, and get to know, the
- editor and reporters on your local paper.

 Find out what their deadlines are and stick to them.
- Submit relevant photographs along with articles. The pictures should be consistent with the image you are trying to portray.
- Keep articles concise an A4 page is plenty. Keep sentence structure simple

and make sure you check your spelling and grammar before submitting.

- Ensure articles contain the most important information early on: who, what, where, when, why, and how.
- Always provide your contact details (or someone else's if you will not be around).
- Be a regular contributor someone the reporter can trust.

Writing a good press release is not much harder than writing a bad one. If you want any assistance or have any questions, please contact me.

Keith Auchterlonie BGA Communications Officer keith@gliding.co.uk

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■ The Alatus M, manufactured by Aerola in the Ukraine, is a selflaunching 'glider' that you can fold up and transport on top of your car! Classed as an ultralight, there are 15 currently flying - in France, Ukraine and the UK. It is aimed at ultralight pilots who want to fly a glider. The self-launching version, pictured above and below, retails at around 24,000 euros.

www.aerola.com.ua



■ TeST exhibited the TST 10 M from its range of ultralight gliders manufactured in the Czech Republic. This 15m span single-seat ultralight self-launcher has a VNE of 180k/ph (108kt).

Also available is the TST MB, with retractable undercarriage and a single-seat motorless TST-10 Atlas with optional engine installation. www.testandfly.com



■ At the Trelleborg stand, S&G witnessed some very high-tech cushions - only four more hours to go, thanks Oskar!

testing of Confur energy absorbing www.trelleborg.com



■ Slovenia-based Albastar develops and produces parts for gliders, motorgliders and ultralights (it makes the wings for Pipistrel's Sinus, Virus and Taurus). This year, Alabastar was exhibiting a prototype of its own two-seat ultralight training glider with auxilliary engine - the AS 18m. With an empty weight of 282kg, fuel consumption is put at six litres per hour. A test flight is due to take place in July. www.albastar.si





■ The past year has been a busy one for Skylaunch. In addition to achieving ISO 9001 accreditation, the company's first six-drum Skydrive winch is now in production and is due to be delivered to the Flying School at Oerlinghausen by the end of the year.

Skylaunch has built 83 winches worldwide to date, and the team delivered a winch to Hanover on the way to Aero.

The delivery of that winch was probably more straightforward than the one ordered by

SAILPLANE & GLIDING JUNE/JULY 10

■ Pipistrel's star of the show was the world's first two-seater self-launching ultralight glider, with an electric engine – the Taurus Electro (pictured left and and centre left). The Taurus, which has won praise from Klaus Ohlmann, has a side-by-side seating arrangement.

The first series Taurus Electro is due to be delivered to France in July. Taurus is also set to become the first glider with an all glass cockpit, which can be retrofitted to the existing Taurus.

The Slovenia-based company also presented its Sinus ultralight motorglider, which has dual flight controls and is available with either tailwheel or nosewheel undercarriage.

The 15m span Bee (pictured bottom left) attracted a lot of attention with a number of orders being placed at the show. Also known as the Apis, it is a single-seat middle wing ultralight self-launching glider with T-shaped tail.

The Bee/Apis, model WR, has already claimed 10 FAI world records. A new version is being prepared for the 13.5m class, which was recently announced by the FAI. This will be available with a retractable auxiliary engine for self-launching and, we are told, will meet all the competition and regulatory requirements. www.pipistrel.si



the Military Defence in Japan, which chose to have the winch air freighted!

It's also great to hear that a glider-derived product is now spreading into other industries. A company in Belgium is investigating the use of a Skylaunch winch in the testing of crash barriers.

Closer to home, Skylaunch products are being used in military testing at QinetiQ in Wales. Winches are being used in place of rockets in the testing of UAVs. Skylaunch can

take pride that its products are helping troops in Afghanistan. The company won praise from the MoD for getting the project from conception to trial in just six months.

wwww.skylaunchuk.com



The Skylaunch team (above) was delighted with the level of interest shown (Right) an impression of the six-drum winch





■ Front Electric Sustainer system, FES, made its first public appearance. An electric motor with foldable propeller can be started at a low altitude. The carbon fibre foldable propeller opens quickly using centrifugal force when rotation starts. The blades are slightly bent to take the shape of the front surface of the fuselage. During propeller folding, pitch of the blades is automatically reduced when they rotate closer to the fuselage and additional drag is said to be minimal.

Manufactured in Slovenia, the maiden flight of the FES was performed last October by one of its creators, Luka Znidarsic, in his 18-metre class LAK17A last October.

The LAK range of single-seaters can now be ordered with FES system or FES-prepared fuselage. The Front Electric Sustainer can also be fitted to a number of existing sailplanes. Those potentially suitable include ASW, ASG, ASH, HPH and JS1. Schempp-Hirth sailplanes may also be suitable, but are likely to require a smaller spinner. Single-seat DG sailplanes do not have the space for an engine in front.

The complete additional weight in fuselage is about 35kg. Suitable sailplanes must have enough reserve in weight of non-lifting parts.

The front sustainer approach is claimed to be less expensive, lighter and provide better handling than the competing retractable pylon system.

EASA certification is currently in progress. While full EASA certification may prove too expensive, it has been suggested that for countries under EASA regulations a Supplemental Type Certificate (STC) can be issued. For new sailplanes a major change to current Type Certificate is an option. Certification may prove easier for ultralight, experimental or home-built sailplanes. www.front-electric-sustainer.com



ALL PHOTOS BY SUSAN NEWBY



A location usually high on a glider pilot's avoid list, Sarah Kelman checks out a packed Luton ramp during a 'flight of principle' and (below) approaching Luton (Sarah Kelman)

UNUSUAL TASK

With volcanic ash grounding IFR traffic, Sarah Kelman set out to explore the Stansted and Luton Control Zones in her ASW 28



PRIL was an extraordinary month for air travel. Ash from an Icelandic volcano drifted over Europe and the authorities responded by closing controlled airspace to IFR traffic. It was also a period of settled high pressure with very reasonable soaring conditions, so on Sunday 18 April I decided to take the opportunity of a lifetime and explore two areas usually high on a glider pilot's "avoid" list – the Stansted and Luton Control Zones.

This was a flight of principle. I had been seconded to the BGA Airspace Committee at the start of the winter and had first-hand experience of the sort of battles the committee has been waging for years.

NATS (the UK air traffic service provider) and the Civil Aviation Authority continue to stare in disbelief at the sort of flights we achieve on a regular basis and at the sheer volume of glider movements on a nice day. They also adamantly believe that gliders can easily transit Class D controlled airspace, without understanding the nature of cross-

country soaring flight, nor the needs of gliders.

Controllers I have met are understandably reluctant to allow an unpredictable glider into their airspace as they have little or no experience of us. The Airspace Committee is continuing to try to introduce some basic appreciation of what we do into recurrent air traffic controller training and has a DVD planned to assist this.

So this was a perfect example to give my local controllers some first-hand experience of a gliding cross-country. Initially I was going to just set Gransden – Stansted – Luton – Gransden, but this looked a little short and I wanted to use proper waypoints. So I studied the chart and decided that Gransden – Newmarket – North Weald – Northampton South – Gransden would be suitable and take me (with a minor detour) via the Stansted and Luton control towers.

As I do not carry a transponder, I called Essex Radar early to get a feel for whether I would be allowed to cross so I could head off



Sarah Kelman is a Captain on the A320 for easyJet when she is not flying her ASW 28 from the Cambridge Gliding Centre. She also sits on the BGA Airspace Committee

A task set as Gransden – Newmarket – North Weald – Northampton South – Gransden took Sarah Kelman (with a minor detour) via the Stansted and Luton control towers

into darkest East Anglia instead if necessary. Stansted is infamous for rarely permitting any VFR crossing by anything, and it seemed like every man and his dog was on the frequency to get a transit to the overhead or a low approach down the runway. It was almost as busy as when I'm trying to get a call in my Big Orange Airbus during the easyJet rush hour.

The controllers had been refusing light aircraft without a transponder so I was pleasantly surprised to be granted the crossing. The radio work was quite intense as they only had an intermittent primary radar trace on me so kept calling to ask my position and to give me traffic information. It was also tricky as conditions went blue at the zone boundary and I was nervous of the easterly wind drawing in stable air from the Thames estuary - and because I was not permitted to climb above 3,500ft into the Class A airspace as this was "contaminated". The other challenge was VFR navigation. The area looks quite different on a half mil chart compared with the instrument approach plates I normally fly with.

The Stansted ramp was a ghost town of abandoned airliners but did give the expected great thermal off the apron. I had the airspace to myself as all the light aircraft

wanted to fly as low as possible whilst I was up at 3,400ft. I turned North Weald comfortably and set off for Northampton via the Luton overhead. This part was especially challenging as I would come close to the area where the Class A drops to 2,500ft amsl (around 200ft above ground).

Stansted tried to get me a clearance through this but failed and I was starting to struggle with the workload of scrabbling along so low down and changing from Essex to Luton Approach for the next clearance.

Luton was much quieter and made a nice respite in the radio chatter, which was fortunate as I found it quite awkward to get back up once clear of the low

Class A boundary. The Luton ramp was even more packed than Stansted had been, with corporate jets double parked on all available tarmac.

With that detour complete, I headed due north over Luton town and back to the cumulus to make my last turnpoint. All in all, the flight in itself was an unremarkable 230km at 87km/h in probably the worst soaring areas of the day, but certainly a unique experience in recent soaring history.

Sarah had the airspace to herself above a packed Stansted ramp, as all the light aircraft wanted to fly as low as possible while she was up at 3,400ft in her ASW 28 (Sarah Kelman)



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HANS-WERNER GROSSE Platypus talks with the chief initiator of the ETA project

PLATYPUS: Younger pilots know of you mainly through your association with ETA, the 31-metre super-ship. What has been the best thing about this project for you?

HWG: Developing ETA has kept me engaged and has given my wife Karin and me enjoyable flying for 10 more years. The performance gain compensates for my ageing. (Well, almost.) Now at 87 I can't outrace the gifted youngsters every day, but I can try. Look at the On-Line Contest speeds. For general cross-country flying ETA is the best glider available. The max glide saves the day when others have to land out. For competitions it might be a good idea to fly it as a single-seater with ballast. I could even imagine flying it with the engine removed, to have more variability with the ballast.

ETA is very docile and does not spin. Some of the owners are pretty old now, so if you are young and have a place in the Worlds or a big nationals, ask an ETA-owner to let you

fly with him in his ETA. It will be the chance of your life – and the old guy will have fun. One might have to persuade the IGC to drop the anachronistic rule of "one nationality only in the cockpit". Look at the nationalities in sailing contests and Steve Fossett and his co-pilots.

PLATYPUS: What has been the worst thing about this project for you?

HWG: My greatest disappointment was that ETA was not welcomed by the IGC. ETA was designed with 950kg all-up weight. All safety flight and ground tests were successful; 1,500 hours of flight time with my prototype No 1 proved that ETA had no operational shortcomings and could very well integrate into Open Class competitions. On take-off, selflaunching, we even climbed better than others.

The IGC was persuaded to replace an unlimited Open Class that met equivalent safety standards to other gliders - a system which had worked well - with a weightlimited Open Class. After years of work and millions of euros, we were ordered to reduce the design All-Up Weight to 850kg to fly in national or world contests. We achieved that goal. But with our two extra square metres we cannot fly at the same wingloading as the ASW 22 and Nimbus 4. On booming days these ships creep away from us. Luckily there are enough days with English weather around. **PLATYPUS:** What is "in the works" on this project? What are the most exciting current developments?

HWG: Bruno Gantenbrink's single-seater Nimeta - Nimbus 4 fuselage and ETA wings seems to be the best-performing glider in the "Weight-Limited Open Competition Class". He is extremely happy with it, although he had almost no training in the new ship. He even won a high-speed day at the 2009 German Nationals, but then he is a very good pilot. We shall know more at the 2010 season's end.

PLATYPUS: Any other plans?

HWG: To improve our performance above 170km/h IAS on very good days, I plan to test shorter wingtips to decrease the wing area,

thereby increasing the wingloading. Ask me next year.

PLATYPUS: Will the results achieved with ETA cause benefits to be passed on to other designs? **HWG:** That's already happened. Walter Binder learned a lot when building the ETA fuselage, controls and spars. The different versions of his EB 28 would not have been the same without his ETA experience.

I hope to persuade people that we need to impose no limits to make the Open Class really open. Dinosaurs were not forbidden millions of years ago; they just proved to be too bloody big!

PLATYPUS: What kinds of competition do you enjoy these days?

HWG: My favourite is the On-Line Contest. OLC is worldwide, running without bugs, and you can see in the evening how the weather was and what others have done with the weather. It has given a boost to crosscountry flying in many countries. I have only one complaint: by the OLC Rules, pilots are persuaded to fly yo-yos along preferential orographic lines or convergences. Yo-yos may be good for high-speed training, but they get boring after a while. To cater for developed pilots, OLC should award additional points for FAI triangles and quadrilaterals.

PLATYPUS: You may remember that when I bought your ASW 22 in 1986 after you had achieved many records in it, I was required to put your name on my insurance policy for a while. Lloyds of London were delighted to read, under Details of Past Crashes, "Shot down by RAF 1944." Tell us more.

HWG: As an 18-year-old boy I was in heaven when my fatherland gave me the chance to train in all those aircraft that aces like Ernst Udet had demonstrated in airshows before the Second World War. Finally, I was checked out in my dreamship, the Junkers 88 with the latest electronics, and was ready to enter combat as a dive-bomber pilot in 1943. However, dive-bombing enemy ships in the Mediterranean had been found to be ineffective, so we were retrained in torpedobombing. We did not know what we were in



for: within three months we twice lost all our crews. I survived a night ditching on 6 June, 1944 with a burning engine 35km south of Toulon. When most of my friends were killed during the invasion of France in June 1944 I was in hospital in Paris. Sometimes it helps to be shot down at the right time.

Our transfer to Norway did not change the situation on the Russian front. We had lousy torpedoes and the sinkings reported by our inexperienced crews filled many lines in German war reports, but did not show up in Allied statistics. Thank God that's all past and must never happen again.

In the half-century after Lilienthal and the Wright Brothers, aviation devastated Europe and killed millions. Something went wrong with our dreams. But enough dreamers worldwide wanted to show that there is more to flying than Boeings and Focke-Wulfs. Gliders hidden in barns came into the open. New ones were designed and built. Before pilots and enthusiasts had finished their education and formed families they secured airfields and defended them against "developers".

Public curiosity about what could be done in gliders by top pilots in cross-country flying was widespread. Flights of 300km found their way into the media. My 1,460km flight in 1972 from Luebeck to Biarritz achieved half a page in the *New York Times* and I got feedback even from behind the Iron Curtain.

But if a young eagle today plans to fly a continental record from Denmark or Sweden to Biarritz with a better glider and instrumentation, with GPS and engine, winglets and ballast, he will probably hear from IGC that he should wait another year or two until all the rules and regulations have been sorted out by a well-meaning person in New Zealand. If this happens, I hope we will have a People's Uprising! If we are not enthusiastic enough to follow our dreams, how can we persuade the general public that gliding is a gift from Heaven?

PLATYPUS: Before you embarked on the ETA project, you were famous for the world records you set, especially in Australia. But the world records are now being set on other continents and not in conventional thermal-flying.

HWG: Klaus Ohlmann has really shown us what you can do in waves in South America. This is just another world of soaring. Other pilots could experience the fantastic views and awesome speeds flying together with him in a two-seater in the Andes. That would be relatively safe. But beating his records is another story. Just trying to get famous is not

good enough. Even Klaus needed years to develop his knowledge and skills.

Since we have continental records now, go for them first. There is plenty of room for improvement. Most of the performances to beat have been flown years ago without GPS, engines, winglets and all the goodies we have now.

If you want to improve your cross-country efficiency, fly in lots of closed contests – that is, competitions based on one site for a week or so. Here you see why other people outfly you in decentralised contests and everyday flying such as the online contests, National Ladder and so on. Some people are so in love with beating the other so-and-so's that they don't fly at all outside comps, and they have fun until they are stopped by the doctor. I stopped competition flying in the mid-1970s, but recently came back just to see if I was missing anything.

Most of the reasons for my being fed up with competitions (illegal use of turn and banks and flying overweight) have been sorted out. But I still hate gaggles, tactical start-line games and low approaches in close company

with other pilots that have not been to enough funerals. With my attitude you may place well on one or two days, but you'll never again win a contest. You can, however, learn enough to fulfil your gliding dreams: flying individual self-set tasks, to places you have not been to before, to bring back films with which to bore your neighbours for hours.

PLATYPUS: So you see competitions not as an end in themselves, but as a way to acquire the skills with which you can achieve your own dream-flights?

HWG: Yes! For years I have been dreaming of a flight from Luebeck to the Mediterranean. That would, by far, not be as long as my flight to Biarritz in 1972, but what a dream! Starting at the Baltic, creeping under low cu's over the German flatlands, climbing up to the Black Forest, crossing to the Swiss Jura and Alps and then enjoying with my wife Karin (I never fly without her) an endless glide to Montpellier or further.

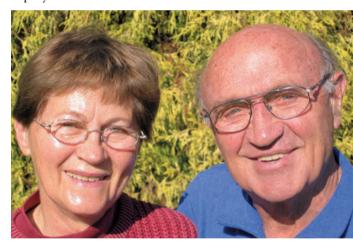
Compare that with beating the other fellow by five seconds!

In former years I got away too late, or was too slow and four times had to land around Grenoble. If 2010 is a better year, and we succeed, we might have a problem: are we running out of dreams?

AVIATING HIGHLIGHTS

- Hans-Werner Grosse was born 1922, crashed primary glider 1939, C badge 1940
 Joined Luftwaffe November 1940 (see text)
- > Renewed 1955 PPL at Southend-on-Sea, bought first German Tiger Moth from Ladi Marmol* to ferry it to Luebeck - almost ended up in jail, but that's another story
- Of his 50 World Records Hans-Werner ranks highest:
- First 1,000km goal flight,
 1,032km in 1970
- Free distance Luebeck-Biarritz 1,460km 25 April, 1972
- First 1,000km FAI triangle, 1975 Finland
- 1379km FAI triangle at 144km/h from Alice Springs, Australia, 1987, with Hans Kohlmeier
- 500km FAI triangle at 171km/h from Newman, Western Australia 1989 with Joerg Hacker

*Czech gliding and power aerobatic ace 1920-1998



Hans-Werner says: "Karin holds a power licence, was my towpilot and is now my reserve brain. She insists on starting the engine no lower than 400m (1,300 ft). And I obey: well, nearly always."

IF WE ARE NOT ENTHUSIASTIC ENOUGH TO FOLLOW OUR DREAMS, HOW CAN WE PERSUADE THE GENERAL PUBLIC THAT GLIDING IS A GIFT FROM HEAVEN?



The Pribina Cup sees around 120 pilots taking part in four classes. During April, the British Team went mob-handed to Nitra to train. Team coach Jez Hood is pictured above in 352 (photos above and below by Elfo.sk)

WHY IT PAYS TO PRACTISE HARD



Club Class champ G Dale explains why taking part in the Pribina Cup, Nitra, is an excellent spring wake-up for comp pilots

'M LUCKY enough to do a lot of gliding in great places, but currency and experience don't make you good at racing. Competent, yes, but not top notch − as I found out in Rieti at the last Worlds. Too much coaching, not enough racing.

To get to Carnegie Hall you must practise. Practise what you will need to perform, practise hard and practise smart. I learned this a long time ago when studying piano at college – but it's taken all of the last 30 years to sink in and for me to start to apply it to gliding. I clearly never applied it to piano playing, which is why I work as a gliding instructor and not a concert pianist. So the British Team (Standard and Club

Classes) plus a coach, went mob-handed to Nitra in April to train together at the Pribina Cup with a bunch of other Brits – hard-nosed comp pilots to a man.

Why there, and why then?

The Pribina Cup is an excellent spring wake-up for competition pilots. It's a big comp – about 120 pilots in four classes – efficiently run by a regular team of club volunteers and skillfully directed by Vladimir Foltin. They've had 10 years' practice and it shows. I've directed a few competitions myself and I would be happy if I could do the job as well as Vlad.

The weather in Slovakia at that time of year

is good for gliding. Good soaring conditions with decent cloudbases (up to and over 6,000ft) with a bit of wave. The terrain is inspiring with interesting hills, ridges and mountains, but usually easy landings in the valleys. Plenty of scope for ridge bashing if you get stuck (and boy did I ever get stuck, more on that later!).

Airspace? Don't ask - you think we have it tough in the UK? I found it hard to understand the system until I realised that, apart from a few corridors, pretty much all of the country seems to be controlled. Areas seem to be released on a daily basis, so unless you heard otherwise, you can't go there!

Actually the system seems to work very well, the airspace use in the competition was very good except up to generally 8,000ft and some places 9,000ft. I don't know what will happen in the summer when the cloudbases go right up though...our director Vladimir is an air traffic controller and he's working hard at getting the ceiling raised for the World Championships in July.

So to the competition. If I can offer a bit of advice to the aspiring competition pilot (or indeed anyone trying for badges or records) - it is "get yourself properly organised!". Most competition pilots have a pretty neat glider and for us Club Class boys it's almost affordable. And of course everything needs to work – trailer, instruments etc. You especially need to be right up to speed with your glider's avionics. Having problems with putting in the right airspace or turning point files is going to slow you down, as sooner or later you will be expected to load up the task and make a plan very quickly and under lots of pressure. I have a new ClearNav, which is big and bright, clear and simple and works very well for me as I am allergic to computers. Unlike the rest of the unflapped team, I'm old enough that Windows is not my native language...

Day one: The Club Class is given a 283km triangle and the Standard get 350km (tasks and traces are available at the the Soaring Spot website). The issues for the team are learning to fly together and, especially for the Club Class, getting the start right. We're flying the fastest gliders, at the high end of the handicap, so you need to start correctly with respect to the fleet of Cirrus, DG100, Jantars etc. Get it wrong and get nailed by the gaggles.

In the event it goes well for us, the weather is straightforward and the only issue is how to quickly cross the rather dead valleys to get to the convection on the other side. Ian MacArthur and I finish first and second with a handy points difference over the others. Team

flying works, and we seem to get along fine, with a similar understanding of the soaring situation. In the 15m class Jay Rebbeck comes in 3rd and Howard Jones 7th. Jez Hood, our coach, comes in 17th in 15m. Other Brits have a mixed day, ranging from a landout for Shaun Lapworth, our Club Class aide, to a win for Russell Cheetham in the Open.

Day two: Best summed up as tricky. The Club and 15m classes are given an AAT and the weather is difficult - a reasonable high cloudbase but with the threat of severe spread out - the ascent shows it to be very damp at the inversion. I don't really know how the Standard Class tackled the task but we had a very interesting time in the Club Class.

One could hit the circles by drifting downwind along the ridges with a quartering tailwind, well off the slope axis - which is

fine, but then you have to get back again, into what is now a quartering headwind. Ian and I get high in shear wave before the start with what seems like the whole of the rest of the field. I have more experience at wave cross-country flying so I lead Ian on a wild goose chase away from the start, not realising how fast the wave is drifting away from the start line. Actually, I can't see the start line on the computer correctly as I forgot to turn off the "tracks" function - and the start line is buried. Far too busy to sort it out in the gaggles...and it really costs us.

As a result, we start a little late and a little low and have a poor first leg. Then we get bogged at the second downwind turn under solid overcast. As you will know, if the turn is downwind, the lift is weak and the wind is strong - make your AAT turn at the top of a climb. We run on, looking for a climb and both find one in the gloom, although we become separated. Then we both have a very tricky bit of ridge flying to do to get back home - in the absence of any more decent thermals.

Many of the slopes have a very gradual entry, which means they work from very low down, but that just means you need to be very low to work them at all. And the wind is light with a bit of shear on the top from weak and broken wave. Just above the trees and a few seconds from a landout – an entertaining way to spend an afternoon, but not if you're trying to win a competition.

Fortunately the damage is light, we come in 11th and 15th and the points total for 🕞 IF I CAN OFFER A BIT OF ADVICE TO THE ASPIRING COMPETITION PILOT (OR INDEED ANYONE TRYING FOR BADGES OR RECORDS) - IT IS "GET YOURSELF **PROPERLY** ORGANISED!"



Team flying worked out well with G Dale (right) and Ian MacArthur taking first and second place respectively in the Club Class, with just four points separating them (photo by Elfo.sk)



Russell Cheetham took a very respectable fifth place in the Open Class, for the second year running (photo by fifteen)

JUNE/JULY 10

the day is only a few hundred so it doesn't sting too much. Now this is the interesting bit – there are six pilots in front of me who finished between 10 and 25 minutes under the task minimum scoring time. That does not normally pay off and I certainly wouldn't have thought of trying it. I suppose they expected to get stuck and didn't? Maybe it highlights just how painfully slow we were!

The Standard Class team do a bit better with 8th and 13th, our coach has his turn in the barrel with an early landout.

Day three: Starting to feel a bit of pressure now after spending the last two days waiting for weather. Ian and I are sitting first and second with only a small gap between us. With a decent forecast we get a 280km quad and the 15m get a 350km.

We have an interesting day in the Club Class. A good fast start separated by a couple of minutes straight into a humming energy line almost on track. We stay separated and I luckily get ahead. The ASW 24 is a fast glider in strong conditions (well, by Club Class standards anyway). By turn two I'm probably 10 minutes out in front of most gliders, after a late start. But then disaster – in the solid overcast I get



Pictured in his ASW 24, G Dale aims to improve his flying concentrating on controlling focus and spending more time with his head outside the cockpit (photo by fifteen)

I THEN BLUNDER INTO THE LUCKIEST CLIMB OF MY LIFE PULLING STRAIGHT INTO A **COMPLETELY SOLID 5KTS OFF THE DECK, NO FUSSING, FOR A VERY QUICK GLIDE HOME**

stuck hovering in weak lift above a power station. The next turnpoint is in range but totally out of reach, being on top of a hill (note competition organisers - please don't put the turnpoint on the top of a mountain!). I find my ClearNav's strangely-named "glide amoeba" function is superb for telling me if I can glide over the ridge line or not. No thinking to do. The computer says no.

This is where competitions are won and lost. Mike Charlie is hanging around with me and he cracks, going on into the gloom, I decide to wait for sunlight or help - or anything to happen really apart from setting off to a certain landout. After a few minutes (seems like an eternity), Ian and a few others start to arrive and we can feel the invisible gaggle of Cirrus and Jantars bearing down on us, so we get as high as we can and get going, a gaggle of two. Very tricky flying at low level around the side of the mountain finally gets us into some sun - just ahead of the big gaggle so we are able to climb away without too much interference from other traffic.

The rest of my flight is then sorted when Ian spots a climbing glider for me – but then makes a tiny slip and falls away on the wrong side of the mountain going into the TP. He has to

> slog up the hill again in weak lift. Due to his call I get a good climb and then the faster route and we finish 9th and 11th. Shaun splits our positions with 10th - a good comeback after the difficult start he's had. I'm still just in the lead with Ian a close second and the pressure is increasing.

The Standard Class team does better with a 3rd and 4th, Jez is back on form with an 8th place. Russell manages a 10th place but the Open Class is being

dominated by Wolfgang Janowitsch.

Day four: Another good forecast with 330km for us and 400km for the 15m. Right from the beginning it's not a good day for me. I'm feeling the pressure a bit and subconciously decide that given the forecast and bigger task this is the day to open out the lead. (D'oh!) As a result I start two minutes after Ian and try to fly fast, instead of correctly. I spend the whole day just missing out on the best bubbles and the best routes. Trying too hard nearly puts me on the ground. In absolute frustration I leave a very weak climb to cross the last valley maybe three hundred feet lower than I could. The gliders above me leave and I just straighten up like a lemming to follow, several hundred

feet down. Stupid, stupid, stupid. But it's too late as I ghost across the dead valley at 55kts and arrive at well below the top of the last, low ridge. Too low to safely get through the pass on to final glide, the hill is in the way! And once again, the computer says no.

I then blunder into the luckiest climb of my life, pulling straight into a completely solid 5kts off the deck, no fussing, for a very quick glide home. Far too risky in terms of scoring and I am shaken at my narrow escape from a landout. More discipline required tomorrow. Ian has a far more consistent and relaxed flight than me today and we finish with Ian 5th and myself 7th. We're still leading overall, but I feel less confident in my flying now.

In the 15m class Jay wins the day, but Howard has problems, coming in at 23rd. Jez comes in 8th. Today a better result in the Open with Russell at 4th and Mark Holden at 6th. They both beat Wolfgang, which has got to cheer everybody up!

Day five: I'm determined to get my head under control and tackle it using the sports psychology techniques I've been studying with Alex Phillips at Lasham. It seems to work - I feel a lot more relaxed and professional at briefing and whilst setting up for the flight.

With soaring conditions forecast to deteriorate from the northeast, we get a triangle that takes us well south towards the Danube. Wet down there and difficult soaring, or so the gossip goes. Because it looks hard and I flew poorly yesterday, Ian and I are careful to make sure we stick together. It pays handsomely, with an early start escaping the slower gliders, a fast flight only interrupted at the second turn (yep, the Danube is a soggy place) and a ripping final glide from way out, just as the forecast headwind starts to pick up and the thermals weaken. One thing about the ASW 24 – nobody, but nobody, in the Club Class is going to get you on final glide! (Now there's a challenge...)

We come in with Ian first and myself third, still hanging on to first and second with only four points between us and a small margin over third place. The Standard/15m get around with 15th and 20th, not so much their day. Russell in the Open gets second (behind Wolfgang, unfortunately) and Phil Jeffery gets his best place so far at 9th.

Day six: Imagine how you'd feel. Ian and I are right up there in the lead, just a few points apart and a little above third and the weather is very dodgy indeed. What do we get? Guess, go on, you'll never guess. That's right, a

minimum time two-hour AAT. Curses. I'll say this only once – AATs are designed to be set on reasonable soaring days. On unpredictable days they are a lottery. IGC please take note.

We get on to the task planning under a very unstable sky. Sure enough, as we are waiting at the gliders to launch we spot very low cu forming below on the ridges to the east – the result of distant but heavy showers on track. And shower lines bearing down on us from upwind. So the organisation call a new task – another minimum time AAT with three areas this time. Quick, no time to spare, jam it into the computer and go, go, go! Remember what I said earlier about being organised? Thank heavens for all the time I've spent learning how to work my avionics.

We launch into strong climbs under rapidly building cu, it's obvious that in half an hour you don't want to be here – it's going to go to rats (technical comp pilot term). Plus there is wind shear and wave on top. Just staying up rapidly becomes an issue, with something like 50 gliders punching through the rain to arrive on the windward side of the local ridges low down. The wrong side of the ridge from the airfield, wave interference in the stable air after the rain and big gaggles going every which way. Very hazardous flying – I go somewhere quieter on the ridge and try to eat lunch with the result that I get covered in advocado.

Ian keeps wrestling with the gaggles. Howard does some constructive lurking and I can't even keep track of Jay, except seeing him flash past once. The start line has just opened for the Club Class. At least I am airborne – several competitors are on the ground underneath me. No way can we make a start yet – I can't even climb off the ridge due to the wave interference. At least they've stopped launching the Open Class – there's a limit to how many gliders you can pack on to one ridge!

We wait and wait for the cu to get to the ridge and for it to start working – but they stay upwind, controlled by the wave. Eventually it shifts a bit and we all start to climb away at about 3kts – now we can get going. At which point the 15m, Open and two-seater class are scrubbed. And eventually, after another nail-biting five minutes, the Club Class is also cancelled (despite the line being open) "for safety reasons", which would have been a great call half an hour ago but is now a bit late.

Of course, when you're directing a comp you can't see what the competitors can see and I have a lot of sympathy for Vlad.

So that's it, a large sigh of relief. It turns out to be a perfectly flyable day of course, the dodgy bit is over and several of us climb into the wave before returning home. I'd be fibbing if I claimed to be disappointed at the task cancellation.

The Club Class team take first and second with only four points between us – a successful team flying result. It really doesn't matter who is first – and you have to believe that if you're going to team fly correctly. Shaun, who has been a considerable help to us at times, is well down at 26th. But watch this space, he's a determined chap. The Standard team finish

with Jay in 3rd, Howard in 9th and our coach Jez in 16th – beaten by Chris Luton (14th) though, who has quietly been slogging away a bit down the pack. In the Open Class Russell makes 5th, Mark 19th and Phil 24th.

Overall impressions then? Great organisation, good weather and venue and a very cheap bar. Oh, and extremely good looking local girls, mostly wearing killer heels – a real bonus for me!

For the team, training was just ideal. Apart from the slog of camping in cold and damp weather and the tedium of driving all the way to Slovakia (about 1,100 miles of rain, traffic and the usual punctures) the flying was great fun. Exciting without being hard enough to be a lottery or frighteningly dangerous and different enough from competing in the UK to really extend your experience. The coaching from Jez was useful and the team flying worked out well. I ended up in first place, but it could easily have been Ian and I am sure I would not have done as well alone.

I have been trying to improve my flying, concentrating on controlling my focus, spending more time with my head outside the cockpit. My newly-fitted ClearNav has quite definitely helped me to do that with its simple software and clear, bright presentation.

So, as I said before, practise, practise. As I write this I am sitting on the airfield at Prievidza waiting for the rain to stop so we can get on with flying the Flight Challenge Cup, another chance to practise in the world's task area against Club Class teams. It's only been raining for the last four days solidly and the airfield is a sponge – I can't even get near my trailer. But there's an airfield restaurant with cheap food and alcohol and Slovak waitresses (all legs and cheekbones) – and best of all, a real fire to help me dry off after yet another very wet and muddy night in the tent.

■ STOP PRESS: G Dale went on to take first place in the Club Class at the 2010 Flight Challenge Cup

I'LL SAY THIS
ONLY ONCE – AATS
ARE DESIGNED
TO BE SET ON
REASONABLE
SOARING DAYS. ON
UNPREDICTABLE
DAYS THEY ARE A
LOTTERY



Ian MacArthur pictured on day five of the Pribina Cup (photo by fifteen)



Gerrard (G to his friends) Dale has been gliding since the age of 20 and first trained at Dorset GC. Inspired by BGA coach John Williamson and later mentored by another coach. Chris Rollins, he went on to become a racing pilot and professional instructor. With about 7,000 hours gliding in Europe, the USA, Australia and New Zealand, G currently coaches for Glide Omarama in NZ each winter, is one of Lasham's DCFIs in the summer and is training to fly his ASW 24 for the British team in the Club Class at Prievidza this July

STORY OF EXPENSIVE DIAMOND

Justin Wills shares a vivid recollection of his Diamond height flight during which the Dart he shared with his father, Philip, was struck by lightning at 23,000ft

"Will the wind ever remember The names it has blown in the past?" Jimi Hendrix

HE events described here occurred over 40 years ago and yet remain vivid in my memory. The soaring achievements are surpassed now almost daily, but the aura of the times, the blitheness of spirit and the lightness of touch are, I think, still worth recording.

I had completed my 300km Diamond Goal Flight in August 1965 at the end of my first year as an Oxford undergraduate, flying with the RAFGSA from Bicester under the legendary Andy Gough (see S&G Aug/Sept 1996). My father, Philip Wills, who by then had been chairman of the BGA for 17 years,

must have been pleased because, to my equal measure of surprise and delight, he then invited me to share his Dart 17R due to be delivered that autumn.

This was the most successful version of the Slingsby Dart which started life as a rather heavy Standard Class glider. It then evolved into a 17-metre series with a lighter metal sandwich mainspar for the inner 15 metres, a modified wingroot, and reduced wing incidence made possible by a large retractable wheel (hence the R suffix).

In early November I drove up to Kirkbymoorside in my Austin A40 to collect it. The new trailer towed well so that despite the car's meagre 948cc we got up to 55mph on the way back (the speed limit for trailers then was 40 mph). Two weeks later we flew her for the first time at Lasham. My mother, Kitty Wills, had modified our usual red and white colour scheme to accentuate the sleeker shape of the fuselage and it looked fine. My logbook records an initial impression of much improved penetration and lighter handling compared to the Skylark 4, but also a more abrupt stall accompanied by a sharp

Winter intervened and I went off skiing, managing to break my left leg in 11 places while practising for the inter-university ski races. I arrived home just in time for Christmas encased in plaster. My longsuffering parents allowed the wings of the Dart to be brought into the living room of their fortunately spacious Kit Nicholsondesigned house (Kit was also the architect of the Dunstable clubhouse to which it bore a distinct resemblance). I pottered around on crutches fettling and, in the process, taped the top hinge line of the ailerons as on the K-6e.

When in March my plaster was cut down to knee length I started flying again and





PEATURE
DIAMOND HEIGHT



noted that the stall was now completely benign. This may have helped considerably when, a couple of years later, my father ran out of airspeed and descended, thankfully with the wings level, on to a small hill in the Chilterns which he had been attempting to soar in a south-easterly wind: the basic problem being that the Chilterns face northwest.

My next objective was to achieve Gold and even Diamond height. In those days there was much less practice and knowledge of wave flying so I assumed this would involve a cloud climb. The RAFGSA gliders had been fitted with artificial horizons, but my father was entirely proficient on his Turn and Slip and I practised hard to become the same. I was rewarded on 10 June, 1966, when the clouds built up around Lasham and I reached 15,000ft to claim Gold height. The rest of the season was spent crewing for my father in the UK and Italian Nationals, completing my first 300km triangle and my longest flight to date of 420km.

1967 was my last year at Oxford, which meant I actually had to do some work for the final exams in June. However, when the forecast for 11 May predicted widespread thunderstorms across central Southern England the temptation proved too much and I rushed to Lasham with Tony Smallwood, who was then working as a power instructor at CSE Kidlington. The day started blue, hot and hazy, with a light southerly breeze. David Darbyshire, a charming schoolmaster, towed me off behind a Lasham Auster at 2.15pm, and I released over the airfield at 1,800ft. My plan was to fly northwards in search of a high climb and then land at Booker, near my parents' home. Tony agreed to drive across with the trailer.

Aided by thermals to 4,000ft I soon found myself north of Newbury, in sight of the

first solitary cloud above Didcot. There was far less controlled airspace then (and gliders were allowed to cross airways in VMC) and I gaily entered the chimney-shaped cloud above the power station. On emerging near the top at 11,000ft I was confronted by the most tremendous sight: to the north over the Cotswolds lay a continuous line of cu-nims stretching east/west as far as I could see like an enormous girdle. The colours ranged from indigo at the base, with an orange layer above and capped by dazzling white tops that were billowing up into the stratosphere. Full of excitement I headed for the largest one north-west of Oxford.

When I arrived just below cloudbase at 6,000ft the light had a curious green quality, rather like a weed-filled aquarium. By good luck I flew into a wide area of strong lift almost immediately and gleefully circled up into the murk above. The air was remarkably smooth and as I rapidly climbed through 13,000ft I put on my oxygen mask and the light rain turned to hail. However, at 16,000ft this changed to snow, which made life in the

cockpit much quieter, and even this petered out at 20,000ft, whilst the variometers remained pegged on their stops.

It had almost seemed too easy when, without warning, at 23,000ft there was a colossal explosion accompanied by a violent electric shock. Simultaneously a ball of bright yellow light appeared on the top of the starboard wingtip.

This all happened in a microsecond, the only lasting evidence of its occurrence being a wisp of smoke from the valve radio set on the panel (which had clearly expired), the strong smell of superheated grease

from the mainpins, and a somewhat shaken pilot.

As the controls still seemed to be working my first instinct was to continue climbing, but further reflection led me to seek clear air and take stock. Harry Cook's ingenious compass had regained its composure and I soon burst out southwards into a brilliant blue sky.

The view from this height was even more spectacular than earlier. Although the rear portion of the canopy had frosted over, the front remained clear. To the south the horizontal visibility seemed infinite and, whilst the colours of the earth far

IT HAD SEEMED **ALMOST TOO EASY** WHEN, WITHOUT **WARNING, AT 23,000FT THERE WAS A COLOSSAL EXPLOSION** ACCOMPANIED BY A VIOLENT **ELECTRIC SHOCK. SIMULTANEOUSLY** A BALL OF BRIGHT YELLOW LIGHT APPEARED ON THE TOP OF THE STARBOARD WINGTIP



(Above) The Wills' home, a Kit Nicholson-designed house bearing a resemblance to the Dunstable clubhouse designed by the same architect

(Top) The Dart 17R shared by Philip and Justin Wills, pictured near Booker

(Far left) Justin in the Dart, spring 1966

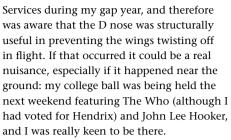


(Above) Dart 17R with Kitty Wills' colour scheme

(Below) Justin, Kitty and Philip Wills with the Dart - Rieti 1966 thought I could discern the coast 70 miles away, basking under a clear sky.

The north provided a complete contrast, with my cloud towering far above me to an anvil that was just beginning to form. I appeared to be only two-thirds of the way up and noted with satisfaction that it appeared to be significantly higher than its neighbours. However, thoughts of further heroism were dashed by the sight through the DV panels along the wings: there were bits of plywood sticking up from both the top and bottom surfaces of the D nose which had apparently burst due to the sudden heating of the air within.

I had worked temporarily for the marvellous Ken Fripp at Southdown Aero



So I decided to experiment; having checked my straps and parachute etc. I increased speed to 85kts (quite fast in a Dart) and then opened the airbrakes. Nothing fell off, which I regarded as somewhat reassuring. I then closed the airbrakes and flew at less than 50kts back to Booker, which seemed to take ages, and landed at 5.45pm only using the brakes during the touchdown.

Tony was awaiting me, and as we derigged we discovered a 2-inch diameter circle of burnt plywood on top of the starboard wing three feet in from the tip. In the centre of this circle was a neat blackened hole leading down to the end of the aluminium sandwich mainspar. There was an identical hole on the port wing, but on the lower surface.

It was perhaps fortunate that the Dart was one of the first gliders built with all its control circuits bonded. This, together with the rubber handgrip on the stick and my rubber soled shoes must have considerably reduced the strength of the electric shock I received. We also noted that none of the damage to the D nose had fractured the leading edge (which I had been unable to see as it was covered in ice) but, as the barograph trace had gone right to the top of the 7km chart, it was just as well I broke off the climb when I did.

We then drove to my parents' house where my father had just returned from his day's work in the City. Given that he had entered the Nationals starting in 10 days time, both he and my mother took the news of the damaged glider extraordinarily well and actually appeared more relieved that I was still intact.

And it all ended happily: my Diamond height claim was accepted; Ron Cousins from the Kent club generously lent my father his Dart wings for the Nationals; Cinders did go to the ball and Keith Moon was suitably outrageous; I managed to obtain a respectable degree; Slingsbys found the spar had suffered no serious damage and repaired the glider within six weeks, in time for me to enter my first regionals, which I won.

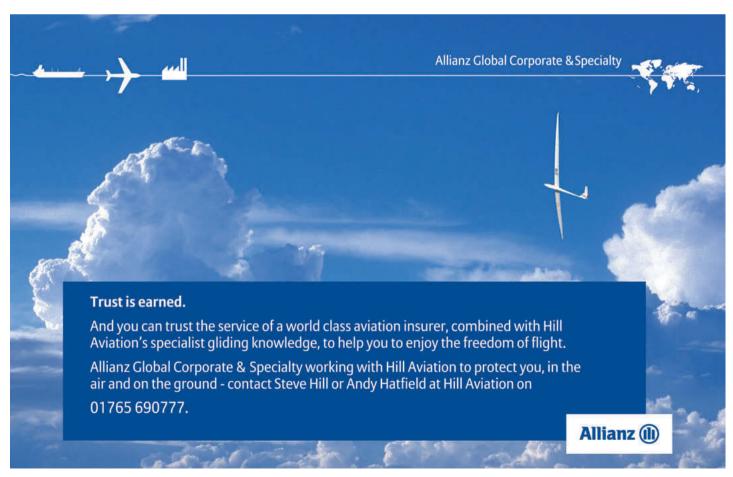
Happy days.





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This page, clockwise from left:
Taken on an April morning during a rapid
500km flight, looking west along Loch Tay
(John Williams)

Brian Du Rieu's newly acquired LS10st, pictured at the 2010 Australian Nationals, Waikerie, South Australia (Brian Du Rieu)

Facing page, clockwise from top:
Soaring a Janus high in the Chilean Andes
with a distant view of Mount Aconcagua,
the highest mountain in the Southern
Hemisphere, on the horizon over the
Argentina border
(Dave Postlethwaite)

Stunning evidence that the Lasham Evening Group is now in full swing (Chris Sterritt)

The rock formation of Mallos de Riglos, famous amongst rock climbers, and the Gallego river in the foothills of the Pyrenees, taken by Mike Greenwood on a flight with Clive Crocker in Duo Discus 494 during the Midland GC expedition to Santa Cilia de Jaca in February

Aerotowing out of Santa Cilia de Jaca on a wet afternoon during the same Midland GC expedition (Mike Greenwood)

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PLANNING A BADGE OR RECORD CLAIM?

FAI Badges Officer
Basil Fairston reports
on recent changes
to the Sporting
Code that you need
to know for badge
and record claims



SUMMARY OF CHANGES TO THE SPORTING CODE

- Cameras no longer allowed for turnpoint verification
- Declarations required for all badge/record flights except durations and height gains using simple barograph
- Can mix turnpoint types on a single flight
- Cylinders not allowed for starts and finishes
- For closed course and goal flights (eg Diamond goal) start and finish sectors have only 1km radius; other sectors are infinite
- When using a flight recorder, any logged point can be chosen as the finish
- GPS position recorders may be approved for Silver and Gold distance flights

IGNIFICANT changes to the FAI Sporting Code, section 3, Gliders, were introduced last September and have to be considered when flying for badges and records. The first part of this article will summarise the changes and is aimed at Official Observers (O/Os) and experienced pilots. The second part is a run through of the procedures for pilots new to badge flying.

Changes to the Sporting Code

After rumours that flight recorders would be required for all badge flights, the final issue of the Code has not made flight recorders

compulsory, but has banned cameras. This means that any flight that has to go round turnpoints must use a flight recorder. However, stand-alone barographs can still be used for straight distance badge flights (from release to landing) and height gain badge flights, so a club pilot flying with just a smoked barograph could complete his Silver badge before needing to have access to a flight recorder. For records, a flight recorder is always required.

Declarations are now required for all flights except duration and gain of height badge flights that use only a stand-alone barograph. This means that a declaration is required for all flights that use a flight recorder even if it is a gain of height or duration flight. This seemingly bizarre requirement will be discussed further in the section on flight recorders.

Observation zones at turnpoints continue to be either a sector or a 0.5km radius cylinder, and a 1km distance penalty is still applied when the cylinder is used. However, the cylinder is no longer allowed for start and finish points. For turnpoints, either type of observation zone may now be used and both may be used on a single flight. This is an improvement and means that the 1km distance penalty need only be applied when the glider enters the cylinder without also entering the sector.

A sector observation zone still has an infinite radius, except for closed course or goal flight start and finish sectors, which are

limited to 1km radius. The only badge flights this applies to are the Diamond goal and UK 100km diploma, which must be flown as triangle or out-and-return flights and are therefore both a closed course and a goal flight. Silver, Gold and Diamond distances are simple distance flights even if they return to the home airfield and are therefore not subject to this restriction.

For flights using flight recorders, any point can now be selected post flight as the finish point. This removes an anomaly where a motorglider pilot could tactically terminate the flight by starting the motor while a pure glider pilot who failed to reach a declared finish would have the landing point taken as the finish point, even if the flight had taken him/her closer to the declared finish prior to landing out. This is a very useful facility.

For example: You are trying for your Silver distance. You select an airfield 60km from your home airfield. Both are at the same height above sea level so you decide you will take a launch to 590m (1,936ft), which means that on landing you will be within the 1 per cent rule (see next page) by 10m (33ft). At 51km along track you are down to 200m (656ft) on your home airfield QFE. There is a just adequate field below you and a good one 2km back.

Last year both options would have failed to get you Silver distance. If you landed at the good field 2km back you would only have covered 49km. If you risked the poor field below you then you would have covered 51km, but unless the field was 80m (262ft) higher than your home airfield your height loss on landing would be more than 1 per cent of the flight distance.

This year you can select (post flight) a logged point when you were 51km along track and 200m (656ft) above your home field and you have a 51km flight distance with a 390m (1,280ft) height loss and you have your Silver distance. You can then land in the good field 2km back.

GPS position recorders

The latest edition of the Code introduces the idea of GPS position recorders. These are non-approved, non-secure recorders like, for instance, the track log facility of a Garmin, and the IGC proposes to accept them for Silver

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and Gold badge when used in conjunction with a stand-alone flight barograph. However, it goes on to say that all such equipment must be approved by the National Aero Club, which must propose rules which will make its use virtually as secure as an IGC-approved flight recorder. This includes download software which will put a security code on the end of the file that will enable post-download changes to be detected, and procedures which will ensure the flight is genuine. This could mean sealing the recorder in a box to prevent in-flight access and comparing the GPS height trace with the barograph height trace as a minimum.

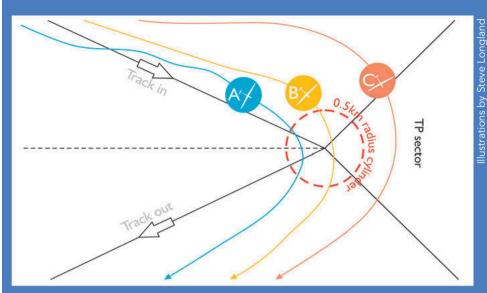
I have doubts that a Garmin sealed in a box could ever be secure enough. However, a GPS position recorder consisting of a standard GPS position recorder chip, with firmware and software modified by a glider instrument manufacturer, has been offered for approval. I can see a possibility of this being approved and marketed at less than £100, so as long as the second-hand prices of Winter barographs don't rocket, this could be an economical possibility for badges up to Gold distance.

A word about flight recorders

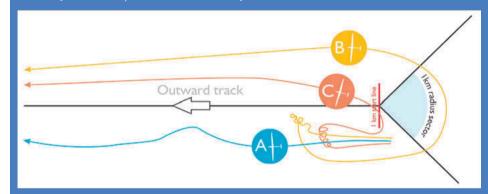
This section is to help pilots and O/Os understand the security issues with IGC approved flight recorders, which should help explain the reason for the current procedures, and also why the IGC has now asked for a declaration for all flights that use flight recorders.

When you start your flight recorder it searches for satellites and establishes its position and the time and date. It then starts to record information. It begins with its make and serial number followed by the date, accuracy of fixes, pilot and glider details if stored, and a load of technical information about the logger (GPS engine, software version etc). Next come the C records, which contain any task in the flight recorder. They start with the date and time of the declaration (which is either the switch-on time for a task already on the recorder or the actual time if a new task is put in) followed by the turnpoints with their lat and long and optionally a turnpoint name.

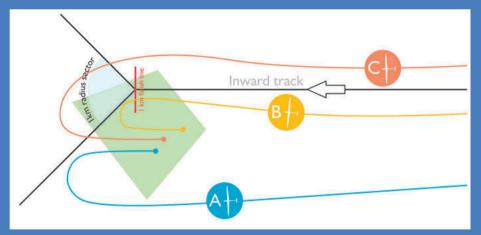
Then come the B records which are the most numerous. Each B record gives the



Rounding a turnpoint: Pilot A just makes it into the 0.5km radius cylinder and gets a 1km distance penalty at this turnpoint. Pilot B logs points in the cylinder and the sector. Pilot C makes a wide sweep round the turnpoint. There is no limit to the depth of the sector. If you need to go 20km beyond the turnpoint to avoid a shower you are free to do so



Making a start: Pilot A gets towed about 4km down track and starts from the point of release. Let's hope that the task is at least 4km longer than required and not a Diamond goal or UK 100km diploma. Pilot B releases, climbs in lift and then makes a start from the sector. Since he wasn't within 1km of the start point he also can't claim a Diamond goal or UK 100km diploma. Pilot C releases, climbs and makes a start by crossing the 1km long start line. He can claim anything if he completes the task



Finishing: A diamond-shaped airfield with the official BGA finish point on the north side (centre of hangars, signal square etc). Pilot A lands at the airfield without crossing the finish line of entering the finish sector. He therefore can't claim a goal or closed circuit flight. He can choose any point on his circuit rather than his landing position as his finish if it helps with the 1% rule. Pilot B crosses the finish line but doesn't enter the sector. The point he crosses the line is his finish position and height for a goal or closed circuit flight. Pilot C enters the sector within 1km of the finish point. Any logged point within the 1km radius sector can be his finish point for a goal or closed circuit flight. If the wind was in the other direction then it would be difficult to land straight ahead and cross the finish line or enter the sector. This might be a case for using a non-BGA point on the runway threshold as the start/finish point, but don't forget to specify the lat and long in the declaration. If pilots B and C are on distance flights then they can choose any logged point as their finish point

THE 1 PER CENT RULE 4.4.3 Limits to the loss of height

- For distance flights of more than 100km, where the loss of height exceeds 1,000m (3,280ft), a height penalty equal to 100 times the excess over 1,000m loss of height shall be subtracted from the length of the course to give the official distance
- For distance flights of 100km or less, a loss of height exceeding 1 per cent of the length of the course will invalidate the soaring performance
- For speed and duration flights, a loss of height exceeding 1,000m will invalidate the soaring performance.

So, for a Silver distance of 50km the maximum height loss is 500m (1,640ft). For flights over 100km it is 1,000m. The height loss is between start and finish points.

If you are flying a one-way flight with only a barograph, your height loss is from release to landing. However, with a flight recorder you can start at any height as long as you finish not more than 1,000m lower, so on a wave task it might well be sensible to start at 4,000m (13,123ft) and finish at 3,001m (9,846ft).



There are a few other types of record which we won't consider here.

The downloaded IGC file is an ordinary text file and can be loaded into any text editor (Wordpad, Notepad, Word for Windows) and edited. However, when the file is downloaded the flight recorder calculates a security code.

To imagine how the security code works, suppose that the flight recorder allocates a number to each character in the file (say 1 for A, 2 for B etc) and adds up the total value for the file. It then encrypts this using similar technology to that used by banks sending data over the internet and records this very long number as the G record at the end of the file.

The manufacturer provides a free validation program which can check the file has not been altered. If you alter even a single character on your text editor program it will fail the validation program. Note that it only checks the file as far as the G record. Modern viewing programs like SeeYou allow you to put a new task into the file, but they save it at the end of the file after the G record so they don't affect the security check. Older programs may save the file with the new task before the G record, thus making the file fail security checks.

So, there we have a secure flight recorder. If the IGC file passes the security check we can be very sure that the flight recorder did the flight shown on the date and at the times shown. We are slightly less certain that it was in the glider and with the pilot who is claiming the flight. The IGC rules in the approval for each flight recorder generally say that either the flight recorder should be sealed in the glider and removed by an O/O after the flight or that the recorder should be seen to be in the glider and running by an O/O before take-off.

In the first case, the O/O can at least be sure that the recorder was in the correct glider, but not necessarily with the correct pilot. In the second case, the identity of the glider and pilot are both certain. In practice, in a club environment, it is more common for an O/O to be approached by a pilot after the flight with a flight recorder (or even a disk with the flight already downloaded) and to be asked to sign up the relevant parts of the badge form.

What steps should the O/O take to be reasonably certain that the flight was not someone else's selected from the club download computer? Firstly the O/O should examine the flight and note the take-off and landing times. Do the club logs show a flight by this pilot with closely corresponding times? If they are slightly out, did the club pundit take off on a 300km just before or after the pilot making the claim? Secondly, is there a valid declaration? It is a lot harder to tie in a valid declaration that has to be done before the flight with a flight trace taken off the club computer, hence the new requirement for a declaration for every flight using a flight recorder. I'm not suggesting that O/Os should take a guilty until proven innocent approach – just to take a few simple steps to ensure a genuine claim.

Let's take a look at some badge flights to see what we need to do:

Height claims with barographs

Height claims using only a barograph are now the only claims for which you don't require a declaration. Before take-off you need to get your barograph signed and sealed by an official observer. The O/O should then install it in your aircraft, out of your reach when flying. Don't forget to switch it on. After release, and especially if you release into lift, make sure you establish a low point by descending for a few seconds. After the (successful) flight the O/O should remove the barograph and add the date, pilot, glider type and ID (which can be whatever is clearly displayed on the glider ie registration or comp number) and barograph type and serial number.

Height claims with flight recorders

If you are using a flight recorder you have to make a declaration. This can be on the flight recorder or a piece of paper signed by an O/O. Obviously for a height claim you don't need to declare the turning points (since there aren't any) but date of flight, pilot, glider type and ID and flight recorder make, type and serial number are required.

One-way distance claims with barographs

These are mostly going to be Silver distances with a few Gold distances for vintage types and people with very good friends prepared to drive 300km to retrieve them. A declaration is required, but there is no need to specify the start point or finish point. In this case the only two points at which you can prove your position are the point of release (signed by the tug pilot) and the landing point (signed by one O/O or two members of the public).

One-way distance claims with flight recorders

As with barographs, a declaration is required, but it does not need to list turnpoints. The

flight can start from the point of release and finish at any logged point nominated post-flight that achieves the required distance and height loss. There is nothing to stop you from adding a start and finish point to the declaration, but there's no particular advantage.

Distance claims using turnpoints

The declaration may include up to three turnpoints and may also include a start point and a finish point, but it is quite in order to use the point of release as the start point and any logged point as the finish. Likely choices of finish point are the point of landing or a previous airborne logged point if it gives the required distance and a better situation with regard to allowed height loss. The three turnpoints can only be claimed once each or not claimed at all. They can be rounded in any order. All turnpoints should be at least 10km apart. The start and finish points may be included in the declaration as turnpoints.

Let's look at some examples. At a club near the coast, or with airspace problems in one direction, the pilot is trying for a Gold distance but not a Diamond goal. The declaration might be Start point, TP1, Start point used as turnpoint, TP3, Finish (same as the start point). TP1 and TP3 are both about 76km from the club and at least 10km apart from each other. The pilot can start at the Start point, fly to TP1 or TP3, whichever had the better weather at the time, back to the Start. to whichever of TP2 or TP3 the pilot had not already used and then back to the Finish. The distance will be 304km, though if the pilot went into the cylinder, but not the sector, at each turnpoint there would be a 1km penalty for each time that happened.

Since there are three turnpoints this could reduce the claimed distance to 301km which is still enough. The pilot could also go from the point of release, but if this was a few kilometres down track the distance could be reduced below 300km. It is therefore better to make a start at the start point or be released on the other side of the start point so that the task distance is lengthened rather than shortened.

A three turnpoint distance declaration can also be used if a Silver distance is flown as a 100km out-and-return. To maximise your chances with our unpredictable British weather, it is in order to declare Start, TP1 51km to the north and TP2 51km to the south and Finish same as start. Having taken off, you can decide which direction has the better weather and fly to that turnpoint and back. The other turnpoint doesn't have to be

used. If you can't make it back it doesn't matter since you can claim the Silver distance from your completed 51km leg. The 1 per cent rule applies to the total completed distance, so if you get halfway back you have completed 75km and the allowable height loss is 750m (2,460ft).

Goal claims

The two badge goal claims are the UK 100km diploma and the Diamond goal. Both have to be flown as a triangle or an out-and-return. The rules are therefore slightly different from above. Firstly, they are closed courses, ie the start and finish are the same point and the pilot must be controlled at the start and finish. This means that going from point of release is not acceptable. Similarly a landing 3km short is not acceptable even if the distance achieved is sufficient. The pilot must enter the finish sector or cross the finish line. For goal flights the radius of the start and finish sectors is only 1km. All other sectors have unlimited radius.

Completing the badge form

It is a good idea to print off a badge claim form from the BGA website and take it with you on the flight so you can collect landing signatures and the tug pilot's signature at the earliest opportunity. Getting the form from the website ensures you have the latest version. Your club may have been photocopying the same form since 1988!

Before you offer the form to anyone to sign, put the date, your name and glider details on it. Any O/O who signs an undated and unnamed form is writing the badge equivalent of a blank cheque and I will reject it if it arrives at the BGA like that.

Where it says "this section must be completed for all claims" you must complete the section or you can expect a rejection (it's a clue). Read the notes on the badge claim form. They are there to help you.

If, after completion of the flight, there is a technical problem, don't try to hide it but get your O/O to add a note explaining why they think the claim should still be accepted. I will often accept a claim that is within the spirit of the rules if not the letter, and will also look sympathetically on a pilot who was badly advised by an O/O (as long as the O/O is prepared to admit it!).

You can ask advice via the O/Os Yahoo group (*bgaoos@yahoogroups.co.uk*) or you can get my mobile phone number from the BGA.

EQUIPMENT

- Barograph An electronic recording barometer incorporated into a flight recorder or a stand-alone mechanical or electronic device
- Flight recorder An electronic device that has been approved by the IGC to record GPS flight data (these always include a barometer)
- GPS position recorder A
 GPS device that can record time and horizontal position.
 (none approved by the BGA yet). These will probably record GPS height, but not have a barograph included.
 They should be much cheaper than a flight recorder but when approved you will need to carry a barograph as well.

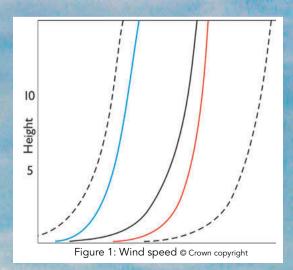


Declarations are now required for all flights except duration and gain of height badge flights that use only a stand-alone barograph (Ronald Richardson)

WHERE IT SAYS
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ALL CLAIMS" YOU
MUST COMPLETE
THE SECTION OR
YOU CAN EXPECT
A REJECTION
(IT'S A CLUE)

WIND, GUSTS AND WIND GRADIENTS

Glider pilots need to be able to meet the challenge of near surface layer winds. Alan Lapworth looks at how conditions determine the behaviour of this layer



HE layer of wind near the surface is the most critical for the glider pilot as this is the region within which the glider takes off and lands, and much depends on the skill of the pilot in meeting the wind speed changes there. This article describes some of the main features of this near surface layer and the factors governing its behaviour in different conditions.

To start with, the meaning of the surface wind speed as supplied in a weather forecast or Met Office station reading needs to be defined. This is not the wind at the surface itself (which is roughly zero), but is defined as the average (or mean) wind over a period measured at a height of 10 metres (32.8ft). This is actually quite high, probably above the height where a glider pilot will start to round out and considerably higher than the height of a glider wing at take-off, which is nearer one metre. Another important fact to note is that it is an

Wind gradient near the surface

The situation considered is that of an unobstructed inland airfield with no significant upwind obstacles or any surrounding hilly terrain, either of which can give rise to large turbulent eddies. The assumed conditions are those of an overcast day with little detectable convection.

An important question given these conditions is – how does the mean wind speed and its associated gusts vary with height? To answer this we need to know what determines how easily one layer of air slides over the layer beneath it.

There are two main factors – these are (i) the size and (ii) the strength of the turbulent eddies in the layer. If these eddies are large and fast, then a layer will not slide easily over the layer below it, and if they are small and slow it will easily slide and the air becomes 'slippery'.

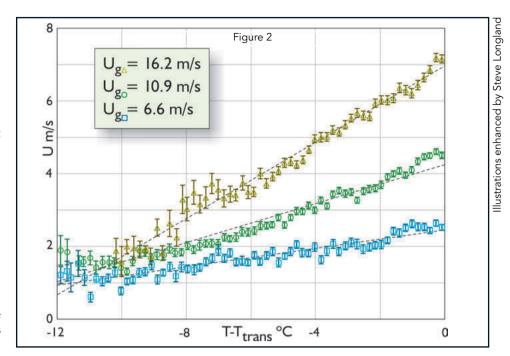
The strength of the turbulent eddies depends mainly on the wind shear near the ground and hence is related to the 10-metre wind speed, but it also depends on the 'roughness' of the surface itself. The size of the eddies is determined by two factors - proximity to the ground and the vertical temperature gradient (lapse rate). Initially we will only consider the effect of proximity to the surface. If we consider the change in eddy size in moving vertically down to the surface from above, the turbulent eddies are increasingly constrained in their size by the increasing proximity of the surface. This means that the layers of air become more 'slippery' as the surface is approached and so the vertical wind gradient increases towards the surface. In fact it is easy to show that if the turbulent eddy size is directly proportional to the height above the surface then the mean wind profile assumes a logarithmic form as follows:

$$U = 0.39U_{10} \log (z/0.03)$$

Where U is the windspeed at height z, U_{10} is the windspeed at a height of 10 metres and a short grass surface has been assumed. The greatest wind gradient (or wind shear) is at the surface itself. The form of this profile is shown in Figure 1 (black solid line).

Surface gusts

Note that although the eddy size is changing with height, the strength (ie wind speed) of the gusts is almost constant with height in the region near the surface. This is important



because the wind gradient experienced when landing is partly due to the variation in strength of the mean (average) wind with height and partly due to the changing gusts. As the eddies get smaller near the surface the rate at which the gusts change gets faster. Higher up, such changes are slower.

Because the gust strength is almost the same at 1 metre as it is at 10 metres, while the mean wind is lower, the gusts are relatively more prominent at the lower height. The dashed lines in Figure 1 show the profiles of the maximum and minimum gusts and it can be seen that gust changes may easily overwhelm the changes in the mean wind profile. This is particularly so because the force of wind experienced by a body increases as the square of the wind speed. Thus a gust causing a 50 per cent increase in wind speed more than doubles its force, and hence its effects on either lift or drag.

Above the 10-metre level, the wind gradually increases with height to a speed around 70 per cent greater at 600 metres, while the direction usually veers (turns clockwise) with height by about 30 degrees in the northern hemisphere. Over this depth, the gust strength gradually decreases with height.

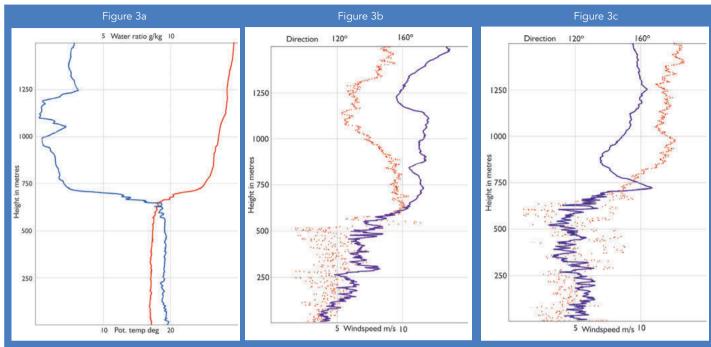
Convective conditions

How does the situation change if conditions become convective? Initially, not a lot although the mean surface wind will increase slightly and the gust strengths will also increase as they are energised by the convection. A typical mean profile is shown ?

Figure 1 (left): Vertical mean wind profiles up to a height of 15 metres. The black line shows a profile in daytime overcast conditions, with extreme gust maxima and minima shown by dashed lines. The profile in convective conditions around midday is shown in red, while a profile in stable conditions for six degrees of surface cooling is shown in blue © Crown copyright

Figure 2 (above): Values of surface wind speed for various amounts of surface cooling for three wind speed bands. Results are averaged from observations made over a sixyear period. Cooling is measured relative to the temperature at a height of 1.2 metres at two or three hours before sunset. Wind speed bands quoted are geostrophic values occurring at heights of around 600 metres © Crown copyright

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Vertical profiles of (potential) temperature (red line), humidity (blue line) (Figure 3a) and wind speed (blue line) and direction (red dots) (Figures 3b and 3c) taken by instruments suspended from a tethered balloon cable in anticyclonic conditions. The observations in Figure 3c have been made



Alan Lapworth has been gliding on and off since 1972. mainly with Oxford GC. He joined the Met Office in 1974 and retired in 2005

if large convective clouds form aloft then downdraughts can reach down to the surface and create serious wind gradient changes there.

Stable conditions near sunset

A considerable reduction in wind speed and the associated turbulence and wind gradients occurs in the evening if the surface cools and convection ceases. This generally happens most quickly if the sky is clear. These changes generally start about two to three hours before sunset. As the surface cools, it cools the lavers of air immediately above it, forming a surface inversion. These layers are then cooler than the air above them and the situation is one

of negative buoyancy in which vertical air movements are suppressed. The air is said to be stable and this is the exact opposite of the convective situation, where vertical motions grow. The vertical extent of turbulent eddies in stable air is therefore suppressed and the air throughout a depth of several hundred metres above the surface becomes more 'slippery'.

This means that the change in wind speed between the upper wind and the 10-metre wind can be accommodated over a much greater depth so that the 10-metre wind speed decreases and all the near surface wind gradients will also decrease. A typical profile is shown by the blue line in Figure 1. In fact the 10-metre wind changes directly in response to the drop in surface temperature as shown by the measurements plotted in Figure 2.

In the case given in Figure 1, which shows the effect of a six degree drop in temperature, the wind and its associated gusts at a height of one metre have halved, but the wind force experienced has dropped to a quarter of the original value.

As seen in Figure 1, the logarithmic profile near the surface also changes, becoming more linear as the air becomes increasingly 'slippery' due to the combined effects of surface and temperature stability.

The change in wind direction between the upper levels and 10 metres also becomes more pronounced as the layers become more



'slippery' and so the 10-metre wind usually backs (turns anticlockwise) by 20 or more degrees during the evening.

It should be noted that while the whole depth of the lowest few hundred metres of the atmosphere change from convective to stable very rapidly around two to three hours before sunset, the reverse does not happen after sunrise. The near surface layers do become convective at around two to three hours after sunrise, but the depth of this convective layer only increases gradually until it reaches a height of several hundred metres at around 11:00 GMT, when soaring flights become possible.

Upper inversions

As is well known, inversions often form in anticyclonic conditions at heights of several hundred metres. Sometimes these are quite low and can affect a glider during a winch launch as the 'slippery' air at the inversion can allow wind gradients to develop at altitude. Figure 3 shows measured profiles obtained using a tethered balloon. Figure 3a shows a temperature inversion and Figure 3b shows a wind profile in which the wind has increased markedly forming a shear in rising through the inversion. Notice that the direction also changes markedly at the inversion. However Figure 3c shows that a few hours later this has changed to a jet - an effect due to the earth's rotation. In general there is a simple relation between the vertical temperature gradient and the maximum wind gradient which can develop within it. This is given by:

$$\frac{\partial U}{\partial z} = 2\sqrt{\frac{g\partial T}{T\partial z}}$$

Where $\partial U/\partial z$ is the wind gradient, $\partial T/\partial z$ is the vertical temperature gradient, T is the (absolute) temperature and g is the acceleration due to gravity.

The formula is modified close to the surface where the effect of the surface in suppressing eddy size combines with the effects of temperature stability.

Conclusions

Overall, it can be seen that on an airfield in flat terrain and clear of obstacles, the mean wind gradient is always greatest next to the surface, but this is often less important to the pilot than the effect of gusts which change fastest next to the surface.

The effects of stability when the surface cools during the evening result in a considerable reduction in wind and wind gradients. At higher levels inversions can give rise to marked wind shears.



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OLD KID IN TOWN

The shiny, noisy and fast aeroplanes of the Shuttleworth Collection are about to have their thunder stolen by the acquisition of a vintage glider, reveals Debb Evans

F YOU'VE ever been to an air show, you'll know that the newest or noisiest plane is usually the one everyone's talking about at the end. Not anymore. Not in one genteel but hardcore corner of the aviation kingdom. The need for speed is not essential to entertain crowds. In fact if you've got no engine and are old and slow, you're almost certain to be a hit at Old Warden in Bedfordshire, home of the Shuttleworth Collection.

Richard Shuttleworth was the son of a wealthy family and, in the 1920s and 30s, developed a love of aviation. He started buying aircraft and had a small strip at his family estate. Richard joined the RAF, but was killed in a flying accident in 1940

and his mother founded the Shuttleworth Collection in his memory. Seventy years on and it is an aviation hall of fame, except the exhibits all fly to earn their keep.

Vintage gliding was introduced to the programme there last season with displays of an Eon Primary owned by the Collection, and Sir John Allison's Prefect. Aviation trustee Anthony Haig-Thomas says it was an obvious step forward. "Three years ago Chris Heames came to Old Warden and gave the most beautiful display of

aerobatics in a sailplane," said Anthony. "A hush fell as the talkers stopped and even those with their noses in the ice cream cornets took them out to watch. They never did that for the majority of the Old Warden displays; catapulting the English Electric Wren or a pair of Edwardians in flight came close, but never achieved the total hush of Chris in his glider."

The two vintage gliders earned similar reactions. A video taken with a mini-cam on top of the Primary has earned nearly 1,500 hits on YouTube and, buoyed by the success, Shuttleworth has now unveiled two further big steps down the gliding path. Firstly, it has acquired the Scud II and intends to display it this summer. It's a mouth-watering image: a balmy summer's afternoon, a glass of Pimm's, a picnic, and the sight of Britain's





Slingsby Kirby Kite being flown by Tony Maufe (Nick Blacow)

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oldest airworthy glider sharing the sky with the Blackburn monoplane, its powered counterpart.

Secondly, the Collection has forged a collaboration with the Vintage Glider Club. Several members have been invited to display their aircraft at Old Warden this summer and a very productive display training day was held with those pilots in mid-March. The gliders in question have been chosen for their historical significance and should fit right in with the powered aircraft.

Bruce Stephenson, secretary of the VGC, was instrumental in setting the partnership up. "An increase in gliding activity at Old Warden is an exciting opportunity for the VGC in so many ways, especially as we have struggled over the years to increase the public profile of our sport's contribution to this country's rich aviation heritage," he said. "We do not enjoy the benefits





The Scud II now owned by Shuttleworth being looked over by Willy Hackett and daughter Grace (Debb Evans)

of a dedicated gliding museum, so this new commitment by Shuttleworth represents a major step forward."

The Collection now owns a Cub to double up as a tug and banner-towing plane, but there is still more to come, according to Anthony Haig-Thomas, who has been calling on the knowledge of Shuttleworth pilots Sir John Allison, Frank Chapman and Willy Hackett; all three experienced in gliding.

"John Allison, Willy and Frank were tasked to procure five non-powered aircraft of unusual design or historical importance," said Anthony. "We already had the Primary and Willy suggested the Scud II as the oldest still airworthy glider extant, which is now at Old Warden.

"Several more are still to join us and ideas are crystallising, so now is the time to lobby any of these three for your favourite aircraft to be included."

The plan is to fly the Scud II and the Primary this season, along with the visiting VGC aircraft, and the Collection's gliding team hopes to purchase at least one other glider soon. Deliberations are a closely guarded secret, but given the nature of Old Warden I think we can expect something worth seeing.

This is surely a great step forward in promoting not only vintage gliding, but the whole sport. Hundreds of thousands

of people attend shows at Shuttleworth throughout the summer.

Shiny, noisy and fast aeroplanes have been warned, there's an old kid in town with no engine and he may just steal your thunder. Somebody pass me the Pimm's.

■ For more information on the Shuttleworth Collection air shows, go to: www.shuttleworth.org



Above: Willy Hackett flying the Primary last season (Rob Leigh)

Main pic: Graham Saw in the Slingsby Petrel (Nick Blacow)

■ The Shuttleworth gliding operation has honorary membership of the BGA. It operates under BGA Laws and Rules







Graham Saw practising in the Lunak at Booker (camera supplied by Julian Saakwa-Mante)

A POTTED HISTORY OF THE **LETOV LF-107 LUNAK** In 1947, a group of designers at the Letov factory, near Prague (which was building MiG-15s under licence), designed a concept highspeed, fully-aerobatic glider. When the prototype flew in 1948, the military decided that the Lunak must go into production to train their jet pilots for aerobatics. Some Lunaks went to civilian clubs for air displays, which included slow rolls on aerotow and even simultaneous flick rolls with a Zlin tug. One Czech woman pilot started her routine by being dropped backwards from a helicopter (Guy Westgate, take note!)

during tail-slides.

Since the Habicht, there have been the 1938 Sokol from Czechoslovakia designed for the Olympics, the Swiss WLM-1 in 1946 (I believe there is still one in flying condition), the Letov LF-107 Lunak from Czechoslovakia, which first flew in 1948, and the German 1952 Lo 100.

My interest in the Lunak started some years ago when a restored example turned up at a VGC International Rally, held that year at Fakashegi, in Hungary. None of us knew what it was, let alone had seen one, so we were intrigued to see this complex wooden glider that looked like a 1950s jet without an engine. On hearing that it originally had a VNE of 400km/h and a 12g Load Factor, I resolved that one day I would own one. As with all these toys, you can't justify them but you don't need to!

I have been competing in my Lunak since 1997 at Intermediate and Advanced level aerobatics at the various competitions organised by the British Aerobatic Association (BAeA) and have not felt at a disadvantage to the more modern machines. There are currently two Lunaks competing in the world - one based at Saltby owned by a syndicate and mine based at Booker.

On the face of it, you would think that flying the 60-year-old Lunak in competitions against modern gliders would be like competing in cross-countries in a Prefect, but that is not the case! It's 'swings and roundabouts'. The Habicht, Lunak and Lo 100 may have trouble keeping the energy going with lower L/Ds and roll rates than Swifts and Foxes, but they come into their

own with the slower or tighter manoeuvres. Loops, Stall-turns, Humpty Bumps, Cubans and inverted turns are probably easier than with a modern glider (the Fox sinks like a brick when turning inverted!), but for Hesitation Rolls, Super-slow Rolls (10 seconds for 360 degrees), Roll off top of Loop and Chinese Loops (loop with a roll centred on top of the loop, not Oriental soup) it is more demanding to maintain heading, shape and energy in the vintage gliders.

One outstanding feature of the Lunak is that it never 'bites' you when you ask it to do something daft - it tells you that you have screwed up then allows you to recover with the minimum fuss.

Considering an aerobatic aircraft is designed with minimum stability and probably no washout (as you need tip-stall for flick manoeuvres), the Lunak gives you great confidence in tackling any new figure that is thrust at you in a competition.

Aerobatic judges are only human so hopefully get bored looking at all the white gliders whizzing about at Mach 1 – with any luck a colourful wooden glider arcing through the sky gracefully will win their hearts and influence the scores. If that doesn't work, I can always drop some flap and thermal off at 32kts - try that in your Swift or Fox!

THE AEROBATIC INSTRUCTOR'S VIEW

► INCE I first flew a glider in 2001, I've had Some fantastic experiences from crosscountry competitions to soaring in wave in the Pyrenees, and rock polishing in the Black Mountains, writes Patrick Greer.

My stand-out experience though happened just north of Dunstable in a K-21.

Not a very inspiring situation, you may think. Don't get me wrong. Looking towards the Downs the scenery can be stunning. We were heading north though towards Leighton Buzzard and Milton Keynes, a much less picturesque proposition.

There is, however, something quite special about seeing familiar and otherwise mundane scenery revolve around the canopy and then stop upside down in front of you. Hanging in my straps seeing Milton Keynes from a completely new perspective was the most bizarre and perhaps most enjoyable experience I had ever had (in a glider). As the blood rushed to my head two things struck me: the first was "This is amazing" and the second was "I HAVE TO LEARN TO DO THIS MYSELF".

This was my first experience of rolling



with an advanced aerobatic instructor. Aerobatics is not everyone's cup of tea, but apart from the immense fun to be had it has a lot to offer every pilot.

If you have safely explored the outer reaches of the flight envelope, and learnt what it feels like to master control of your glider at attitudes that you don't usually encounter, you can only become a more confident and competent pilot.

It's not likely that you will find yourself upside down unexpectedly often if at all during your flying career, but if you can control and recover safely from that scenario, it really builds confidence in your ability, and in your glider.

Since that first roll, I have gone on to learn to roll gliders myself. It's not something you should try without extensive training. Last year I was given an Advanced Aerobatic Instructor rating and can now teach pilots to roll safely along with all the other manoeuvres that some gliders can perform.

Last year at the Dan Smith Competition at Dunstable I met up with a keen group of pilots from the Windrushers club at Bicester.

Since I moved to the south-west I've been a bit isolated from the aerobatic scene, so it was good to link up with keen pilots from a club within driving distance.

Since then I've travelled to Bicester regularly to help train budding aerobatic pilots and do a little coaching with the pilots who are already competing.

We hope to have least two new pilots from Bicester competing in the Sports class this year at national level, which will be a great achievement for them and for the club.

Having been successful in aerobatic competitions myself, it's great to be able to help others to become proficient at aerobatics and compete themselves.

It's the most demanding and rewarding aspect of my flying. You can imagine how challenging it is to diagnose a fault in a split second whilst inverted, with the student applying inputs at various rates to all three controls at once, and give clear instructions on how to make the glider come out pointing in the right direction (and the right way up!).

In competitions, a five degree error in the line the glider draws in the air in any axis will result in a loss of a mark, with 10 marks up for grabs for each manoeuvre. So precision is essential.

Taking repeated high tows is expensive, so quick fault diagnosis is really important.

On a national level, aerobatics is growing as a sport in the UK, and this year we should



have a team of four or five pilots who will reach the standard required to represent Great Britain in the first Advanced World Championships in Finland.

By the time this article goes to print, selection will have already started, and I hope to be able to confirm my place in the team.

The Unlimited European Championships are running at the same time and Mike Newman, our sole entry at last year's Worlds, will be aiming to improve on his top 10 placing in the Unknown section and should be pushing for a top 10 place in the overall competition.

With two new BAeA events this year, at Saltby and Bicester, the competition calendar is becoming busy.

Moves are afoot for the BGA to start running formal aerobatic courses in the future. This can only be a positive move with EASA certification looming. Watch this space!

■ Aerobatic courses are available at the following clubs: Booker, Buckminster, Lasham, London (Dunstable), Midland, Windrushers (Bicester) and Yorkshire. Aerobatic glider competition information can be found at www.aerobatics.org.uk

Three Bicester pilots took the top positions at the 2010 Dan Smith competition held in March at Dunstable. Pictured left to right: Maz Makari, Dave 'Maverick' Morgan and Sally Cooper took silver, gold and bronze respectively. Sally and Dave are two of Patrick Greer's prodigees (Patrick Greer)

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PILOT

GETTING AWAY...

It's not always easy to get away from a winch launch (or aerotow). BGA National Coach Mike Fox offers some valuable advice

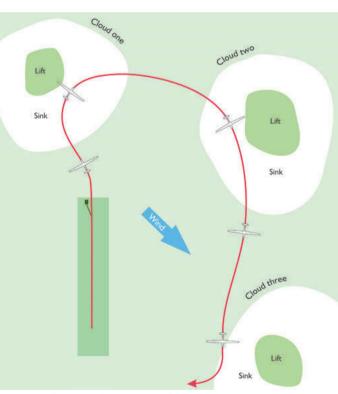


Illustration by Steve Longland

I LOVE WINCH
LAUNCHING – IT
APPEALS TO MY
FRUGAL SIDE. IT
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ACHIEVED FROM
A £6 WINCH
LAUNCH TO ME!

AVE you ever heard a club pilot land from a winch launch telling everyone that there is sink everywhere? Have you seen a pilot take three winch launches late in the afternoon on a really good day, landing soon after each launch totally fed up, pack up and drive home having had a rubbish day? After all, the sky looks fantastic – they must indeed be incompetent to fail to soar on a day like this!

The fact is that this is a very difficult thing to do, especially given some of the misconceptions around. I'll try to give

> you some ideas that I have picked up over the years. This advice concentrates mainly on winching, but can be applied to aerotowing as well.

Some key assumptions about thermals:

- As you glide towards a thermal, you should expect sink and then bumpy air. While this should be expected, it doesn't always happen.
- If you are attempting to 'get away' in mid-afternoon on a storming day with a 5,000ft cloudbase, it is somewhat likely that the thermal below a cloud is disconnected with the ground; especially if the cloud is a big mature looking one. This means that sometimes, especially from a winch launch, by the time you get below the cloud you are 4,000ft below it and there is no rising air where you are. It is often better when you are low to

look at good triggers in sunshine around the airfield, as well as the clouds. Good triggers around your airfield may be well known to some of your more experienced pilots – ask them!

• If you only look up at say 70 degrees towards the best looking bit of the cloud and you are 4,000ft away from it, you are actually (if my trig is correct) 1,456ft (or 450 metres) away from the bit you are looking at – and you have to crane your neck quite a bit to look up at 70 degrees. To look vertically upwards takes some effort, but it is essential

if you are to identify your location below the cloud. It is very common for pilots to look up (not enough) and believe they are under the dark bit of the cloud, when in fact they are still miles (ok – a quarter of one anyway) away from it!

- If you turn a bit towards the lifting wing, you are much more likely to find more lift (or less sink) than if you turn the other way. Always 'go against' any outside influences regarding wings being lifted.
- Don't turn in gusts that cause a sharp surge and instant vario readings.

It is easy to end up flying in sink due to some of the factors mentioned above. Consider the following with the diagram on the left: You take a winch launch to 1,300ft. You fly towards cloud one and encounter sink, but quite rightly you are worried about making it back to the circuit, so you are already starting to think about flying towards cloud two; it must be better than all the sink under this one! You look up (but not enough) to check that you are under the cloud - you are. You look back down, and see that the wings are not level, and you are turning gently towards cloud two. Ah well, you think, I'll try that one then. You look up as you approach the second cloud, and realise that you are now down to 950ft - all that blooming sink again! You edge towards the second cloud, but realise that you are getting towards the point of being too low for the circuit, so you half heartedly try it - look up - I'm under the cloud (!), still sink - going towards the circuit now, so better concentrate on landing...

What can be done to avoid the psychological and physical problems encountered above?

- Don't expect that on high cloudbase days, you will always find good lift under mature clouds, even if your mate is climbing well several thousand, or in some cases only a hundred or so, feet above.
- Instead, especially if you are closer to the ground than the cloudbase, search the ground for triggers.

Do you ever experience a surge of lift as you turn final to your airfield – after all that sink you encountered during the rest of the flight? Even grass airfields are often pretty well drained compared with surrounding farmland.

Other triggers may include (but are certainly not limited to) edges of lakes, woods in the afternoon, car parks, brown fields (especially with farm machinery operating), large road junctions, edges of towns, hangars, industrial estates, etc.

- Expect the sink and bumpiness that surrounds MOST thermal cores.
- If you feel a sharp surge at exactly the same time as the vario showing lift, this is probably a horizontal gust. Ignore it, fly on and wait for the gentle surge FOLLOWED by an indication of lift on the variometer (there is science behind this related to total energy, but it's not for this article).
- Look VERTICALLY up. Make sure you are under the best looking bit of the cloud. (Don't forget to keep an eye out for other gliders also looking vertically upwards.)
- Always turn against the lifting wing even just a few degrees if you are not expecting lift yet. You will have more chance of finding the core.
- If you fly through sink during your search for lift, remember where it was and don't fly through that bit of sky again unless you have to the sink is unlikely to move within a few minutes!
- Always try to search upwind first this means that you can stick with weaker lift to start with, as you drift back towards your site.
- Getting away from a winch launch is often about timing. If there is a big cloud shadow over your best triggers, or (with a lower cloudbase) no clouds that look good within range, but there should be in a few minutes don't take a launch! Push to the back of the line, or use delaying tactics (but don't tell anyone you heard that from me)!
- If the odds are stacked against you to get away from a winch launch, don't be proud; take an aerotow and not just to the stock 2,000ft. Take it to a height and position that you know you can get away from.
- Make a plan on the ground, but don't be bound by it. The sky can look very different from the end of the wire. Point the glider in the required direction once released 5kts of sink can rob you of lots of height if you are busy fiddling with the trim and putting the wheel up while flying in the opposite direction to your expected lift!
- Above all of the above, don't forget your situational awareness know your location related to the airfield and remember that if you flew through a big patch of sink to get out, you may have to fly through it on the



way back! If you can't think of anything better, try just downwind of the airfield (at a sensible distance and height of course).

I love winch launching – it appeals to my frugal side. It always feels better if a good flight was achieved from a £6 winch launch to me! However, I have a personal rule that if I can't get away from the first winch launch, I'll cut my losses and join the aerotow queue. I never take a winch launch if it's the 'day of the year' and I'm up early to try something special. At some clubs, of course, you can't join the aerotow queue, but I hope that the tips above may serve to get you away when you might not otherwise. Enjoy your flying!

Getting away from a winch launch is often about timing (Neil Stuart Lawson www.whiteplanes.com)



Mike Fox is the BGA National Coach. He flies an LS4 from Pocklington

CBSFTCBE DONE YOUR CHECKS? Can all the members of your club access your key safety documents such as club glider flight manuals, club rules and flying orders easily, securely and at their convenience? Can your CFI add new flying days to the club diary and notity all your members in one simple process and then know in advance which members

are coming along on any given flying day?

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SEE AND AVOID

CAA Safety Promotion Officer David Cockburn explains why the visual scan is the ONLY way to spot likely collision hazards

HERE we were, in the middle of a navigation exercise, watching a Cessna 172 which was supposed to give way to us getting bigger and bigger in the same place in the windscreen. My student was getting quite concerned, and I used the opportunity to reinforce the Rules of the Air – "notwithstanding the Rules pertaining to right of way, nothing absolves the pilot-incommand of his responsibility for avoiding collisions". Eventually we had approached as close as I dared, so we descended to keep him in sight and passed underneath him.

Mid-air collisions are externely rare, but their consequences are usually catastrophic, so when they do occur they tend to hit the headlines. For that reason the UK Airprox Board studies all reported near-collisions ('airproxes') with the aim of identifying particular hazards and recommending remedial action before a real collision occurs. It does not, however, concern itself overly with situations similar to those we found ourselves in – there was no danger of collison because we manoeuvred to prevent it.

Many aircraft, including most commercial flights, are kept apart from each other by procedures within controlled airspace, where air traffic controllers monitor every flight and provide instructions to separate each aircraft

> from the others (or at least from those others which they know about). In UK airspace, as over virtually all of Europe and many other countries, these procedures are supported by the controllers interpreting radar pictures, backed up by computers, 'Secondary' radar allows the aircraft itself to provide information automatically on a dedicated frequency protected from interference. In its modern form, Mode S, the pilot's intentions as programmed in to the flight management computer may be displayed.

However, as one might expect, most of the incidents the Airprox Board investigates occur outside controlled airspace. Many are circumstances similar to our experience recounted above, but as the Board concludes, neither pilot saw the other, or if they did it happened very late. Outside controlled airspace, in general the aviation community relies on the principle of "see and be seen", combined with the statistical improbability of two aircraft being in exactly the same part of the sky.

However, the actual number of aerial collisions is vastly greater than the statistics might suggest if one considers how much air covers the country, and how small an aircraft (even a Jumbo jet) is. The problem

is that aircraft spend much of their time concentrated in particular areas. The concentration is greatest around their take-off and landing fields, but there are many other places. Easily identified navigation features (and radio-navigation beacons) attract everyone. The purpose of the flight may dictate where an aircraft is more likely to meet others; gliders will attempt to fly in rising air, aerobatic pilots will seek long straight line features, and sightseeing trips will congregate around prominent features. Other flights are 'squeezed' between obstacles, whether natural such as mountains, or man-made such as restricted or controlled airspace.

The idea of "see and be seen" has limitations. There are many books on Human Factors in aviation which describe the limitations of the human eye, and those associated with the perception process. In simple terms, objects which are likely to collide with you will remain in the same relative position in your field of view, and appear very small until just before impact. Stationary objects cannot be seen unless they fall within a narrow cone of 10 degrees or so around where the eye is pointing, and every time the eye moves, it takes a second or two for it to adjust itself in its new position. Even if a pilot has medically excellent eyesight, in order to see 'threats', he or she must constantly move his or her eyes around in a series of movements called 'saccades', holding the eyes steady for a couple of seconds at a time.

Various 'scan patterns' can be adopted with the aim of maximising the chance of spotting the most dangerous 'threat'. Obviously, if a pilot can identify the most likely area in which another aircraft might appear, the scan should be concentrated in that direction, and the chances of identifying a threat can be proportionately increased to match the greater risk. Pilots are taught to look carefully in particular directions in the circuit pattern, for example.

Aircraft can be made more visible to others, although the background against which an aircraft may have to be identified varies so a colour scheme which provides adequate



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contrast is difficult to achieve. Lights, including flashing ones, can attract the eye, and many modern powered aircraft are fitted with relatively high-intensity strobe lights.

However, a problem which is ignored, or at best merely hinted at, in most Human Factors books is that of 'scan fatigue'. The concentration needed in an effective scan covering even the 'threat areas' is more than the average human being can maintain for long. As can be read in reports of the Battle of Britain, even military pilots who were expecting to be attacked 'out of the sun' did not see the enemy who shot them down. And a pilot has many other calls on his or her time. If a pilot can get help to see a potential threat, the scan can be revitalised.

And that help is available, although perhaps not usually for a soaring pilot. Using normal radio communications (requiring licences for both pilot and equipment!), Air Traffic Service Units can provide traffic information outside controlled airspace, either from their radar displays, or from information they have received from other pilots about their position and intentions. The services available in UK airspace have recently been restructured, as has the terminology. A 'Traffic Service' gives guidance to a pilot as to where to look for possible collision threats, a 'Deconfliction Service' can provide radar vectors to avoid that threat. However, there are limitations on the service which can be provided at busy times, which by definition are probably when pilots need assistance most!

Technology has not been limited to the ground environment, however, and manufacturers have produced devices to help pilots identify other aircraft in the sky. Airborne primary radar arrived during the Second World War, and derivatives can be found on airliners and business aircraft, although because these usually suffer from similar, if less restrictive, fields of view to the human eye their main function tends to be identifying weather hazards. They have disadvantages, however; for recreational aviation (the vast majority of aircraft flying outside controlled airspace) they are heavy and expensive.

As a result, simpler systems have been attempted. For example, in the 1980s a device was trialled which identified the flash from a strobe light (carried by an increasing number of light aeroplanes and helicopters) at a distance, and displayed its relative position on a simple instrument face.

However, the general carriage of secondary radar equipment has provided opportunities

for manufacturers to provide the information available to air traffic controllers direct to other pilots. Computerised Airborne Collision Avoidance Systems (ACAS) are fitted to airliners and many other aircraft and can provide not only Traffic Alerts (where to look to see a possible collision threat), but also (if both aircraft have the appropriate equipment) Resolution Alerts (what to do to avoid the collision). Less sophisticated (less expensive!) equipment can display Traffic Alerts on their own screens, or integrated into the displays carried by many of the light aircraft being produced today. Using a simple receiver, Mode S information can be displayed on any laptop computer screen.

Not every aircraft carries a transponder (secondary radar transmitter), often because of weight or power consumption. Industry and the aviation regulators are struggling to

find a simple light and lowpower transponder which will permit that, but the solution is a long way away. The advantages of receiving signals from other aircraft which a simple computer can resolve into traffic alerts have led to other devices. The FLARM system was developed for gliders, initially for use when soaring in mountainous areas, and transmits on frequencies lower than those dedicated to secondary radar.

The 'ADS-B' concept has been trialled and used in Alaska and other areas. Every aircraft so equipped transmits relevant information, including its position (normally derived from GNSS information), and depending on the sophistication of the software, computers in the receiving aircraft make similar calculations as in an ACAS system to provide traffic alerts. The current systems also use frequencies which may not be

totally protected from interference from other transmitting devices. One of the proposed improvements to Mode S transponders is to provide a similar ADS-B facility (using an "extended squitter") on the protected frequency, in addition to the information needed by the controllers.

The devices currently available can help a pilot identify where to look for a potential collision risk, and they are undoubtedly of considerable value. CONCENTRATION
NEEDED IN AN
EFFECTIVE SCAN
COVERING EVEN
THE 'THREAT
AREAS' IS MORE
THAN THE
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LONG



(Above) Can you tell if this glider is flying towards or away from you?

(Left) The actual number of aerial collisions is greater than the statistics might suggest if you consider how much air covers the country, and how small an aircraft (even a Jumbo jet) is. The problem as aircraft spend much of their time concentrated in particular areas (Mike Fox)



SAFETY COMMITTEE CHAIRMAN

The BGA is looking for a volunteer BGA Safety Committee chairman to take over from Phil King as soon as practical. The task of the BGA Safety Committee is to develop policies for the achievement of safe gliding and to influence those in gliding so as to bring about a reduction in the accident rate. The Safety Committee chairman's role is to;

- Lead the management of the necessary routine of safety committee business
- Encourage the creation and steering of projects addressing big targets and based on plausible hypotheses for achieving fewer accidents
- Promote the identification and exploitation of initiatives towards fewer accidents
- Effect the integration of safety management into other BGA processes within the BGA Operations Group

The Safety Committee meets approximately 4 times per year. Out of pocket expenses are paid by the BGA.

Please apply in confidence or seek further information from Pete Stratten pete@gliding.co.uk





However, none of them can provide total, or even a high level, of protection. They all rely on the 'threat' transmitting the necessary information in a fashion which the receiver can use. FLARM, and ADS-B currently, use different frequencies from normal transponders, and not every aircraft is fitted with strobe lights. Even if fitted, unservicabilities occur.

There are other reasons why the protection they can offer is limited. Once again, Human Factors are involved. The information received has to be identified by the pilot. He needs to learn how to use the equipment properly, and historically recreational pilots have found learning new technology difficult. A visual display inside the cockpit requires the pilot to not only look at it regularly, but recognise the potential threat. All that detracts from the time available for the visual scanning which provides the only protection against aircraft which will not appear on the display.

But technology can also reduce the time a pilot needs to keep his eyes inside the cockpit. Most of the systems incorporate an audio alarm which sounds when the device considers an aircraft has entered a potentially dangerous zone. This would appear to remove the major disadvantage of electronic systems,

and encourage their fitment and use.

Sadly, however, Human Factors still play their part. As suggested in a recent accident report, it is possible to switch off, or turn down the volume, in these devices in order to hear radio or intercommunication transmissions. Other accident reports indicate that pilots may hear, but completely ignore, an audio alarm such as an undercarriage or even a stall warning when under stress. Even then, the audio signal can only attract the pilot's attention to the display, to determine the direction of the other aircraft. The pilot then has to look in that direction, see and identify the threat, decide on suitable action and move the controls accordingly, all of which takes time, during which the hazard is approaching rapidly.

There is a final Human Factors concern in the use of electronically derived information. As our experience proves that these devices can do what they claim, our belief in their effectiveness grows. Despite knowing all their limitations, there is a natural tendency to develop a reliance on these imperfect systems, and in the case of traffic alerting devices, relax the essential scan. That must not be allowed to happen.

Technology such as FLARM can reduce the time a pilot needs to keep his eyes inside the cockpit (John Williams)

CONCLUSION
The visual

scan is still the ONLY way to spot likely collision hazards. However, that is not to say that these devices should be ignored. Far from it. Anything which can direct the main part of our scan towards the most likely threat has to be worthwhile.

Let us embrace the technology, but just as we pilots have to integrate our GNSS information into our visual navigation technique, we need to learn how to integrate the information from Traffic Alerts into our normal scan pattern effectively.

Such integration is not only possible, but essential!



Cartoon by Matt Wright, Devon & Somerset GC

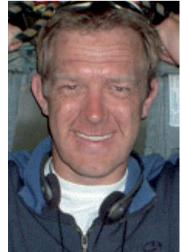
YO... OLD MAN!

■ This year the Air League Educational Trust (ALET) will very generously be sponsoring 10 more young people with a gliding scholarship. At the time of writing, the final allocation of type of award was still to be determined. However, the following 11 pilots will be awarded either a gliding scholarship or a 12-hour Flying Scholarship towards an NPPL, of which 50 are awarded annually by ALET.

- Oliver Mankowski
- Rachel Fincham
- Matthew Rourke
- Timothy Marlow
- Kieran McTaggart
- Alan Stewart
- Richard Green
- Lee Ball
- Siena Whiteside
- John Youngman
- Mike Gatfield

Later in the year we will look back at how some of these young pilots fared and hear first-hand what they achieved.





How the youthful Matt Cook (left) and Andy Perkins may look in 30 years time – with a little help from ageing software iFutureBooth – at a time when they hope to be able to look back at a sport that has adapted to ensure a healthy future

S I turned to hurl some abuse along the lines of "I'm not that old you..." I realised that the yelling was in fact directed at Matt Cook, who is well over a month my senior! This obviously filled me delight and immediately I turned my attention to encouraging such banter. Priceless entertainment ensued.

The focus on Junior Gliding should now be apparent to all across the sport. At the heart of this strategic drive are two elements: www. juniorgliding.co.uk and Junior Gliding Centres.

The latter were launched on 20 March, 2010 at the BGA conference. These clubs have a focus on Junior pilots (anyone under 26). Why bother? Well there are lots of reasons, but the highlights are: collaboration, a common branding/identity, networking, third-party link-ups and resources to allow a more structured and co-ordinated approach to gliding for young people. Third-party interaction is of particular importance as, in this litigious world, many organisations need to show their members (mostly parents in this instance) what precautions and procedures are in place before committing to participation in activities such as gliding.

So what about www. juniorgliding.co.uk? This website has many aims and ambitions and we can only achieve them with your help; especially use by Junior pilots. The primary function of this website is to act as a central hub for anything and everything related to Junior Gliding. Without Junior pilots interacting and adding to the content, this website will be irrelevant to its target audience! So please, if you are a Junior take a look at www.juniorgliding.co.uk and supply content, events, ideas etc to steve@gliding.co.uk. It is intended that the site will evolve

as a result of interaction with the Junior community it is set up to serve, so please get involved. You will note that I have mentioned the web address a couple of times now – please GO AND LOOK!

Not only do we have a new fully-

functioning website for Junior Gliding but Facebook also has a specific page – search for the group "UK Junior Gliding". Although we know of its existence, the plan is for us to leave you to develop the content and the way this is used. All I ask is that any Junior pilot takes a look. My aspiration is that this will allow the creation of an effective network of Junior pilots enabling people across the country to tell each other what is happening near them. As people move for university, career beginnings and career changes, they will be able to link in with like-minded people to continue gliding wherever they are in the UK or worldwide.

What else is new? Well, it's the beginning of a new soaring season, which means there are new scholarships awards being made. The first of these to be released are the Air League Educational Trust (ALET) awards (see left). These are for any solo glider pilot to provide experience and skills in one of three areas: cross-country, aerobatics, SLMG flying towards an NPPL.

There are a lot of people happy to assist Junior pilots in developing sport gliding in the UK into a dynamic and wildly fun sport that is appropriate and accessible to all young people. The sky is literally the limit, so if you can see a way of connecting people across the sport nationally, or a way of getting more young people interested in aviation locally, I challenge you to put in some effort into making it happen.

As for the "Old Man" comments? Well although Matt will always be old in my eyes, at 31 he is an ex-Junior Team member, top five finisher in the Nationals on several occasions, No 10 in the comps ratings and a member of the BGA Executive, which shows what can be achieved by any young ambitious pilot if you put your mind to it. The fact that we have ex-Juniors actively engaged in the running of our sport gives me hope that in another 30 years, when Matt and I will be properly getting into middle age, we will be able to look back at a sport that has adapted to ensure its survival with young people leading it into the future.

■ In the next issue information on RAeS, Caroline Trust and GAPAN awards should be available. (See p5 for RAeC Trust burseries.)









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FREE THINKING

Neil Goudie and James Ewence report on recent changes to the Competition Rules



VER the last two seasons there have been some significant changes to the Competition Rules and competition pilots should be aware of these. While it is recommended that all competition pilots read the 2010 Rules for BGA Competitions, a summary of the significant changes is provided here.

Team flying in National and Junior competitions

With the aim of encouraging individual free thinking and to ensure that individual ability is appropriately awarded, the rules this year will discourage team flying in Nationals and Junior Championships. This will be implemented through limiting the use of radio transmissions. The Comps Committee appreciate that this rule may impact on the fun element of regionals competitions, therefore this limitation does not apply to such competitions.

Limiting FLARM transmissions

The Comps Committee recognises the safety benefit of FLARM, however, the extended features that are now available with these units enable pilots to identify other thermalling gliders from some distance away and read live cockpit information such as climb rates. This not only encourages more head-down time within the cockpit, but will potentially encourage some pilots to use this information to follow other competitors. The makers of FLARM have incorporated a 'Stealth Mode' which does not diminish any of the safety features of the equipment, instead removing the additional features. This year the use of Stealth Mode for FLARM (and other similar devices) is mandatory for competitions.

World Junior Gliding Team selection

To be eligible for the Junior World Gliding Team, a pilot must have finished within the



FEATURE
COMPETITION RULE CHANGES

top 20 places in either of the last two Junior Nationals, and they now must have flown a UK senior Nationals within the last two years. It is expected that by flying within a UK senior Nationals the British Junior Team will be more experienced and prepared to fly in a high-calibre world gliding competition, as well as having the added benefit of passing this experience on to the other Junior Nationals pilots. In order to encourage suitably qualified Junior pilots to compete at a senior level, reduced Nationals entry fees have been negotiated for 2010.

Airspace penalties

The airspace penalty system has been revised to deter any airspace infringements and ensure that there is no possibility of any competitive advantage from infringements, while also making the system simpler to understand and score.

A simple penalty structure has been introduced that awards a small, but significant, 50 point penalty for a single or series of infringements of prohibited airspace of less than 200 metres horizontally or 100 feet vertically. A penalty of 500 points will be applied for a single or series of infringements simultaneously greater than 200 metres horizontally and 100 feet vertically. This will also result in day disqualification, and ultimately event disqualification, for significant infringements on subsequent days.

Start procedure

Feedback from competitors for several years has indicated that the start procedure needed to be revised due to the high workload required at this point of the flight.

The previous procedure required pilots to monitor time, position, altitude and other gliders. The director is now required to set the maximum start height approximately 1,000 feet above the local cloudbase (or other airspace restriction) likely to be experienced in the start area as the line opens, with the primary purpose being to limit the advantage that might be gained by contacting wave. Pilots are required to remain clear of cloud and in full visibility of all gliders in the same thermal when within 10km of all start and base airfield reference points. Cloud flying is not permitted prior to starting and the radius of the start volume has been reduced to 5km. In the event that pilots manage to get above the maximum start height, there is still a time period that they must remain below it before starting – this is to prevent diving through the start volume. The new procedure



In order to encourage suitably qualified Junior pilots to compete at a senior level, reduced Nationals entry fees have been negotiated for 2010 (Robert Cronk)

eliminates in most instances the requirement to monitor time and altitude as well as limiting the possibility of gliders descending into start gaggles from above.

The start method now closely mirrors that used in IGC-sanctioned international events.

Flight record logging time interval

Flight recorders must now be set to record at a maximum interval of 12 seconds for all types of glider, and not 60 seconds for pure gliders and 10 seconds for gliders with means of propulsion as previously mandated.

Drugs and anti-doping

New anti-doping regulations have been introduced for all air sports (including gliding), with changes being made to the competition entry process and applications for competition licences. For most UK glider pilots, the only impact will be some additional paperwork at BGA rated competitions and when applying for or renewing a competition licence, but it is important that competitors comply with the paperwork and familiarise themselves with the basic requirements.

Any competitor who needs to take medication that contains a banned substance should continue to do so if there is no suitable alternative and should apply for a Therapeutic Use Exemption (TUE) if they expect to be flying in international FAI-sanctioned competitions (ie normally European or world championships).

The BGA is not currently under any pressure, nor does it have any plans in the foreseeable future, to introduce testing at national or regional competitions, or to introduce out of competition testing. As a result, a TUE would only be required in a situation where testing may take place, ie in international competitions. Should this situation change, competitors will be advised at the earliest opportunity.

■ The BGA Competition and Awards Committee (the Comps Committee) is responsible to the BGA Executive for the policy and administration of all BGA-recognised competitive, record, badge and annual award flying activities in the UK, and for the selection criteria, procedures and management of British team entries to international competitions.

The committee meets periodically throughout the year and consists of a cross-section of active pilots, some who have been, or are involved in, running competitions.

One of the main duties of the committee is to review and develop the rules for BGA competitions so that competitive gliding in the UK remains on a level playing field for the following gliding season

The committee values input from competition pilots and if you want to ensure that your views on the rules are taken into account either:

 take part in a competition forum (normally run on a scrubbed day at a regionals or nationals competition), or
 use the online feedback form on the BGA website www.gliding.co.uk/bgainfo/ competitions/feedback.php

The Comps Committee (chaired by Russell Cheetham) has spent the winter reviewing such feedback in order to update the rules to ensure that they remain fair and fit for purpose.

The 2010 Rules for BGA Competitions have now been published and can be found at www.gliding.co.uk/forms/competitionrules2010.pdf

THE NEW
PROCEDURE
ELIMINATES
IN MOST
INSTANCES THE
REQUIREMENT
TO MONITOR
TIME AND
ALTITUDE

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		MEMBERSHIP								NEW PILO	2	
	Full Flying Members (Adult)	Full Flying Members (Junior)	Affiliated Members	Female Members	Temporary Members	Non- Flying Members	Winch	Aerotow Launches	Total Hours Flown	"A" Badge	Bronze	Cross- Country Endorsement
Andreas Gliding Club	14		C	С	10	С	205	85	71	С	С	C
Angus Gliding Club	13	0	0	· —	47	0	404	0	76	0	0	0
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Bath Wilts & North Dorset Gliding Club	81	10	83	2	37	29	2109	743	1790	2	0	က
Bidford Gliding Centre	99	2	0	9	316	0	0	1734	2000	ო	0	∞
Black Mountains Gliding Club	64	4	0	m	339	12	0	2674	3115	0	_	0
Booker Gliding Club	155	12	0	0	938	12	0	5611	4270	15	6	6
Borders Gliding Club	96	6	0	4	150	27	130	1846	1725	2	2	က
Bowland Forest Gliding Club	86	_	27	11	462	42	3139	0	1223	2	4	0
Bristol & Gloucestershire Gliding Club	171	19	11	23	334	48	4186	1408	4461	7	က	4
Buckminster Gliding Club	101	9	0	2	482	0	1545	1970	1680	7	_	0
Burn Gliding Club	87	7	0	2	237	6	3128	770	726	4	_	က
Cairngorm Gliding Club	36	-	0	က	81	2	174	733	910	0	0	0
Cambridge Gliding Club	175	16	20	15	971	35	7520	1790	10000	2	2	∞
Channel Gliding Club	20	4	0	_	227	0	994	0	182	-	0	0
Connel Gliding Club	∞	0	0	0	0	3	0	0	102	0	0	0
Cotswold Gliding Club	155	12	52	80	672	69	5889	296	2818	11	4	_
Dartmoor Gliding Society	47	က	0	n	211	0	2377	0	389	0	0	_
Darlton GC	57	13	20	9	231	0	3044	0	942	က	0	_
Deeside Gliding Club	59	4	0	80	487	0	0	2185	2518	4	0	m
Derby & Lancs Gliding Club	137	7	0	9	478	23	4379	0	2175	2	2	_
Devon & Somerset Gliding Club	115	9	26	13	407	31	6414	301	2102	m	2	2
Dorset Gliding Club	41	0	0	_	192	22	1303	664	675	က	0	_
Dumfries & District Gliding Club	18	-	0	2	09	3	536	0	102	0	0	0
East Sussex Gliding Club	92	12	0	14	545	0	1750	1155	1146	_	က	2
Eden Soaring	18	2	0	-	10	0	731	0	1500	_	_	_
Essex & Suffolk	118	6	0	∞	446	0	2009	29	2825	11	2	2
Essex Gliding Club	46	2	0	4	127	10	1583	663	640	0	က	0
Herefordshire Gliding Club	22	0	0	-	80	0	0	009	328	_	0	0
Highland Gliding Club	28	7	26	7	32	0	314	295	629	_	_	2
Kent Gliding Club	116	7	0	က	434	29	3915	1648	1880	9	2	∞
Lakes Gliding Club	32	က	0	2	66	14	0	463	267	0	0	0
Lasham Gliding Society	639	100	40	74	1306	149	14970	7500	2600	36	20	19
Lincolnshire Gliding Club	30	2	0	2	161	1	1521	0	234	2	_	0
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Mendip Gliding Club	99	6	0	∞	250	2	2560	190	787	4	_	0
Midland Gliding Club	135	35	0	19	465	0	6552	383	2918	∞	2	က
Needwood Forest Gliding Club	40	က	0	2	188	20	1712	0	441	0	0	0
Nene Valley Gliding Club	44	2	0	2	236	10	2033	4	784	_	2	0
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Local emergency services took part in a safety day held at Hus Bos in March, aimed at sharpening awareness and creating a club culture where everyone is focused on improving the way things are done (Rolf Tietema)

'TUG ON FIRE...'

...But it was part of an emergency response exercise held during The Gliding Centre's safety day. Tricia Pearson reports

Ambulances arrived by road and air, with crews working alongside firemen to extract an 'injured' pilot (Rolf Tietema)

COMPELLING EVIDENCE DEMONSTRATED THAT THE MORE HOURS YOU FLY THE SAFER YOU ARE ANY years ago, the CFI where I learned to glide used to hook on the cable and say – "fly nicely". By this he meant safely and with consideration for other users of the skies. To this day I still carry this exhortation in my head when reviewing "E for eventualities" before a launch.

At recent regional CFI meetings, the message being presented is "if things don't change they will stay the same". A 20-year BGA summary of accident information reveals that we average 36 crashes a year, 2.5 with fatalities and 4.3 involving a serious

injury. Analysis of these figures underscores four key areas: approach and landing, stall/spin awareness, field landings and winching.

At The Gliding Centre we decided to get the season off to a good start with a safety day. The idea behind this initiative was to sharpen up awareness and create a culture whereby everyone – instructors, tug pilots, ground crew, *ab-initios* – is focused on improving the way we do things – our club culture.

Facilitated by Chris Curtis, deputy CFI, the day started with a series of illustrated talks covering these four specific topics and incorporating a presentation by Andy Miller, BGA senior regional examiner (motorgliders), on the important topic of airspace and navigation.

Lunch was followed by a full-scale emergency response exercise involving a simulated accident on the airfield, organised in conjunction with the local emergency services. The Duty Team was suitably briefed and the fire tender DI'd, hoses rolled out,

bottles and hammers checked, etc. This in itself proved to be a useful exercise, one person later commented: "I had no idea before how far they would reach." A mocked-up hull was set alight and when an 'emergency call' announced "a tug has crashed, it's on fire up by the hangars", the tractor and fire tender combo rattled down the field looking rather more like an episode of *Dad's Army* than a rescue team. They quickly positioned themselves upwind of the fire, unrolled their hoses and attacked the flames with gusto.

A long five minutes elapsed before the real fire engine arrived, sirens blaring, and proceeded to spray copious amounts of foam until the fire was extinguished. This took a surprisingly long time. Ambulances arrived both by road and air and, working alongside the firemen, extracted the unfortunate pilot and passenger.

We are especially grateful to Sgt Darren Burton of the Leicester Police who gave us tremendous support in planning the exercise and provided a running commentary throughout.

Rounding off the day was an illuminating talk on Threat and Error Management by Capt Steve Oddy from the CAA and, to close, a spirited presentation from the charismatic Dr Steve Jarvis from Cranfield University's Faculty of Human Factors. Some gliding myths about the safety margins of that first solo were challenged and compelling evidence demonstrated that the more hours you fly the safer you are. Our thanks to both for giving us pause for thought.

Reactions to the day were positive, from club members and visitors alike – now all we need to do is follow up by adopting some necessary changes in our thinking and practices to always "fly nicely".

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■ Cambridge celebrated the 60th anniversary of its oldest aircraft with a flight by the pilot who first flew her in Cambridge. University Gliding Club Chief Engineer Ted Warner flew the distinctive blue glider with CFI John Free on the day she was delivered in 1950 and immediately christened her Bluebell. On 29 April, Ted, now 93, was at the controls again to take Bluebell aloft as part of her birthday celebrations.

Bluebell is officially a Slingsby type T-21b, built at

Bluebell is officially a Slingsby type T-21b, built at Kirbymoorside inYorkshire. Thousands of people have had their first taste of flying in her open cockpit. She's now semi-retired, and today's young pilots are trained using a new generation of sleek, white glass-fibre gliders, none of which have names.

However, in warm weather Bluebell is still routinely flown. In her 60 year life, she's made over 72,000 flights, an average of three flights per day, and clocked up over 10,000 hours in the air.

flights per day, and clocked up over 10,000 hours in the air.

Ted Warner, who has flown and instructed in her many times since that day in 1950, said "It's always a joy to fly Bluebell. I'm happy to see that the latest generation of pilots are just as fond of her as I am, and are taking such good care of her."

Club chairman Richard Brickwood said "Ted was was our

Club chairman Richard Brickwood said "Ted was was our CFI for many years, and Bluebell was the main training aircraft; together they were the mainstay of this club for over two decades. We owe them both a huge debt of gratitude."

Andrew Watson (Photo by Colin Hinson)





Our thanks to all the photographers and to our *Club News* contributors for sending these in. If you'd like to submit your previously-unpublished photographs for possible inclusion somewhere in *S&G*, send them to *editor@sailplaneandgliding.co.uk*







This page, clockwise from top: Somewhere over the rainbow - taken during a Nottingham/Oxford/Cambridge uni expedition to Portmoak in March (Philip Scott)

Devon & Somerset's Richard Harris (left) and Mike Robinson practising winch rope splicing on a rainy day (Cheryl Smith)

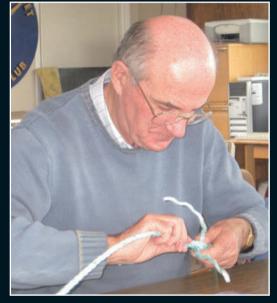
Members of the Gedling Scout Group enjoying a day at Buckminster, which included flights in a K-21 (Chris Hayball)

Facing page, clockwise from centre left: Up Slack Doodle! Molly (a cross between a Golden Retriever and Poodle) looks at home in Lisa Humphries' new glider, a 1978 ASW-20L G-LYSA, at Devon & Somerset (Lisa Humphries)

This Red Kite was photographed in February from the back seat of Black Mountain's K-21 at 3,000ft. "It hung around us for around 10 minutes and then performed a very aggressive pass at us missing us by about 6ft. I have been told that at this time of year they are very territorial." (Robbie Robertson)

"Didn't you know they made a two-seater K-6?" Christopher (3), front, and Lewis (5) Higgs show club member Rick Wiles how it's done at Dartmoor Gliding Society's Open Day in April (Martin Cropper)

Burn's Aladdin pantomime cast (left to right) are: Keith Springate (Widow Twanky), Heather Ellis (Aladdin), Charlotte Kitchen (the Princess), Andy Kitchen (the King), and John Stirk (the Evil Banker) - note he has Aladdin's Flying Account in his hand! (Pat Stirk)







JUNE/JULY 10

VOL61 NO3

CLUB NEWS

ANGLIA (WATTISHAM) WWW.ANGLIAGLIDINGCLUB.ORG.UK 520739N 0005722E

AS the winter finally subsides, our friends from Ridgewell are heading to their home airfield after co-operative flying. Unfortunately the good weather took a little too long to arrive this year and severely disrupted a weeklong ab-initio course over Easter. In order to improve student progression and reduce the time taken to go solo, we plan to start running intensive training at weekends alongside our usual club flying. This should particularly benefit our military members who continue to be regularly posted abroad. Finally, with the longer days now upon us we're preparing to re-start our Friday-evening flying for corporate groups.

Andy Smith

BANBURY (AQUILA) WWW.BANBURYGLIDING.COM 520435N 00118784W

THERE has been lots of activity and investment this year with a large new clubhouse at Hinton and a new launch point vehicle. The new clubhouse will allow us to have fantastic briefing and training rooms plus a comfortable members' lounge. Internal refurbishment should be completed by the end of May, just in time for the inter-club league. Thanks go to all who have helped, especially Rob Cronk, Chris Berry, Andy Preston and Laurie Clarke. Our new coach is also currently being refitted. There's been sad news for the club too with the death of member Norman Mills. We hosted a 'Norman Mills Memorial Flying Day' in April as a fitting send off.

Martin Gould

BANNERDOWN (RAF KEEVIL) WWW.BANNERDOWN.CO.UK 511858N 0020631W

WE'VE been busy and all our club aircraft are now fitted with FLARM with many private owners following suit. Planning is under way for Bannerdown GC's 50th Anniversary bash in June this year, details of which can be found on our club website. We're also making preparations for the Interservices regional competition at Keevil after the great success last year with many civilians joining in. Our Expedition proved popular this year with 14 members travelling to Portmoak, although the weather defeated us for several days. Well done Andy Smith who managed his five hours Silver duration and his Silver height in wave to 10,000ft over Loch Leven. Congratulations also go to Brian on completing his Bronze.

Arran Armstrong

BICESTER (WINDRUSHERS) WWW.WINDRUSHERS.ORG.UK 515458N 0010756W

THE start of the season has been very busy, particularly at the aerotow launch point, with many members practising for various aerobatic competitions. Congratulations to the BATS (Bicester Aerobatic Team) for swooping 1st, 2nd and 3rd for the Dan Smith Trophy. Our first rated aerobatic competition, the Bicester Open, is on 6-8 May. At the end of May we host the UK National Vintage Glider Rally, and on 29 May, a huge RAFGSA re-union party – all welcome! Our Regionals entry list is now well over 50, and we look forward to seeing many new faces this year in July.

Mike Pettican

BLACK MOUNTAINS (TALGARTH) WWW.BLACKMOUNTAINSGLIDING.CO.UK 515848N 0031215W

AT the AGM our directors were able to report a good 2009 with turnover, profit, launches, hours and days flown all up on 2008. However, the average length of flight is slightly down to only 1 hour 6 minutes. We have seen frequent wave over what has been a very good winter and during nine consecutive flying days in late February we had good east wave on seven of them. The club fleet has been well utilised when the cold weather made rigging private gliders a bit tedious. Bo Nilsson, our resident instructor, is back with us again and we are operating every day until the end of October.

Robbie Robertson

BOOKER (WYCOMBE AIR PARK) WWW.BOOKERGLDING.CO.UK 513642N 0004830W

BY the time this is read we will have held our first Bronze Course week, our first task week, our Annual Dinner, and our Regionals will be in progress. We have been having excellent cross-country weather. Booker is the only gliding club with "Part M" approval for its own tug maintenance operation, and we traded at a modest surplus last year. Tim Scott, current British Team Member, planned a cross-country mentoring group during the winter and it's already successfully in action. We have two full-time tuggies for the season and a new summer instructor in Richard Crockett, from Essex & Suffolk.

Roger Neal

BORDERS (MILFIELD) WWW.BORDERSGLIDING.CO.UK 553514N 0020510W

OUR AGM was on 27 March and two new members joined the committee, John Brown

and Tom Farquar. A big thank you to Geoff Forster (our outgoing safety officer) and Brian Brown (our outgoing dept chairman) for their service to the club. Brian was awarded life membership of the club as a token of all our gratitude. We've just come to the end of five more 'adult learning' flying courses, funded through the county council. Huge thanks to all the members that helped in the air and on the ground. And lastly, Steve Ray went on to complete his Silver badge, claiming the distance as part of a 100km triangle.

Rich Abercrombie

BOWLAND FOREST (CHIPPING) WWW.BFGC.CO.UK 535301N 0023714W

THE AGM was held at the end of March and saw a number of changes to the committee. Steve Robinson continues as chairman and Russ Weaver has been appointed treasurer in place of long serving lan Hamilton. John Harter stepped down after his term of office finished and two newcomers to the committee appeared in the form of Andy Huggon and Henry Stott, who has taken up the position of vice chairman. We handed out the usual crop of awards; Roger Shackleton earned two – one for a flying achievement and one for enthusiasm. Derek Littler also received an award for making the club website the technical triumph that it now is.

Russ Weaver

BRISTOL & GLOS (NYMPSFIELD) WWW.BGGC.CO.UK 514251N 0021701W

THE Marling School Boeing-sponsored Build a Plane project kicked into high gear as their workshop area was built in our tug hangar. The project was being launched soon and the year-8 pupils from Stroud will start building their plane. Thirty-two pilots have registered for the 15m Nationals in July. A series of talks attracted members to the bar, including one by John McWilliam on "where in the world to fly" and one on the new Bath Gap airspace agreement by Andy Davis and another on mentoring by Rob Thompson. We were sorry to hear of the death of former instructor Tim Bradbury, brother of Tom, at 84.

Bernard Smyth

BUCKMINSTER (SALTBY) WWW.BUCKMINSTERGC.CO.UK 524912N 04228W

WE are delighted to have been nominated as a Junior Gliding Centre and continue to encourage local youngsters to come and fly with us. In particular, Air Training Corps (Left to right) Burn CFI Dave Peter congratulates William Spittle on a first solo; Julia Rigby and Jan Nelder both went solo at Cambridge (Andy Beatty/ Robert Theil); Lauren Hibbard pictured with instructor Tim Davies after going solo at Cranwell (Kiera Evans)



cadets of No.138 1st Nottingham Squadron have delivered a package of ground school lessons to the Gedling Scout group. The Air Cadets benefit from this project work because it counts towards a BETEC in aviation studies and the D of E requirements for skills and service. Congratulations to Michael Sheehan and Andrew Rattray who have successfully completed the BI course. Stuart Black has been appointed operations manager, Berian Griffiths has become treasurer and Pete Uden has become secretary to the committee.

Stuart Black

BURN (BURN) WWW.BURNGLIDINGCLUB.CO.UK 534445N 0010504W

THE club had a very informative presentation from RAF Leeming and RAF Linton air traffic control centres. Glider pilots were encouraged to radio them if flying away from Burn, thus helping them identify gliders in the area and ensure that RAF aircraft movements were kept clear. A stand at the Goole Hobbies Fair in March generated considerable public interest. Over Easter, the pantomime Aladdin was staged by members, with Keith Springate as a stunning Widow Twanky. The new website allows trial flights to be booked online and provides up-to-date information for members. Finally, in April William Spittle had his 16th birthday and soloed shortly afterwards.

Chris Cooper

CAIRNGORM (FESHIEBRIDGE) WWW.GLIDING.ORG 570613N 0035330W

MEMBERS are beavering away getting the club ready for Mayfest, which is fully booked. We welcome back the "walking on air" flying for the disabled association. Thanks to all who helped laying the new carpet in the clubhouse, spring cleaning, and making the place homely. We have managed to fly between the snow showers when even yours truly managed a smart climb to 10,000ft, only to find the oxygen was turned off! Dates for Octoberfest are 2-17 October and bookings have started. Aerotows are only £20 to 2,000ft, the catering and bar are the best anywhere - and the wave is not bad either!

Chris Fiorentini

CAMBRIDGE (GRANSDEN LODGE) WWW.GLIDE.CO.UK 521041N 0000653W

THE season has got off to a promising start with some early significant cross-country flights taking place in March and April. Courses are in full swing and Tuesday and Thursday

evening flying is also on offer for pre and early solo pilots to consolidate their learning. Congratulations go to Jan Nelder and Julia Rigby on going solo and to Ian Vickers for re-soloing after a long break. The ever popular Gransden Regionals are running from 21-29 August – entries need to be lodged as soon as possible. See website for more details. The new club ASW 24 has arrived and should be up and running by now.

Lorna Sleigh

COTSWOLD (ASTON DOWN) WWW.COTSWOLDGLIDING.CO.UK 514228N 0020750W

NOW that Easter has passed we are operating seven days a week and holiday courses have started. We welcomed Imperial College students for a flying week: they are tough - some camped! Congratulations to Paul Mather who soloed in March. Apologies to Doug Gardner, who I accidently left off the cup winners' list in the last issue. We have formed a working group, led by David Roberts, to recommend the most appropriate structure for us as many clubs have become either limited companies or friendly societies. Finally a big welcome to Guilermo, who has just completed commercial pilot training and will be driving the winch this summer while improving his

Frank Birlison

CRANWELL (RAF CRANWELL) WWW.CRANWELLGC.CO.UK 530231N 0002936W

FIRST of all our congratulations go to Lauren Hibbard who went solo on 13 March. The weather has been kind to us and has seen quite a number of cross-country flights. With club and university members going on their annual pilgrimage to Portmoak, we look forward to the even better weather and a great new soaring season. Our thanks goes to Mick Lee and Kev Atkinson for providing some interesting after-flying talks, on safe field selection and cross-country flying techniques. We also welcome Steve Benn back after his hospitalisation and recuperation, no doubt as always ready to regain his flight status.

Zeb Zamo

CRUSADERS KINGSFIELD (CYPRUS) WWW.RAFAKROTIRI.CO.UK/CRUSADERS 3501N 03344E

IT is finally beginning to warm up, but we still need our jackets towards the end of the day. The changing weather has meant some good thermals although some pretty strong winds too. The parachute club have begun their

operations again so we are back to mostly afternoon flying. During the past couple of months we have had a few new members from Ayios Nikolaos base (welcome guys) and one of these has gone solo already congratulations to Matt Moores. Our vehicle member, Greg Marshall has gone off to Benalla, Australia (again) and our instructor Glenn Turpin has left us for the summer – hurry back, you are sadly missed.

Jo Rigby

DARLTON (DARLTON) WWW.DARLTONGLIDINGCLUB.CO.UK 531444N 0005132W

SPRING seems to have arrived with the airfield partly drying and enabling some serious flying. The members are very keen to get back in the air and, after completing annual checks under the watchful eye of our CFI, it's time to go. The recent lost flying time was not wasted, with members very active on numerous projects on the site, which is now looking quite impressive with our two hangars, aircraft maintenance bay and new clubhouse. The club will be holding two full flying weeks this year, commencing 31 May and 30 August, and offers a warm welcome to all to come and fly on the most friendly gliding site in North Nottinghamshire.

Geoff Homan

DARTMOOR (BRENTOR) WWW.DARTMOORGLIDING.CO.UK 503517N 0040850W

FROM the first cross-country of the year on 14 February to a new site height record of 15,000ft set on 7 March, this has been a period of unremitting achievement at Dartmoor. Whilst David Jesty set the new height record, Roger Green flew his Astir to 11,300ft before passing the glider on to father Barry for him to gain Silver height. Other achievers include Mike Jardine, Trevor Taylor, Dave Rippon, Guy Massey and Sandra Butterly. John Bolt, Dave Hooper and Colin Sanders have completed reweighing the club fleet. At the BGA Conference, our outgoing CFI Roger Matthews was awarded a BGA Diploma. Well done Roger.

Martin Cropper

DEESIDE (ABOYNE) WWW.DEESIDEGLIDINGCLUB.CO.UK 570430N 0025005W

AFTER a long, hard winter, the Deeside pilots have finally come out of hibernation and we are all looking forward to another good year of soaring - lenticulars have been in abundance this spring, as has the snow. We expect to be fully-manned with instructor and tug pilot to



(Left to right) Sandra Butterly after her first solo on type in **Dartmoor**'s K-8; **Dartmoor**'s Roger Matthews was awarded a BGA Diploma following his retirement as CFI after 15 years; **Dorset**'s Nick Barnes raises his glass during at trip to S Africa, where he got his Silver C reaching a height of 12,850ft amsl



commence seven-day-a-week operations from May. Mid-week flying will be available by prior arrangement or through the online "wannafly" system. Details are on our website.

James Addison

DERBY & LANCS (CAMPHILL) WWW.DLGC.ORG.UK 531818N 0014353W

WE are starting to get some flying, the last Saturday in March giving ridge and wave soaring. Congratulations to Ken Singer and Steve Day on their Gold heights, achieved at Edensoaring. Our new hi-tech flight logging system, masterminded by Maurice Bent, has gone online, linking the computer in the launch point vehicle to the office by wi-fi. If you are out of check, or out of money, Big Brother tells. We welcome new and re-joining members, in our 75th anniversary year. In May we are holding a 75th Anniversary Press Day, and Task Week starts on May 15. Our annual Vintage Week is 18-26 June.

Dave Salmon

DEVON & SOMERSET (NORTH HILL) WWW.DSGC.CO.UK 505107N 0031639W

EASTER Sunday saw Pete Startup, Simon Minson and John Pursey complete a 100km triangle, the first good cross-country day for a long time. An instructor training course held in February was very successful and, despite the snow, Matt Wright and Mark Courtney managed to climb to 8,000ft in wave. We are enjoying smooth launches with our 'borrowed' Skylaunch. Many members have been trained as winch drivers (thanks to Les Hill) and we have added rope splicing to our skills. We were sad to hear that Dr Gordon Peters, one of our founder members, had passed away in February.

Cheryl Smith

DORSET (EYRES FIELD) WWW.DORSETGLIDINGCLUB.CO.UK/DGC 504233N 0021310W

DUE to ongoing 'iffy' weather we have not managed much flying yet. We did have a good day on Easter Sunday, with the club K-8s kept busy and a cloudbase of over 4,000ft. Congratulations to Chris Woolgar who went solo on 27 March. Nick Barnes went to Bloemfontein and got his Silver reaching a height of 12,850ft and clocking over 23 hours in one week. Peter Robinson is enjoying the conditions in Minden. CofA work is in full swing in the hope of soaring to come, and we plan to start re-covering our hangar in May.

Colin Weyman

DUMFRIES & GALLOWAY (FALGUNZEON) WWW.DUMFRIESGLIDING.110MB.COM 545638N 0034424W

MARCH ended well with Iain McIver getting his Bronze and Allister McGregor well on the way. Well done to both. Bob Rodger began Basic Instructor training with the help of our CFI. The Centenary of the Girl Guides this year has resulted in us flying many Guide Leaders, who thoroughly enjoyed themselves. This has promoted the club and gliding in the area. On a sadder note our secretary, Charles Ferrier, has moved south with our thanks for all his hard work over the years. At our AGM it was decided to give John McIver a lifetime membership. We also decided to hold another flying week this year, the first week of August.

Wendy McIver

EAST SUSSEX (RINGMER) WWW.SUSSEXGLIDING.CO.UK 505423N 0000618E

THE great news from Ringmer is that we're flying again after nearly three months of being grounded by weather and waterlogging. A big effort is under way to get everyone who wasn't able to fly from Parham or Kenley current. The end of February saw us holding a Safety Day. It was well attended, with 40 members coming along to brush up on things after the long lay-off, and should help ESGC to maintain its excellent safety record. Sadly we will be losing one of the instructors whose efforts have contributed greatly to that record and we would like to thank lan Smith for everything he's done for the club over the years.

Jim Izzard

EDENSOARING (SKELLING FARM) WWW.EDENSOARING.CO.UK 544152N 0023506W

EDENSOARING has been shut for the winter, but members have been flying out of other clubs. We have a full-time instructor for the summer season, with plenty of people to train and take for trial flights. We have joined the local tourist board and are fast becoming an adventure location in Cumbria. Bookings are flooding in for visiting gliders and pilots. Booking must be done by email before you turn up, as the site has limited space for parking trailers and gliders. Congratulations to Des Pearce for winning the 2009 Enterprise Trophy with his flight from Edensoaring around the Lake District in thermals and ridge lift during a fantastic trip.

Sandy Hawkyard ARPS

ESSEX (RIDGEWELL) WWW.ESSEXGLIDING.ORG 520253N 0003330E

WE are now back at our own site after a very enjoyable time with the Anglia Gliding Club at Wattisham during the winter. Very many thanks to all for making us feel so welcome. We are converting one of our containers into a workshop, and we are hoping it's fully operational soon. It is with great sadness that we report the death of Wally Smith, one of the club's original members. Wally, who retired from gliding some years ago, was a great personality an extremely good instructor with a wry sense of humour and an immense fund of gliding stories. He will be sorely missed. We extend our sincere sympathy to all his family.

Peter Perry

ESSEX & SUFFOLK (WORMINGFORD) WWW.ESGC.CO.UK 515630N 0004723E

THE AGM gave us all a chance to hear our chairman, Graham Wright, tell us that we have set new records in the number of launches in the past year, also to list the new solo pilots and our various completion successes. John Gilbert and Rob Lockett jointly received a new trophy (thanks to Shell Oil) – a model of the Bleriot XI cross-channel pioneer aircraft in recognition of their own cross-channel exploits. The return of the K-21 from being re-gelled plus various site improvements including repairs to the track, new door to the MT hanger and such routine work as rolling the runway leave us well prepared for the coming season.

Dick Skinner

FOUR COUNTIES (RAF WITTERING) WWW.FOURCOUNTIES.CO.UK 523645N 0002835W

THE first of our Station flying days was a great success and provided the start of a thoroughly enjoyable weekend. There was much revelry with two club stalwarts achieving age-related milestones. Juniors team pilot Shaun M is holding a lecture on competition/cross-country flying with a view to encouraging newer pilots and developing those more experienced. Refurbishment is about to start on the K-18 trailer, which may well be seeing an increased workload as a result. At the time of writing, we have two expeditions out at Portmoak and Talgarth. Details will follow but initial reports from Wales are very good with lots of flying including a late evening wave flight.

Ian Dawson

(Left to right) Essex & Suffolk's Rob Lockett and John Gilbert with the Bleriot XI trophy (Colin Ebdon) Sarah Barrington after first solo at Hus Bos; London's John Sniadowski after his first solo (Paul Rackham); Nene Valley's Roger Morrisroe received a BGA Diploma and RAeC Certificate of Merit



HEREFORDSHIRE (SHOBDON) WWW.SHOBDONGLIDING.CO.UK 521429N 0025253W

WE have hosted visits by London, Booker and Surrey Hills Clubs. The weather was a bit mixed but we had some very good wave and thermal days. Some of our own members who have been hibernating are beginning to spread their wings. We presented talks on wave flying to each club during their visit, with the aim of improving their chances of achieving successful flights in our area. Plans are under way for the Shobdon airfield Open Weekend in June and also for our task week in August. A few stalwarts have continued to develop the facilities of our workshop and are making good progress with bringing the Twin Astir back on line.

Diana King

HIGHLAND (EASTERTON) WWW.HIGHGLIDE.CO.UK 573508N 0031841W

WE are still reorganising after the hangar collapse in January. Our K-21 will be offline for several months; in the interim we have hired a Puchacz from Aboyne. The hangar is a write-off and we are discussing compensation with our insurers. There have been more heavy snowfalls, but no more damage. Our AGM was held on 21 March, followed by the annual prize giving: Robert Tait won the trophy for most points on the ladder; Angie Veitch won best height gain, Mark Norton had the most meritorious flight and Roger Christie won the CFI shield. We have increased the cost of trial lesson vouchers to £65 – the first change in three years.

John Thomson

KENT (CHALLOCK) WWW.KENT-GLIDING-CLUB.CO.UK 511230N 000495E

THE AGM saw Mike Moulang hand over the reins of KGC to Dave Shearer. We thank Mike for his term in office and wish him well in his post-retirement career as one of the two part-time course instructors across the summer. Tim Barcht stood down as our mechanical plant guru, but probably will still be found with head under bonnet most weekends. We are now operating seven days a week, our course bookings look reasonable and our community flying is fully funded for the fifth year in the row. Eight members completed the Bronze exams, so all we need now is the weather. Come and join us for the Vintage Rendezvous in the last week of July.

Stefan Bort

LAKES (WALNEY) WWW.LAKESGC.CO.UK 570752N 0031549W

FLYING in wave over the Lakeland snow has been spectacular. Piles of paperwork have been completed to CofA the gliders, thanks mainly due to Jan Eldem and Geoff Bailey-Woods. Congratulations to chairman Rose Saunders on completing her Silver badge. The Lancaster students are a valuable addition to the club, lowering our average age and keeping us up to date. Sadly, we lost one of our older members with the death of Gordon Taylor, a very lively and popular octogenarian, who looked forward to his gliding all week. Club dinners will not be the same without him. Finally thanks to Kate Frost who wrote our club news so well. I wish she had continued.

John Martindale

LEEDS UNIVERSITY (POCKLINGTON) WWW.LEEDSGLIDING.CO.UK 535541N 0004751W

LEEDS University Society's year started with learning, the day before the AGM, that our host club Clevelands was to be closed. We were pleased to be offered a new home at Pocklington with Wolds Gliding Club, who have been most welcoming. Their support has provided a great atmosphere for *ab-initio* training and they are dedicated to helping new learners. We have run open days for new members in conjunction with Wolds, who have offered an opportunity for students to experience gliding without making a long-term commitment. Our efforts have attracted fewer new recruits than was hoped, but all those who have taken part have found it enjoyable.

Will Scallan

LONDON (DUNSTABLE) WWW.LONDONGLIDINGCLUB.CO.UK 515200N 0003254W

A big thank you to Chula Rupasinha, who designed and presented an excellent RT course which was so over-subscribed he did it twice. Congratulations to John Sniadowski on his first solo, and to cadet Tom Atkins, who soloed on his 16th birthday. The soaring season is off to a good start, with over 6,800km on the ladder in March. Congratulations to Mark Newland-Smith who won our Easter mini comp. We have a soaring course in May, and a task week planned for August, as well as the Regionals in July. Meanwhile our aerobatics group continues to thrive, with Wednesday evening coaching throughout the summer. Congratulations to David Morgan, winner of the Dan Smith trophy.

Andrew Sampson

MENDIP (HALESLAND) WWW.MENDIPGLIDINGCLUB.CO.UK 511544N 0024356W

WE have had a very successful recruitment drive over the Easter holiday following the launch of Mendip as a Junior Gliding Centre. We have received 14 applications for MGC scholarships and two youths taking up our new Junior Fixed Price to Solo. We also had three Silver duration flights completed over two days. Well done to Jack Tonkin, Dave Close and, finally, Terry Hatton. Let's hope Mendip members find something new to make fun of now!

Terry Hatton

MIDLAND (LONG MYND) WWW.LONGMYND.COM 523108N 0025233W

WINTER is at last over, our course season has restarted, and the club is now open seven days a week. At the end of February, about 15 of our members and the DG-505 went to Jaca and experienced flying that made the rest of us quite envious. In March we welcomed visitors from RAF Halton and Cosford and, later in the month, our regular Dutch group. They experienced a cross section of Mynd conditions; bungy, thermal and wave. They also presented us with some novel presents! (Follow the link on our Blog to the Dutch Week – all will be revealed.) We have had an aerobatics course, which we intend to develop. **Steven Gunn-Russell**

NENE VALLEY (UPWOOD)

WWW.NVGC.ORG.UK 522612N 0000836W

WE'VE had a combination of bad and good news. Our bad news was the loss of Brian Cracknell (fondly known as Dad). We have all been deeply moved by the way he faced his illness with courage and dignity. In Brian's own words read out after his funeral he said: "I've taken my last launch and gone off to get my Diamond Height". We'll miss you Brian. (See obit p68.) On the upside, our ex-CFI Romo (Roger Morrisroe) has received two coveted awards, a BGA Diploma and a RAeC Certificate of Merit – both in recognition of his outstanding dedication to the sport and in achieving 50 years as an instructor. Well done Romo, we're all very proud of you.

Kerry Mertz

NORTH WALES (LLANTYSILIO) WWW.NWGC.ORG.UK 530239N 0031315W

WHEN flying has been possible we've had some excellent flights, with some private



(Left to right) **N Wales** CFI Dave Holt receiving the President's Shield from Ken Payne (Neil Hughes); **SGU** soloists Mark Howarth (left) and 16-year-old Tom Okely, pictured with instructors Kate Byrne and Ian Dandie; **Trent Valley** CFI Dick Hannigan with French member Hugh Berdouticq after his first solo



we have already flown people who had contacted our club as a result of the BBC's Thrill Seeker publicity and have had quite a few more interested. Our replacement tractor has been stolen, costing the club £3,500 and all Ken Fixter's time working on it. At our AGM we gave a vote of thanks for many years' service to departing chairman Dave Compton and welcomed Dave Hughes to the role. Our CFI Dave Holt received the President's Trophy for all the hard work he put in on our hangar extension. Thank you Dave.

Brian Williams

OXFORD (RAF WESTON ON THE GREEN) WWW.OXFORD-GLIDING-CLUB.CO.UK 515249N 0011311W

IT'S been a quiet few months. There was some good early soaring and we were all impressed as the workshop team managed to get both K-13's out by Easter. A top team, led by Phil Pratley, has built us a magnificent new barbecue shelter in time for the start of season party. Many thanks to them. It's big enough to park the tractor under, but I've been forbidden from doing so. The party was a great success, with 75 people enjoying the evening. Finally it was good to see Claudia Hill get a great big cup at the BGA AGM, our first national award at Oxford for a long time.

Neil Swinton

PETERBOROUGH & SPALDING (CROWLAND) WWW.PSGC.CO.UK 524233N 0000834W

CONGRATULATIONS to Tony Claydon for going solo in February. Our AGM was held in May. Chairman Paul Goulding is standing down and is replaced by Murray Spittel. Our thanks go to Paul for all his hard work. This year's Open Day is set for 8 August; we'll have the BGA simulator and a flypast by the Battle of Britain Memorial Flight. We now have a new website – thanks to our cadet Connor for all his hard work in designing it and getting it online. We are all looking forward to this season and some decent flying. And, as former CFI Martin Ewer says, "have fun and be safe".

Merv Bull

PORTSMOUTH NAVAL (LEE ON SOLENT) WWW.PNGC.CO.UK 504855N 0011225W

THERE were signs of spring arriving during our Easter course week, with 16 students and a busy airfield benefitting. Our Annual Dinner Dance was enjoyed by all, thanks to Mandy and Sarah. A week later at the AGM, the chairman set out a vision for the

future and highlighted numerous positive developments in the past year. Well done to all those who received awards. Congratulations to Ben Mullins, who was sent solo on his 16th birthday after just two months of flying. Ben was granted the afternoon off school and was watched by his father and a local reporter. We now look forward to a strong programme of expeds, courses and events.

Neil Shaw

RATTLESDEN (RATTLESDEN) WWW.RATAIR.ORG.UK 521001N 0005216E

WE have had a good start to the season, with several members are working towards their Bronze, including Brent Noble and Mike Jillings who have passed their Bronze papers. Congratulations to them. Tony O'Meara has re-soloed and converted to the Junior, Darren Hatcher has soloed on aerotow and Colin Poole has re-soloed after many years, congratulations to them. At the AGM, Geoff Lynch, Geoff Avis and Lorna Willcox stood down from the committee. Humfrey Chamberlain has stood down as a director after many years dedicated service to the club. Many thanks go to them all for their service. Martin Raper, Kim Smith, Lynne Morley, Robin Lloyd and Tia Smith were welcomed on to the committee.

Helen Page

SCOTTISH GLIDING CENTRE (PORTMOAK) WWW.SCOTTISHGLIDINGCENTRE.CO.UK 561121N 0031945W

DESPITE the snow-covered airfield, some intrepid pilots still managed to achieve their personal goals during February and March. Congratulations go to Mark Howarth, Tom Okely and David Barbour – solo, Paul Wigginton –Bronze badge and cross-country, and Sally Woolrich – Gold height. At the end of March, our Walking on Air team hosted an excellent evening talk by Captain Eric Brown, who regaled an enthralled audience of more than 100 with his talk on the Struggle to Break the Sound Barrier. The evening, at Strathclyde University, finished off with a raffle and auction of aviation goodies.

Ian Easson

SHENINGTON (EDGEHILL) WWW.SHENINGTON-GLIDING.CO.UK 520507N 0012828W

WE now have our Skylaunch winch back after a complete overhaul. Thanks to Derrick Sandford who stood down after three years as chairman at our recent AGM. The meeting took place in our new clubhouse building, which is really

coming together! Now the good weather is here, we have had our first achievements. Congratulations to Clive Smith on his Silver height. Plans are under way for the Shenington Regionals in July. We are hoping to build on the great success of last year's event. As well as our courses, we have a number of clubs booked in for expeditions. If you would like to join us for a week, please give the office a call.

Bob Winters

SOUTHDOWN (PARHAM) WWW.SGC1.ORG 505532N 0002828W

FOUR perfect soaring days in February brought visitors from Lasham, Ringmer and Booker and put the smile back on the faces of the cross-country squad. Craig Lowrie flew four 300km sorties along the Downs; Darren Blackman completed his Silver, following it up with Gold distance. On the social side, Maggie Clews put on a number of events, including a very successful Christmas dinner and Awards evening. We continue to offer flying days to youth groups and to send speakers out to local societies, but we reserved the best for ourselves when Chris Foss delighted the clubhouse with an eclectic mix of science, technology, and humour on the subject of "Designing model aircraft".

Peter J Holloway

STRATFORD ON AVON (SNITTERFIELD) WWW.GBUTLER.DEMON.CO.UK 521406N 001431W

THE summer has begun well and we're open seven days a week now - many thanks to those instructors who have volunteered their time. We're beginning to pick up the pace with flying visitors on our trial lesson evenings and we're experimenting with holding some corporate events. We've got a handful of folk being put through their paces towards their BI rating and the youngsters who joined us earlier in the year are now experiencing what it's really about. We're looking at sorting out a new clubhouse roof – we try and leave maintenance work for winter, but roofing and cold and wet weather don't mix. We're also exploring opportunities to bring renewable energy onto the site.

Richard Maksymowicz

THE GLIDING CENTRE (HUS BOS) WWW.THEGLIDINGCENTRE.CO.UK 522626N 0010238W

NOT a lot of flying has been happening at The Gliding Centre as the airfield has often been water logged. I am sad to report the deaths of two well-beloved longstanding club members, (Left to right) **VOWH** award winners Steve Nash – Return Trophy for 308km O/R flight, and Jay Myrdal –awarded the Sweeny Tot for a field landing requiring a fence railway retrieve; **Yorkshire**'s Mark Hillyer is congratulated by instructor John Marsh, watched by Richard Cole, after first solo



Lou the Glue, who has been with us from day one (see obit on p69) and Cliff Jones, who lost his fight with cancer this spring. Both will be missed and remembered with affection. Our Safety Day and Start of Season buffet was extremely well received by all who attended. Don't forget to get your entries in for the Regionals and Task Week. Congratulations to Sarah Barrington aged 16 and two months, who has gone solo.

Tricia Pearson

TRENT VALLEY (KIRTON IN LINDSAY) WWW.TVGC.ORG.UK 532745N 0003436W

OUR Annual Dinner was a great success. We thank Paul Barron CBE, Chief Executive of National Air Traffic Services, who was our very entertaining guest speaker. We have recently had a change of CFI with Paul Holland retiring from his second stint. We all thank Paul for his outstanding contribution. He is replaced by Dick Hannigan, who we are sure will follow the trend of excellent CFIs at Trent Valley. On the flying front, we have had a pretty miserable winter, although some members have enjoyed trips to Portmoak. In addition to our normal Wed, Sat, Sun operational days we have a flying week scheduled to begin 31 May. Visitors welcome.

Geoff Davey

VALE OF THE WHITE HORSE (SANDHILL FARM) WWW.SWINDONGLIDING.CO.UK 513614N 0014030W

THE season is looking promising. Already members have been flying cross-country flights of several hours with no landouts. Our club skittles dinner and awards presentation was a great success. Our annual awards were won by Steve Nash – Return Trophy; Peter Scheiwiller – Glass Trophy (first 300km), Paul Graham and Peter Berridge – Whitbread Cup (best flight in a club aircraft); Peter Berridge – Clubman of the Year; and Paul Kellett – Cadet Cup. The booby prize for most difficult retrieve went to Jay Myrdal. Friday flying has started and, forever the optimist, I am looking forward to a great year! Don't forget! Hangar party and hog roast – 24 July.

Jay Myrdal

WELLAND (LYVEDEN) WWW.WELLANDGC.CO.UK 522758N 0003430W

IN October, we flew 24 people as part of the Festival of Learning. Thirteen of them subsequently scored higher questionnaire scores on the 'I'm feeling better about myself' rating. These folks had never flown in a glider before, but all enjoyed themselves very much. In November, trophies were presented to Richard Lovegrove, Ian Cogin, Alex Strachnan, Strzeb and Mark Rushton. Dick Short and Paul Porter were presented with the dreaded Faux Pas. We purchased a tow-out tractor, accessorised with a drafty cab and now our engineers are even busier replacing the winch engine. As the season begins, some are planning trips to Feshiebridge as we are having our first soaring flights.

John Strzebrakowski

WOLDS (POCKLINGTON) WWW.WOLDS-GLIDING.ORG 535541N 0004751W

THE club annual dinner and awards evening was well attended and a great success. We looked forward to welcoming visiting pilots, as well as many of our own members, to our soaring weekend on 24-25 April, with Pete Harvey and John Williams attending to advise, explain and hopefully demonstrate their techniques. Congratulations to three of our cadet members who were the Caroline Trust Cadet of the Year winners and were presented with their awards at the BGA Conference in March. Congratulations also to the newly-solo Dr Michael Martin-Smith. Don't forget to sign up for the 25th Two-Seater Competition at WGC, 22-29 August. Preparations are already under way!

Evelyn Dell

WREKIN (RAF COSFORD) WWW.WREKINGLIDINGCLUB.CO.UK 523824N 0021820W

DESPITE the effects of global warming we have had a busy winter, with Mike Gagg seeing to the annuals on our fleet of gliders and our MT fleet having a make-over to meet health and safety requirements. Congratulations to Lindsey Goetz, Dave Tudor and Karen Turner on going solo. Our winter exped to the Mynd was plagued by easterly winds, but Nigel Lassiter managed to gain his Silver height. Karen Turner converted to the K-23 and got a Bronze leg at the same time. The winter has seen some good flying with wave and thermal keeping us interested. The treasurer is smiling, so the club is in the black and excited for summer.

Nick Lewinton

WYVERN (UPAVON) WWW.WYVERNGLIDINGCLUB.CO.UK 511712N 0014700W

WYVERN has completed the first weeklong course for Army personnel and a new batch of 10 *ab-initio* students has joined us

under the QinetiQ Graduate Airmanship scheme. Following their attendance on a few club weekends, the QinetiQ members completed a dedicated course and, the following weekend, the first was sent solo. Congratulations to Tristan Jones. Annual maintenance and inspections on several gliders are complete and HYT is being modified with hand-operated rudder controls to enable us to support gliding training for handicapped persons, particularly wounded Service personnel under the "Battle Back" Tri-Service initiative, which uses adventure training and sport in the aftercare of the injured to aid their rehabilitation and return to an active life.

Andy Gibson

YORK (RUFFORTH) WWW.YORKGLIDINGCENTRE.CO.UK 5357100N 00111332W

OUR scheme to attract new members involves a one-off payment of £1,400 to solo, which provides a mix of experience in motorgliders, aerotow and winch. The deal includes all flights and one year's membership, with no hidden costs. Alan Wrigley is a new examiner of Basic Instructors and Pam Shuttleworth introduces visitors to our sport as a Basic Instructor. Very heavy rain has soaked our grass areas, but has not stopped our flying, as thankfully we have a tarmac north-south main runway.

Chris Brayne

YORKSHIRE (SUTTON BANK) WWW.YGC.CO.UK 541338N 0011249W

OUR annual dinner dance in Thirsk gave everyone time to reflect on last year's performances and, in one case, a lifetime of achievement was being celebrated. Mike Wood was awarded a BGA diploma for his contributions to gliding. At 79 he still shows as much enthusiasm as he did in his youth. Congratulations Mike! Other awards went to Up and Coming Pilot Ross Cleave, Andy Wright, Martyn Johnson, Club Ladder winner Phil Lazenby, David Ryall, David Latimer, Richie Toon, Sam St. Pierre and John Ellis. Congratulations to our first solo of 2010, Mark Hillyer, and to John Ellis for the first 300km of the year, in March.

John Marsh

S&G's thanks as usual to Debb Evans for editing this issue's Club News – Susan Newby, editor



> CLUB FOCUS

SURREY HILLS

AT A GLANCE

Membership:

Full: £240pa Junior/Student: £35pa

Launch type: Winch: £7

Club fleet:

2 x Grob 103, Slingsby Sport Vega, 2 x K-8, T-21

Private gliders:

6

Instructors/members: 9/70

Types of lift:

Thermal and ridge (for the brave)

Operates:

Monday - Friday all year (not weekends)

Contact:

0208 763 0091 www.southlondongliding. co.uk

Long and Lat:

511820N 0000537W

Field size:

120 acres

URREY HILLS GC flies from the historic RAF Kenley Airfield. Created in 1917 by the acquisition of common land under wartime laws, it remained an RAF base, enlarged in 1939 prior to the outbreak of war. Its all-weather runways completed in spring 1940, Kenley became famous in the Battle of Britain as a key fighter base in the defence of London. It was recently described by English Heritage as "the most complete fighter airfield associated with the Battle of Britain to have survived" and is now a designated conservation area. The fighters left in 1944 and RAF gliding, which started in 1955, continues with 615 VGS providing gliding for Air Cadets and RAF CCF units from London and the South-East.

SHGC was started in 1985 by some of 615's pilots, and established in its present form in 1993. Sharing the airfield with 615 puts the club in the unenviable position of being a weekday-only club – providing a serious membership challenge. Located under the London TMA at 566ft, the 2,500ft amsl ceiling makes cross-country tasks challenging, although members have flown out-and-returns to Challock

and Lasham. Nevertheless, with two hard runways and extensive grass landing areas, Kenley is an excellent training site and the only gliding site within the M25.

The club has seen substantial modernisation of its fleet with the purchase of two Grob G103s to replace ageing K-7s and a Slingsby Sport Vega, retaining two K-8s and a T-21 (which we believe to be the oldest in club ownership still flying). In 2009 we acquired a reengineered winch from Skylaunch with the help of the Philip Wills Trust (see p12, *S&G* Oct/Nov 2009). Our hangar was recovered in 2008 and we are in the process of replacing dilapidated wooden huts with modern steel cabins to form clubhouse, workshops and stores.

Surrey Hills is a small, friendly club, with views (on a clear day) of Heathrow, the Wembley Stadium arch, Central London and Canary Wharf, the M25 Thames Crossing, the South Downs and the sea beyond – all from 1,934ft above the airfield!

Our hard runways see regular winter visitors from waterlogged sites – and on weekdays from weekend-only clubs.

Marc Corrance



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(The BGA website will be redesigned during 2010)

Brian Cracknell, 1932-2010



BRIAN CRACKNELL died peacefully at home early on 11 March after a short illness. Some of us found it remarkable how he faced up to what was happening to him and how he was able to joke

that he soon intended to claim Diamond height records, sans oxygen, whilst the rest of us were still struggling way down below.

During his retirement from the Post Office and service in the RAF, Brian put in many working and flying hours at the Nene Valley Gliding Club where he often said "You will miss me when I have gone" and "Let us wear out the Old Ones first". We never knew how true that was to be. It is impossible to walk around the hangar, workshops, caravan or clubhouse without seeing some of his handy work. Shelves, doors, notice-boards, tables all benefited from the Brian touch. For many years he maintained the glider fleet and was proud to hear visitors commenting on the high standard of the fleet.

His story-telling from early days in the RAF where he managed to talk himself into flights in Mosquitoes and Vampires, plus his recall of the number of 2 BA nuts and bolts that had to be undone to reconfigure the seating in the Hastings, was legendary. As his stories were recounted, it became necessary for him to stand and illustrate the tale with hand and arm actions. Central heating boiler malfunction and roller doors at the Post Office received the same detail of description.

Brian shared a lovely little K-8 with a red nose that he maintained could outsoar anything on the airfield because of the red nose. He eventually donated it to the club for others to enjoy. When he first flew his Cirrus, on landing he went down on his knees and kissed it on its nose. A red one again

My earliest recollection of Brian's help was when as a new boy (well newish) as recently as 2000, he adopted me, took me under his wing and helped me to integrate into the family that is the Nene Valley Gliding Club. No wonder he was affectionally known as Dad by many members.

A buddy scheme managed Brian-style has merit that might be used more often to help newcomers. Visitors to the airfield

were always made welcome, particularly on Open Days, when Brian would use his motor caravan as a main information

Brain's jealously guarded collection of tools, paints, empty jars, tins and pencils took pride of place in the workshop and perhaps will become, with his handy work, a lasting memorial at the club.

You were right Brian. We will miss you now you have gone and perhaps it is not always a good idea to "wear out the Old Ones first"

John Bennett - Nene Valley GC

Frank Prime, 1922 - 2010



FRANK PRIME passed away on 2 March. With the exception of his last two years, he had enjoyed really good health.

Frank was born into a farming family and ran a farm in Farnham, near Bishops Stortford,

for much of his life.

When the war came, he joined the RAF and became a Warrant Officer. Serving in South Africa, he learned to fly gliders which were to be towed into France behind Lancasters. Fortunately for him, the landings took place in Europe before he was ready. He was also very lucky again going to Karachi preparing for taking on the Japanese - the Americans got there

Whilst in his fifties, his daughter gave him a gliding lesson for his birthday and from that day on farming wasn't quite so important. Anytime the sky looked soarable he was off, saying "You can manage without me can't you?".

I got to know Frank well when I purchased a share in a Dart 17 in the early 80s. Together with the third member of the syndicate, Peter Pool, we spent the winter recovering the wings and refinishing the glider. Frank always made a good contribution, particularly on any manual tasks as he was a large man and as strong as an ox. He was a good syndicate partner and friend.

Frank really enjoyed his gliding and flew solo into his eighties. The only thing that stopped him flying was the difficulty he had getting in and out of the cockpit.

He accrued over 1,000 hours in gliders and, as well as flying with the Cambridge

Gliding Centre, he enjoyed numerous expeditions to The Long Mynd, Sutton Bank, Portmoak, as well as other local clubs.

He and his wife Norma took several holidays in the Antipodes. He always managed to find an airfield where he could fly. Even on the last trip, at the age of 84, to celebrate their 60th wedding anniversary, he still managed a flight.

One of Frank's memorable comments was "hope springs eternal", which he used when he needed to be really optimistic about a particular outcome.

The other was "I can't be doing with that" when things were happening that he didn't like or approve of.

Frank was a true gentleman with a down to earth approach to life. He was larger than life and always jolly and positive. He was a popular member of our club and we will miss his cheerful and helpful presence.

Our sympathies go to his wife Norma, son David, daughter Tuppa, and all his family and friends.

Mike Smith, Cambridge Gliding Centre

Dave Jobbins, 1944-2009

DAVE JOBBINS came to gliding during the late-70s, starting at Shobdon and moving to South Wales GC shortly after. A former hang-glider pilot, he guickly soloed and like so many others soon established himself as an excellent soaring pilot. Quickly outgrowing the club fleet, he bought his first glider, a Club Libelle in which he was to clock-up many happy hours, often being first to launch and last to land, including on one memorable wave day, with the help of headlights, about 10 minutes too late...

During the summers, the whole family soon became regular faces, staying on site, and were often seen driving out of the gate with the trailer in tow. Sometime after doing his 300km in the Libelle, he joined Earl Duffin in syndicate with a Nimbus 2c, and with this newfound performance, the distances got bigger, regularly clocking up 4-500km

One of Dave' outstanding features was his generosity, and willingness to help others, including retrieving yours truly from half-way around a 500km O/R, although I think he'd agree that he owed me that one!

We all miss Dave, but none so much as Rose, his children Grant and Haley, and the grandchildren who gave him so much

Simon France, South Wales GC

Pilot

No.

Louis Glover (Lou-the-Glue), 1923-2010



A FAMILIAR figure at the Coventry Gliding Club over five decades, Lou was one of those seminal figures in our sport, attaining almost legendary status as a wizard with wood. From

the time he established his full-time repair business - Gliderwork - in his prefab at Husbands Bosworth in 1965, he considered he'd given up work. A firm belief that earning a living doing what he loved, without the tyranny of the clock-card and the relentless march of the production line he had left behind at the Hillman Motor works, allowed him to consider that life was 'just one long holiday'.

That perhaps belies the great thought and effort that Lou poured into his long life. Anyone who remembers his old workshop - hardly useable as such after his first year at Hus Bos - will recall it crammed from floor to ceiling with what he called his 'stock'. Seemingly a junkyard to others, Lou would unerringly find his way to the very item required to fix your particular problem, and on the way would unearth buried treasures ranging from a genuine Louis Bleriot headlamp to a wooden clock and a miniature Newtonian reflector telescope he'd built - complete with hand-ground mirror - a camera from a PR Spitfire, home-built test apparatus for calibrating altimeters, and beautiful musical instruments including a lute and full-size clavichord he'd made.

There seemed to be simply no limit to the erudition and wide-ranging interests of this extraordinary man: muzzle-loading flintlocks, bee-keeping, mead-brewing, 3D photography, pendulum holography, and much more, quietly displayed only if someone expressed an interest in the subject.

Lou served in tanks during the war, seeing action from Normandy through to the liberation of France. He joined Coventry GC in the mid-50s and made swift progress to become CFI in the early-60s. He soon made his presence known in the workshop at Baginton and was a prime contributor to the construction of the first of the giant upand-over hangar doors that are a feature to this day at Hus Bos.

A quiet, unassuming man, he always knew what needed to be done, and quietly got on with it. He will be sorely missed.

Keith Nurcombe, Coventry GC

Phil Turner, 1936-2010

BURN Gliding Club has sadly lost one of its long-time members, Phil Turner, who died recently.

Phil started his working career as an electrician in the Yorkshire coalfields, which is where he met his wife Cynthia, who worked in the wages office. He graduated up to becoming an electrical inspector working for the West Yorkshire County Council, then on to the South Yorkshire Council as Chief Electrical Inspector.

During his working life Phil pursued his three main interests, which were flying (of course) at Doncaster then at Burn, astronomy at the Mexborough & Swinton Astronomical Society, and gardening at his home.

Phil's very keen interest in astronomy had him build his first telescope in 1964, another in 2004 and, to complement this, he built an observatory in his back garden.

Some people didn't see the wry side of Phil's sense of humour, which could be quite acute when for instance he would recall times past. On one occasion he mentioned a time when he and his syndicate partner Derek Wilson visited Germany. They had to explain mysterious mechanical parts in the luggage to customs men on the way home. The customs man thought it a suspicious contraption until Phil and Derek went to great lengths to explain its function on a Discus Turbo engine mounting. My short words here belie the actual comical events as they actually happened.

More so when he knew that he was going to leave us, he insisted to Cynthia that his funeral not be held on a Thursday, as this was a flying day, and that "no bugger would turn up".

Phil was an instructor when I joined Burn. Although he held a PPL, he never wanted to fly the tug. He once told me, "It's more of a task than a pleasure flying that thing". As a tug pilot myself, I have often described Phil as the one glider pilot above any other in our club who you never felt on the end of the rope regardless of turbulence or conditions, he was an absolute master of the aerotow at our club.

The passage of years is steadily and unfortunately taking away many of the true characters of our sport; the likes of Phil Turner who we can ill afford to loose.

To his wife Cynthia, we all extend our profound and heartfelt condolences.

Tony Flannery, Burn GC

BGA BADGES

Club (place of flight) Date

	riiot	Club (place of fligh	it) Date
	K DIPLOMA	6 1 1 1	40.40.0000
18	Charles Jeffery	Cambridge	13.12.2009
100k DIE	PLOMA PART 1		
		Kent	29.8.2009
Stuart Ma	axweii	Kent	29.8.2009
DIAMON	ND HEIGHT		
3-1722	John Castle	The Gliding Centre	11.10.2009
		Portmoak	
3-1723	Frank Roles	The Gliding Centre	11.10.2009
		Portmoak	
3-1725	Malcolm Winter	Yorkshire	14.9.2005
		Aboyne	
		,	
DIAMON	ND GOAL		
2-2388	Ian Paterson	SGU	13.3.2010
		Portmoak	
DIAMON	ND BADGE		
754	Malcolm Winter	Aboyne	14.9.2005
755	Ian Paterson	Portmoak	13.3.2010
GOLD D	ISTANCE		
Ian Pater	son	SGU	13.3.2010
		Portmoak	
GOLD H			
Sally Woo	olrich	SGU	13.3.2010
		Portmoak	
GOLD B			
Ian Pater	son	SGU	13.3.2010
SILVER E		D 9 C	10 10 2000
Joe Drun		Devon & Somerset	
Demetri :		Crusaders	26.1.2010
Nigel Las		Wrekin	1.3.2010
Stephen	Rae	Borders	21.3.2010

GLIDER ARCHIVE FILES

Standard Known Adrian Nettleship Lasham 6.12.2009

Booker 18.10.2009

AEROBATIC BADGES

Standard Known Jane Moore

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This free of charge service will be available until 31st August 2010 following which the unclaimed files will be shredded:

BGA accident/incident summaries

AIRC	RAFT				PILOT		
Ref	Туре	Damage	Date, time	Place	Age	Injury	P1 hours
21 The	Grob Acro rear canopy o	minor pened and broke a	28/11/09, 14:00 t 400ft during a wir	Windrushers GC nch launch.	57 / -	none / none	5,000
22 The	Phoebus undercarriage	minor collapsed halfway	4/03/10, 14:05 through the landing	Burn GC g ground run.	71	none	905
24 The	K-21 port wingtip c	substantial caught on the grou	7/03/10, 15:50 nd while manoeuver	Scottish Gliding Centre ring to avoid an obstacle after	78 / 42 er a simulated	none / none launch failure.	not reported
Incid 14 Ope grou	Pirat n canopy caug	minor ght by propwash as	13/02/10 s the tug engine stal	- rted. The restraining cord bro	– oke and the ca	none nopy cracked as i	- t fell to the
15 Impr	n/a operly secure	none d winch separated	11/02/10, 10:30 from the tow vehicl	- e while being towed.	-	none	-
16	Bocian K-21 Grob Acro Astir CS K-6cr club hangar ro	write off substantial minor minor none pof collapsed unde	12/01/10, overnight		-	n/a	-
17 Pilot	Discus was unable t	none to release from aero	29/11/09, 12:30 otow and had to lan	- d with rope still attached. 8r	– nm washer late	none er removed from r	- elease.
18 Wind	Puchacz ch cable shock	none cord jammed in n	18/10/09, 14:30 osewheel axle after	- a ground run over-run. The (- club are to inve	none estigate how this o	- could happen.
19 Whe	LS6 el-up landing	none by experienced pil	29/08/09, 14:00 ot after a local soari	- ng flight.	-	none	-
				- ne glider was jerked forward attached until the tug started			
		none ovement restricted sliding forward.	1/03/10, pm by Dynafoam cushid	_ on during roundout on a cor	- oversion flight.	none The club will mod	- ify the cushion





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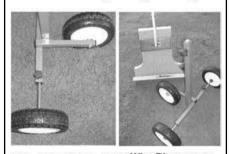




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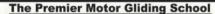






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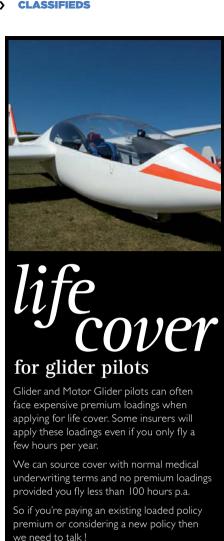
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